

FELTAG

Recommendations

Paths forward to a digital future for Further Education and Skills

Recommendations

for the Minister of State for Skills and Enterprise, Matthew Hancock MP

Based on the October 2013 proposals from the

Further Education Learning Technology Action Group (FELTAG),

amendments sent via the www.feltag.org.uk site, and revised by expert commentators

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1 Executive Summary

"Learning technology is the broad range of communication, information and related technologies that can be used to support learning, teaching, and assessment." (Source: http://www.alt.ac.uk/about-alt/what-learning-technology).

The Further Education Learning Technology Action Group (FELTAG) was set up in January 2013 by Matthew Hancock, Minister of State for Skills and Enterprise in BIS, as a sector group to make practical recommendations aimed at ensuring the effective use of digital technology in learning, teaching and assessment in Further Education and Skills. Members identified and developed six workstreams to gather evidence and ideas and to develop their recommendations.

At the outset, FELTAG agreed that:

- digital technology was not the end goal in itself
- Government cannot, and should not, provide all the answers
- ownership by the FE sector of FELTAG's outcomes is key

FELTAG's focus was divided into thematic workstreams:

1. Horizon-scanning:

The sector has to keep abreast of change.

Informed by research commissioned by the **Institute for Prospective Technological Studies,** it is obvious that the pace of technological change is accelerating and the impact of digital technology will continue to have a profound effect on the economic and social well-being of England, including the FE and Skills sector.

It is critical that our policy-makers, teachers, governors, and managers fully understand these technological developments and their implications for teaching, learning and assessment in vocational and adult education.

2. Investment and Capital Infrastructure:

Procurement must be appropriate and agile.

Investment in technological infrastructure is critical to ensure that the FE and Skills sector is capable of responding to the rapid changes in digital technology. It is vital that procurement of infrastructure is agile and capable of responding to fast-changing technologies and pedagogies. Providers will need to consider the need for any capital proposals, and whether learning can be achieved more effectively online, or virtually, or in partnership with commercial providers. If new buildings are needed, do they have industrial strength digital infrastructure capable of supporting learning any time, anywhere?

3. Regulation and Funding:

Regulation and funding must not inhibit innovation and its effectiveness in improving learners' outcomes.

During extensive discussions with sector stakeholders it became clear that regulatory and funding models have a significant impact on a providers' ability to innovate using learning technology.

If FE institutional cultures are to change, the regulatory and funding regimes must, at the very least, cease to inhibit innovation and ideally facilitate learning technology's optimal use to improve learner outcomes.

4. Workforce capacity:

The entire workforce has to be brought up to speed to fully understand the potential of learning technology.

One of the strongest themes that emerged from FELTAG's commissioned research, its online conversation and its surveys with teachers and managers was the need for significant investment in the knowledge, skills and understanding of the learning technology's potential among policy-makers, governors, principals, senior and middle management, teachers and support staff.

Benchmarks should be established for initial teacher education/training and teachers' continuing professional development so that their ability to understand and optimise the use of learning technology can be enhanced and refreshed regularly. This should include the use of assistive technology. Additionally, continuous professional development for teachers needs to be considered when purchasing any capital expenditure for learning technology.

5. Employers:

Relationships between the FE community and employers should become closer and richer, and enhanced by learning technology inside and outside the workplace.

It is clear from the research and sector discussions that a closer relationship should be established between employers and FE and Skills providers so that learning technology in and outside work are more effectively exploited.

There have been examples of excellent employer-provider partnerships using digital technology innovatively, for example, in some apprenticeships. This needs to be commonplace.

6. Learners:

Learners must be empowered to fully exploit their own understanding of, and familiarity with digital technology for their own learning.

FELTAG's research and conversations consistently referred to the under-exploitation of learners' skills, devices and technical knowledge when it came to the use of learning technology. The greatest resource available to FE and Skills providers in this domain is their learners. More effort needs to be made to engage and empower learners' use of digital technology - and the use of their own devices – in the learning process.

2 Background to FELTAG

An essential characteristic of learners in the FE sector is their diversity. FE students:

- learn in a wide range of places, including colleges, workplaces, and private training providers, and are funded in distinct ways
- often come from disadvantaged backgrounds and challenging circumstances
- frequently have not achieved highly at school, and may have English as a second, or additional language
- are aged between 14 and over 65, on courses between entry level and NVQ level 5, which
 may be "niche" (such as violin-making) or very general (like GCSE mathematics), academic
 or practical

Other key factors:

- many teachers have access to smart devices, and are keen to use them in the learning process
- some learners have great capability in using digital technology for learning, which can be used by FE providers
- Ofsted, the Skills Funding Agency and Ofqual participated in FELTAG and recognised the need to ensure there is no conflict between innovation, funding and inspection. As a result, FELTAG suggests some small changes to the Common Inspection Framework and to the funding regime that should serve to support the kinds of change called for in this report
- many employers continue to invest in digital technology and there are excellent models of co-operation and joint investment between colleges and employers
- employers are looking for greater customisation, flexibility, and relevance, training people to use the equipment they will use in a job
- BIS established the Education and Training Foundation to underpin the FE workforce;
 supporting FELTAG's recommendations is one of its priorities and the foundation has the potential to build its own capability in this area

Learning technology, when astutely used by teachers and providers, can improve FE learners' chances and successfully influence what students do to learn, so that every student can reach their learning potential

This report from FELTAG:

- explains how digital technology helps us achieve our ambitions for education
- summarises the changes needed to enable this
- anticipates a Ministerial response which will help to facilitate it

FELTAG's recommendations draw on the exciting opportunities offered by digital technology to enhance the learning experience of millions of people in Further Education and Skills in England. The passion and drive behind this work reflects the notion that enormous strides can be made in the effectiveness and impact of learning when digital technology is harnessed and used creatively by learners, teachers and assessors.

The work of FELTAG addresses how digital technology can personalise learning, enabling people to take greater control of how they learn, when they learn, and how and when they are taught and assessed. Learning technology has the potential to support more peer-to-peer learning, emulating how adults learn once they are in work, and it can reach adults who are habitually unlikely to walk into a college or other building to learn, but for whom the digital domain provides enticing hooks.

FELTAG makes practical, innovative and broad-ranging recommendations for the England, demonstrating how learning technology can be used to deliver greater benefits to learners, teachers and providers.

It proposes an implementation phase focused on three key areas:

- Funding frameworks
- Assessment, accreditation and inspection
- Professional development of teachers and management

Key to implementing FELTAG's recommendations is collaboration and interplay between government, sector organisations and individuals. Building on the open process that FELTAG embraced in its work, the ownership of its outcomes is in the hands of everyone who continues to contribute to its development.

The process of developing FELTAG's proposals, with almost forty key recommendations for adoption by the FE sector and Government, demonstrates an innovative and inclusive approach to developing policy. The creation of an open-access document, which was determined through in-depth discussions, group meetings and online contributions from innovative and well-informed people in the FE world in autumn 2013, lays the groundwork for a system-wide plan for change. This was an example of how digital technology can help develop policy by using open source and crowd sourcing technology.

Its ambition is a radical one: to enable the system to become continually adaptive to an environment that creates new challenges for learners and teachers.

From the outset, members wanted the recommendations to be a 'living document', displayed online in a way that would offer the sector extensive opportunities for continuing refinement and involvement. If FELTAG was to focus on identifying how digital technology could be used to generate enhanced outcomes for FE learners, members felt that FELTAG itself should make the most of relevant digital technology. To make the process more innovative, learners and teachers

were asked to contribute so that their input could enrich a public discussion that might otherwise have involved only high-level managers.

Another reason for this approach was that sector experts and officials knew that there had been many, recent, valuable reports on the state of FE that had touched on opportunities provided by learning technology. They also knew that few of these reports, whether in England or beyond, had realised that potential because they lacked workable implementation strategies. To mitigate this, a team of sector experts and Government officials was assembled to identify the barriers and opportunities associated with the proposed changes. Then, at FELTAG's third plenary in late October 2013, the Minister decided its remit would be extended by 12 weeks to sharpen its focus.

The success of FELTAG led to the formation of a cross-departmental, ministerial learning technology implementation team (the Education Technology Action Group, ETAG), set up in February 2014, to support the use of digital technology across FE, HE and schools for the benefit of learners, employers and the English economy. It will explore the potential to replicate FELTAG's success across the education system.

The workstreams

- Horizon-Scanning: covering a 10 year horizon, including an externally-commissioned report on learning technology (see attached report)
- Investment and Capital Infrastructure
- Regulation and Funding
- Capacity and Capability of Providers
- Employers
- Learners

FELTAG's initial recommendations reflected the priorities of workstream participants: in the workstreams, 'scoping' documents were developed and workshops held to explore and refine the emerging ideas. Feedback was used to create 'straw men' proposals, which were circulated and improved.

The proposals were then road-tested with external stakeholders, including colleges. Google Drive, with public access, and the feltag.org.uk website were used to allow others to comment and amend proposals across the workstreams. While initial priorities were often sourced from the areas of interest of workstream members, common themes within each group soon emerged. In addition, some of the issues, such as tackling disincentives to innovation through funding and inspection, and technical issues around broadband capacity, were identified as priorities across the workstreams. We explore one of these, funding, in more detail below:

3 A funding system fit for a technological society

The Review of Adult Vocational Qualifications in England¹ (The Whitehead Review) suggested there is little incentive in the current system to deliver learning as quickly, flexibly and affordably through digital technology, as many individuals, employers and providers would like. Similarly, in FELTAG a salient theme was the need for an optimal end-to-end funding and regulatory system for the delivery of professional qualifications. A suggestion emerged that innovative training providers, who develop ideas for using newer digital technology and meeting market needs, should be more readily able to access state funding. FELTAG's participants felt the system should be stable, yet capable of becoming continually adaptive. They identified particular challenges in the following areas:

- the funding system should be more responsive and adaptive, able to support the rapid development and approval of funded qualifications and assessment methods that meet the changing needs of employers and learners
- the sector should be focused on outcomes rather than measurement and control of the learning process
- regulators should increase their knowledge and understanding of learning technology
- revised funding schemes and contracts would facilitate the entry of new providers

Other key observations included the view that there is little consistency of approach, with variable strategies for innovation and experimentation among teaching practitioners within colleges and other providers. Suggestions to address this included targeting leadership teams in FE institutions to strengthen their awareness of, and capability with, learning technology, and advising how they might best do this.

As Whitehead noted, trainers and teachers may not be sufficiently trained or confident in the use of new digital technology, and this may discourage its take-up due to limited access to continuing professional development opportunities, or personal preferences towards low-tech teaching methods. The challenge is often more to do with pedagogy than technology. Technology may simply not fit comfortably with their preferred, familiar pedagogical models.

In FELTAG a related theme that emerged was that the sector should boost access to initial teacher education/training as well as continuing professional development, including digital technology-enhanced learning-specific qualifications and informal continuous development tools for teachers; take-up could be incentivised in various ways.

FELTAG felt the sector should circulate its innovative ideas more widely, connect the best physical and online knowledge-sharing networks, and involve smaller providers who have great ideas but who often lack the confidence or the means to share them. It was noted that there are many

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¹ http://www.ukces.org.uk/assets/ukces/docs/publications/review-of-adult-vocational-qualifications-in-england-final.pdf

examples of excellent practice in the sector, including social media as a small feature of a larger process. What emerged was the need for ways to incentivise and enable wider dissemination and adoption. More providers, for example, might learn from ideas emanating from HE and schools, such as "TeachMeets", piloted in FE for the first time in September, and "Digital Leaders" schemes where digitally-skilled students are appointed to assist teachers and other students, drawing on the massive resources that learners can offer. There may be other ways too, such as practitioner research, repositories of lesson ideas, networks of providers and information about resources.

The European Commission initiative *Opening Up Education*² (September 2013), identified issues that chime with FELTAG's recommendations, calling for member states to support innovative teaching and learning environments, including through the use of structural and investment funds (ESIFs). It recommended that regulation be adapted to new forms of learning, including validation of skills acquired online, that teachers be supported to acquire a high level of digital competences and adopt innovative teaching practices through flexible training and education.

It also spoke of revised curricula in teacher education and new professional evaluation mechanisms which reinforced digital skills in education and training institutions, including among disadvantaged groups, and called for revisiting learners' assessments to ensure all skills acquired through digital learning are recognised. Significantly, it stressed the importance of ensuring that bottom-up innovations are well-aligned with the top-level goals and strategies of key stakeholder groups. All these are themes that emerged in FELTAG.

The Richard Review³, Whitehead review and CAVTL report, *It's About Work*⁴ recognised the need for employers to play a greater role in course development and delivery. FELTAG noted that the sector should harness the potential of digital technology to enable greater employer ownership of the vocational curriculum, and give vocational experts a platform for speaking *en masse* to learners. By virtue of the 'two-way street'⁵, it should also encourage educator input into relevant, higher-quality workplace learning.

Other recommendations included that the sector should: improve digital technology infrastructure for individual learning; create minimum requirements (notably, access to digital technology and infrastructure) for all FEIs; develop new, digitally-relevant investment criteria; and improve sector dialogue with funders.

http://ec.europa.eu/education/policy/strategic-framework/education-technology.htm

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/34708/richard-review-full.pdf

⁴http://repository.excellencegateway.org.uk/fedora/objects/eg:5937/datastreams/DOC/content

⁵ "The **two-way street** is about genuine collaboration between colleges and training providers, and employers... [where] employers are not just customers of vocational teaching and learning, but are engaged at every level in helping to create and deliver excellent vocational programmes" (CAVTL, p7).

4 'Horizon-Scanning Workstream'

In addition to the expert groups and online public discussions, FELTAG commissioned reports on digital technology use in FE. The first was a Horizon-Scanning Report. Its remit was to identify digital technology likely to improve:

- personal support for, and access to learning
- flexibility of provision
- learning effectiveness
- ways of assessing learning
- the ability of teachers to innovate
- data security and identity relevant to the FE sector as a 'learning system'

There is a lot of experimentation and research taking place in FE, driven in part by globalization and technological innovation. If the FE and Skills sector had effective evaluation and feedback mechanisms then the best of those innovations would be identified and more widely adopted. The potential of 'the system' to adapt to change rests on the balance between variation and selection, and that determines the extent to which emerging digital technology opportunities will be embraced.

Issues that emerged in this horizon-scanning report are:

- for digital technology to be a true 'game-changer' in the vocational education and training sector it needs to enable new economies of scale. An adapted version of Massive Open Online Courses (MOOCs) could fit the FE sector because of the flexibility for adult learners who are capable of more independent learning, and who need to learn at their own convenience and pace, and because of the potential for economies of scale
- adult learners already use social media platforms for their professional networks, and to share information and user-generated content, so they will expect a culture of not only 'Bring your Own Device' but 'Bring Your Own App' as a natural part of their learning environment
- providing video conferencing in the workplace, or virtual masterclass demonstrations, could give teachers and learners a virtual presence in different locations, and would enable big improvements in the 'line of sight to work'⁶
- One of the biggest perceived barriers to change is paper-based assessment. Digital
 technology has the potential to enable new forms of formative and summative eassessment. Modelling and simulation encourages learners to vary their strategies
 through feedback and reflection, and select those that are most successful. Digital

⁶ "A **clear line of sight to work** is critical because vocational learners must be able to see why they are learning what they are learning, understand what the development of occupational expertise is all about, and experience the job in its context. The real work context should inform the practice of vocational teaching and learning for learners, teachers and trainers." (CAVTL, p7)

- technology is also improving the quality of the formative assessment that teachers employ by providing more analytics and data visualisation
- human-computer interfaces that incorporate haptic (touch) and kinaesthetic (motion) are
 widely used in gaming and they have pedagogical potential for practice-based vocational
 education training. Haptic interfaces have already been used to increase authenticity in
 classroom learning in, e.g. medicine, dentistry and animal welfare
- learning analytics, which apply a pedagogical approach to educational data mining, are becoming increasingly used in online academic learning - but for the FE sector, off-theshelf analytics are unlikely to be sufficient. Nonetheless, there is a tantalising opportunity for improved selection of the teaching and learning strategies that lead to successful learning and labour market outcomes
- new and open management systems that provide a seamless integration of management and pedagogic elements, would enhance learning outcomes, with learners owning their data and being able to move between institutions and use the best tools for the job

Workforce attitudes and experience surveys

FELTAG conducted two surveys to investigate the technology-related attitudes and experience of teachers and leaders in the FE sector.

The first survey reviewed teaching practitioners' current perspectives on the use of learning technology in the sector, building on a previous similar survey. Its principal findings demonstrate that while there is a trend towards more teachers innovating with digital technology, this is *on their individual initiative* and support comes only from *peers* within their organisation:

- teaching practitioners increasingly use their personal digital technology experience and apply this to the circumstances of their learners
- teaching practitioners are more curious than fearful of digital technology and are using a wide range of products and digital technology in their practices
- there is a growing degree of collaboration between teaching practitioners with their colleagues and learners - but this is mainly confined to collaboration inside their organisations
- teaching practitioners increasingly regard themselves as independent professionals who
 explore their own use of digital technology, with few indicating that they expect guidance
 or direction from others

Clearly, confidence and capability in using learning technology is increasing among some teaching practitioners. However, what appears to be missing is the means to share these ideas and developments across the sector.

The second survey was conducted with managers to elicit their current perspectives. It showed why there is little organisational support for learning technology innovation, primarily due to:

• a lack of funding to purchase digital technology and provide release and support for staff to enable them to incorporate digital technology in their practices

- even with the most recent changes it is likely that risk-averse learning providers will shy
 away from fully exploiting digital technology in their operations until funding
 methodologies are perceived to be supportive of digital technology-supported learning
- lack of direction at a strategic level, which results in a fragmentation of practice across providers, curriculum areas, and levels of work
- reliance on individuals to champion innovation and exploitation of their willingness to support colleagues - managers particularly recognise their culpability doing this when they are short of resources
- lack of 'headroom' to support innovation and risk-taking, even where funding might be available in the sector; providers therefore leave innovation to others
- the lack of encouragement to staff to use or upgrade their competence with using digital technology. The result is that many focus their use on the mandated 'admin processes': registers, 'learner outcomes' versus the progress learners make, and summative rather than formative assessments that have diagnostic work with individuals at their heart

Managers also identified external factors that work against the use of learning technology:

- lack of credit and recognition for innovative uses of digital technology by key influencers such as Ofsted, awarding bodies and governing bodies, with associated lack of guidance on what would constitute 'good' and 'outstanding' practice across the range of digital technology use
- the speed of change in digital technology and the problems of individual institutions trying to assess particular new technology on their own, as providers are often reluctant to share information on costs and evaluation of new equipment, software or pedagogies. While technology changes rapidly, pedagogy may not
- technology policies focused on 'security' and 'e-safety' with few exemplar organisational policies on digital technology for learning and teaching
- little recognition that learning technology diverges between what is sensitive data relating to the administration of learning - and what develops independently and collaboratively between learners and staff - much of it beyond the college
- a focus on omission and error in inspection and audit systems which discourages experimentation and exploration of the potential of digital technology in the sector

Despite tight funding, the sector must find the means to foster learning organisations capable of adapting to the wealth of opportunities that digital learning technology can bring. To do this, they need freedom to take responsibility for long-term sustainable innovation.

This will involve fundamental and systemic change. Planning and investment must extend over *longer periods than the annual cycle* in order to plan for, and benefit from, economies of scale. Secondly, to be affordable, innovation must be *collaborative across the sector*.

Educational organisations have small margins for building investment funds, so this innovation requires them collectively to orchestrate small-scale local innovations if they are to reap the

benefits on a sustainable scale. From the teacher survey, we know that they are doing the innovation, and there are many examples in the sector of highly effective and innovative use of digital learning technology. The CAVTL report on digital simulations reported on a wide range of novel applications now being used. However it also reported that while teaching practitioners are keen to do this, senior management are less interested due to their 'hand-to-mouth' environment⁷.

Summary and implications of the research

Imminent digital technology developments will improve all aspects of learning and education, providing personal support for learning; access to education; flexibility of provision; efficiency and effectiveness of learning; assessment methods; teacher innovation; and data security issues.

The FE sector is keen to innovate, and is already doing so, but on a small scale and in a fragmented manner, without strategic support.

There is increasing confidence and capability in the FE sector in using digital learning technology. What we lack is the means to share these ideas and developments across the sector.

FE senior managers consider as barriers to the optimal use of learning technology: the lack of strategic leadership; funding methodologies that are too risk-averse to encourage innovation; and inspectors and quality assessors in the sector that counter moves towards innovation in teaching and learning.

All the findings point towards the need for a new approach, one that balances an ambitious top-down vision with a radically more collaborative bottom-up responsibility for innovation. Digital technology can support teachers in collaborative innovation on a wide scale, an approach that would be a world first - investment in digital technology innovation has invariably been in infrastructure and content, never in the human capital in education.

This approach could be extended to other sectors - it is needed more than ever in HE, where the sudden focus on the MOOC phenomenon exemplifies how non-strategic the HE approach to LT has been. Similarly, the school sector has no strategic focus for its digital innovation, lacking even an equivalent of Jisc to foster cross-institutional and cross-sector collaboration.

FELTAG therefore recommends that we invest in developing the capability of leaders, managers, teachers and service staff in FE so they can drive and respond to future digital technology

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⁷ The Potential to Coordinate Digital Simulations for UK-wide VET, Report to CAVTL, 2013. This view of senior management was not one expressed by CAVTL; it came from the report prepared by the London Knowledge Lab, commissioned by CAVTL, to explore the implications of the CAVTL proposal explore the feasibility of co-ordinated investment in digital simulation resources. With thanks to Jenny Williams for this clarification.

innovation in the sector: "the key to adapting to disruptive innovation...is not technology. It is to put people ahead of strategy"⁸.

A possible implementation strategy would be to use capital funding to provide an online 'innovation network' as a new approach to enable FE sector leaders, teachers and trainers to drive digital learning technology innovation. The specification should be agreed with teaching practitioners to provide the functionality to develop, test, and share innovative uses of digital learning technology, to collect the learning analytics that show the effects on learning, and to commission the further technology capabilities needed for the sector through collaborative development with the private sector.

This approach, together with FELTAG's further recommendations below for updating the work of Ofsted and the awarding bodies, would secure sector ownership of a flexible framework for change, and incentivise innovation, and thereby create the conditions for an agile evolution of the FE system.

FELTAG also welcomed the CAVTL Report's recommendations, that astute use of learning technology could have a strong bearing on each of the distinctive features of adult vocational teaching and learning, notably in the following areas:

- through the combination of sustained practice and the understanding of theory, occupational expertise is developed
- practical problem-solving and critical reflections on experience, including learning from mistakes in real and simulated settings, are central to effective vocational teaching and learning
- vocational teaching and learning is most effective when it is collaborative and contextualised, and takes place in communities of practice that involve different types of 'teachers' and when it capitalises on the experience and knowledge of all learners
- it often requires a range of assessment and feedback methods that involve both 'teachers' and learners, and which reflect the assessment cultures of different occupations and sectors
- it benefits from operating across more than one setting, including a real or simulated area of work, to develop the capacity to learn and apply that learning in different contexts
- occupational standards are dynamic, reflecting advances in work practices, and it is through collective learning that transformation in quality and efficiency is achieved

It was noted that there were opportunities to co-ordinate the investment of resources in learning technology through, for example:

BIS access to capital and programme-matched funding

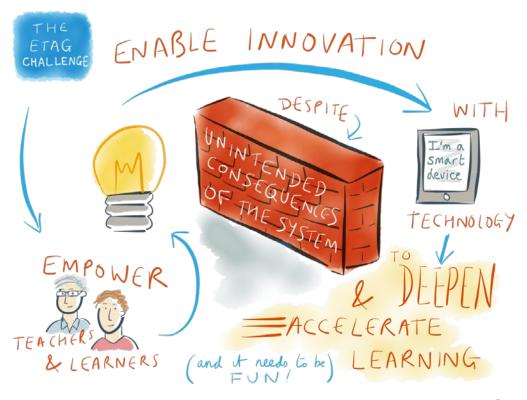
⁸ From Further Education Learning Technology: A horizon scan for the UK Government Foresight Horizon Scanning Centre. August 2013 (p 36). Written by Michael Reilly, with guidance from Professor Diana Laurillard.

- The Education and Training Foundation's investment in workforce capability
- the UFI Charitable Trust's desire to invest in innovative, large-scale developments
- employer willingness to invest and sponsor learning tech activities
- employer interest in increasing input into the curriculum so that industry gets the skills it needs and FE courses give learners the skills they need for life and work
- exploration of synergy with European initiatives and projects in digital learning

Where are we now, what happens next

In the year since FELTAG was created Jisc refocused and reprioritised its interests in the FE sector, including creating a £1m Innovation Fund; The Education and Training Foundation developed a strategic plan and hired permanent staff; the Offender Learning Virtual Campus was developed; NIACE's Maths App was published and the Maths Apps index established; the UFI Trust funded a Level 2 Maths MOOC and VOOC (Vocational Open Online Course) for FE Teachers. In addition, UK Online Centres were set up and more EdTech start -ups appeared. Good progress is already being made. To build on this, the following section sets out FELTAG's final list of recommendations based on contributions from FELTAG's members, guest members and public conversations with the FE and Skills sector.

Following these recommendations, a Ministerial response will be published and the FE and Skills sector will be expected to respond to the recommended actions. In addition, as much as possible will be used to cross-pollinate the new Ministerial cross-sector Education Technology Action Group (ETAG).



5 FELTAG's Recommendations

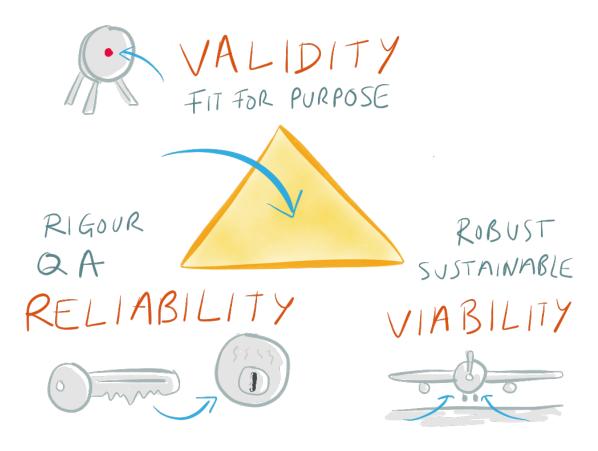
Learners

- 1. scaling up the Digital Leader: empowering learners with digital technology by encouraging participation in 'Digital Leader'-type schemes
- 2. increase learner influence in each provider's teaching and learning strategy in OFSTED's Learner View survey include the technology-enabled learning-related question: 'The technology and online learning resources support my learning and I can access them from anywhere, anytime and using any computing device (mobile, tablet, computer, etc)'
- 3. assistive Technology: providers need to make more use of Jisc's Techdis in order to raise levels of awareness and use of Assistive Technology
- 4. sector providers to be made responsible for identifying, supporting and developing learners' digital capabilities so that they can demonstrate their online skills to employers e.g. ITQ and become active digital citizens



Employers

- 1. employers should play a more integrated role in the development and delivery of FE curricula. These employers should specify which digital skills they need
- 2. identify to what extent digital technology can help get greater engagement of employers in the design and delivery of learning
- 3. an innovation fund should support leading-edge apprenticeships, traineeships and internships that use a high degree of digital technology in their delivery
- 4. employers and FE providers should work together to scale up existing 'best practice' learning technology network-building
- 5. encourage and support the use of collaborative MOOC approaches in the FE system, including the development of online courses, such as VOOCs, between groups of providers, awarding bodies, employers and e-learning companies to avoid duplication and increase the vocational sector's international visibility, engage with new markets, and increase economies of scale
- 6. consider how SMEs can build the digital capability of their staff and discuss findings with a partnership formed from local FEIs and Local Enterprise Partnerships

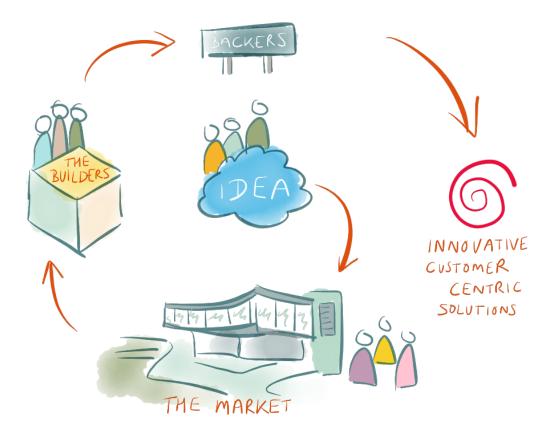


Capability and Capacity of FE and Skills Providers

- 1. encourage the development of programmes to professionalize FE governors, principals', managers' and teachers' use of learning technology, building on the best current models
- 2. all providers to have a learning technology strand in their teaching, learning and assessment strategy, which will form part of Ofsted's inspection framework
- 3. raise profile of appropriate and relevant accreditation schemes, such as ALT's CMALT, which accredits the learning technology capability of staff, and the RAPTA self-assessment tool, which assesses how effectively an organisation uses learning technology
- 4. Jisc to consider the realignment of its Regional Support Centres (RSCs) to play a bigger role in FE; FE providers to strengthen their relationship with the RSCs
- 5. colleges to simultaneously run a national annual 'Learning Tech Development Day', centrally-coordinated by Jisc's RSCs with streamed Ministerial input, where tutors and learners are trained. Include REal Deal /TechDis In Book Social Media platform for learners with difficulties; use this to spearhead provision to permanently allow disabled learners to communicate across provider institutions
- providers with new and innovative ideas should use available research, and encourage
 and support new research before making decisions about the purchase and deployment
 of digital technology for learning
- 7. all FE sector staff should ideally have minimum basic online capabilities and be on a progression path towards more advanced online tutoring skills
- 8. identify public sector online learning content that could be useful for functional skills and make this available under an OGC licence
- scale up the impact of cutting-edge teaching a day a week in VE (Teach Too) by screening such classes on a video-sharing platform, crowd-sourcing questions using Twitter, etc.
 These should be introduced and sponsored by the Minister
- 10. 'teach-the-teachers' how to design on-line learning materials on their own websites using open-source packages
- 11. mandatory (practical) module on all teacher training courses on effectively using digital technology tools for teaching and learning, including online
- 12. The Education and Training Foundation to model ways to help FE providers and employers to create Learning Technology Innovation Partnerships with Local Enterprise Partnerships (LEPs)

Investment

- ensure that prior to the approval of capital expenditure on college building expansion, evidence is provided that alternative delivery methods have been considered, including mediated by learning technology and if this is approved, it needs to be 'future-proofed' for learning technology
- 2. providers should aim to provide industry-standard technological infrastructure (including broadband resilience and bandwidth) to maximise the effective use of learning technology
- 3. create a Technology Exemplar Network using a 'hub and spoke' model, and link to Jisc's RSCs
- 4. ensure regulatory rules for capital investment keep pace with digital technology
- 5. exploit opportunities for low-cost collective licensing for shareable online content
- 6. ensure the Technology Strategy Board's innovation funding for digital technology, as agreed in BIS's International Strategy, materializes. Encourage TSB to develop greater synergy and alliances with colleges



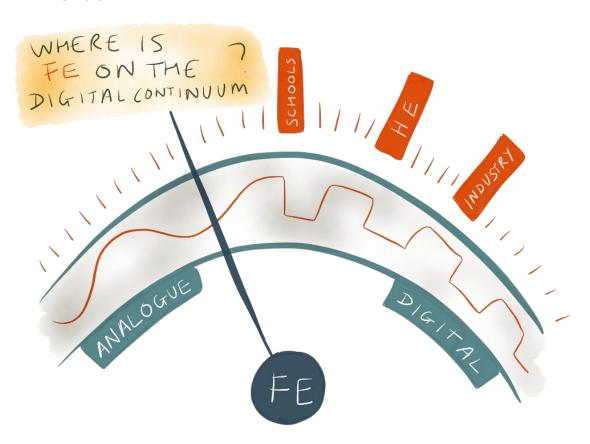
Regulation

- ensure Ofqual's review of the regulation of Vocational Qualifications and other associated regulatory developments supports, and does not hinder, the use of digital technology in teaching, learning and assessment of regulated qualifications. (See Ofqual's Corporate Plan 2013 - 2016)
- Federation of Awarding Bodies (FAB) and Joint Council for Qualifications (JCQ) to work
 with Ofqual and others to increase awareness of the optimal uses of digital learning
 technology and develop confidence to use it in assessment and quality assurance in the
 awarding industry
- 3. Ofsted's inspection framework to include a requirement for all providers to explicitly embed learning technology in their teaching and learning strategy. Ofsted to increase understanding of quality and effectiveness of technology deployed by providers. Comprehensive training to be provided to Ofsted inspectors to enable them to identify good practice and evaluate the effectiveness of deployed learning technology
- 4. encourage awarding bodies to increase the amount of e-assessment across FE, including for apprenticeship qualifications developed with industry partners; aim for half of all VET assessments to be online from 2018/19
- 5. awarding bodies to explore the use of "open badges" to accredit learning in virtual environments and digital skills
- Ofsted to include a new judgment, 'Capacity to Innovate using learning technology' or include this under Leadership and Management in the Common Inspection Framework



Funding

- 1. the funding system must fully support the adoption of new digital technology and learning methods. It must challenge and adapt its quality and success measures in accordance with the leading edge in the FE sector
- 2. the funding methodology should encourage 'learning presence' not 'physical attendance'
- 3. raise Skills Funding Agency's awareness of courses that maximise the effective use of digital technology in learning and assessments
- 4. mandate the inclusion in every publicly-funded learning programme from 2015/16 of a 10% wholly-online component, with incentives to increase this to 50% by 2017/2018. This should apply to all programmes unless a good case is made for why this is not appropriate to a particular programme
- 5. providers need a drive to develop and use high quality online learning content; funding incentives; the relaxation of current GLH definitions will encourage them to take this forward



Appendix

horizon-scanning report (Ariel Research Services)

Original FELTAG Member Organisations:

157 Group

AELP

AQA

Association of Colleges

Association of Learning Technology

Blenheim Chalcot

City & Guilds

Department for Education

Department of Work and Pensions

Edmix

Federation of Awarding Bodies

The Guardian

Home Learning College

Jisc

Learndirect,

London Knowledge Lab

Ofqual

Ofsted

Open University

Oxford, Cambridge and RSA Examinations

Pearson

Plotr

TEN Group/Norwich City College

Toshiba

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Seb Schmoller

Rod Smith, Pearson

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Nick Lambert

Further Reading

Horizon report 2014

http://www.nmc.org/publications/2014-horizon-report-higher-ed

Beyond Prototypes

http://tel.ioe.ac.uk

System Upgrade-Realising the Vision for UK Education

http://tel.ioe.ac.uk/wp-content/uploads/2012/06/TELreport.pdf

The Impact of Digital Technologies on Learning

http://educationendowmentfoundation.org.uk/library/the-impact-of-digital-technology-on-learning

Decoding Learning

http://www.nesta.org.uk/publications/decoding-learning

Learning in a Digital Age

http://www.jisc.ac.uk/whatwedo/programmes/elearning/digilifelong.aspx

Innovating Pedagogy

http://www.open.ac.uk/blogs/innovating

The Future of Learning-Preparing for Change

http://ipts.jrc.ec.europa.eu/publications/pub.cfm?id=4719

Scaling Up

http://www.ufi.co.uk/reports/ufi-report-scaling-achieving-breakthrough-adult-learning-technology

Commission on Adult Vocational Teaching and Learning

http://www.excellencegateway.org.uk/cavtl

Digital technology in vocational teaching and learning

http://www.skillsdevelopment.org/research_projects/culture_coaching_collaboration.aspx

