

Chris Jones

Bob, thank you very much indeed. I'm not so sure about the old, although given the fact that we've known each other for some 12 years we've probably shown much more age now given the amount of change that's happened in the system over the past 12 years.

I mean I just want to first of all say a big congratulations to BTL. 30 years is no mean feat, and I'm sure we can all think of a number of technology businesses that launched some 30 years ago that certainly have not seen the light of day and rapidly burnt out. Particularly, given the amount of change that we've seen in the educational landscape over the past 30 years. I've known Bob and Keith for 12 years, and it really is great to be here to celebrate their achievements. It's an important milestone, and obviously I'm delighted that our Secretary of State Nicky Morgan could be with us as well, and to share her views and thoughts on how important technology is in education.

I suppose when I thought about this speech and to try and give some perspective around what City & Guilds have done, I thought more about where was technology when BTL was set up? Well, we didn't have mobile phones, can you imagine that? We didn't have home computers, if only! And we were lightyears away from even thinking about uploading everything onto things such as Instagram, Facebook, Twitter, and the emergence of that real-time communication. It was just sort of unknown. I can remember my first job, looking forward to the sales order coming through on the fax machine in the morning; that was real breaking edge technology. That just seems like years and years ago. But technology is an industry that's clearly based on innovation, and we constantly see headlines about the next big thing, the next new life-changing gadget. Yet often those advances in technology are dismissed; critics claim it will never catch on, and I'm certainly guilty of that too. My son said to me, "Dad, I want an Apple Watch". No son, that will never catch on. Take TV for example, who thought in 1939 the New York Times predicted that TV would never be a serious competitor for radio. And more recently, in 2013, the chief executive of Blackberry said tablets would be obsolete in five years. Perhaps his company might be, but tablets certainly won't. To be fair though, I think it's tough to anticipate what will be a game changer in life as in technology, and education is certainly no exception.

So the big question facing us in education generally is, "so, what is next?" In our world, from MOOCs to VOOCs, we're constantly asking ourselves: what should we invest into, what should we expect to be just simply a passing fad, or what is going to be a genuinely sustainable development that really does have traction. We've seen this for a very long time in the City & Guilds group; in fact, for 137 years since we were established. And throughout our history, we have depended on innovation and new technology, it has been core to our success. It's allowed us to help tens of millions of people get the skills they need to progress into a job, or more importantly progress onto the next job.

So, when e-assessments began to surface in 2002, naturally we started exploring the possibilities, and back then we had no idea that e-assessments would become very much the staple of what we do. It is our primary testing channel, and paper-based tests for us are very much the exception. We assess millions of exams over the year, and we award somewhere close to some 2 million qualifications across 80 different markets, internationally too.

If you think about an average exam script as being about ten pages long, in the vocational context, and an average of 350-500 test scripts in a box; you can just begin to imagine the logistical challenges that emerge, of tens of thousands of boxes travelling around the world, stacked up in storage rooms, all waiting to be marked by hand. It is not a pretty picture; it is a logistical nightmare, and arguably the people that it will probably let down the most are the learners at the end of the

day. Fixed date paper-based exams introduce many chances for mistakes: illegible handwriting, postage delays, no back-up copies, just to name a few. I'm pleased to say that we've moved from stacks of paper exams to a slicker, more efficient system that's better for everyone, and I hope that it won't be much longer before we can genuinely say we have phased out paper-based tests entirely. The main reason to make that switch is very clear, it's very simple; e-assessment provides a better service, pioneering new assessment methods just made sense, and while it was a risk back in 2002, it was one we felt then that was worth taking and I think we have been proven right.

Our intention was simple, we wanted our assessments to be as accessible to as many people as possible, so we became the first awarding organisation in the UK to offer large-scale online testing as an alternative to paper and pencil based exams. 13 years on, we've delivered and certificated some 16 million online tests around the world. So how did we do it? And what did we learn along the way?

Well our approach was to handle the risk with care, to let change have time to bed in; innovation is important, but it shouldn't be pushed at the expense of quality, and reliability, and the integrity of the assessment itself. So to start, our focus was mostly on translating old to new. We worked to convert paper-based tests to digital formats; laying the foundations for some of the transformations to come. At the same time, it gave us experience to know what we were doing, because we were very much learning as we went alongside our centres and partners. And we didn't do it alone; as we scaled up we knew we needed stable, reliable partners that met our needs and understood our values. 5 years ago, we started working with BTL and I think it's fair to say that we have never looked back. In BTL we found a partner that understood education, which was critically important to us. They understood training, and they really understood the role that assessment played in that. And, importantly, they happened to get technology too. We found a partner that was genuinely flexible in working with us and the peculiarities of an organisation like City & Guilds.

BTL works with us to find the best models to suit our long-term needs, it isn't about a one-size-fits-all solution. I think most importantly for us is we found a partner that recognises the importance of each and every individual that takes one of our tests; a partner that believes deeply in the transformative power of education, and in skills development, which is very much at the heart of our purpose for the organisation. For myself and all of us at City & Guilds, it has been a pleasure to work with BTL for so long, and I very much hope that our relationship will continue, and I know you very much hope it will too. The price could always be better, Bob, but there you go!

Today I'm proud that City & Guilds now delivers 1.8 million tests each year, covering 250 qualification areas, and more than 2,000 different types of tests. For example, in Saudi Arabia, we're providing the assessment learning platforms and staff training as part of a major modernisation of the vocational education system. Saudi is aiming to increase the dissipation of vocational education from 10% to 40% by 2023, which is equivalent to some 400,000 students. It would be almost impossible to start that with a paper-based system. So along that journey, we have come a long way, but we cannot and must not be complacent.

So back to my original question, what's the next big transformative technology, and what's it got in store for FE? Well for one, and Bob alluded to it, we can expect to see much more multimedia in assessment, using to connect learning with real-world situations more often. We're using video and audio files to capture performance, and witness testimonies in a range of fields; everything from hair and beauty, right the way through to mechatronics. Being able to see and hear someone demonstrate skill is a much more authentic and flexible way to validate their competence. For us, it's not simply knowledge, you have to be able to demonstrate that real skill in a consistent number of times. And I expect to see assessments increasingly happening across many platforms; with so many

tablets and smartphones out there, it's important that assessment makes the most of it. Who knows, maybe we will even see assessments taking place via a smartwatch someday, my son may just prove me wrong.

I'm not saying this just to play to the Instagram generation, but because this is a logical way to provide a richer, more authentic assessment experience. For example, we've worked with Barclays to develop a range of games that are actually the assessments, helping people become more digitally literate. They're freely available to anyone on the App Store. And these games help people develop a range of skills, from understanding the internet through to how coding works. If someone passes enough modules, they get their digital driving license, using open badges to prove their capability to others. Clearly, open badges is going to be another trend that is set to continue, and will be an important part of the assessment landscape. My point is though that it's important to see technology as an opportunity, not a threat or indeed a risk. And my vision for City & Guilds group is for us to be at the forefront of the race to exploit the power of on-the-go technology so that one day all learning spaces are potential assessment opportunities., whether that is happening in an educational institution, or whether that is happening in a place of work.

It means an end to the fixed exam calendar, and the chance for learners to be accessed flexibly, when they're ready. It means the possibility for on-demand adaptive tests for teachers to use as and when they choose; offering greater flexibility and precision to our assessment offer. We're already seeing the development of adaptive algorithms, changing the nature and the frequency of test delivery based on an individual's level of understanding. It's just not possible with paper and pencil. And we should all keep challenging the concept of what online assessment experience can be. For example, at City & Guilds, we have been exploring assessments in virtual reality, and the role that devices such as Oculus Rift can have in providing truly immersive and valid assessments of knowledge and of skill.

As with many of the anecdotes I shared earlier, some of my predications may indeed come true, and other may not. But what's clear is that we are only at the tip of the iceberg in terms of how technology will impact and change assessment.

E-assessment opens up a range of opportunities that all of us here today need to grab hold of with both hands. It encourages better learning experiences, and more effective assessment of an individual's skills. But for any of this to become a reality, there is one very important caveat: our policy-makers need to embrace the value of colleges and schools investing in digital infrastructure. The digital infrastructure in this country's schools and colleges is patchy and inconsistent. It's baffling to me that when the UK's broadband speeds are more than twice as fast as the world's average, this is not the case in the classroom; and I speak as a governor of five colleges, I know that this is a reality. The British Educational Suppliers Association reported that half of the UK's state schools have slow broadband, or unreliable Wi-Fi. A third of secondary schools had inadequate broadband, and figures in 2013 suggested that 80% of colleges were dependent on just one broadband connection. We have to make connected classrooms the norm. We've got to give schools and colleges access speeds to rival the largest multi-national companies. We must make sure that educational establishments have access to laptops and tablets that they need to make every space a digital learning space, rather than relegating technology to a computer room with old-fashioned desktop PCs. We can't simply hold up our hands and say there's no money to invest in technology, it is too important and we all collectively have a role to play in it.

Encouragingly, I am seeing more and more people begin to understand this. I am proud that FE has been leading the way, and actually that general education is only just starting to catch up. In fact,

everyone here today as an important role in embracing the power of technology to improve teaching and learning, and measuring teaching and learning. The future, I think, is very exciting, and there is so much opportunity for us to go after. And BTL is playing an incredibly important role in helping us unlock that potential.

So before I finish, I would just like to say congratulations again to BTL, to thank them for everything they've done to pioneer new ways of delivering and assessing learning, and for being a great partner to City & Guilds. Thank you very much, guys.