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What We Know and What We Need to Know About Graduate Skills

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What We Know and What We Need to Know About Graduate Labour And Skills

Abstract

The expansion of higher education has led to more graduates in the UK labour market. Despite government expectations, this expansion has not boosted national economic competitiveness. This paper argues that current understanding of the impact of graduates' skills is limited by methodological and conceptual narrowness in current research and that a broader research agenda is required. This agenda needs to cover not just the supply but also the demand, development and deployment of graduates' skills and, as a consequence, distinguish between 'graduate skills' acquired in higher education and the 'skills of graduates' formed prior to, in and parallel to HE study.

Introduction

Successive governments in the UK have believed in the power of upskilling as the route to economic competitiveness (DfEE 2000; DBIS 2009; HM Treasury 2011). According to the Leitch Report (2006) this upskilling can be achieved by expanding higher education – both the number of universities and students. Expanding higher education assumes that external workforce development (the increased supply of workers with analytical skills gained through higher education) aligns with organisational development (improved workplace practices to make best use of these higher skilled workers) and business development (the need to accommodate these changes by pushing the firm up the product value chain) thus improving economic performance (Scottish Executive 2004; HM Treasury/DBIS 2011). The current UK government continues to subscribe to this policy, positing that it will help lead the country out of the current economic downturn, as the Forward of the Browne Report (2011) exemplifies.

Of course, as the causes of the recent economic downturn have shown, economic fortunes rely on more than just improving the labour supply. Even before the economic downturn however, it was evident that having more graduates on the labour market was not having the desired economic impact. An increased 45.5% participation rate in higher education (DBIS 2010a) has failed to deliver superior national competitiveness compared to other European economies (OECD 2008), some of which have significantly lower higher education participation rates. As proxied by qualifications, skill supply has been boosted in the UK but not economic competitiveness. Indeed, far from driving up competitiveness, recent graduates seem to be one of the victims of the economic downturn. Unemployment amongst graduates has risen, and risen most steeply for recent graduates, around one in five of whom is now unemployed (ONS 2012).

These outcomes, we argue, arise from the disjuncture between government's faith in the organisational and economic impact of graduates' skills and what is actually known about these skills. The reason for this gap in understanding lies in the methodological and conceptual narrowness of current research on graduate skills. Whilst it has long been recognised that the government focus has been too narrowly focused on supply (e.g. Keep and Mayhew 1999), the recent shift by government to demand (e.g. UKCES 2009) is hampered by insufficient evidence-based understanding of graduates' skill, particularly their demand and deployment and, we argue, their development. The analytical scope of research therefore needs to broaden. This broadening reveals that a distinction needs to be made between *graduate skills* – technical/analytical skills acquired at university – and the *skills of graduates* – skills acquired through processes of socialisation at home, school, university and during paid/unpaid employment whilst studying at university and also carried into the workplace. Drawing on existing

research some of which is graduate focused, others not, this paper first outlines what we know about policy and research on the skills possessed by graduates. The second part of the paper outlines why this current understanding is problematic. The final section of the paper discusses what more we need to know about these skills and offers some tentative comments on how this better understanding might be pursued in future research.

What we know about graduate labour from policy and research

Compared to the co-ordinated market economies such as the Netherlands, with the exception of some of the traditional graduate occupations such as medicine and law, the linkage between higher education and employment in the UK is relatively loose (Tholen 2012a). Recent UK governments, including the current one, would like to see higher education become more responsive to business needs through 'graduate employability'. This employability however is imprecisely and ambiguously defined. On the one hand it means delivering employers' demands to have graduates with 'work experience' and 'commercial awareness'. On the other hand the government sees graduates as a way of delivering its desired ideas-driven knowledge economy through graduates' use of analytical skills. Although degree subjects are heterogeneous, a 'remarkably homogeneous' list of graduate skills are now prescribed by the Higher Education Academy across subjects. For example, in economics, students must be able to 'analyse and reason'; in maths, 'pursu[e] problem solutions'; in English, 'sift, interpret and organise ... information'; in classics and ancient history 'exercise reflection and critical judgement' (cited in Boden and Nedeva 2010: 44-45).

The possession of these skills are not assessed per se but rather are expected to be embedded in the qualification. In this respect, an important point to note is that with these 'student employability profiles' qualifications continue to be used as a proxy of skills – a practice common amongst successive UK Governments (e.g. the Leitch Report 2006; HM Treasury/DBIS 2011). As a consequence policy tends to focus on the supply of graduates onto the labour market with these qualifications. Once on the labour market, research then tends to examine into which occupations these graduates enter, as the 'destination' surveys exemplify (e.g. Purcell and Elias 2005). These occupations are classified using the International Standard Classification of Occupations (ISCO) into major groups. Occupations are clustered into these groups on the basis of the tasks undertaken and the general nature of the qualifications, training and experience associated with competent performance of these tasks. There are nine major groups ordered hierarchically.¹ Traditionally major group 2 – the professions – is that for which a degree (Level 4 skills) has been required. Around one-quarter of graduates enter these 'traditional' professions (HESA 2012).

However, governmental expansion of higher education has resulted in an over-supply of graduates compared to the number of traditional graduate jobs available. There are now 30-40% more graduates than jobs needing graduates as measured by skill level (Felstead et al. 2007) and over a third of new graduates are now employed in lower skill level jobs not requiring a degree (ONS 2012). This over-supply has led to a cascade down the occupational hierarchy by graduates as they increasingly enter occupations previously non-graduate (i.e. SOC² major group 3) and which previously required Level 3 (sub-degree level) qualifications. This development has led to a shift in terminology, with Elias and Purcell's (2004) analysis referring to the 'jobs that graduates do' rather than 'graduate jobs'. Many of these jobs are traditionally non-graduate, for example so-called 'niche' graduate jobs in which 'most workers do not have degrees' – occupations such as leisure and sports, and hotel and accommodation managers (p.7). It should also be noted that, with graduate entryism into lower skill jobs, there is lower job satisfaction and organisational commitment for these graduates compared to graduates in traditional graduate jobs (Okay-Somerville and Scholarios 2013). Moreover, and perhaps not unrelated, such graduates can not only displace non-graduates but also work alongside them, suggesting that there is no simple conversion of an occupation from being non-graduate to graduate. Instead, occupational *hybridity* may occur with a mix of graduates and non-graduates (Holmes 2010).

There are different accounts of this cascade of graduates down the ISOC. The most obvious claim is of a 'skills mismatch', whereby the supply of graduate skills on the labour market is outstripping employer demand. This mismatch results in an over-qualified workforce in which, once hired, graduates' skills are being under-utilised at work (Brynin 2002; Felstead et al. 2007; Green and Zhu 2010). By contrast, Chillas (2010a) argues that 'multiple matching' is now occurring with graduates from different types of universities entering different levels of occupation within the ISOC. Old universities' graduates continue to enter the traditional professions; the newer universities' graduates enter the associate professions. These latter occupations are typically ISOC major group 3 requiring sub-degree qualifications, though some are undergoing professionalisation projects, which involves a shift to become a graduate-only occupation. One such example is Risk Managers (Chillas 2010b). Chillas believes this articulation represents a continued tight coupling of education and employment but mediated by university type.

Both of these accounts focus on the increased supply of graduates in the labour market and, in essence, whether or not the labour market is functioning effectively with this increased supply. The first account points out that, in the aggregate, there are more graduates than graduate jobs, creating disequilibrium in the labour market between supply and demand. The second account points out that as

higher education has changed the number of supply routes have expanded, as have the number of jobs that can be classified as graduate, with the balance between supply and demand maintained.

The problem with what we know

While these accounts make important contributions to the understanding of graduate employment, their concern is supply, and therefore offer only a partial understanding. Three particular weaknesses are apparent that need to be addressed.

First, because it is not the analytical concern, *demand* is treated bluntly, left as aggregated and abstract. With more qualifications on the labour market there is a policy belief that more jobs will follow that align with those qualifications and a policy tendency to then focus on the share of workers with university degrees in order to ascertain the health of the labour market, national economic competitiveness and progress towards having a knowledge-based economy (Warhurst and Findlay 2012). UKCES (2009: 115), in its *Ambition 2020* report for example, uses the ISOC major group occupational classification as a substitute for skills, labelling workers in the top three major groups – 1) Managers and senior officials; 2) Professional occupations; 3) Associate professional and technical occupations – as the higher skilled workers. Consequently, when comparing the proportion of these skilled workers in the UK with other countries, UKCES worries that the demand for these workers is lagging behind supply. This form of ‘occupational label-gazing’ occurs frequently in narratives about upskilled economies (Darr and Warhurst 2008). It is a form of analysis that focuses merely on changes in the structure of employment, not necessarily any impact of having workers with higher skills within these occupations. There is no specific examination of whether employers have a conscious, deliberate demand for graduates’ skills. For example, physiotherapists, as Associate Professionals and a graduatised occupation pursuing a professionalisation project, have been upwardly reclassified in the UK’s SOC2010³ whilst their workplace skills have generally remained the same (Anderson and Warhurst 2011). Simply highlighting the employment tendencies of graduates does not indicate if the jobs actually require high(er) skills associated with graduates.

With more graduates on the labour market, some employers now recruit graduates for the same jobs for which they previously recruited non-graduates simply because they can. For example, with an over-supply of graduates onto the labour market, one-fifth of UK estate agents are now graduates, despite almost universal agreement amongst employers and employees that the job requires only compulsory education level skills i.e. school-leavers’ skills (skill levels 1 possibly 2 but not 4) (James et al. 2012a). It could also be that with qualifications acting as a proxy for skills, the possession of a degree acts as a

labour market signal of ability. Quite rationally, employers, faced with a better-qualified workforce, select workers with better qualifications. However it is important to appreciate that employers hire workers based on many factors, not just qualifications: a wide array of skills (basic, interpersonal, analytical etc.) as well as personality traits and demographic background influences who obtains which jobs (e.g. Ashley 2010; Dafou 2009). With more graduates competing on the labour market, Brown and Hesketh (2004) find that the value of having a degree has diminished and qualifications represent just one factor in hiring decisions. Indeed, according to the Confederation of British Industry, a UK employers' organisation, only 20% of the weighting in employer decisions relate to hard skills or qualifications (CBI 2007:13). Even within this 20% it is clear that there are other supplementary considerations made by employers. As Keep and James (2010) point out, in making decisions during recruitment and selection based on qualifications, employers also factor in the awarding body/institution (and relative status thereof) and the type (academic, vocational) and level of qualification.

Second, with analysis focused on the labour market and not the labour process, there is no examination of whether the skills demanded by employers at the point of hire are being *deployed* in the workplace – in the current policy vernacular, whether there is 'skills utilisation' (e.g. UKCES 2009, 2010). In the government's recent shift to appreciating that skill is a 'derived demand' (see UKCES 2009), it is recognised that supply remains important but is not sufficient; it also matters that skills are used in the workplace. Unfortunately, research on skills utilisation generally is limited and patchy (Buchanan et al. 2010) and even more so for graduates (Keep and Mayhew 2010). What is known is that employer demand for skills appears to be weak, with little evidence of improved use of the higher skills now available amongst the workforce (Felstead et al. 2007), but also because the jobs on offer do not require higher level skills. Indeed it is acknowledged by government that there is poor translation from policy to practice (UKCES 2010). In other words, despite government encouragement, employers remain reticent about maximising employee skills – most obviously because there is little perceived business need to do so (Warhurst and Findlay 2012).

At the same time, within liberal market economies such as the UK, it seems that whatever employers say is a skill has become regarded as a skill (Grugulis et al. 2004). *Generic* skills (Felstead et al. (2007) such as 'influencing' – or what are called elsewhere 'interactive' skills' (Moss and Tilly 1996) or just plain 'soft skills' (Grugulis et al. 2004) – shows a long-term rise. If once being a skilled worker meant completing a time-served apprenticeship and becoming competent at complex technical tasks (Payne 2009), now being a skilled worker seems to rest on possession of a seemingly expanding nomenclature of personal capacities; even being good at managing emotions is cast as being highly skilled (Bolton

and Boyd 2003). These skills are socially ascribed as such. Not accredited as qualifications and so not made tangible, it is not surprising that employers are often unaware of the skills possessed by new recruits and, as a consequence, workers' productive capabilities can be under-employed (Spence 1973). This problem is compounded by a failure to appreciate that whilst of the same skill *level* (as proxied by qualifications), jobs in different industries use different *types* of skill and in different combinations. Thus whilst the three major groups in the SOC are now regarded by UKCES (2009) as graduate to varying extents, there is a wide array of occupations within each group, ranging from the usual scientists, lawyers and dentists to shopkeepers, professional cricketers and comedians, all of which use different types of skills. To return to Elias and Purcell's niche graduate jobs of leisure and sports, hotel and accommodation managers, as Goldthorpe (2003) has stated, employers in this industry attach less weight to qualifications than ascribed skills because the work involves customer interaction rather than complex technical tasks; the same skill demands therefore might not be true for graduates in engineering occupations.

Third, there is no examination of where graduates' skills are *developed*, simply an assumption that they are formed in higher education; yet these different skills can have different sites of formation. Currently researched through the lens of emotional and aesthetic labour (Payne 2009; Warhurst and Nickson 2007), the 'soft skills' referred to above are typically acquired through informal socialisation not formal education (Goldthorpe 2003). Hochschild (1983: 97) even refers to the emotional labour of her air cabin crew as 'middle class sociability'. It can be that these 'skills' are acquired informally within school education, but through the 'hidden curriculum' that shapes the attitudes and behaviour of workers-to-be (e.g. Bourdieu 1986; Willis 1977). Moss and Tilly (1996) point out that these skills can also be acquired in the workplace as part of informal occupational or organisational socialisation. This workplace socialisation is more likely to occur because, with reduced state support for study, many UK students have paid work during their time studying (Author B). In addition, degree study including work experience and/or internships are now more encouraged, especially by government (HM Government 2010). Consequently, even for students, the firm can be a key site of skill formation. It is not clear therefore that graduates' skills are solely acquired at university. What employers now regard as the skills necessary to do the job are developed in a number of sites; not just universities and the firm but also at school and in the family. At best, it is an open question whether it is the assumed *graduate skills* that are required to do the job or the range of other skills acquired elsewhere. It is important therefore to distinguish where graduates' skills are formed and if they are developed and acquired before, parallel to or through higher education.

What is needed to understand graduate skills

If we are to understand why increased participation in higher education has failed to deliver superior economic performance, we need to better understand graduates' skills. This need has become even more imperative given that skills policy is still 'tightly bound up with a well-worn set of policies in relation to the economy and the labour market' (Payne and Keep 2011:1), there is an increased share of graduates in the labour market, and higher university fees are now being charged. Much current understanding overly emphasises graduate analytical skills acquired through higher education, with these skills manifest in qualifications (e.g. HM Treasury/DBIS 2011) and, thereafter, the effects on the labour market of this supply (e.g. Brynin 2002; Chillas 2010b; Elias and Purcell 2004).

We suggest that better understanding will be enabled, firstly, by going beyond supply and even demand where it is bluntly conceived, to have research focused specifically on demand for and complemented by research on the deployment and development of the skills of graduates; the latter meaning the skills possessed by graduates as they transition from education to employment. All four aspects of skill need to be points of analysis. Moreover our phrasing of the 'skills of graduates' is deliberate because the second point to be made is that these skills comprise not just so-called 'graduate skills' but also a whole range of other skills (formed elsewhere prior to and alongside study), all of which aid their employability and can have organisational and economic impact. Conceptualisation of graduates' skills therefore needs to be changed and broadened.

To incorporate the four points of analysis, research methodology also needs to change. Firstly, the scope of analysis needs to widen to focus research attention on pre and during and post higher education rather than just at the point at which graduates transition from education to employment. Secondly, methodology must broaden to envelop the labour market and the labour process to understand the impact of graduates' skills. To these ends what is required is a new analytical framework that envelops and clearly distinguishes the four aspects of skill discussed above:

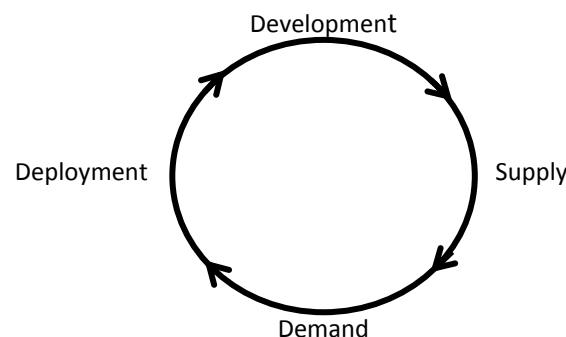
1. Skill development – centres on skill formation and skill acquisition but needs to focus on what skills are formed, how and why. For example the skills of graduates may have been formed through the family or school, during paid employment whilst studying, through formal work experience as part of study, as part of the (higher) educational curriculum or, most likely, a combination of these possibilities.
2. Skill supply – centres on the skills presented to the employer through the labour market. These skills may only be some of the skills possessed knowingly and unknowingly by graduates. These skills are more than just 'graduate skills' articulated as analytical skills embedded in

degree qualifications. Rather there is a range of 'hard' (as codified in qualifications) and 'soft' skills possessed by graduates and are better articulated as the 'skills of graduates'.

3. Skill demand – that is, the skills employers explicitly solicit during the recruitment and selection process. Whilst degree qualification possession is used in some cases as a proxy for ability and assumed productive capacities, in other cases reference to it is simply expediency on the part of employers, or it is a requirement of hire for reasons of compliance (sometimes merely symbolic) and in yet other cases, whilst it is undoubtedly useful, it is not sufficient for being hired.
4. Skill deployment – that is, the skills actually utilised in the labour process. These skills can vary between what are now regarded as graduate occupations and between industries and within workplaces, and, in some cases, the deployment of these work-required skills can be by workers with different education levels – graduates and non-graduates.

Importantly, these aspects of skill do not form a linear process. Workforce skills gaps (i.e. a deployment issue) can trigger the hiring of new employees (i.e. a supply focus) or the training of existing employees (i.e. skill development action), for example. Consequently whilst discrete analytical points, Figure 1 below depicts the four aspects as dynamic and integrated.

Figure 1: Integrating the four aspects of skill



This research design would help address the methodological and conceptual problems identified above that underpin current understanding of graduates' skills:

- The limited awareness of the range and nature of the skills supplied by graduates.
- Weak articulation of the varying nature of employer demand for graduates.
- The varying potential impacts of graduate entryism into occupations and workplaces.
- The gap in understanding what drives the deployment or otherwise of graduate-related skills.
- Recognition of the range of the situs and nature of skill development amongst graduates.

It is clear graduates possess skills in the transition from higher education to work. To date emphasis has been placed on so-called graduate skills - the analytical skills said to be acquired through higher education. However at the point of transition graduates possess a range of other skills acquired in other situs and which are also likely to be of use both to get and do jobs. For this reason we suggest that in analysing the impact of graduates' skills, there is a need to focus on the 'skills of graduates' rather than merely 'graduate skills'. One way of gaining a better understanding of the skills of graduates, and how, where and in what way their skills are being utilised, is through case studies of occupations. For example, in a project utilising qualitative methodology, semi-structured interviews allowed an in-depth understanding of the skills, work and employment of real estate agents; a previously non-graduate occupation becoming 'graduatised' (see James et al. 2012b and Tholen et al. 2012b).

Developing a new research agenda with this broader focus will enable a better understand of why increasing the number of graduates has not boosted economic growth. It also matters because it is an important public policy issue whether it is graduate skills, formed specifically in higher education, or the skills of graduates, developed in a range of situs but possessed and presented by graduates as they enter the labour market but might even be acquired before higher education study. If it is the latter, it might be that money currently spent on higher education might be better spent elsewhere, as Wolf (2011), perhaps mischievously, suggests. Whilst UKCES (2009) is right to state that the UK workforce's skill are currently not used well', we would add that, with respect to graduates in the workforce, they are also not well understood. Having a new research agenda would help overcome this problem.

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Endnotes

¹ That major groups are: 1) Managers and senior officials; 2) Professional occupations; 3) Associate professional and technical occupations; 4) Administrative and secretarial occupations; 5) Skilled trades occupations; 6) Personal service occupations; 7) Sales and customer service occupations; 8) Process, plant and machine operatives; and 9) Elementary occupation.

² The UK's Standard Occupational Classification (SOC) aligns with ISOC.

³ The latest iteration of the UK's SOC.