Skills Challenges for C21 – three big issues

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The issues:

There are potentially hundreds, but here are three inter-related topics:

1. Skills, who pays for them?
2. Employers' in-house training capacity – the workplace as a place of learning?
3. The impact of digitalisation on work and skills

Who pays?

There are only three sources of funding:

- The state via taxation
- The individual
- The employer

We have a rough current agreement about initial E&T, but none that works about LLL. How are we going to pay for up and re-skilling for adults and for LLL in future?

Some employers seem to be doing (and paying for) less

The harsh reality is that there has been a steady and cumulatively massive fall in the volume of employer provided training. Latest estimates by Greater London Authority Economics suggest a total decline of training hours per person employed between 1997 and 2017 of 65% across the UK outside London and 72% in London.

Employer spending on skills is also declining, with estimates of the reduction for the last decade ranging from 15-30%. Far from stepping up to the plate, many (though not all) employers are retreating from skills investment.

The levy is not a magic solution

The apprenticeship levy in England is not working as was intended. Providers, including University business schools are helping employers to ‘game’ the system.

How do we pay for more adult education and training?

The workplace as a site of learning

- *Opening the Black Box* – SDS Skills in Focus 2013
- *Unlocking workplace skills* – CIPD, 2015

We know next to nothing about employers' in-house training capacity, but the fact that even very large employers (JLR, BT, Stagecoach, Unilever) have to contract out their apprenticeship provision to ITPs suggests it is weak.

We should be worried, because the vast bulk of adult learning takes place in and through work. Firms' ability to facilitate this may be weaker than we need.

What can colleges do to help?

- Training of trainer and HRD courses
- Shared lecturer/trainer development
- CAVTL's two-way street model of dual professional.
- Workplace innovation and upgrading job design

Is there are role here for SDS?

Digitalisation and its impact on work and skills

The structure of what follows:

1. Macro-level issues
2. Existing trends in work and employment and path dependency
3. Education, training and skills
4. Implications for policy

Macro-level issues 1:

- The impact of AI, digitisation, robots, etc on work is mainly unknown at present.
- Most attention is focused on the potential impact on employment levels –ranging from digitopia to robot apocalypse.
- There is considerable debate about what levels/types of human skills will be most at risk of replacement

Macro-Issues 2:

Digitisation is one challenge among many:

- Low paid work
- Poor job quality and abusive employment relationships
- Lack of employee voice
- The low status of HR within management
- Lack of investment in plant and equipment
- Low productivity
- Poor management practices

These are not new – we had a 'gig' economy in C19 dock labour.

Macro-issues 3:

The **pace and scale of digitisation** will vary enormously across:

- Sector and sub-sector
- Firms within sector (remember the ‘long tail’)
- Occupation and jobs within it
- Nations and localities therein

Between country differences will be driven by:

- Labour market structures and regulation
- Strength of unions and social partnership
- Government's ideological stance towards jobs, labour markets, regulation, etc
- Sectoral mix
- Wage structures and levels
- Companies' product market and competitive strategies and technological absorptive capacity

Fundamental divide:

1. Countries that see digitisation as a an unstoppable ‘force of nature’ (c.f. New Labour’s approach to globalisation), with the market in the driving seat and the main role of government being to help ameliorate the worst impacts.
2. Countries, like Germany (Work 4.0) that choose to try to shape how, with what effect and to what end(s) digitisation is adopted.

Where does Scotland want to be?

- Technology is not destiny
- Technology is a servant not a master
- Digitisation presents a spectrum of potential effects and outcomes, between which policy can make choices. The state has agency.
- Government's Labour Market Strategy sets a context for thinking and action.

"There is no need to panic about the impact of digitisation, but there is a need to plan" – TUC.

The dangers of path dependency

- Large segments of the Scottish economy and labour market are low waged and in SMEs.
- We have a long tail of poorly performing firms across the UK (JP Morgan/CIPD project)
- Our record of investment in plant and equipment is very weak.
- We have major problems with the take-up of high performance management practices

The results from SES:

- Skill-biased technical change weakening
- Demand for some forms of skill falling
- Proportion of graduate jobs has stalled
- Training times are down
- Take-up of high performance work practices has fallen
- Work intensification has risen.
- LFS analysis shows that across the UK, since 1997 hours of training provided by employers have fallen by about 70%.

A fundamental choice

- Firms see labour as a cost or factor of production

VERSUS

- Firms see labour as a source of creative spark or resource to generate competitive advantage.

We know a lot of UK firms favour the former rather than the latter.

As a result of all this……

It seems plausible to suggest that many firms/organisations in Scotland will be slow, late adopters of digitisation, will struggle to use in imaginative ways, and will adopt it primarily to reduce labour costs. Digitisation may be used for closer monitoring and control of work, reduced discretion, and de-skilling, rather than to augment human labour and help create high discretion, autonomous working.

The impacts of digitisation on skills

1. The creation of new digitally-centered jobs and associated skill needs (e.g. cyber security manager). The number of such jobs may be quite small.
2. The need for digital skills in jobs that are not primarily digital
3. Wider changes in work and jobs (e.g. unbundling and re-bundling tasks. Australian research suggests that workers now spend 2 hours less per week on physical and routine tasks than they did 15 years ago.

The state of play?

- Relatively limited UK research on any of these three yet. There is lots of speculation, there are few real facts.
- In Whitehall, DDCMS is taking the lead. DfE is not. What is happening in Edinburgh?
- A few sectors have had a go at thinking through the impacts of digitisation (among other changes) – e.g. Retail Consortium.

Barriers to re-skilling the workforce

- A **culture of lifelong learning is lacking**, and people (both managers and employees) think that learning is for the young.
- **Motivation is lacking** as people don't see a need for digital skills, and analysis by the OECD (forthcoming) suggests that this is often the case with precisely those workers whose jobs are most liable to be impacted by digitalisation.
- There is a **lack of leadership** on the issue within organisations.
- The **resources** (time and money) to support new learning are hard to find.
- People and organisations are unable to easily find training that is **relevant to their needs**.

Broader skill changes – vague lists

1. communication skills,
2. organisational skills,
3. writing, planning,
4. detail orientation,
5. teamwork/collaboration,
6. problem-solving,
7. time management,
8. research,
9. computer/digital skills

IN THAT ORDER – but what do these categories mean

Employers are notoriously incapable of specifying skill need in the UK

- Lack of employer-based LMI
- Vague categories
- Tools (software packages) rather than actual skills

Information and data is lacking

- Employers Skill Survey is not much use for this
- What alternatives are available?
- How do we help employers to think through their skill needs (digital and more generally)?

Shadbolt Review of Computer Science degrees:

"a clear challenge is that employers are often divided on where the problem lies….we found that employers disagree on what technical skills Computer Sciences students should be taught, although the balance of evidence points to support for HE providers teaching the fundamental principles of Computer Science, and encouraging and enabling students to learn and adapt to new technologies over their careers. This runs counter to an opposing school of thought that has been evident from some employers, that suggests that they want graduates with the skills that reflect the most up to date technological trends"

(Shadbolt 2016: 5)

A few glimpses of implications for specific jobs

Accountancy:

"It is worth noting that while the process of cutting entry-level, process-centric roles in favour of machines may favour short-term efficiency, it will almost certainly have a disastrous impact on future talent pipelines by creating significant shortages at newly qualified and mid level in the next three to five years".

UK Digital skills partnership

Essential digital skills framework:

1. Communicating – in order to communicate, collaborate and share online
2. Handling information and content – find, manage and store digital content securely
3. Transacting – apply for services, buy and sell, and manage transactions online
4. Problem solving – find solutions to problems using digital tools and online services
5. Being safe and legal online

Pretty minimalistic stuff?????

English Digital Skills Entitlement

- An adult skills entitlement (to free tuition) for post-19s without prior qualifications – currently for literacy and numeracy
- Announced by DfE in 2016
- Supposed to be rolled out in 2020
- Design of the Entry Level and Levels 1 and 2 courses and quals currently out to tender.
- No extra cash and the post-19 AEB has been cut by 45% since 2010.

LLL will be key!

- There is a broad international consensus that LLL for all will be key to ensuring that workers and citizens are equipped with the ability to respond to change.
- How will this be funded?
- Who will actually design and deliver this provision?

Final Thoughts!

Left to their own devices, many firms will struggle to do this well.

If we have societal and broader economic objectives, the state will have to assist and sometimes guide and incentivise.

The model offered by the Finnish workplace innovation programmes (Tekes) is an important one that joins up technology uptake, workplace change, work organisation, job design, quality of working life, skill acquisition and usage. Stop seeing policy in silos!

And……

Without capacity (in government and in whatever agencies and actors it chooses to deploy in this field) adequate strategies can neither be crafted nor delivered.

Where do we want to go? What are our aims and objectives? How do we wish to proceed? Or are we just going to let things happen and see how it turns out….?