Educating for the modern world: a report review

Educating for the modern world

Lisa Rowe

Centre for Work Related Studies, Chester Business School, University of Chester, Chester, UK

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Abstract

Purpose – This review explores the Confederation of British Industry Education and Skills Annual Report (2018), which considers the issues and challenges facing employers in managing future workforce requirements against a backdrop of unprecedented global change. The review examines the evolvement towards the broader competencies of problem solving, resilience, communication and leadership to address concerns of a growing talent shortage. The review incorporates debate surrounding the relevance of student-owned identity, work-based learning, degree apprenticeships, lifelong learning and reflective practice. The purpose of this paper is to share a practitioner's view of the report and provide a range of recommendations to develop and improve employer and higher education institutions practice.

Design/methodology/approach – This review combines desk research combining an industry-based perspective with a literature review to effectively consider the implications upon current and emerging higher education institutions and employer practice.

Findings – There were a number of key themes which emerged from the report. These include the need for effective, employer-led curriculum design, resilience building strategies, effectively situated workplace learning, the creation of time and space for reflective practice and normalising lifelong learning.

Research limitations/implications – As global change and technology continues to gather pace, skills demands will shift, new programmes and competitors will enter the higher education market and opportunities, funding and resourcing will rapidly change in the context of government policy, impacting upon employer appetite and strategies for supporting lifelong learning. This means that additional findings, beyond those highlighted within this review may emerge in the near future.

Practical implications – There are a number of practical implications in supporting skills development in the workplace from this research. These are reflected in the recommendations and include the development of flexible, innovative and collaborative curricula and effective work-based pedagogies.

Social implications – This review is of particular social relevance at this time because of the alarming fall in part-time and lifelong learning numbers juxtaposed with the threat of funding cuts and United Kingdom Government's failed initiative to expand the number of apprenticeships in the workplace to 3m new starts by 2020. Originality/value – This review is based upon one of the first published skills reports of the employers' perspective within the new apprenticeship policy context in the United Kingdom. As a result, the work offers a unique insight into the emerging challenges and issues encountered by higher education institutions and employers working collaboratively in the twenty-first century business environment.

Keywords Skills, Degree apprenticeships, Reflective practice, Lifelong learning, Work-based Learning, Resilience

Paper type Viewpoint

Context

In total, 28,000 institutions are in the business of preparing over 207m students for work against an unprecedented backdrop of rapid and relentless global change, requiring resilient and adaptable, work-ready graduates (UNESCO, 2017; Webometrics, 2018). The Confederation of British Industry/Pearson Education and Skills Report (CBI, 2018) is therefore a timely reminder for educators of the critical requirement to maintain pace with global demand for a modern workforce, described by Schwab (2017) as the fourth industrial

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Journal of Work-Applied Management Vol. 11 No. 1, 2019 pp. 5-16 Emerald Publishing Limited 2005-2062 DOI 10.1108/JWAM-06-2019-0014 revolution where previously stable jobs may rapidly evolve to require new skills or are replaced by automation.

Indeed many influential United Kingdom (UK) business bodies including the Chartered Management Institute (CMI, 2019), City and Guilds Group and Industry Skills Board (2015) and Chartered Association of Business Schools (CABS, 2014) have long warned of the difficulty in acquiring and maintaining transferable skills juxtaposed with a technological, robotic and communication evolution, altering the way in which people interact, form ideas and use their skills. At the same time the CBI (2018, p. 6) reports so called "megatrends of demographic change, globalisation, income inequality, environmental sustainability and urbanisation" are forcing contemporary businesses and products to emerge, requiring lifelong learning that not only embraces technology but also embeds problem solving, communication, resilience and values and leadership skills in individuals.

The CBI (2018) report effectively contextualises the speed at which providers, businesses and government bodies are able to adapt, a particularly relevant point given the warnings over the last decade. Western economic performance was implicitly linked to human capital and knowledge stock at the World Economic Forum (2009), whilst the Chartered Institute of Personnel and Development (CIPD, 2012) acknowledged the accelerated demand for enhanced productivity and performance back (p. 9), which they described at the time as an escalating "more for less" macro environment. Subsequently, King *et al.* (2015) cautioned that the transformation of technologies, economies and government policies was giving rise to an incomprehensible future workplace which would require resilience in the workplace, creating an associated challenge for educators and employers in their attempt to predict future skills needs for jobs that did not yet exist.

Conversely, government skills lists have remained constant for two decades, perhaps reflecting the difficulty of keeping pace with such extraordinary change and increasing variance in employer requirements. Similarly, the extant research consistently cites problem solving, project management, communication and independent, creative thinking as critical employability skills (e.g. Virtanen *et al.*, 2012; Jackson and Chapman, 2012; Hughes *et al.*, 2013). Yet, significantly the CBI (2018) report cites that priorities in 60 per cent of recruiting companies have evolved to add resilience to communication and problem solving as the top three priorities, with 45 per cent identifying work readiness as the most critical single factor.

The review here continues by examining the key themes of the report, focusing upon whether higher education institutes (HEIs) are truly able to adapt quickly enough to an increasingly uncertain and volatile market, through collaboration with employers to create future-proofed, innovative curricula, with delivery models that meet learner and business needs.

Changing business needs and expectations for skills

Given this potential disconnect between business and educators it is unsurprising that the report confirms employer concerns over the availability of future talent, with nearly two-thirds of organisations lacking confidence that they can fill high level jobs. Currently, the growth and value of graduate recruitment is evident with 87 per cent of businesses increasing or maintaining their graduate intake. However, just 69 per cent of employers find that HEI programmes are relevant to their needs compared to more than 85 per cent satisfaction with private training providers, casting doubt upon the rhetoric of HEIs to develop adaptable, work-ready graduates.

Whilst 74 per cent of employers cite their preference for a mix of technical and academic qualifications, the report projects a 73 per cent growth in business demand for leadership and management skills. Here, the introduction of the Chartered Manager and Senior Leaders Master's degree apprenticeships has provided HEIs with an unprecedented opportunity to develop collaboratively designed, innovative curricula to meet the needs of employers through the inclusion of requisite management and leadership skills, competencies and

behaviours within the apprenticeship standard, in return for lucrative funding (CMI, 2019). Nascent research into degree apprenticeships by Mulkeen *et al.* (2019) and Hughes and Saieva (2019) has largely focused upon the opportunities and challenges of programme design and delivery from an institutional perspective, whilst the work of Rowe *et al.* (2017) concentrated upon the workplace management perspective rather than examining apprentice development. However, early case studies and anecdotal evidence from CMI and Chartered Association of Business Schools (CABS) indicate that this type of work-based learning programme has largely been successful in promoting the integration of lifelong learning strategies, which may reduce skills obsolescence and ultimately yield highly adaptive and resilient employees.

Work readiness and broader skills

Whilst a majority preference remains for a mixture of technical and academic skills, the report confirms that much of the early groundwork should take place in schools. However, changing demands in the workplace have shifted towards a broader remit, which focuses upon the attitudes and behaviours of employees including their ability to communicate and solve problem as well as evidencing resilience at work, collectively contributing towards work readiness.

Barnett (1997) and Harvey (2003) agree that employers are less interested in technically trained graduates, preferring to engage individuals with the ability to reflect, analyse, critique and synthesise experiences, and who respond positively to change, broadening their reflexive capacity accordingly. Wisher's (1994) competency-based approach emphasises the need to empower learners to demonstrate a range of qualities to achieve excellence, particularly the ability to think and work "outside the box" in developing conceptual, helicopter and analytical thinking skills. Likewise, research by Hinchliffe and Jolly (2011) and Pegg *et al.* (2012) confirms that this individual personal development approach informs skilled practice and identity, in turn contributing towards performance. Their findings were later endorsed by Vanhove *et al.* (2016) who argue that above all, student owned and driven identity development is needed, to build and self-manage careers underpinned by a far broader positive attitude with a "can do" approach to maintain employment security and address the constant flux in roles and workplaces.

Eden's (2014, p. 268) view of "graduateness" takes a whole person approach in describing employability as more than simply skills and knowledge by incorporating coping abilities to deal with stress and change, a view endorsed by Baird and Palmer (2017). Similarly, Kossek and Perrigino (2016) believe that employability is dependent upon an evolving conceptual toolkit containing both resilience and transferable skills. Together with this emerging graduate skills philosophy, there is increasing congruence in the literature that resilience is a critical workplace requirement, underpinning employer demands for graduates which Harvey (2003, p. 11) describes as "adaptive, adaptable and transformative people, ultimately able to anticipate and lead change".

McIntosh and Shaw (2017, p. 4) highlight the role that HEIs can play to support the notion of work readiness, believing that HEIs are well placed to design and deliver "innovative pedagogies" to support resilience development. However they argue that there is inadequate research into the characteristics demonstrated by resilient students and facilitative environmental factors, diminishing the opportunity to develop effective HE practice and policy. Likewise, Wall *et al.* (2017) believe that the critical challenge for contemporary business school education is primarily to understand which pedagogies might be the most effective, given the already intensive curricula within an unpredictable environment. These foci are of particular relevance given the current preoccupation for student well-being and their ability to cope with the twofold challenge of fast-paced learning and an increasingly demanding workplace (Davies, 2018).

Business-education relationships

Just over half of all businesses maintain some form of engagement with HEIs, but the support for further education colleges and school collaboration is far higher at 72 per cent, although showing signs of stagnation. Yet there is extensive evidence to support the crucial connection between work and the self-development of skills, where higher education (HE) is supported by real-world learning, assessment and developmental interventions, linking knowledge to production (Boud, 2009). Such a move towards learner driven self-development requires HEIs to accept that knowledge production is not merely the preserve of academics, who must adapt from the deep-rooted continuum of "process based" teaching towards experiential and reflective learning, hallmarks of work-based learning designed in collaboration with employers (Kolb, 1984; Raelin, 1997; Boud and Solomon, 2001; Bravenboer, 2018).

However, HEIs recognise the risks of pedagogic inconsistencies, leading to what Dalrymple *et al.* (2014, p. 78) describe as "academy-aligned" programmes as opposed to "academy-based". Much of the difficulty lies in the contextual establishment and verification of skills, largely beyond the HEI's control (UK Commission for Employment and Skills, 2016) but a greater problem exposed by Billett (2004) is the variation in opportunities to learn through work, often affected by intangible cultures and norms, organisational type, size and sector. Conversely, Bishop and Hordern (2017) found that overly narrow employer-led programmes risk stifling cross-pollination of student ideas through under-exposure and a lack of intercultural interaction with learners from diverse sectors and industries.

A further issue lies in the resource constraints with little timetabled allowance for academics to fully engage with external organisations and learners, despite the promotion by many business schools that their core purpose is not just academic delivery, but also supporting industry, student well-being and resilience (Cahill *et al.*, 2014; Bamford *et al.*, 2015). Whilst recruitment methods are slowly changing there are still insufficient academics with a blend of practical and pedagogic experience. Academic intellect has traditionally been ranked more highly than emotional intelligence skills in most institutions (Cox, 1998), combined with a majority income from traditional undergraduates, resulting in a heavy bias towards didactic, paradigm bound teaching methods rather than supervision of individually centred learning.

Here Martin *et al.* (2018) have found that the pressure upon academics from multiple responsibilities as teachers, researchers, programme designers and managers, combined with new expectations from employers and professional bodies, is provoking uncertainty and ambiguity over the identity and purpose of the academic role, a growing issue in HE highlighted in the earlier work of Clegg (2008) and Angervall and Beach (2017). Although Martin *et al.* (2018) found that student academic and career success are natural motivators for tutors they also believe that increasing workloads and juggling of roles in a rapidly changing HE landscape have the potential to threaten academic self-worth and well-being as well as learner development and employer/institutional relationships. As a result, specialist work-based facilitation skills are still less prevalent within HE than the other education and training sectors.

Clearly the risks and costs associated with poorly designed programmes and inadequate employer consultations are high, but there is emerging evidence (e.g. Bravenboer, 2018) that work-based learning can strengthen engagement and understanding to create new learning opportunities and create a truly collaborative learning environment which can support business more effectively and shape workplace performance and outcomes.

Technical-level apprenticeships

Technical-level apprenticeships are under reform, with the aim of providing a technical alternative to A levels and creating a seamless Level 3 pathway into HE. Vocational programmes in France, Germany, Norway, Denmark and the Netherlands are commonplace, with the Department for Education (DfE, 2019) admitting that the UK is still lagging behind in terms of accessibility to technical degree pathways.

Educating for

It is disappointing to note that the report confirms this ongoing lack of certainty over how the espoused pathways might work in practice. Despite the innovation of access to funding for degree and master's programmes in England, it is apparent that the current perceived technical level gap at Level 2 remains challenging for employers. Criticism persists over the inflexible rules surrounding how employers can choose to spend the apprenticeship levy and the cost of degrees and commitment in terms of time has raised a number of employer concerns. The current list of approved providers is formed of a limited number of schools and colleges with HEIs seemingly unlikely to enter this market (UK Education and Skills Funding Agency, 2019).

Future proofing the higher education and skills system

The report confirms the value placed upon degree and master's level qualifications but many failing part-time programmes have caused part-time student numbers to fall drastically, by 40,000 (a 51 per cent decline) between 2010 and 2015 (Callender and Thompson, 2018). This trend reduces lifelong learning opportunities and employee adaptability, negatively impacting upon the UK government's social mobility and skills agenda to meet the future productivity, robotic and technological demands. Callender and Thompson (2018) admit that part-time HE completion rates are unrecorded but carry a high risk of drop out due to external pressures. This finding is supported by similar historically low levels of non-completion of other part-time undergraduate and postgraduate cohorts, reported by Woodfield (2014).

Despite the attractive financial benefits of degree apprenticeships, unpublished research by this author identifies a similar pattern emerging at this author's post 1992 institution in the North West of England. The full-time student withdrawal rate currently averages 7 per cent compared to the Chartered Manager degree apprenticeship, which is already at 20 per cent just halfway through the programme. Requests for interruption of study are at an unprecedented level due to cited workload pressure. As such, there needs to be far more consideration for this type of learner and the wider influences that impact upon their ability to complete such intensive and sometimes complex programmes. Pressure points may be anticipated within the pedagogic design, as they are often likely to result from a range of university, workplace or environmental factors (Stevenson and Zimmerman, 2005; Lewis et al., 2011; Kossek and Perrigino, 2016). Here it is important to re-think delivery models in partnership with employers so that apprentices are seamlessly able to contextualise learning through performance delivery at work, rather than merely adapting existing content from fulltime provision. Paradoxically, part-time and apprenticeship learners have less opportunity to access specialist HEI support provision due to work commitments. Employers who provide financial support are naturally reticent to allow 20 per cent time off the job for study leave, confirming Boud and Rooney's (2015) view that workloads always take central priority.

Re-skilling the existing workforce to instil a culture of lifelong learning

The CBI report confirms increased employee mobility and a demand for degree qualified candidates in over 70 per cent of professional service jobs. A steady increase of graduates means that 14m graduates are now in the UK labour market, with a higher propensity of employment. In total, 40 per cent of graduates work in public administration, education and the health sector (Clegg, 2017). Nearly 78 per cent of postgraduates are employed in highly skilled jobs as opposed to just over 65 per cent of graduates (DfE, 2018).

Unqualified and under qualified employees are increasingly challenged by a continuously expanding pool of fresh graduates, placing many experienced and often mature employees under pressure to complete a qualification to progress to a higher grade, or in some cases simply to maintain parity with new career entrants. Boud and Rooney (2015) had already predicted an increased frequency of participation in HE programmes by mature workers during their career span, normalising lifelong learning and aligning well

with work-based learning models of learning. Many participants are sponsored learners, increasingly funded by levied apprenticeships. Phoenix (2016) found that this type of learner is more concerned with evidencing a return on their employer's investment by demonstrating their new skills to generate significant impact to progress internally, exponentially increasing the value of the employer–employee "exchange relationship" (Cropanzano and Mitchell, 2005, p. 878) rather than the common misconception that they may covertly be seeking further qualifications to secure alternative employment.

Whilst Kossek and Perrigino (2016) have found evidence of improved skills currency and occupational resilience through regular workplace initiatives including lifelong learning, research by Cairns and Malloch (2011) and Biesta *et al.* (2011) confirms that adequate workplace learning is possible without formalised taught programmes, negating the requirement for assessment. More recently, mandated qualifications within degree apprenticeships have been hotly debated by the Institute for Apprenticeships (2018) raising questions over the requirement for degrees within Levels 6 and 7 (third year undergraduate and Master's, respectively) leadership and management apprenticeships, and the suggestion that the degree can be removed from the apprenticeship followed by a rebranding to "degree level" apprenticeships.

Despite such controversial proposals, the findings here evidence that academic qualifications and grades are still viewed by the majority as essential indicators of ability and goal orientation, with the subsequent effect upon behaviour and knowledge application thought to make a significant difference in individual. Fletcher and Sarkar (2016) argue that part of an individual's natural appraisal of interventions is their evaluation and interpretation of what is occurring and how that might affect their own objectives but warn that goal setting, which often leads to positive outcomes, is frequently overlooked. Here, educational aspirations and the degree component as the distinctive goal is a crucial component and mandatory for most individual's career progression, so their wholesale removal from role and apprenticeship criteria is likely to reap unintended consequences. Without such clear objectives there is a genuine risk that this revival in lifelong learning will stall, leaving individuals less well equipped in adopting a self-determination approach to their own selection of behaviours, goals and outcomes to meet contemporary employer requirements (Ryan and Deci, 2000).

Report recommendations

It is evident that well-designed work-based lifelong learning programmes may provide an effective platform upon which to develop effective skills, traits and behaviours. The findings support a number of recommendations for providers to improve their programmes' pedagogic design and include resilience building strategies to support all types and levels of learners across a range of settings. Recommendations for providers include:

Programme strategies

- Design programmes which meet employer needs rather than merely adapting existing content or combining delivery with full-time provision.
- Review delivery models in partnership with employers so that learners are seamlessly able to contextualise learning through performance delivery at work.
- Evaluate progress through regular reviews and dialogue with relevant stakeholders, affording the opportunity to design the most effective support mechanisms.
- Create on-line workshop support materials and learning activities through the provision of additional content and guidance in multi-accessible formats, including enhanced digital delivery.

Educating for

the modern

- Adapt and vary assessment methods to reflect workplace practice, to include practical assessment of presentations, podcasts, multi-media items, meetings and interviews.
- Increase employer engagement with design of assignments to meet organisational objectives as well as individual goals.
- Ensure adequate resourcing and training so that the academic team are equipped to
 pro-actively support the development of learners' cognitive capabilities as well as a
 gradual transfer from intensive support towards learners taking responsibility and
 ownership of their own skills development as the programme progresses.
- Discuss and normalise failure with students, particularly in terms of academic achievement, which is unlikely to be the sole influencer upon their desired career success.
- Design one or two longer modules to bridge the step up between levels of theory and provide the space and time required for deep and effective critical reflection.
- Develop the reflective practice element of placement assessment and incorporate resilience. For example: a focus on encouraging students to reflect on what did not go well and what they would do differently in the future in a similar situation to create practitioners who automatically reflect and plan.

Employer engagement strategies

- Develop a deeper understanding of employer requirements in terms of content, delivery methods, support for learners and motivators for putting employees on programme.
- Strengthen engagement and understanding to understand the context in which employees are learning and to collectively create learning opportunities, creating a truly tripartite learning environment for learners, which can shape workplace performance and outcomes.
- Facilitate opportunities for employers, apprentices and academics to share best practice, showcase progression and afford an opportunity to integrate academic and employer assessment.
- Foster closer links with direct line managers to deliver an all-encompassing support strategy and/or engage preceding cohort members to buddy and mentor, particularly when drawn from the same organisation or a similar sector.
- Provide employers with guidance and advice in their selection and provision of workplace mentors.

Reflections

The findings within this report are particularly illuminating in revealing employers' clear priorities for all-round learner development through a suite of easily accessible, well-designed and innovative curricula to improve performance capabilities and outputs in a complex and challenging global environment.

Degree apprenticeships offer an unprecedented opportunity for employers to drive their own skills agenda and create learning opportunities for early career entrants and mature learners, however there remains a significant risk that funding cuts will threaten the future of these innovative programmes and may reap unintended consequences. Given the

reported esteem in which employers view qualifications, the removal of a qualification within a degree apprenticeship casts doubt over its purpose.

Whilst the employees' viewpoint is not apparent within the context of this report, the author's unpublished research confirms that their goal is likely to be to gain an accredited qualification, largely to facilitate career progression and professional development, but also to maintain currency and avoid skills obsolescence. Thus it stands to reason that any removal of qualifications from degree apprenticeships would impact upon the motivation of the apprentice. In many cases, this motivation is underpinned by competition from the growing numbers of new workers entering the workforce with degrees, forcing mature workers to consider part-time study merely to preserve their status. At the same time, prerequisite qualification entry levels have increased to degree level for more than 70 per cent of professional service jobs (Boud and Rooney, 2015; CBI, 2018) providing a further impetus for this group.

Of particular relevance here is the link between goal setting and resilience, and its notable appearance in the report as the latest behaviour sought by employers. Individuals who are able to maintain a sense of purpose and optimism often do so through the persistent pursuit of their own aspirations, subsequently improving the achievement of objectives and developing resilient qualities in the process of achieving present, short-term and future goals (Cooper *et al.*, 2013; McIntosh and Shaw, 2017).

Work-based learning is an effective framework to provide the foundation for all types of experiential and reflective learning. However, compressed timetabling to meet employer, learner and institutional demand has led to a somewhat superficial practice of reflection which often lacks the fundamental pedagogical characteristics of genuine work-based learning activity, identified by scholars such as Raelin (1997) and Boud (2009). Many espoused work-based learning programmes do not afford sufficient time or space to reflect effectively or to reflect forward, do not incorporate dialogue or collaborative questioning, action or thought within assessment and do not allow for group or team reflection, all of which are core activities of reflective practice (Helyer, 2016). Therefore it remains unclear to what extent reflection truly takes place and how it can be measured. There is also a risk that poorly managed reflection can adversely affect levels of confidence and subsequently weaken resilience, exacerbated by persistent issues of academic resourcing and juggling of roles (Martin *et al.*, 2018).

With sufficient resource and planning there is an opportunity for programme teams to create a supportive and dynamic culture whereby Brockbank and McGill's (1998) vision of experienced reflective practitioners supporting learners intellectual and emotional development through collaborative questioning, action and thought becomes the norm, rather than the traditional one-dimensional, written feedback practice. One example here might be a tripartite discussion with line managers or team members to provide an opportunity for 360-degree holistic assessment. The benefit of doing so would not only affords the opportunity to enrich resilience as Siegel and Schraagen (2017) found, but also creates distinctive characteristics to differentiate new programmes from a growing array of older "ersatz versions" of work-based learning provision.

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Educating for

the modern

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Corresponding author

Lisa Rowe can be contacted at: lisa.rowe@chester.ac.uk

16