JGP0050

Written evidence submitted by Jisc

Treasury Committee have opened a new call for evidence which will look "into jobs, growth, and productivity after coronavirus. It will examine how the Government can reduce and mitigate economic scarring and job losses after the pandemic, how much difference the Government can make to economic growth, and what has caused the UK's productivity growth to be persistently weak"

Jisc is responding to the following two questions:

- What policies are effective in helping people to reskill, move between occupations and sectors and take advantage of new opportunities? How could these be best implemented in the aftermath of the pandemic, and as technological developments such as artificial intelligence change the nature of work?
- Does the Government have the right mix of policies and a coherent strategy to promote long-term productivity growth and create new high-quality jobs?

About Jisc:

Jisc is the UK's digital lifelong learning and research body. Its vision is for the UK to be the most digitally advanced education and research nation in the world. Jisc operates, protects and develops the Janet network – the ultra-fast UK National Research and Education Network (NREN), enabling access to the digital infrastructure that UK education and research relies on, with built-in cyber security protection. Jisc provide technology solutions for colleges, universities and research institutions as well as public sector bodies, helping save time and money by negotiating sector-wide deals and providing advice and practical assistance on digital technology. Jisc is funded by the UK higher and further education and research funding bodies and member institutions. Jisc has recently merged with HESA (the Higher Education Statistics Authority) enterprise, enhancing Jisc's ability to support the education sector to use data to plan their business operations and improve efficiencies. Through Jisc's merger with HECSU (the Higher Education Careers Service Unit) this year, the increased use of data to improve the careers, advice and employability of students in colleges and universities will support the Government's priority in addressing post-Covid jobs.

Answer:

The Government's proposed Lifetime Skills Guarantee and affiliated Skills and Post-16 Bill are policy interventions that offer strong potential to improve productivity and create jobs through their aims to deliver flexibility in the skills and education system that will enable learners to move between occupations at various stages throughout their lives.

Jisc's views in reference to the shaping of the aforementioned skills policies, align with the recommendations made in this report by the British Chamber of Commerce which calls **for a 'root and branch reform' of the UK's training system** to help businesses access the skills they need to boost productivity.
They identify several **key principles** which businesses have told them they want from the skills system, of which Jisc agrees two are paramount:

- **Skilled People:** Employers want to support the development of adults in the workplace to ensure people are effective in the job role and can contribute to the success of the business.

- **Flexibility**: Employers want access to high quality, accredited and cost-effective training and development - available flexibly online, in the classroom and in the workplace.

Creating the optimum digital conditions in a world fundamentally changed by the major shift to online delivery during lockdown, will enable better transitions into work and across occupations, particularly for those vocational disciplines and technical qualification that match roles and sectors that have been further transformed by technology.

In order to be most effectively implemented, Government needs to consider aspects of the Lifetime Skills Guarantee that require the optimum digital and data environment to support tertiary education providers facilitate the proposed flexibility and modularisation of learning and skills in delivering training and education online that both employers and learners require.

Jisc, in its role as providing digital connectivity, expert advice and guidance to colleges and universities during the pandemic, supported the tertiary education sector to deliver the wholesale shift to online delivery of teaching and learning during lowdown. Several key issues came to the fore as identified by Shaping the Digital Future of FE and Skills – a Jisc led partnership with the Assocation of Colleges and leaders across the FE sector, to review what education providers require to build back better post-Covid, in an education system that has been transformed by digital delivery.

As part of the research project, carried out in the summer of 2020, several issues and supporting recommendations were identified that would help the college sector level up its offer to address current and future skills gaps, based on the enhanced requirement to deliver teaching online, as well as in person.

These following issues need addressing in the Lifetime Skills Guarantee, Skills and Post-16 Education Bill as well as cross-cutting policies (including the Government National Data Strategy and National Artificial Intelligence Strategy, to create the right conditions for achieving most positive impact to help learners and those already in employment to reskill, train and move between occupations:

1. Improving the digital skills of Further Education (FE) teaching staff to ensure the Government's National Skills Fund is invested in the most effective way for FE providers to deliver Level 3 courses: According to Jisc's 2020 Digital Experience Insights survey of 2,685 college teachers, only **38% of FE staff** agreed that their organisation provided guidance about the digital skills they need in their job role, and 21% agreed that they had the chance to assess them.

2. Levelling up college connectivity: SDFFES identified recommended to Government that **Improving sector connectivity and resilience is** vital that colleges are supported to address the different levels of connectivity across all regions of England.

   - **13%** of English FE (**32 English colleges** (excluding independent specialist colleges) **have less than 1Gb/s primary** connections despite **Jisc providing 1Gb/s bandwidth as part of the subscription**. The reason they don't have 1Gb/s connections is that they have not purchased the digital infrastructure to enable them to take advantage of it (n.b. all of these colleges are outside London where every college has a 1Gb/s connection).

As part of the Lifetime Skills Guarantee's commitment to upgrading the college estate, it is critical that such investments considers digital infrastructure as a key opportunity to future-proof the sector's ability to level up and deliver workforce-suitable teaching and learning methods. Levelling up all colleges to enable them to support all learners within their communities to get into work with relevant skills, knowledge and behaviours suitable for industry 4.0 jobs. Supporting colleges with their **digital infrastructure investments, planning for new builds/refurbishments** and **curriculum development.**

3. Enabling colleges with the right data and digital environment to be agile and responsive so they can respond to differing funding opportunities such as National Skills Fund: Supporting colleges to deliver **bite sized learning, remote assessment and micro credentials and** delivering learning that is modularised (flexible) and blended between online and 'in person'

Improved use of data across tertiary education - microcredentials:

In order to deliver modularised, flexible learning efficiently in both colleges and universities, a digital record of a learners' accreditation for prior working as well as prior learning is vital for employers, providers and students alike. Jisc proposes that **micro-credentials to enable a 'Lifelong Learning Record'** should be introduced as part of the Lifetime Skills Guarantee.

Through the micro-credentialing of bite-size knowledge, skills and behaviours the 'system' will be able to identify when a learner has displayed competence in different aspects of their learning and add these to a lifelong learning record. As the expectations of employers change these micro-credentials will be able to map a learners' knowledge and skills to these new requirements. Microcredentials would also help identify skills deficits by employers and employees needed in order to upskill to a level required for a new role as well as provide a means for transitioning to different occupations with more efficiency. Thet would also support a wider need for better careers advice and guidance for learners in further education which will become increasing important as both adults and employers seek to navigate the learning pathways available to upskill and move between occupations. Following Jisc's merge with HECSU who provide careers advice and guidance for HE students, Jisc is developing a similar service for FE learners.

Underpinning the ability to introduce microcredentials for post 16 learners, is the better availability and use of data as well as improving connectivity and linkage between existing data sets. Notably, there is significant potential for increasing the connecting of learner focussed data within Government, by expanding and bettering the use of and access to Unique Leaner Numbers (ULNs). Most UK learners have been issued with ULNs that are linked to their Personal Learner Record (PLR). ULNs have tremendous potential to support and enable Lifelong Learning by linking data on learner education, training, and skills to capture qualifications and accredited learning wherever and whenever it occurs. For example, enabling better use of ULNs could facilitate credit transfer for students switching courses or institutions and enable portfolio or accumulated learning over time. It will also support the growth in demand for accredited and verifiable micro-credentials linked to learner records.

There is a discrepancy in the use of such types of data, in contrast to the inconsistent use of ULNs, the UK Provider Reference Number (UKPRN) is a unique number allocated to providers after successful registration on the UK Register of Learning Providers. The UKPRN is used extensively in education by funding bodies, sector agencies, UCAS, and Government bodies to identify and link

data on providers. In higher education applicants and students are issued with a separate identifier by UCAS, HE providers, the Student Loan Company, HESA, professional bodies and others. Because ULNs are not universally issued, providers and funders cannot rely on them under the current system. The issuing of a ULN to all UK learners and its use beyond secondary and further education should be made mandatory by Government, like the UKPRN. It is as portable, secure and useful as a national insurance number and would deliver long-term benefits to individuals, to Government and to the nation's future prosperity in an increasingly digital world.

Jisc produced a [future of assessment report](#) and is working with various bodies including Qualifications Wales and awarding bodies to **establish new digital assessment approaches** including flexibility for hybrid delivery, such as just in time, simulated assessment and micro-credentials which will support modular delivery of the National Skills Fund.

Similarly, for HE, as part of Jisc's work to understand the impact of Covid-19 on Higher Education and explore the future of digital learning and teaching, Jisc alongside sector partners investigated and released the **flagship 'Learning and Teaching Reimagined: A New Dawn for Higher Education?'** report, involving high levels of engagement with sector leaders, staff and students. In preparing for the 2021 academic year there is common agreement that the main barriers to greater online learning and teaching relate to culture and not technology.

A move to blended learning at scale underpinned by a flexible funding system as described with the Lifelong Loan Entitlement will further open higher education by offering more adaptable, inclusive and progressive routes to reskilling and upskilling opportunities. These in turn will broaden the reach and further heighten the appeal of higher education.   One of LTRs' key recommendations is:

> *1: Universities to use their strategic and structural planning processes to effect the digital transformation of learning and teaching, ensuring that sponsorship is provided by governing bodies and executive teams.*

This includes:
- The embedding of modularised learning across Universities requires a significant shift to ensure digital becomes a central feature of learning and teaching, requiring the support of governing bodies and executive leadership.
- The major cultural shift caused by the COVID-19 crisis also needs to be recognised: it requires resilience and a growth mindset to lead and support staff through such change. The introduction of lifelong, flexible student finance could enable organisations to provide learners with greater options to study anywhere, anytime and in any mode, opening-up higher education to many potential students for whom it may currently be out of reach.
- There is also significant potential to encourage Universities to offer high quality, shorter courses, enabling the upskilling of the population in a flexible way that not only meets the changing demands of employers but can embrace new ways of working that have come to the fore during the Covid19 pandemic.

Role of AI:

AI has long been transforming industry and professional services.   Jisc recently produced a [report](#) on current uses of AI in colleges and universities just last month, as part of announcing it has established a new National Centre for Excellence in Tertiary Education.   With the increased reliance and use of technology in education providing a rich digital landscape, a stronger data foundation

would enable widespread innovation in the use of advanced technologies in teaching, learning, assessment and deliver sector-wide efficiencies.

- Does the Government have the right mix of policies and a coherent strategy to promote long-term productivity growth and create new high-quality jobs?

Jisc's observation isiat there are a range of policies that could offer effective means to enable the Government's levelling up agenda and boost productivity but there remains a risk that none of these are joined up so the impact is lessened. The Skills and Post-16 Education Bill, the National Data Strategy, the National Artificial Intelligence Strategy are to name but a few that Jisc see as a priority for join up as they provide the right mix of policy conditions in education, data use and infrastructure considerations that are a fundamental backbone to create the right framework for building back better across both business and education. It is vital that such polices are seen as one and not separately, especially regarding the great need for society to experience equitable digital connectivity that enables both effective learning, work, employability and access to public services, in post-pandemic Britain.

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