Education Secretary delivers speech at BETT show

Good morning everyone...

I am delighted to be joining you today and I'm only sorry that parliamentary business has meant that I can't be there in person. I was very much looking forward, just like you, to seeing BETT's fabulous showcase of the very latest technology for myself...

I want to start by saying some thank yous.

The past two years have been really challenging for everyone working in education.

So I particularly want to thank every leader and teacher who helped colleagues deliver learning and lessons online, especially those who weren't used to using the tools to do this...

And thank you to every school who supported other schools and to our EdTech Demonstrators who were brilliant in showing how to make technology work...

We also owe a huge debt to the many EdTech company that gave free trials or offered free licences to schools and colleges.

We already had an EdTech market to be proud of but the pandemic has shown just why we are so well regarded around the world.

You have all been a real inspiration...

All of us have learnt and achieved so much in the past two years.

But pivoting to remote learning didn't magically happen overnight, it was hard earned.

Some of these new ways of working have become incredible success stories. Remote parents' evenings for example, seem to be here to stay...

Digital technology, and the data and infrastructure that underpins it, is changing the way we live and work and learn.

So thank you everyone, for being tech pioneers and leaders, and coming today to BETT to continue this exciting journey.

We need to build on what we learnt in the pandemic to embed and spread new and better ways of doing things for the benefit of all.

One thing we definitely have to do is keep up this momentum... what one of my predecessors called the restless spirit of technological innovation...

I want to see an environment where it is easy for tried and trusted digital

products to be taken up by our teachers, as part of their teaching toolkit, and used by families at home too.

It needs to be hassle free.

I mean, let's take passwords for starters. Is anyone else here driven to distraction by passwords?

I can tell you that the Zahawi household becomes a much less tranquil place when our nine-year-old daughter needs to log in and Dad has to get the right password. Apparently, overseeing the UK's vaccine rollout did NOT count as a good enough excuse for her.

There has to be a simpler way than this.

I want to create an ecosystem where good tools can spread quickly across and between families of schools and colleges.

... Where data can be shared effortlessly in a system that is safe and secure and that enables the right people to see the right things at the right time.

I want teachers and leaders to have easy access to the information they need, in formats that are easy to digest.

And I want the DfE to be the most data-driven department in government because young people's learning depends on it.

Any child or student — or teacher for that matter — has to be able to walk into any classroom totally confident that everything in it works.

My vision is for the UK to be a science and technology superpower, and for our schools, colleges and world-class universities to develop the next generation of UK and global talent to make this happen.

But we can't get to this point if schools are working in isolation. Everyone needs to work together. And when I say 'we' here I mean, all of us, including you and your schools and the EdTech sector — to make sure we have the right technology at every level of the system.

There is no getting away from the fact that school systems are complex. The logistics of running a school or college, as any head will tell you, is an incredibly challenging business. I can't promise to make it easier, but I do want to make it simpler.

We need a level playing field, so that schools all have access to tech that does what they need it to. As teachers progress through their careers, they should be able to develop their own expertise using technology that is proven and reliable.

We cannot make sure tech is delivering for every school if the infrastructure can't support it.

So we will invest to fix the basics. Every school has to have a decent

broadband connection and we are going to upgrade networks as a priority. My department will work with DCMS and with our broadband providers to enable every school to have access to a high-speed connection by 2025.

We are going to set clear standards so that schools know technology they should have in place and we will provide support to help meet these standards for schools that need it.

We will build on the success of our Connect the Classroom programme and invest a further £150 million to upgrade schools that are struggling to reach the minimum WiFi standards.

The first of these standards are being published today, so all leaders will shortly know what the tech set up should look like in their school.

As part of these standards, we are going to issue more concrete help on how schools can keep themselves secure and safe from cyber crime.

Once we've got those basics in place everywhere, technology can help all of us make better decisions

I'm not a believer in taking chances myself. Imagine, in my previous job as vaccines minister… if I'd been given an option to roll out something that wasn't 100% backed by evidence but scientists thought it would 'probably' do the trick.

It doesn't bear thinking about.

So I'd like to talk in more detail about how schools can roll out technology in ways where the 'probably' becomes a 'definitely'.

I want to modernise our data systems across the board. For example, I am sure you would be happier if there was a way to reduce the data you report to DfE.

The way forward has to be for schools and families of schools to start using data from cloud-based systems that are linked together to make better, more timely decisions.

Data and evidence, shared transparently, are key to improving complex systems. For example. Let's go back to Covid for a second. Every day computers were crunching enormous quantities of data to give up-to-date pictures of infection and hospitalisation rates.

That data was key to helping the government plan its next move but it was also key to keeping people safe. Take the BBC's coronavirus website... thanks to the charts and the graphs and the analysis, it gave people at home the ability to follow the latest medical data to protect themselves and their families.

We've started this journey in education already. In January we launched a national trial to automate pupil attendance data returns to the department. Having better, more consistent attendance data at national, regional and local levels is vital in helping us to spot where problems are occurring, as

well as identifying what solutions are working well.

Another area I'm keen to explore in more detail, together with Ofqual and the Standards and Testing Agency, is digital assessment. Other countries have been experimenting in this area and it's possible we can learn from what they are doing.

We have already made some progress in our primary assessments with our multiplication tables check and I have asked the STA to continue this work.

We have also made progress in vocational and technical qualifications.

It's possible that more digital assessment could bring significant benefits to students, teachers and schools and I want to start carefully considering the potential opportunities in this area.

The potential for what we can do with the right tools is so exciting.

But while data can give us the flight plan, it is evidence that will show whether we travel by hot air balloon or helicopter or plane.

When anyone tells me that something is a must-have, my first reaction is to ask why? What makes it so good?

When it comes to any school resources, from textbooks to white boards to AV units, teachers need to know that they work and that they'll help pupils learn. In the past we know that schools have invested precious cash in buying tools that were either not fit for purpose or not what they needed.

So in the same way as data will be our ally, evidence must be our watchword.

Teachers need to be able to critically assess digital products.

I want to see a new culture of evidence-based use of technology embedded in every school. In this way it will be easy for schools and families to use the right products at the right time for their learners.

This extends to Assistive Technology too — making sure that technology improves access to learning as part of targeted support.

But let me be clear. I am not going to wade in and start telling schools which bits of kit to use or when. Nor will you see my department suddenly start buying EdTech companies or interfering in the marketplace.

My role is to make sure schools get the guidance and information they need to make informed decisions for the benefit of all their pupils and staff.

So I would like to challenge the EdTech providers... to build that evidence base ... What is the impact of your product on learning outcomes? And then to share it openly.

I couldn't finish today without reassuring our tech partners where their future programmers and coders are coming from.

It would be a far braver Education Secretary than me to forecast what the technology landscape will look like five years or even a year from now.

One thing I can say with absolute confidence is that we are going to need more and better STEM skills... The Prime Minister is committed to building up the UK's position as a 'Science Superpower'. He has said that "the STEM subjects will be key components in steering us through the great challenges the world faces today and tomorrow'.

We need teachers to be totally comfortable and adept with technology and we need children to be tech-literate from a young age.

There is a growing hunger in the young to learn about technology and we need to be able to satisfy that. Between 2013 and 2019, computer science was one of the fastest growing GCSE subjects. Entries are roughly 19 times higher in 2021 than they were in 2013.

And computer science was also the fastest growing STEM A Level.

Digital T levels are now in their second year with students progressing on to apprenticeships or degrees or into the workplace.

As part of our mission to level up the UK, we want to make sure that everyone has the opportunity to improve their STEM skills and not just in school but throughout their lives.

The National Centre for Computing Education backed by £84 million of government funding, will help to keep teachers' subject knowledge up to speed.

And as part of our mission to attract the best and the brightest to become STEM teachers, we are offering scholarships of up to £26,000 and the Levelling Up Premium of up to £3,000.

So with a strong technology infrastructure for every school, data working effectively to support decision making, an evidence-based market for EdTech tools, and digital skills developing at pace, we'll be in pole position for whatever technological revolution is just around the corner.

It won't be the same for all of you... For some it might be seeing literacy outcomes leap for year 6, for others it will be a new tool to add to your existing kit. The changes could be small or totally transformative but they have got to be take us closer to our goal of a world-class education for all.

Despite the pandemic, I really think that this is the most exciting time to be in education. I cannot wait to see how far or how fast we're going to travel together. Thank you for coming on the journey too.