

Speech: Education Secretary opens Education World Forum

Good afternoon ladies and gentlemen. How wonderful to see such a wide variety and such a large number of colleagues from around the world here at the Education World Forum – the world's coming together of ministers and policy makers from the world of education, and of course ahead of BETT that follows it – the world's largest education and technology trade show.

There is so much we can learn from each other and I want to start with thanking the people who have organised this – this will be the fifteenth that there has been – for all their work they put into it. Some of them have worked on all fifteen of those forums and have brought close to a thousand ministers from around the world to London to share their expertise and share their experiences. And the feeling that they have today, of preparing students for success in the fourth industrial revolution, can hardly be more apt or more timely.

If you think about all the changes going on all over the world, whether that's artificial intelligence, advanced robotics, face recognition, voice computing, autonomous vehicles – any one of these things on their own has the power to be revolutionary. Taken together, they certainly do constitute something of the sort of magnitude to turn a revolution.

And of course in this country, having learnt lessons from earlier industrial revolutions, we are very conscious of the effects that can be. Of course we've been here before and on the screen you see some of the various changes that have happened throughout the ages, and there have often been predictions that long swathes of people will find themselves out of work as a result.

Now of course in the end people found new jobs, whether they would be the stable hands or the scribes, they found other work – or their work evolved to take account of those new technologies. But of course there was often, in these previous big changes, a great deal of upheaval along the way. And the reason why they say that the theme of preparing students for success is the fourth industrial revolution is because of course there is nothing guaranteed about preparing us for these changes and being able to make the very best of the opportunities that present themselves.

The other thing that is very noticeable from this timeline is that when things accelerated, the pace of change is so much greater than it had been in the past. So we need to make sure – as our economies evolve, as society evolves – we need to be sure that in the world of education we are absolutely there and on top of it.

So what does it mean for education? Well with all the things that are changing in the world I believe there are some things that don't change, apart from, they may just be more important than ever they have been. And I do believe this more than ever, that our young people complete their formal

education coming away with the knowledge and with the qualifications that they need to make the best success of their lives.

So these core academic subjects are at the heart of that. In this country, in the United Kingdom, before 2010, our focus had slipped away somewhat from those core subjects and we found that we were experiencing results which were apparently improving year on year. Even while our standing in international comparisons – objective measures of performance – was stagnated. So we had year on year grade inflation.

All too often, the expectations for the results that would be achieved by young people from disadvantaged backgrounds were not high enough. There was a shift toward alternative qualifications, often targeted toward those people. But it turned out those qualifications were not as highly regarded and did not have the same worth in the jobs market and in society as the more traditional qualifications. And so that could unfortunately limit the possibilities that those young people would have.

So, the government after 2010 set about addressing those issues. Firstly, by reforming our national curriculum, by bringing renewed rigour to our qualifications, to our GCSEs and A-Levels and bringing in a new suite of subjects, a new measure to really focus on those core subjects that we know are the enabling subjects that open up so many possibilities – English, Maths, Science, the Humanities and languages.

Nobody, of course, has all the answers and the British government didn't believe that it had all the answers. In fact, unashamedly, we looked right around the world for where we can learn from. For example, from East Asia, learning approaches to teaching primary mathematics, and that approach has continued. Just last week we welcomed another 36 teachers from Shanghai in a continuation of our teaching partnership with China that has gone on since 2014.

There's so much else for all of us to learn from one another, and so many challenges that we share in our different countries. For example, closing the attainment gap, spreading education opportunity ever wider to disadvantaged groups.

There is no practical limit to the educational world. With organisations like Ofsted and ARK, some of the great names in higher education. What the British Department for International Development has done, particularly in supporting education for girls in developing nations. Some of the great innovators of educational technologies, some of whom you have a chance to meet hear and at BETT. And indeed my experience on change programmes, on school autonomy, on the early years and on phonics.

We want, like you, we want our students to have an international perspective and very wide horizons. Hence the continuing importance of exchange programmes, particularly for us with European countries but also looking further afield. For example, with the British International Citizenship Service and the Generation UK China programme – and indeed not just with students but also with teachers and headteachers. And we are pleased to have

just celebrated the 10th anniversary of our head teacher exchange with Singapore.

But now that point about international global perspectives helps to highlight the way in which exams and qualifications – the most important things you take with you into life – but they are not the whole picture when it comes to what we will achieve outside the realm of qualifications, which matters a great deal as well.

That you believe you can achieve, that you stick with the task at hand, that you understand the link there is between the effort you make now and the reward that may come in future – albeit distant and uncertain – and the resilience, the ability to bounce back from the knocks that inevitably life brings to all of us.

Now I was, until I became the Education Secretary, I was the Minister for Employment and in that role I also heard a lot from businesses about the importance of work place skills, sometimes called 'employability skills'. Sometimes, by way, also called 'soft skills' but I would suggest to you, ladies and gentlemen, there is nothing soft about these skills.

The hard reality of soft skills is that actually these things around the workplace and these things around character and resilience are important for what anybody can achieve in life, as well as for the success of our economies. They're not exactly the same thing, character and workplace skills, but there obviously is some overlap.

I don't suggest they can just be taught, but clearly what happened the ethos of the school, the expectations that are set for students, and the support that's given, alongside what happens in extra-curricula activity and sport, public speaking, voluntary work will all have an effect on character resilience or workplace skills that our young people take with them.

There's something else about the needs of the modern economy, and that's digital skills. Something like nine in ten of the new jobs being created require digital skills to some extent and we are blessed in having, coming through now, what you might call the generation digital. Those who have grown up with computers, tablets and phones who can do stuff that when I was young was unimaginable.

But we want to go further than just having young people who are just able to work with technology and we are taking every chance to make sure we make technology work for us. So, in our new computing curriculum, we are going beyond the ability to use apps, to write apps. We are investing quite heavily – £84 billion over five years – to improve the teaching of computer science. That includes the additional training to a higher level for 8,000 existing teachers of that subject.

But of course, throughout the economy, throughout society, you can't predict exactly what the future is going to be. I suggest to you, ladies and gentlemen, that is even more true when you talk about the development of technology. We need to be flexible and we need to be open minded about what

may come in the future. And that, of course has a knock on effect into what happens in the Labour Market as a whole, and there are academics throughout the world about what the future shape of the Labour Market may be.

The truth is, no one really knows what exactly the future of work and what the future of the Labour Market may be and we will need to be able to flex and adapt and adjust.

Now for too long in this country, the level of adult training has been at a too low paid level. For decades, in this country as I know in others, we've talked about the importance of lifelong learning – that's the ability to take on new knowledge and new skills that shouldn't stop when your education ends.

It is a well worn theme I know in many of our systems. I think we are now at the point where we have to really make this a reality. In Britain, we are launching a national retraining scheme to make sure those opportunities are available throughout peoples' lives. We're starting in construction and in digital skills and particularly with the digital skills part of the national retraining scheme, it is an opportunity for us to pilot how educational technology can help to deliver digital skills to people right throughout the country in a new innovative way.

That point about the possibility, the potential of technology leads me to the last thing I wanted to say, and that is about the role of technology in education itself. I know there is trepidation in schools, quite often colleges, about the role of technology. And let me be clear about one thing, in the research that the Department for Education in the UK has done on classroom teaching and how it works, it is absolutely clear that direct instruction is of paramount importance. Teaching education is a people business and it is the inspirational teacher at the front of the class that makes the child's education. That is the bit which famously and repeatedly they say they will never and do never forget.

But technology must have a role in our sector, as it does in other sectors, to be able to ease workload – which is a matter I know is of great importance for teachers in this country, and quite rightly so. And I share their drive to wish to work around but also to be able to track and monitor the progress of pupils – and where there are further opportunities to bring new types of content to students and effectively introduce them to whole new worlds.

And in parts of the world where school is too distant – or perhaps too dangerous – to reach, technology gives an opportunity to reach out with education to people, whether they are children or indeed adults, who might otherwise not have had the opportunity to benefit from it at school. And at the BETT conference that follows this Forum there will be the opportunity to look into those classrooms and those virtual classrooms of the future, and I know colleagues will look forward to that very much.

Ladies and gentlemen most of what is good in this world comes from our ability to share knowledge. The great inventions, the everyday conveniences – it's all about coming together and working together. This Forum – the Education World Forum – is a fantastic example of that. It's about coming

together to make sure we can replicate our successes but also, just as important, to make sure we can avoid avoidable and costly failures.

Decisions that are made here can change lives. Again, I want to thank the organisers for putting on this Forum and all of you for being here. I welcome you to this city and wish you a very successful, enjoyable and productive conference.