EDUCATION & TRAINING FOUNDATION



## EDTECH STRATEGY 2018-21

## A LEARNING TECHNOLOGIES ROADMAP

THIS STRATEGY IS ABOUT EDUCATION AND HOW ETF CAN BEST SUPPORT THE FURTHER EDUCATION AND TRAINING SECTOR IN HARNESSING NEW TECHNOLOGIES TO MAXIMISE OUTCOMES.

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### CONTEXT

#### Reference

The Education and Training Foundation's EdTech strategy was informed through an in-depth positioning review performed in February 2018 and is aligned to the Foundation's strategic goals, mission<sup>1</sup> and values<sup>2</sup>. The roadmap also takes into consideration the UK digital Strategy (March 2017)<sup>3</sup> and the UK Industrial strategy – Building a Britain Fit for The Future<sup>4</sup>. The EdTech strategy aims to help FE teachers play their part to the full in tackling the digital divide and digital exclusion.

The Industrial strategy along with the Sainsbury Review of Technical Education<sup>5</sup> introduce a new plan of post 16 education and the creation of 15 new technical education routes each with a digital skills element. Its "Common Core" raises the digital skills' profile to the level of Maths and English. The government is currently developing the Essential Digital Skills Entitlement<sup>6</sup> from Entry level to level 2 that should be rolled out in 2020.

Deloitte contributed to the debate about the future of business in the UK and reviewed the impact that automation and robotics may have on work and employment. The recent "Future of Skills – Employment in 2030" report produced collaboratively between Nesta, Pearson and Oxford University maps out how employment is likely to change, and the implications for skills.

While there is a clear awareness that digital skills and technologies must be harnessed for the UK to remain a global leader, the further education sector's landscape with its broad range of organisations, subject areas, accreditation boards and digital skills development needs present a real challenge to the development of a coherent and cohesive EdTech strategy for ETF that will fulfil the sector's diverse expectations and needs.

#### Change

The technology and information revolution has had a tremendous impact on our lifestyle, the long-term effects of which are not yet well understood. The ways we socialise and communicate have expanded, not only in scale, but also in scope with new modes of expression to fit the new media. Most interactions take place on a mobile device and the facilities offered are constantly growing: travel guides and maps; music, TV, film and game collections, photo and video albums; newspaper, encyclopaedia, book and magazine libraries as well as an arsenal of tools to create or interact with content. The moment is seamlessly being captured whether by voice, picture or video, and our achievements, our failures, our triumphs and our

<sup>&</sup>lt;sup>1</sup> http://www.et-foundation.co.uk/about-us/our-mission/

<sup>&</sup>lt;sup>2</sup> http://www.et-foundation.co.uk/about-us/our-values-2018/

<sup>&</sup>lt;sup>3</sup> https://www.gov.uk/government/publications/uk-digital-strategy

<sup>4</sup> https://goo.gl/6kJddh

<sup>&</sup>lt;sup>5</sup> https://goo.gl/f6LqMY

<sup>6</sup> https://www.thetechpartnership.com/basic-digital-skills/basic-digital-skills-framework/

https://goo.gl/NNLly4

<sup>8</sup> https://www.nesta.org.uk/sites/default/files/the future of skills employment in 2030 0.pdf

tragedies are now indelible and instantly replicable beyond our control. This power all fits in our pocket! We now expect to have everything accessible and on demand, from anywhere, at any time – "immediacy" is second nature, hugely multiplying the power of those who have the cognitive resources to wield it effectively, and potentially inhibiting and stifling the growth of others.

The incredible advances in communication and information technologies are having profound effects on society and on education; some positive effects, some negative, and some yet to be understood. Our attention span is lower, some types of communication skills are greater, and access to surface knowledge is almost infinitely wider than in the pre-internet age. Learners' expectations and habits have also changed as a result. Previously well-guarded and closed sources of information have become radically democratised, and 'citadels of power' have been breached, creating new public accountability and transparency for professionals and leaders. On the other hand, a belief in the ability of instantly accessible information to replace the need for deep knowledge threatens the competence of learners (and teachers and other professionals), if they fail to commit knowledge to their long-term memories, thereby impacting negatively on their critical and creative faculties. 9 The rising tide of mental health problems also has an as-yet under-researched relationship with the new ubiquity of digital communication technology.

There are clearly issues that must be addressed but the increasing use of technology is inevitable, and everyone involved in education must be prepared to maximise its "positive" potential while guiding learners in better self-regulating and building their capacity to resist the lure of perpetual distraction it offers.

Technology is the key change driver of the early 21st century and harnessing technologies will enable providers to streamline processes, become more agile, share effective practice across their organisations and the education sector and upskill their staff in a way that is both time and cost effective. In turn their staff will build confidence, employability skills and feel empowered, while better engaging their learners by offering more dynamic, accessible and personalised learning, thereby meeting their changing needs. The pitfalls of the uses of technology can be mitigated by ensuring that those in education policy and practice keep up to date with advances in cognitive psychology, and understand the limits and dangers associated with attempting to "outsource" human understanding to digital devices.

For anyone living in the 21<sup>st</sup> Century, fast pace adaptation will be ongoing, and we can expect non-linear change to continue to occur at an exponential rate. Traditional pedagogical approaches must be adjusted considering the following:

- The growing omnipresence of mobile devices, with individuals constantly connected,
- The permeation of technology across all industries and its impact on employability and the economic performance of the country,

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<sup>9</sup> Willingham D. (2013) Why don't students like school?

- The spread of artificial intelligence, automation and internet of things,
- The rise of the "personal cloud" of information from anywhere, at any time.
- The change of expectations with access and immediacy as the norm.
- Scarcer time versus increased productivity.
- Facilitation of more collaborative and efficient ways of working with crowd platforms, social networking, media sharing, gaming, virtual environments including virtual/augmented/mixed realities.
- An ever more diverse and complex information and multimedia landscape.
- A more holistic life, work and study environment.

#### What does it mean?

- Digital literacy is a necessary component of 21st Century education and employability.
- Mobile technology is increasingly central to most of us.
- The teaching and learning landscape is becoming more complex.
- New learning activities can be delivered that would not be conceivable without technology.
- Formal & informal learning are becoming more interlaced;
- Adaptable soft skills are required to "navigate" and operate in this new environment:
  - Critical analysis
  - Self-regulation and safeguarding
  - Communication and collaboration
  - Problem solving and creativity
  - o Digital literacy.
- Domain-specific knowledge remains as vital as ever to the ability to be both critically analytical and creative, due to limitations in the human working memory.<sup>10</sup>

Technological advances and more specifically the internet facilitate a "shift from thinking about teaching as providing information to thinking of learning and creating learning environments." This in turn creates a relationship shift between teachers and learners as the teacher is no longer the sole information holder and promotes an "evolution toward inquiry-based learning and toward the development of a learner-centred environment." 12

<sup>&</sup>lt;sup>10</sup> Sweller J. (1988) Cognitive load during problem solving: effects on learning

<sup>&</sup>lt;sup>11</sup> Orrill C. H. (2000) Building Learner-Centered Classrooms: A Professional Development Framework for Supporting Critical Thinking *Association for Educational Communications and Technology Annual Meeting* 

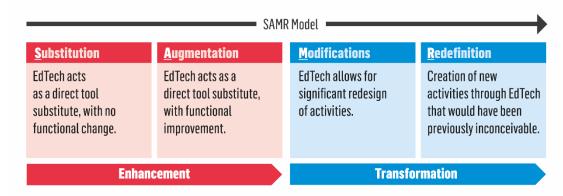
<sup>&</sup>lt;sup>12</sup> "I was thinking about the textbook – I guess in the beginning, I thought the textbook was all I needed to teach them. But, I've come to find out or realize that it's not all that I need. And, I don't want to shoot myself in the foot, but if the year was longer, I could do a lot more with them in terms of making them do research. Finding out information about different things. As opposed to just trying to give them this surface things that you get out of the textbook." https://goo.gl/5V12P5

The teacher's role is becoming the one of a coach and facilitator, guiding learners to take ownership of learning, through enquiry, interpretation, correlation and understanding. Learners need access to information and also the skills to interact with it. The role of the teacher as the subject expert remains paramount to guide learners in gradually taking ownership of their learning, encouraging them in developing their critical skills when reviewing the validity of information and in being more creative when interacting with content.

ETF's role is not only to set teachers' professional standards but also support teachers and trainers with their pedagogical and professional development. Digital and pedagogy are no longer divided but closely interlinked. ETF has the power to change the sector's perception of new technologies and, through its professional development programmes, promote the use of digital to enhance teaching, learning and assessment.

"Technology will never replace great teachers, but technology in the hands of great teachers is transformational" - George Couros

Technologies allow us to adopt new innovative practices: The SAMR model, developed by Dr. Ruben Puentedura, is designed to help educators enhance teaching, learning and assessment. "The goal is to transform learning experiences, so they result in higher levels of achievement for students." 13



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#### What can ETF do about it?

- Support teachers, trainers and leaders in developing their digital skills and understanding.
- Provide a pedagogical EdTech competency framework to guide them with their professional development.
- Better embed digital skills in our QTLS and ATS offers and develop a new advanced teacher EdTech status pathway (EdTechTS) to further promote, support and recognise EdTech pedagogic achievement and skills in the sector.
- Develop training material that will be customised to teachers' and trainers' needs and expectations: bite size, accessible, just-in-time from anywhere, at any time and from any connected device.

<sup>&</sup>lt;sup>13</sup> Examples of Lesson transformation <a href="https://www.emergingedtech.com/2015/04/examples-of-transforming-lessons-through-samr/">https://www.emergingedtech.com/2015/04/examples-of-transforming-lessons-through-samr/</a>

<sup>&</sup>lt;sup>14</sup> Dr. Puentedura R. (2013) SAMR model

 Facilitate the development of a digital learning community to share pedagogical practices.

## **VISION, MISSION AND VALUES**

#### Vision

The Further Education and Training workforce will be digital citizens, confident in using technologies safely, collaboratively and constructively to learn, live and work in a global society.

#### Mission

To inspire and support teachers, trainers, leaders and governors in the Further Education and Training sector in building skills, understanding and confidence in using new technologies to enhance the learners' journey and maximise personal, organisational and learners' outcomes.

#### Culture

Learning technologies are engaging and empowering - Harnessing new technologies can likened to riding a bike: challenging at first then fun, fast and rewarding.

#### **Values**

These are the recognised values of ETF as expressed for the EdTech environment.

**Responsive** - We listen & provide effective solutions. We foster responsiveness by promoting engagement and industry-relevant digital skills & processes.

**Expert** - We are passionate about education and digital capability to empower individuals & organisations.

**Inclusive** – We adapt our support and delivery to include everyone. We believe in technology to widen access. We share, listen and support. We value teamwork, people and interactions. We aim to build long lasting relationships. We reflect your views in our thinking and in our actions.

**Trustworthy** - We are open, honest and act with integrity. We are solution focused and empathic. We believe in safeguarding and delivering tangible and positive change.

**Striving for Excellence** - We aim for the highest standards in everything we do. We base our decisions on evidence and expertise.

### STRATEGIC PRIORITIES

#### **Seven Strands**

Our EdTech strategy is formed of seven strands that delivered together will achieve our mission and vision:

- Pedagogic EdTech Competency Framework (Digital Teaching Professional Framework - DTPF) – To ensure a common understanding of digital skills in the education sector and promote a set of digital teaching professional standards. [SP1]
- EdTech Teacher Status (EdTechTS) Mapped on the Digital Teaching Professional Framework to provide effective and progressive development and offer recognition of the digital capability of teachers, trainers and leaders. [SP2]
- Accessible Learning To continue to take down barriers to development and offer learning that is responsive to identified needs and encourages individualised progression through continual feedback. [SP3]
- 4. **EdTech Learning Community** To enhance research and innovation, and to build a community to share practices across the sector through improved collaboration, partnership and network opportunities. [SP4]
- Sustainability To place the FE and Training sector stakeholders at the centre of all our services and engage them in service developments and quality improvement, while encouraging the use of digital products to expand their own services and promote sustainability. [SP5]
- User Experience To develop, curate and improve access to content that informs, supports and inspires our members while enhancing the user experience. To design and facilitate the delivery of projects and programmes that will achieve our goals. [SP6]
- Tailored Training Services To align resources to strategic
  priorities to maximise grant investment, as well as develop income
  generation streams to better respond to specific needs through
  tailored development and services. [SP7]

## **EDTECH STRATEGY OVERVIEW**

# **EDTECH STRATEGY** 2018 – 2021

## **VISION**

The Further Education and Training workforce will be digital citizens, confident in using technologies safely, collaboratively and constructively to support learners to develop the skills to learn, live and work in a global society.

## **7 STRANDS**

- 1 EdTech Competency Framework (DTPF)
- 2 EdTech Teacher Status (EdTechTS)
- **3** EdTech Learning Community
- **4** Tailored Training Services
- 5 Accessible Learning
- **6** User Experience
- **7** Sustainability

## **MISSION**

To inspire & support teachers, trainers, leaders and governors of the Further Education and Training sector in building skills, understanding and confidence in using new technologies to enhance the learner's journey and maximise personal, organisational and their learners' outcomes.

## **VALUES**

Trustworthy
Responsive
Striving for Excellence
Inclusive
Expert

## **CULTURE**

Harnessing new technologies likened to riding a bike: challenging at first then fun, fast, empowering and rewarding.

## **AWARDS**

**Online Badges**