## 'Inspirational' robots to begin replacing teachers within 10 years

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Robots will begin replacing teachers in the classroom within the next ten years as part of a revolution in one-to-one learning, a leading educationalist has predicted.

Sir Anthony Seldon, Vice-Chancellor of the University of Buckingham, said intelligent machines that adapt to suit the learning styles of individual children will soon render traditional academic teaching all but redundant.

The former Master of Wellington College said programs currently being developed in Silicon Valley will learn to read the brains and facial expressions of pupils, adapting the method of communication to what works best for them.

The new era of automated teaching promises an end to grouping children by year, as the personalized nature of the robots will enable pupils to learn new material at their own pace, rather than as part of a class.

"It will open up the possibility of an Eton or Wellington-style education for all," Sir Anthony said.

"Everyone can have the very best teacher and it's completely personalized; the software you're working with will be with you throughout your education journey."

He warned, however, that the new technology would have to be carefully introduced to avoid "infantilising" pupils and teachers.

As part of robot-led learning, teachers would adopt the role of "overseers", monitoring the progress of individual pupils, leading non-academic activities and providing pastoral support, Sir Anthony said.

The efficiency of automated teaching would also mean that only 30 per cent of school time will be spent in class.

A contemporary historian who has written biographies of David Cameron, Tony Blair, John Major and Gordon Brown, Sir Anthony heralds the new educational era in a book, The Fourth Revolution", due out next year.

"The impact is going to be massive" he said.

"This is beyond anything that we've seen in the industrial revolution or since with any other new technology."

The first revolution is understood to consist of learning the basics of survival - foraging, hunting, growing crops and building shelters.

The second involved the first organized sharing of knowledge and the third was marked by the invention of printing.

Automated teaching machines would be "extraordinarily inspirational", Sir Anthony said.

"You'll still have the humans there walking around during school time, but in fact the inspiration in terms of intellectual excitement will come from the lighting-up of the brain which the machines will be superbly well-geared for.

"The machines will know what it is that most excites you and gives you a natural level of challenge that is not too hard or too easy, but just right for you."

He expected the National Union of Teachers to be "very alarmed" by the prospect.

"The technology's already beginning to arrive," he said. "It's already there on the west coast of the US and it's already beginning to transform schools.

"I'm expecting this to happen in the next 10 years.

"The great danger is that it takes jobs away, and for human beings much of our fulfilment in life comes from the satisfaction of work.

"If we get the technology wrong it will end up doing everything for us in the same way that satnavs mean we no longer know how to read maps."

Experts predict that automated teaching of math and science will form the vanguard of machineled learning, but that sophisticated algorithms would soon be devised to teach other classes like English or social studies.