Universities and the informal knowledge economy

Introduction

The 'Knowledge economy' is, without doubt, a fashionable and contested term. Indeed, the expression is now used so frequently, it can be difficult to discern its exact meaning. Nevertheless, this chapter aims to enrich debate on universities and the knowledge economy through exploring the existence of an informal knowledge economy or, more accurately, to illuminate the frequently unacknowledged informal aspects of the knowledge economy. We argue that these informal activities which fall outside paid employment, such as volunteering, active citizenship and managing welfare in health, finance and children's education, provide a vital contribution to a knowledge economy and thus require due recognition.

In the chapter, we will first provide our perspective on what is commonly meant by the term 'knowledge economy' through an overview of current political discourse in the UK - the country of context for this chapter. A conceptualisation of the informal knowledge economy, together with examples of its existence and an appeal for its significance - both epistemic and political - will follow. We will then argue that the coalition government's vision of the 'Big Society', in which responsibility for local services is shifted from the state onto communities, is implicitly dependent on such an informal knowledge economy, and that the economic pragmatism behind the policy of the Big Society is echoed internationally across advanced economies. We will suggest that informal knowledge exchange by university staff, students and alumni not only provides continuity to the historical mission of the university but also challenges the priority awarded to quantitative measures of university outputs and the favouring of investment in Science, Technology, Engineering and Maths (STEM) by UK politicians. The chapter will conclude with an assertion of the vitality of these informal knowledge offerings and advocate that a university empowered with the agency to assert its full array of social and economic benefits, must be one that has its informal knowledge economy contributions duly appreciated.

The Knowledge economy in a global context

That the knowledge economy is an inevitable and positive development in advanced postindustrial nations has been a recognised feature of government policy on all levels (Warhurst, 2008: 71). As the institutions of global governance have endorsed the transition towards a knowledge economy (OECD, 2001; EC, 2004; World Bank, 2002), national governments have been quick to adopt the phrase and ratify particular economic and educational policies with the logic that will aid this transition.

The knowledge economy is popularly thought of as: a marketplace of monetary transactions; the buying and selling of technological knowledge; an education system which provides this knowledge and individuals equipped to devise and produce technological products; and the global competition of all developed economies to be the best at facilitating this system. The overwhelming message of the proponents of the knowledge economy is that national economic competitiveness will depend upon a workforce of individuals equipped with high skills – in other words, educational qualifications to the level of a university degree. The impetus placed upon national governments in this situation is thus: how best to promote the end goal of a national knowledge economy.

Higher Education has achieved seminal status in the political plans to construct national knowledge economies. As higher education systems have become increasingly focussed upon

the production of knowledge workers, the university and industry have drawn visibly closer. Subsequently, higher education policy has been progressively influenced by the views of industry - specifically, the axiom that STEM graduates and research will provide the fuel for the engine of the UK knowledge economy (HM Treasury, 2002). The spotlight on STEM is not unique to the UK. Global knowledge trends such as the emergence of rival technology-based industries in India, China and the United States have convinced UK industry that future economic security rests upon the generation of commercially-applicable technical knowledge (CIHE, 2009: 1).

UK policy and the knowledge economy

Hyperbole of the knowledge economy became a defining insignia of New Labour's 1997-2010 government. The global knowledge trends mentioned above transformed the government's way of thinking about the UK economy. Understanding the the economic importance of knowledge was deemed '*vital to the future prosperity of advanced economies*' by the then Chancellor of the Exchequer, Gordon Brown (Brown, 2006). In order to identify how knowledge would boost the British economy, New Labour commissioned the independent research organisation, The Work Foundation, to conduct a long-term project to provide insight into the workings and issues of a UK knowledge economy.

The account provided by the Work Foundation was fully embraced by New Labour, quite possibly because its findings chimed perfectly with other pieces of government research and evidence-based policy. It was noted that knowledge, innovation and technological change had always facilitated the economic health of advanced economies, but that the difference with the contemporary picture was one of scale (Brinkley, 2006: 5). It was clear to all that primary and secondary industry in the UK had been in permanent decline over the past century. In the meantime, the 'ICT revolution' had occurred and science-based technology had advanced (Brinkley, 2006: 4). The economy which New Labour inherited was one dependent upon the tertiary sector and high-tech industry for its global competitiveness. It seemed clear therefore, that the role of the government was to carefully nurture the global commercial edge of UK scientific and technological corporations.

This conclusion was complimented by the findings of other government research. The structural change in the UK economy had been a key message of the 2006 Leitch Review, which emphasised the need for a highly-skilled workforce (HM Treasury, 2006: 1). The necessity of highly-educated minds within the formal economy had long been a vision of New Labour, and together with the objective of social mobility, had provided a justification for the continued expansion of higher education. As early as 2001, New Labour's first minister of Education, David Blunkett stated:

I make no apology for placing higher education at the heart of the productive capacity of the knowledge driven economy (Blunkett, 2001).

The value of higher education was judged to be two-fold: it provided graduates equipped with technical skills - demonstrable through tangible, formal qualifications; and, it generated specific research outputs which were increasingly focused on research with a technical application. This satisfied the analysis of the Work Foundation; that a knowledge economy demanded both high-skills and innovative knowledge products to ensure global competitive advantage. The goal of innovation was responsible for New Labour's preoccupation with the maxim 'knowledge transfer', defined by the Department for Innovation, Universities and Skills as the two-way flow of knowledge and skills from university to wider society and the

economy. This might mean research for evidence-based policy, or the use of STEM expertise in the world of business. The aim of knowledge transfer is clear:

To create the environment in which researchers and businesses can work together to turn their ideas into high-value products and services. (DIUS, 2009).

Examples of knowledge transfer partnerships include the i10 universities-business collaboration in the East of England, which culminated in the largest geographical concentration of research engineers in the UK, and three times the UK's average spend on R&D. Individual universities have followed suit; Cambridge University has a research centre funded by Unilever and the University of Lincoln's Engineering School has a partnership with Siemens. The notable feature of most knowledge-transfer partnerships is that they focus upon the transmission of STEM knowledge to policy or industry.

Towards the end of the New Labour administration, the UK faced growing national debt, following the 2008 'Great Crash' (Watson, 2009: 25). This did little to damage the faith of government - or bodies such as the Confederation of British Industry (CBI), in the importance of creating a globally-leading UK knowledge economy. Rather, the knowledge economy was pitched as the 'post-recession' economy (Brinkley 2009). The framework of the knowledge economy continued to provide the *sine qua non* of higher education policy under the Conservative-Liberal Democrat coalition government in 2010. There is clear cross-partisan agreement that the knowledge economy requires an open, free-market state, the promotion of entrepreneurship, and the creation of 'Great Britain Plc.' (Evans, 2009: 96). Business secretary Vince Cable confirmed the expectation of increased demand for STEM graduates to serve the needs of this knowledge economy, and admitted that his government would ensure that this need was met: 'through, for example, differential funding of STEM subjects' (Mroz, 2010). Although coalition members have denied pressurising students in their subject choices, the 10,000 additional university places created by the government were in STEM and other subjects identified as priority areas by the CBI.

Beyond present orthodoxy

By now, the popular connotations of the knowledge economy - particularly those favoured in UK political parlance should be clear. However, what is not so readily obvious is the fact that the politically-favoured expressions of the knowledge economy conceal the diverse theoretical legacy of the term. The seminal theorists of the knowledge economy are often identified as thus: Daniel Bell (1974); Manual Castells (1996); Nico Stehr (1994); Peter Drucker (1967); and Michael Gibbons et al (1994). However, their approaches to the subject are very distinct. David Guile (2005) noted that the role of scientific knowledge is the distinguishing feature of the knowledge economies envisioned by Bell, Castells and Stehr. However, a second strand of theorists - Guile cites Drucker, Gibbons, and Nonaka and Takeuchi (1995), who drew upon their analysis of knowledge management in Japanese corporations - emphasise the role of tacit and subjective knowledges. We classify Bell, Castells and Stehr as presenting a macroeconomic view of a knowledge economy, focused upon the corporations and institutions which shape it; the labour force required to power it; the type of innovation necessary to achieve it; and the subsequent commodities produced by it. We concur that the 'knowledge' in the knowledge economy essentially refers to the knowledge generated by Science, Technology, Engineering and Mathematics. The promise of the knowledge economy is underpinned by an unswerving faith in scientific rationalism and its technological fruits. On the other hand, Drucker and Gibbons are far more concerned with the micro-level management of knowledge. Here, the type of knowledge necessary for the knowledge economy is management knowledge; the organisation of information to ensure its optimum application and commercial success. Competitive knowledge economies will be those which perform best at problem solving, requiring individuals who are rich in creativity, communication skills, finesse in people management and possess the ability to weave together distinct threads of knowledge. If this sounds slightly vague, it is because it is meant to – Drucker's and Gibbons' models prioritise tacit knowledge over technical expertise.

It is beyond the realm of this chapter to weigh up the relative strengths and weaknesses of these theses. Nevertheless, considering the disparate theoretical beginnings of the knowledge economy allows one to legitimately raise the question of how UK politicians arrived at their decision to champion the account provided by the macroeconomists, particularly since there is no traceable public justification as to why this reading gained favour. We do not refute the importance of the STEM subjects in facilitating technological advances, nor in the growing importance of technological products in contributing to national economic success. However, we do suggest that the fixation upon STEM knowledge and workers alone as the key drivers for a flourishing knowledge economy is too narrow. We do this from the position that the current definition of a knowledge economy used by politicians is too constricted.

Our proposition therefore is that the knowledge economy is not merely the sum of STEM advances and the commerce of technological knowledge. The epistemic narrowness of the definition popularly employed by politicians and those in industry fails to capture either the vast theoretical history of the concept, or the relational interplay between knowledge, the university and the economy. Our primary concern is that current models wholly overlook 'informal' aspects of the knowledge economy. Although the activities composing the informal knowledge economy are different from those in the formal knowledge economy, the two spheres can be viewed as parts of the same continuum; they are not positioned in antagonism. Appreciating the informal knowledge economy provides a crucial new perspective for any comprehensive understanding of the university within the knowledge economy.

The informal knowledge economy

Characteristics of the informal knowledge economy

The informal aspects of the knowledge economy consist of unpaid, voluntary and informal types of labour and activity. It is work which does not possess a recognised 'market-value'. The informal knowledge worker does not typically receive monetary payment for work undertaken. Since activities which fall into the domain of the informal knowledge economy are largely intangible, a clear-cut and comprehensive definition of the informal knowledge economy is an unrealistic philosophical pursuit. Therefore, our endeavour is to map out an elementary exposition, providing a framework which begins to elucidate the nature of the phenomenon.

Activity in the informal knowledge economy mostly involves the diffusion of social knowledge and 'soft skills' - personality and communication traits which foster successful interpersonal relationships. This is distinct from the niche technical expertise required in the formally recognised knowledge economy and more in keeping with management theorist interpretations. Furthermore, whereas information in the formal knowledge economy flows through official business channels and economic networks, information in the informal knowledge economy relies mostly upon social networking within social - as opposed to work - contexts. This is not to say that the flow of this information cannot be aided by technology;

social networking sites for example may prove a very useful tool in expediting informal knowledge work.

The ethos of the formal knowledge economy is to measure success in terms of economic advantage and profit, and direct individuals to work towards explicit economic goals. By contrast, the informal knowledge economy is organised towards the greater good; social collectivism is both its vehicle and outcome. This does not rule out possible economic benefits, but monetary profit is not the axiomatic motivation. Informal knowledge work typically arises in an 'organic' manner and relies upon moments of serendipity rather than planning. Given this haphazard nature, it might even be more effective than 'traditional' or formal means in achieving its goal.

The informal knowledge economy presents an 'open' system in contrast to formal knowledge work, which usually requires prospective workers to have certain academic qualifications - normally an undergraduate degree. Although formal qualifications are not required to partake in informal knowledge work, we will demonstrate below that those involved in initiating and managing this work will also be likely to hold higher education qualifications. It is thought that those who contribute to informal knowledge work will typically be informed citizens, with a high level of social awareness.

The emphasis here is not concerned with a particular form of specific or technical knowledge. Thus as far as the humanities, arts and social sciences (HASS) prepare and encourage graduates for informal knowledge work, they are deemed to have equal importance to the STEM subjects for the social and economic health of a country.

Some dimensions of the university's contribution to the informal knowledge economy

The informal knowledge economy is multi-dimensional and there are many ways in which the university contributes. Higher education fosters social justice and welfare, political activity and citizenship, charity work and volunteering, informal knowledge exchange and cultural enrichment and we will provide evidence for each below.

Social justice and the welfare of self and others

One aspect of the informal knowledge economy is the realm of activities promoting social justice and individual welfare - the aims traditionally associated with the post-1945 UK welfare state. On the level of the individual, two examples are prominent. The first concerns personal knowledge of health, well-being and finance. In the UK, Schuller et al. (2004) have used National Cohort Study data to demonstrate that at all levels, education produces both financial and socio-cultural benefits such as improved mental and physical hearlth, better family relationships and greater well-being. A study from the US by Walter McMahon (2009) provides evidence that the consequences of engaging in higher education are particularly significant. The 'non-market' skills which graduates acquire, such as efficiency in household management, health management and financial management generate the wider benefits of higher education; better health - for example lower smoking and infant mortality; greater civic participation; charitable giving; racial tolerance; better parenting; lower crime; and political stability. Graduates with access to this realm of the informal knowledge economy, and those with whom graduates shared this knowledge, report a greater sense of well-being and happiness. We suggest that such well-being, social engagement and social cohesion also increase the productivity of individuals, for example through lower sickness absences, and so could be considered to have an indirect market benefit.

Second, while formal educational qualifications take a central place in the recruitment processes of the knowledge economy, the intangible parental role in a child's education is only partially acknowledged. Parents are expected to support the schools their offspring attend, and their role in encouraging learning is valued. McMahon argues that university educated parents are in a much better position to pass on educational values and knowledge to their children than those who are not. The extent to which wealthy and educated parents help their children with schooling from an early age is often underestimated. The benefits of growing up in a knowledge rich household are difficult to quantify, but poverty and low educational attainment and aspirations are strongly linked in affluent countries around the world (Raffo et al, 2010; Hirsch, 2007), and raising the educational level of parents has a positive economic knock-on effect for generations to come.

At the institutional level, universities claim they are increasingly taking on the social welfare of the vulnerable; extending the arm of the welfare state. Under the slogan of Widening Participation, universities are encouraged to take on challenging students, for example, those with mental health problems and learning difficulties. Universities also recognise the growing issue of stress among students, with most UK universities now offering night-time phone lines and counselling services – often run by volunteering students and staff. Whether the stress of university life exacerbates pre-existing conditions of these individuals is far from clear. Baker and Brown (2007) claim that there is little evidence of empowerment through education for these students and the argument that the university has inherited social functions once associated with the welfare state paints a rather negative portrait. However, this can be countered by the examples of the enhanced capabilities and self-reliance of individuals who attend university.

The SOMUL (Social Mediation of University Learning) project, investigating 'What is learnt at university' concluded that self-fulfilment, confidence and well-being were the most significant outcomes reported by undergraduates at the end of their degree (Brennan *et al*, 2010). Indeed, there is a growing sense that the at present under-recognised, informal learning experiences of an undergraduate's life – which occur in the spaces outside one's degree course, such as voluntary work, or running an arts or political society – ought to be incorporated within a more total appreciation of university learning termed 'life-wide learning' (Barnett, 2010). The implication is that boosting independent individuals, who then support the needy, secures the positive effect of the university upon wider society and future generations. A society balanced in such a sustainable manner also enables a high number of individuals to undertake formal work, of any type, lowering the number of individuals dependent on financial support from the state.

Political activity and citizenship

McMahon argues that higher education brings greater political stability and studies from Europe support this. Hoskins, Hombres and Campbell (2008) administered a large scale study of 'Active Citizenship' across Europe. Using European Social Survey data, they ascertained the impact of education upon 'Active Citizenship', which comprised; representative democracy (voting and political party membership); protest and social change; community participation; and the associated values of democracy - human rights and an understanding of different cultures. These attributes are likely to be influenced by family background as well as education; nonetheless the study provided a strong indication that higher education has a disproportionally strong effect on Active Citizenship compared to lower levels of education.

They concluded the arguments for the expansion of higher education should assert the benefits to citizenship as equally as those benefits to the economy.

Political parties and pressure groups are seen to link society and the state within a liberal democracy. It has long been known that the Members of the UK Parliament are likely to have attended university (Sutton Trust, 2010). Partisan and issue-based societies on campus nurture the networking and communication skills necessary for the political world; those political and pressure groups armed with knowledge, contacts and negotiating skills typically form the most successful campaigns (Berrington, 2003). The experience of university thus appears to facilitate an individual's ability to exercise democratic rights and this is most likely to be achieved through the experience of both the curricular and the co-curricular activities that life-wide learning seeks to capture.

Charity work and volunteering

Charity and voluntary work are clearly part of the informal knowledge economy since they are unpaid, and the ways in which these forms of activity enhance society and the economy are manifold. Charities and volunteers can ease pressure on the welfare state – for example, assistance in the care of vulnerable groups such as the elderly, disabled and children. Voluntary groups can support an individual's transition to work from unemployment – for example in the case of life-long learning and adult skills initiatives. Meanwhile volunteering can prepare young people for the formal economy, equipping them with organisational, problem solving and team work skills, often presented as tangible qualifications on an individual's Curriculum Vitae, which employers then value as a sign of employability (Prospects, 2010), assisting them to 'realise their potential' (Hefce, 2010).

The university expedites voluntary and charity work on two levels. Firstly, there is the direct influence on the individual student undertaking co-curricular activities. These might take the form of established schemes, such as the Duke of Edinburgh's Award, although it may be individually motivated and informally organised (PACEC, 2010: 8). 15.3% of undergraduates have reported undertaking voluntary work within their first year at university, with those in medicine and social science most likely to participate (PACEC, 2010: 8). Despite the promise of enhanced employability, most students stated helping an individual or the community as the primary motivating reason for volunteering, suggesting that there is something distinct to the ethos and organisation of the university which encourages individuals to fulfil this ambition during their study (PACEC, 2010: 9).

Second, there is a longer-term more indirect effect. Individuals who have benefited from a university education will be more able to manage and participate in the charity sector in later life. Volunteers work in schools, libraries, parks and other community services – duties which require experience of knowledge management, people management, communication, problem solving, planning and delivery of projects. More specifically, local choirs, sports groups, youth services, environmental and conservation work profit considerably from graduates who have expertise in music, leisure, youth work, environmental issues and history. While the ownership of these voluntary activities does not always belong to the university, the university has a central part in their realisation and particularly, in the provision of individuals able to contribute to them.

Informal knowledge exchange

Far from being simply an academy in which to train future volunteers, a university will assert its own identity as a research institution proficient in the production, dissemination and exchange of knowledge geared to support society and the economy. By UNESCO definition, universities are a 'community of experts', and the challenges facing modern society: enhancing health and well-being, peace, sustainable economic growth and climate change – will only intensify the need for academic consultation (Hefce, 2010). The fruits of academic research enhance quality of life in countless, indirect ways – breakthroughs in environmental and medical science being two obvious examples. Furthermore, there are a growing number of research endeavours with an explicit aim to benefit local communities, specifically, the most disadvantaged members of those communities.

Community-university partnerships undertaken by the University of Brighton are one such example of a university designing a research project around its host town and transferring its expertise where possible. The partnerships cite civic responsibility and a desire to produce 'real-world' knowledge as foundational principles (Hart, Maddison & Wolff, 2007: 9). Examples of community-university research projects include a qualitative study of the needs and experiences of homeless lesbian, gay, bisexual and transgender youth in Brighton - undertaken by the university and the local YMCA; and the evaluation of local Neighbourhood Renewal projects - undertaken by social and housing policy academics at the university, and being fed back from the university to local and national policy makers (Hart, Maddison & Wolff, 2007). The latter example in particular reveals the way in which the established institution of the university can empower the voices of the local community vis-à-vis national policy-makers.

Community-university partnerships are not always top-down in their approach. The notion of 'knowledge-exchange' rather than simply 'knowledge transfer' is gathering momentum as an approach to social research. One example of this is the attempt by the University of Brighton to empower local refugee communities to direct their own research projects. Refugees were recruited as 'co-researchers' to assist in the design and conduct of research projects relating to their community (Hart, Maddison & Wolff, 2007: 108). Academic staff reported benefits in terms of the knowledge accrued and in discovering new approaches and ways to work.

The popularity of knowledge-exchange is growing, and many universities take a role as the symbol of academic excellence very seriously. Public lectures and consultancy work on social issues or for civic projects are examples of the way in which the expertise of the university remains unparalleled as a voice of wisdom in society. The London School of Economics, for example, prides itself on delivering evening lectures, debates and discussion with leading figures from academia, law, politics and business, which are open to all members of the public (LSE, 2010).

Cultural enrichment

The final example of informal knowledge activity around the university refers to one its founding principles: the advancement of a higher arts and culture through society. University libraries and museum collections can be accessed by members of the public; performance arts and music concerts are often held at university venues; and art exhibitions are frequently hosted at universities. The Access to Art program, run by the University of Brighton grew out of the university's commitment to the creative arts and its awareness that learning-disabled individuals in the local community had very limited chances to better their artistic skills. The scheme saw undergraduate art students mentor these individuals, their integration into the local sixth form, culminating with their work on display at the Tate Modern in London (Hart,

Maddison & Wolff: 139). The promotion of abstract and impressionistic varieties of knowledge through projects which fall under the banner of being 'creative' or 'cultural' – for example, exhibitions, music concerts and student theatre - rely largely upon individuals equipped with HASS knowledge and skills demonstrating once more that HASS play a crucial role within the informal knowledge economy.

As discussed above the university's contribution to the informal knowledge economy is not merely a matter for the university's own interest, there are wider social impacts. The welfare and voluntary work aspects of the informal knowledge economy detailed here bear a striking resemblance to the vision of the 'Big Society', championed by the Conservative party in the 2010 General Election campaign.

Big Society

Before we proceed to explain the particulars of the Big Society, it is essential to note that this policy vision is emblematic of the contemporary welfare approach of the governments of several advanced economies. This is a point we shall return to after a brief discussion of what the Big Society entails. The key attributes of the Big Society are individual empowerment and neighbourhood renewal. Proclamations of a 'revolutionary' approach which would seize the 'creativity' of the UK public were made at the time of manifesto launch (Hasan, 2010). More precisely, the party envisaged; the delivery of public services to be increasingly undertaken by social enterprises, charity and voluntary groups; the establishment of a National Citizen Service - a volunteering programme for young people aimed to develop their skills, mix with others from different backgrounds and improve their communities; the encouragement of civil servants to partake in voluntary work and social action projects; training 'independent community organisers' to run neighbourhood groups; and - perhaps the most noted ambition - the promotion of local communities running their own local services to include, enabling parents to open new schools, letting neighbours run parks and libraries, greater public control of the planning system, and allowing residents to hold local police to account in neighbourhood meetings (Conservative Party Manifesto, 2010).

With the party now representing a majority of the coalition government, plans for the delivery of the Big Society are underway. It requires a degree of foresight to anticipate exactly what this might mean for the future of UK higher education and the current schemas of valorisation of the university's contribution to society. David Willetts, Minister for Universities and Science has paid tribute - in rhetoric at least - to the contribution of universities 'far beyond economic growth'. Willetts waxed lyrical about the virtue of notice boards filled with 'visiting lecturers, sports competitions, new brands or chamber concerts', although the coalition government are yet to articulate policies to support this aspect of 'the ideal community' (Willetts, 2010).

The Conservative plans have been well received; the National Council for Voluntary Organisations welcomed what they viewed as evidence that the party recognised the values and worth of voluntary organisations and social action (NCVO, 2010). However, whether the coalition will provide an adequate framework to support the fruition of this model of civil society remains to be answered. Admittedly, the welfare state has always depended on the goodwill of individuals and the work of organisations to provide for the most vulnerable in society - or, for example, develop creative projects where state money was not forthcoming. The difference of the Big Society is one of scale.

The reason for this shift in scale - or, the enhanced dependency upon voluntary social welfare activities is, quite simply, due to a reduction in scale on the part of the traditional welfare provider; the welfare state. While the word-play of this transition - here in the case of the UK, the 'Big Society' - may reveal more about national policy fashions, the underlying causes have an international character. These longer term causes - reduced welfare spending and a retrenchment of state services - are apparently permanent in nature and representative of a shift affecting many advanced economies internationally. The welfare state model is being scaled back across Europe as governments attempt to limit their expenditure - seen most prominently in France, Italy, Spain and Greece. Even the revered Nordic welfare state, labelled by Esping-Andersen as tending to have the highest rates of public-expenditure and generating the highest degrees of social equality (Esping-Andersen, 1990), are clearly no longer expanding (Sorman, 2010).

The longer- term view therefore suggests the need for a growth in informal knowledge activity internationally - whether or not this is something pushed by national governments under banners such as the 'Big Society'. Failure to increase and expand upon the informal knowledge economies of countries affected by similar welfare cutbacks, will presumably lead to diminished support for the domain of social welfare. The argument we present for state investment to not undermine the informal knowledge economy, is thus instructive for policy-makers and citizens beyond the shores of the UK.

A pressing need for recognition of the university's contribution to the informal knowledge economy

If the Big Society is to succeed, the informal knowledge economy will need to grow and will require more public investment. In terms of higher education, that money needs to be distributed far beyond STEM subjects, for all graduates have a vital contribution to make irrespective of discipline and indeed the informal knowledge work provided by HASS graduates is likely to be greater. In terms of the informal knowledge economy, the proposed 40% reduction in public funding of UK higher education and the commitment only to the teaching of STEM (Morgan, 2010), together with Lord Browne's (2010) recommendations that students take out higher loans to pay higher fees, will inevitably exacerbate social inequality as financial support for the most needy diminishes (Booth, 2010). Support for the informal knowledge economy- both rhetorical and fiscal - is at present inadequate and forecast to deteriorate further.

So far, two significant implications have arisen from our recognition of the informal knowledge economy. The first is that contemporary political narratives of the knowledge economy are incomplete. They overlook the extensive array of informal knowledge work which, as has been demonstrated, often supports the formal tier and hence possesses an indirect economic value. The second point is that higher education in any discipline benefits the informal knowledge economy are undervalued, the role of the university in developing individuals who contribute to the informal knowledge economy will remain ignored and unsupported. A key issue is that of measurement of the knowledge contributions of universities.

Questioning Performativity

Current methods to valorise the knowledge contributions of the university are problematic. By definition, quantitative measurements *cannot* capture the qualitative. However, since the guiding light of higher education policy designed by successive UK governments has been the enhancement of national economic competitiveness, assessment of outputs has focused upon the tangible and the economic. This echoes Lyotard's *Performativity* principle (1979), whereby the university - stripped of its position as the guardian of all knowledge by the arrival of Postmodernism - must find a new means of legitimacy. In the postmodern age where all knowledge can claim relative validity, the university must find a new means of supremacy. As Rowland elucidated, university knowledge claims have become justified through *demonstrated* utility (Rowland, 2006: 45). This means that university knowledge must be countable in nature and effect.

If valorisation is reduced to quantitative evidence, the 'special effects' of HASS subjects which are almost impossible to quantify - are overlooked (Drakeman, 2010). This was a limitation of the 2004 British Academy report, 'That full complement of riches' (British Academy, 2004), the sole aim of which was to quantify and demonstrate the formal economic contribution of HASS. To take this argument further, if a knowledge economy is recognised to possess both formal and informal economic activities, then demarcation between disciplines becomes less important. The limited capacity of metric measurements, however, remains a problem. Admittedly, it would be a step in the right direction if governments began to measure those quantifiable elements of the informal knowledge economy. The number of students undertaking voluntary community work, details of university-supported community research programmes, or the number of university hosted public lectures and events could, for example, be counted and the data made public to give some indication of the informal knowledge activities of universities and their students. Once more though, statistics alone would not sufficiently capture the intangible activities and contributions of the university in the informal knowledge economy. Therefore, the value of the term 'informal knowledge economy' is that it serves as a point of reference to encompass the full range of those 'special effects'. On the rhetorical level at least, this will aid universities to assert their importance in the informal knowledge economy, and call for it to be observed and celebrated by policymakers - something which the presently favoured valorisation methods do not.

In honour of history

Critics of the political projection of the knowledge economy commonly deploy the argument that its arrival marks the death of the foundational principles of the university. The most vociferous opponents refer to 'paradigm shift' (Delanty, 2001) or the subjugation of academic freedom to capitalist priorities (Evans, 2010). Through recognising the university's contribution to the informal knowledge economy, in particular to cultural enrichment and social justice, we can see that aspects of the historic university continue to find expression in the present day. References to the traditional university often rest upon the Humboldtian narrative, established after the inauguration of The University of Berlin, 1810. Humboldt stressed the societal function of the university, and the expectation that all students should develop bildung - or good character (Ash,1997: 9). Bildung did not depend upon technical knowledge but rather the ability to foster social relationships and acts of citizenship, clearly informal knowledge activities. In The Idea of the University (1852) John Henry Newman concurred that the university must produce graduates who contributed to societal - as well as economic - activities. Karl Jaspers later asserted that only a university which taught HASS alongside STEM would realise its ambition of societal enhancement (Newman, 1931: 38; Jaspers, 1960: 30). A fuller recognition of the informal knowledge economy therefore protects / legitimises the modern university to pursue a broad mission which includes valuable activities from its past.

Conclusion

This chapter has proposed a rhetorical framework through which universities can assert both the existence and virtue of the informal knowledge economy, and their role – irrespective of discipline - within it. We have identified knowledge transfer and exchange which exists in an informal domain of the knowledge economy, and which is at present unrecognised in the dominant definitions. We have shown that the characteristics of this informal knowledge economy activity are that it is not directly financially rewarded but is motivated by social enhancements which have possible indirect market benefits; it relies on tacit knowledge and 'people skills' and not necessarily disciplinary expertise; and that normally the knowledge exchange processes are not formally recorded.

We conclude this chapter with four further points. Firstly, the unpaid activities of individuals to enhance the functioning of society such as volunteering, welfare work, active citizenship have always existed outside of the welfare state, however, the arrival of the Big Society – in rhetoric at least - has brought the importance of informal knowledge activity to the fore. The newness of the Big Society lies mostly in its scale and its success will depend on an equally extensive informal knowledge economy. If the coalition government is serious about the construction of a Big Society, then it must support the university in its full array of contributions to the knowledge economy: both formal and informal. Big Society: small university would be a flawed mantra.

In contrast to the activities of the university in the formal knowledge economy, the informal knowledge value of the university focuses upon nurturing of soft skills and social knowledges, and the cultivation of citizens who are willing to contribute towards social - not just economic - goals. The second contention is that as a result of its conceptual neglect, the informal knowledge economy does not receive adequate investment – politically or financially. The strategically targeted funding of STEM students only will prove insufficient to maintain the informal knowledge economy. HASS skills and knowledge make an equal and unique contribution within the informal knowledge economy. The need for investment will only increase in the current age of welfare retrenchment by the state.

The third point is one of epistemic significance. If the notion of a knowledge economy is expanded to include its informal aspects, then the assumption that a knowledge economy relies only upon STEM expertise is mistaken. The knowledge economy depicted here encompasses both the formal and informal and thus, both the role of HASS in effecting a flourishing knowledge economy deserves equal theoretical consideration to that historically awarded to STEM. Shifting the philosophical debate leads to our fourth and final point. If HASS knowledge is confirmed to be of equivalent importance to the knowledge economy, current measurements of the university's contribution to the knowledge economy must adapt to account for the unique role of HASS.

In the final chapter of this book, Barnett urges the university to define its identity in an age where knowledge claims are increasingly diverse and fragmented. For the university to proclaim its value and responsibilities within this 'liquid age', it must possess the capacity of agency, i.e. the freedom to make judgements and take actions. It is hard to see that non-elite universities in the UK presently possess a great degree of agency. While the language of policy and the metrics of output measurements continue to place disproportionate emphasis upon economic output, there lacks an incentive or vehicle through which the university can begin to express its broader contribution. We have presented the informal knowledge economy as an invaluable framework for both redirecting and recapturing the social functions of the university.

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