

Vocationalism in British Higher Education for a knowledge based economy

Pericles 'asher' Rospigliosi

Abstract: This chapter analyses the relationship between universities, vocational education and the professions using a chronological telling of the history of universities in the UK. It explores graduate employment and the mediaeval university, which highlights the important role of the Latin Church and demonstrates foundational links with the professions. The early modern university is reviewed, when the power of the church waned and the role of the state grew. This era reflects the pivotal importance of Britain's colonial ventures in the emergence of early capitalism. The relationship between industrial capitalism and universities is critically reviewed showing how UK universities learned lessons from the Humboldtian University leading to the introduction of the modern research-led university. The final section of this history explores how the contemporary neoliberal turn has facilitated the massification of higher education and the emergence of a financialised and precarious graduate workforce.

Contemporary developments in graduate employment outcomes, and the expansion of the professions are considered and linked to the growing importance of the creative and cultural industries in the post-industrial UK economy. The limited role of colleges of further education, and the importance of the adoption of mass higher education under neoliberalism is used to identify key themes in the relationship between vocational education and contemporary UK higher education. This relationship is evaluated against the many attempts to stimulate a new vocationalism for UK universities, and proposes that the willingness and disposition to learn are the new vocational qualifications of polyvalent university graduates in the knowledge economy.

Keywords: Neoliberal university, new vocationalism, professionalism, UK higher education, graduate employment, graduate employability

Introduction

This chapter analyses the relationship between universities, vocational education and the professions in the UK. Reflecting on the history of UK universities, it charts how vocational outcomes have always been an important part of UK university education. Since the founding of the first UK university many students have attended in order to gain access to a vocation (a particular career or occupation). Professions are a specialised subset of vocations as will be considered later in the chapter. Professions demand a more specialised professional-scientific education than most UK university graduates achieve. This distinction can be clarified by a set of examples related to the construction industry. The following is a list of some vocations in that sector, but only the final two are professions: labourer, bricklayer, painter, roofer, architect and structural engineer. The final two need a professional-scientific education.

The chapter explores the complex relationship between university education, vocational outcomes and the professions. It also highlights the limited role of colleges of further education in the provision of vocational education and training in the UK. Finally, it offers an evaluation of the contemporary situation of higher education and its vocational outcomes in the UK. In the neoliberal economy, the professions have expanded rapidly, accelerated by the growing importance of the service economy and the incorporation of the creative and cultural industries into the vocational domain of UK higher education. By studying how universities have addressed the vocational needs of students, society and the state the chapter offers insight into the types of vocational learning that UK universities deliver now. The current neoliberal model of mass higher education and the resulting financialisation of the graduate workforce, which is often justified by the trope of the technologically determined knowledge economy is critiqued, and a more grounded proposal for a new vocationalism is offered.

The first section offers a chronological telling of the genesis of universities in the UK from a vocational perspective, exploring graduate employment and the mediaeval university, which highlights the important role of the Latin Church and introduces some linkages between university education and the professions. The connected role of the professions in vocational education is revisited later in the chapter. In the next section the early modern university is reviewed, outlining how the power of the church waned and the role of the state grew. This era of the history of UK universities reflects the pivotal importance of Britain's colonial ventures in the emergence of early capitalism. The relationship between industrial capitalism and universities in the UK is critically reviewed by a comparison, showing how UK universities learned lessons from the Humboldtian University. These lessons lead to the introduction of the modern university. The final section of this history explores how the con-

temporary neoliberal turn has facilitated the massification of higher education and the emergence of a financialised and precarious graduate workforce. This chapter uses a chronological approach which updates the widely adopted three stage model from the landmark histories of UK universities written at the end of the last century (H. Ridder-Symoens, 1992; Ridder-Symoens, 1996; Rugg, 2004a). Here the mediaeval, the early modern and modern are extended to accommodate neoliberal developments since those histories were told.

Following the history of how UK universities have engaged with vocational education, the relationship between the professions and universities is explored. Contemporary developments in graduate employment outcomes, and the expansion of the professions are considered and linked to the growing importance of the creative and cultural industries in the post-industrial UK economy. The limited role of colleges of further education, and the importance of the adoption of mass higher education under neoliberalism is used to identify key themes in the relationship between vocational education and UK higher education. This relationship is evaluated considering the many attempts to stimulate a new vocationalism for UK universities, before proposing how the willingness and disposition to learn have become the new vocational qualification of university graduates in the knowledge economy.

1 The long view: the role of vocational engagement in (UK) universities

1.1 Graduate employment and the medieval university

Universities in the UK have from their very foundation been closely connected with the Latin Church. In the mediaeval context of Europe in which the first universities were formed, the most concentrated gathering of literate peoples, was the Latin Church (Pedersen, 1997). After the papal decree issued in 1079 by Pope Gregory VII the genesis of the earliest universities in Europe began. The first universities emerged from the cathedral schools of the Latin Church as the papal decree instructed all cathedrals to prepare people to serve the church by forming schools at the sites of cathedrals. This emphasis on developing the capability of people through the cathedral schools reflected the increasing power of the Latin Church and its ambition (Southern, 1970). The foundation of the cathedral schools formed the underpinning of the universities that developed in the century that followed. And this foundation was based around the need for an educated clergy so that the Latin Church could grow (Rudy, 1984).

The power and dominance of the church, and the resulting need for a literate and educated workforce can be seen in the Domesday book of 1086 in England.

This survey of the resources of England show that the Latin Church managed a fifth of all the land and assets of England. The Domesday book itself is testament to a record-keeping and administrative function that was expanding, and showed the need of the church for those who could read and write accurately. This need for a polyvalent workforce capable of scholarship was not just to support administration but also for the innermost workings of the Latin Church, a text-based religion where analysis of Scripture (especially the Holy Bible) was a central element of the authority of the church. The clergy needed to be educated, not only able to read and write but also to interpret and contextualise Scripture.

From the cathedral schools emerged the universities, which developed further the institutional capabilities to increase the quantity, quality and polyvalence of scholarship available to the Latin Church. The universities also developed other important administrative and professional strengths for the emerging theocracy of the Latin Church. The first universities not only focused on Latin and scriptural scholarship but also had faculties of medicine and law. Thus, we see in the development of the very earliest universities a close linkage between research, such as study of Scripture, and a vocational mechanism for the professional and technical education of lawyers, doctors and administrators (Haskins, 2002). We will return to the relationship between the professions and scientific and technical education in the UK later, after charting the development of the growth of universities in the UK in their vocational context.

As universities grew in size and number, a standardised set of studies developed. This reflected the needs of the Latin Church and emphasised the underpinning skills related to Latin language and the liberal arts in the trivium and quadrivium. For those who studied further there were more specialised higher faculties in philosophy, theology, medicine and law (Cobban, 1975). These higher faculties were not the route chosen by the majority of students. For most students the vocational value of Latin and the arts was sufficient. The full degree or LD (*licentia docendi*) was the pathway into teaching and was only of value to a few.

In reviewing the birth of the university in the UK and its relation to the Latin Church we can see the emergence of a vocational and technical education closely aligned to the needs of that economy; a theocratic economy centred on the power structures of the Latin Church. We also see a complex relationship with the more prestigious learned professions linked to more scholarly outcomes which will be considered a little later in this chapter.

1.2 The early modern university before the industrial revolution

There was decline in the power of the Latin Church, even before the Reformation, when the assets of the Church were seized by the power of the state and

became the Church of England. Aside from the Reformation, the loss of power of the Latin Church came about for a number of reasons which included the dramatic demographic shifts brought about by the Black Death and the widespread repugnance at the venality of indulgences and other signs of corporal corruption in the church (Horrox, 2013). This shift away from the power of the Latin Church was reflected in a decline in the status and value of university education in this period. Vocations in “service to the church” became less relevant for ambitious and talented young men. The numbers of students fell significantly leading to a loss of revenue, see for example the number enrolled in at Oxford as described by Green (1974):

“In the fifteenth century the university entered into... a period of contraction. Its numbers apparently fell from 1,500 to 1000; only 27 men took the masters’ degree in 1456–7. Contemporary letters complained of the shortage of students, teachers and endowments...”. “Once, the university exclaimed somewhat rhetorically in 1430, ‘she was famous in the world: students flooded to her from every nation: then she abounded with men learned in every art and science; her schools were not dilapidated nor her inns empty’. The university it was urged in a letter to the Duke of Gloucester, pleading for his patronage, ‘is reduced to the greatest misery. Lectures have ceased and a complete ruin of education is imminent.” (Green, 1974, p. 31)

The changed power base which resulted from the Reformation and led to universities needing the patronage and support of the British ruling classes is highlighted by Green above in the pleading letter to the Duke of Gloucester. Endowments and fees from the wealthy replaced the patronage of the church. This led to changes to the education offered by UK universities. The changes reflected increasing power of the nation-state, and the growing importance of trade coupled with the cultural shifts stimulated by the Italian Renaissance. This last factor resulted in excitement at classical and humanistic studies. All these changes contributed to reconfiguring the vocational value and polyvalence of UK higher education (Grendler, 2004).

The universities were depending on study fees and needed to recruit students for their fees and for the later financial benefit from them as alumni. Universities became more student centred, offering courses that developed both the cultural sensitivities and vocational skills of their students. The growing complexity and importance of the nation-state widened the range of useful vocational skills needed, and accelerated the demand for a literate and numerate ruling class. There was a rapid expansion of new occupations and roles that required higher learning. These new roles included personal assistants for those in power, curators and librarians to manage the growing body of knowledge which the Renaissance was restoring and expanding, and architects and designers to realise the classical taste in building, arising from the Renaissance. Classical studies, history, literature and aesthetics all became important contributors to the value of university education for the sons of the wealthy ruling classes in Britain (Grendler, 2004).

While the Renaissance stimulated an intellectual revolution, the more material successes of the growing capabilities of capitalism, and the vast influx of wealth from the nascent colonial ventures stimulated the need for a rapidly expanding workforce of literate administrators, civil servants and diplomats (Armitage and Braddick, 2009). More complex organisations, and an increase in trade and legal and political processes led to an increasing number of graduates becoming involved in the roles of state. For example, in the last half of the 16th century the number of graduates working in the House of Commons grew almost threefold (Curtis, 1959, p. 59).

As the material growth and economic expansion of mercantile capitalism accelerated, the need for an ever-greater numbers of graduates able to perpetuate the cultural assumptions of the ruling classes grew. A higher education that gave access to a Eurocentric history derived from classical studies made possible the enormous administrative record keeping that underpinned the British mercantile successes of colonial venture and slavery (Williams, 2021). The pipeline that led to evermore graduates managing the growing complexity of the state, the economy, the colonies and society increased the need for tutors and teachers. Literacy as a prerequisite to governance boosted the value of both vocational higher education, and the pre-learning required to participate.

The early modern university was concerned with attracting the sons of the wealthy and offered an education focused on literacy and culture with little focus on science, engineering and technology despite the emerging importance of these technical skills in the burgeoning Industrial Revolution. The next section will consider how UK universities came to revise their focus in light of the growing successes of the Humboldtian Universities of Germany.

1.3 Lessons from the Humboldtian University

As the industrial revolution gathered pace the disconnection between the vocational value of university education and the powerful new ways of scientific thinking that were underpinning the massive social and economic changes widened. The industrial revolution was fuelled by many factors, among them were an increasing dependence on scientific and technical ways of thinking. This growing reliance on science was not reflected in the UK university education of the time, which still focused on aesthetic and classical concerns. Even to a great student of classical history the university education of this time offered little stimulation, as here attested:

“In England the historian of the Roman empire Edward Gibbon described his student days at Oxford as “the fourteen months the most idle and unprofitable of my whole life,” and his teachers, “the monks of Magdalen,” as “decent, easy men who supinely enjoyed the gifts of the founder” (Perkins, 1997, pp. 14–15).

Because of this lack of relevance and rigour, the number of students enrolled in UK universities fell, and the universities financial position became difficult (Cobban, 1988).

The area in which UK universities were least capable of contributing was in the development of research skills, based on empirical knowledge. The history that had shaped the traditions in UK universities was of the recording and sharing of learning from the past. In the medieval university, and the early modern university research and the techniques for the generation of new knowledge were seen as of little value. This reflected the ways in which different forms of knowledge were ranked as more or less important. Sacred, or spiritual knowledge was considered far more important than worldly or profane knowledge, theology was the Queen of academic learning (Hannam, 2009).

Outside of the UK a major change was taking place to the relationship between universities and research, pioneered in Berlin by Wilhelm von Humboldt, director of education at the Prussian ministry of the interior. His emphasis was on the university as a place of new understanding. In his own words: "*at the highest level, the teacher does not exist for the sake of the student: both teacher and student have their justification in the common pursuit of knowledge*" (Humboldt, 1970, p. 243).

The change of emphasis which Humboldt promoted elevated the status of scientific and technical knowledge. Historical circumstances such as Napoleon's victory over the Prussians and a growing recognition of the power of scientific and technological knowledge meant there was a receptive view towards this change in the emphasis of higher education (Noble, 1994). The Humboldtian Universities of Germany were able to build on their existing traditions of critical thinking as part of the science of philology. Critical philology was well developed in Germany and was able to provide a philosophical underpinning to the development of training scientists and the emergence of the Ph.D (Clark, 2006, 1989). It was in the development of the Ph.D. that the highest level of this innovative approach to learning was realised. In the thesis which was required in order to gain this highest academic award the difference between the PhD and the Masters degree was stark. A Masters dissertation was a useful summary of what was learned, and thus helped maintain knowledge over time, but the requirements for a doctoral thesis emphasized originality and critical-reflective creativity "*in the treatment of academic knowledge*" Wright, 1827 quoted in Clark (2006, p. 211).

While it had been easy for higher education which focused on the thoughts and writings of antiquity to exclude science and new knowledge, as the emphasis changed to new knowledge the physical sciences gained status in the university (Noble, 1994). Throughout the course of the 19th century, German universities grew in status, as Germany's economy developed and benefited from a growing body of science researchers and research publications. By the end of the 19th century German universities were regarded as the most suc-

cessful in the world. Academics came from around the world to learn what was known as the German model (Simpson, 1983). UK universities were slow in recognising the importance of research. Even by the middle of the 19th century debate in the UK about the purpose of a university education still favoured the traditional focus on the cultivation of classical culture, as laid out in the influential article by Newman: *The Idea of a University* (1852).

By the start of the 20th century, science as a profession, and the growing number of scientific disciplines was contributing to significant growth in UK universities. Greater numbers of students were choosing to follow postgraduate courses and the ever-expanding British Empire provided many new opportunities for vocational outcomes. From the start of the 20th century the modern university came to be the dominant model for UK universities. Nonetheless, some of the most prestigious UK universities were slow in adopting the research focus, for example Oxford did not award a PhD until 1919 (Simpson, 2009).

Throughout the 20th century, the acceptance of the modern research-led university became the norm in the UK. Less graduates sought work in the Anglican Church, and evermore went into education-based employment. The growing importance and number of PhDs evidenced this transition towards a research-led, knowledge-based form of higher education. The changes suited specialised professions and reinforced the vocational value of higher education. When the UK government started collecting data on the jobs taken by recent graduates, at the start of the 1960 s, about two thirds of all graduates remained in the field of education after completing their first degree (Bourner and Rospigliosi, 2008).

This transition to a more knowledge-based, technical and vocational form of higher education was accelerated in the decades after the Second World War. Integrative technical and scientific projects were recognised to have been decisive in the war effort. From the role of nascent computing in code breaking, to the optimisation of food production, scientific and technical skills were celebrated. The post war push for social consensus led to investment in schooling for all and included the expansion of the number of UK universities. There was some cultural resistance, during the 1950 s, when the relative value of science was contrasted unfavourably with the importance of the arts, in what became known as the two cultures debate (Snow, 1959). Nevertheless, by the time of the Robbins report into Higher Education, for the UK government (1963), there was national consensus about the need to expand the number of universities rapidly. This was achieved initially by technical colleges being granted university status, and over the longer term by the development of the polytechnics as degree awarding vocational institutes of higher education. The Robbins report gives an insight into the combined focus of UK universities in the middle of the last century on both culture, vocational skills and fulfilling the Humboldtian mission of the pursuit of knowledge:

“Instruction in skills; the promotion of the general powers of the mind so as to produce not mere specialists but rather cultivated men and women; to maintain research in balance with teaching, since teaching should not be separated from the advancement of learning and the search for truth; and to transmit a common culture and common standards of citizenship.” (Robbins, 1963, pp. 6–7)

In the UK for the last 100 years the status and uptake of higher education has increased steadily. UK universities adopted the Humboldtian pursuit of knowledge, and increasingly specialised scientific and technical courses fed into the burgeoning of the professions, as we will see later. Despite some persistent antagonism between a focus on education as developing applied scientific and technical learning, and the enduring attachment of academia and the ruling elites to some ideals of a classical education, higher education in the UK has resiliently become ever more central to vocational development and employability.

During the final quarter of the 20th century as the social consensus changed, the emerging neoliberal perspective emphasised entrepreneurship and innovation. As the mass employment of Fordist production waned a new rationale for higher education emerged, described in shorthand in the concepts of the knowledge economy, and the need for lifelong learning. The next section will consider how UK universities have expanded rapidly under neoliberalism to the point where almost half the UK population now has a university degree.

1.4 The knowledge economy and the massification of higher education in the UK

For the last quarter of the 20th century, the UK economy moved away from mass manufacturing and towards a service economy. Large-scale unemployment during the 1980s coincided with a crisis in graduate vocational outcomes and a change of focus in UK universities. Manpower planning identified skills gaps and an explicit focus on vocational outcomes began to feature in the concerns of university planners. These change to the labour market and to the skills planners valued were connected. Policymakers in the UK began promoting a more explicitly skills based and vocational approach for higher education, particularly in the Polytechnics. Polytechnics were eventually allowed to award degrees, and courses in vocational areas of study blossomed. These popular vocational courses included not only traditional professions such as law and accountancy, but also areas of growing demand such as management, computing, planning and administration.

The move to a service economy was frequently characterised as a move to a knowledge-based economy. While the two had distinct differences, policymakers tended to emphasise the growth in knowledge work, rather than mention the increasing number of low skilled, low paid service jobs. During the last

decade of the 20th century, the emphasis on developing knowledge workers with the skills needed for the knowledge economy became widespread policy across Europe. In the UK polytechnics were incorporated into and merged to form the Neoliberal University at the start of the 1990 s which rapidly increased university capacity. By the end of the decade the “New Labour” government of Tony Blair was promoting an aspiration for 50% of young people to go to university, under the mantra “*education, education, education*” (Blair, 2001).

Over the course of the 20th century, the landscape of higher education in the UK had changed significantly. Much of the thrust of the Robbins report from 1963 had been achieved. The wave of new universities built during the 1960 s, together with the incorporation of the technical colleges and polytechnics had more than doubled the number of universities in the UK, and about half of school leavers went on to higher education (Colville, 2016). Mass higher education led to significant changes in the nature of vocational outcomes for UK graduates. Between 1960 and the end of the century, the proportion of graduates who stayed on in the education sector, which had been the foremost graduate employer during the high day of the Humboldtian University, halved (Bourner & Rospigliosi, 2008). For the graduates of the new universities a wide range of vocational outcomes grew. This opening up of the vocational outcomes for graduates coincided with a rapid change in what were considered graduate jobs. This widening of desirable employment reflected changes in what was understood by the professions, and professional work. The next section will examine the relation between the professions and the vocational outcomes of higher education in the UK.

In summary, it is clear that graduate polyvalent employment has been a key element in the development of universities in the UK in each of their key stages: medieval, early modern, modern (Humboldtian) and neoliberal mass education. It is impossible to understand UK universities without appreciating the importance of the vocational outcomes of their graduates. The relationship between higher education and vocations is especially important to understanding the professions and the professionalisation of an increasing number of occupations.

2 The professions and the increasing importance of professionalisation for graduate polyvalent employment outcomes

The following section investigates the concept of the professions in order to understand the growing importance of professional education in our analysis of the vocational role of universities. It addresses the changes identified in the

brief history of the vocational role of higher education in the UK and sets the scene for the changing vocational outcomes to be discussed later. The focus here is on those professions which will help us address the complex relationship between higher education research and teaching, and the labour market, and the changing needs of wider society for competencies such as lifelong learning and personal development.

The concept of the professions as a form of high status occupations is ancient and deeply entwined with the formation of universities across Europe and in the UK. At least this can be said for those professions favoured by patriarchal power structures, less so for those associated with the work of women. For example, the early professions are embedded in scientific or legal practices such as law, medicine and philosophy rather than natural magic or childbirth. All the professions are characterised by a significant period of learning, and tend to be valued for their specialised expertise in areas of risk.

Attempts to study and define the professions, and what constitutes professional work has attracted the attention of scholars almost since the start of the European tradition of scholarship. The close relationship between the medieval university and the seven liberal arts of the trivium and quadrivium are both the basis of the study of arts and sciences and the foundational learning for the early professions such as law and medicine. “*university education, at first without a degree and later with one, became a characteristic mark of professional elites engaged in the cure of souls, legal practice, governmental administration, medical care, and education*”(H. de Ridder-Symoens, 1992, p. 22)

2.1 The growth of the professions

The professions embedded in the medieval university covered a limited range of human concerns, over time the increasing variety or demands of the labour market and the specialised needs of the state increased both the range of topics studied in higher education, and the types of occupations considered professional. As seen in the complex history of vocationalism as part of the development of the UK universities, earlier in this chapter, as the state grew in scope so the need for highly qualified specialists increased. Where these specialisms were concerned with bringing expertise to areas of risk, there was also a tendency for these areas of work to become considered as professional. This was important for at least three reasons:

For the students at university the range of possible respected and rewarded outcomes grew. This benefited the student as it increased the value of investing time and effort in study, through the increased likelihood of gaining power, income and status.

For the universities the range of specialisation in which scholars could engage grew. This allowed universities to take on more students and generate secure and valued roles for an increasing number of professors and teachers.

For the labour market the new professions meant that there were more diverse skills and wider society competencies available to solve problems, and bring growth and personal development to the economy, and state.

By the time of the emergence of the Humboldtian University, the Industrial Revolution rapidly increased the needs of industry, the state and wider society for those who had attended university, and received a professional and scientific education. This coincided with the increased specialisation of courses of study, and increased specialisation of the underlying focus of research conducted by universities, which characterise the Humboldtian University. These two concurrent areas of growth were reflected in the growth of the range and scope of the professions and the growing number of professionals. Throughout the 20th century, there was a steady increase in these three related aspects of the vocational role of professional scientific higher education.

In the last half-century, the pace of growth of polyvalent vocational knowledge, specialised professional-scientific education and the scope of the professions has accelerated. This is apparent in such phenomena as the increased range of occupations that claim professional status, the increased number of universities, courses and graduates, and in the proliferation of specialised academic outlets for research such as journal articles, conferences and books. As discussed in the brief history of the relationship between higher education and vocationalism above, this growth can be explained in part by changes in the economy and wider society. The last half-century has seen the economy of the UK move from a manufacturing economy to a service and knowledge work economy. This change to the economy of the UK has also seen a widening of participation in the workforce most notably that far more women are working. It has also seen a steady delay to the age when young people enter the labour market.

Since the incorporation of polytechnics into the university system at the start of the 1990 s, the proportion of the UK population who participate in higher education had grown to nearly 50% (HEFCE, 2015). This growth has had a significant impact on the types of employment which are considered as graduate jobs. This growth in the number of workers who are graduates, together with the growth in the number of women working has significantly widened the scope of those occupations which claim the status of professional. The process of an occupation becoming professional, or professionalisation, may be driven by those who work in that occupation or by those who manage and regulate it or when a more scientific approach becomes standardised (Evetts, 2006). For example in the scientific field of medicine and health, nursing and midwifery have gained professional status quite recently. That this had not been the case sooner is largely due to the historical tendency for the professions to be do-

minated by men, and the professions of nursing and midwifery, to predominantly be the domain of women. In other careers class was the inhibiting factor to professional status. For example the law, long associated with the origins of the professions, has expanded to include policing as a recognised profession only recently.

The professionalisation of contemporary occupations is taking place in a wide range of work contexts. These include those related to the traditional professional concerns such as medicine and law – shown in the previous examples of the professionalisation of midwifery and policing (Brante, 2010). Professionalisation is also coming to new areas of expert work such as estate agents (Webb, 2000) and retail managers (DuPont and Craig, 1996). These new polyvalent occupations, which claim professional status, are also work associated with providing expertise to offset risk and which require a professional-scientific education (Evetts, 2013).

Professionalism in this regard means there will be trust for the competence and integrity of those who do this specialist work, an expectation that they will have access to expertise and a “*shared ways of perceiving problems and their possible solutions*” (Evetts, 2006, p. 518). This normative value system is developed in individual professional practice over time in a process of professional identity development (Hughes, 1958). The common feature among both the established professions and more recent areas of work which claim professionalism are that they require extensive professional-scientific study to gain access, and thus that knowledge is their “*core generating trait*” and that this knowledge is credentialised (Halliday (1987) quoted in Macdonald 1995:157). The requirement for recognised credentials is part of the reason that the professional-scientific university degree has become increasingly associated with access to professional employment.

Thus we see the UK labour market changed rapidly in the first decades of the 21st-century. The number of graduates grew rapidly, and the variety of courses and degrees mushroomed. This coincided both with the increased emphasis put on knowledge work by policymakers and commentators and with limited growth in the economy, particularly after the global financial crisis of 2008. These trends were exacerbated by structural changes in the funding of higher education in the UK through the 21st-century, and by the incorporation of a range of occupations and professions associated with the creative and cultural industries, which will be considered in the following section.

The changes to higher education funding came about in three significant steps:

The introduction of student fees: following the publication of the Dearing Report (1997). The New Labour government introduced tuition fees in 1998 of £1000 per annum. This followed a period of debate about the relative merits of tuition fees, or a graduate tax.

The rapid raising of student fees. Over the decade that followed the introduction of student, tuition fees the cost to students rose rapidly. In 2004 fees were raised to £3000 a year and following the global financial crisis in 2010 the fees were raised to £9000 per year in the name of austerity.

The lifting of the regulation of the caps on numbers. In 2015, the state regulation on how many students were allowed to be recruited by any individual university was removed. This regulation had been a legacy of the centralised planning of higher education. Removing it contributed to a growing expansion of the number of school leavers choosing to go to university, despite the substantial increased level of personal debt students accrued.

In summary, this section has explored and highlighted the important relationship between the professions and the polyvalent vocational outcomes of professional-scientific university education. It also charted the expansion of both university education in the UK, and the professionalisation of many forms of graduate occupations. Before turning to an analysis of the changes to vocationalism which these trends exemplify, there is one other significant area of growth in the domain of UK higher education: the growing importance of the creative and cultural industries in the UK economy, and how they came to be of great value to UK universities.

2.2 The capture of creative and cultural industries

The creative and cultural industries hold a range of attractions for policymakers as well as for the neoliberal university, and also for graduates seeking enhanced vocational outcomes. The creative and cultural industries became part of a particular approach to the knowledge economy favoured in the UK in the late 1990 s. In part this was due to a recognition of the economic value of successful UK exports such as pop music, fashion and film by the New Labour government of the time. This government promoted the creative and cultural industries to the point of making their marketing slogans about “Cool Britannia” a cliché (Hesmondhalgh et al., 2015). The creative and cultural industries cover a wide range of vocations often related to consumption. These include not only art, music and fashion but also media, advertising and design. The creative and cultural industries generated jobs of value in the service industries that replaced manufacture at the heart of the UK economy. During that New Labour government which introduced student tuition fees (above) there was a conflation of the creative and cultural industries to include the digital economy, an area of growth seen then and now as of significant value (Garnham, 2005). A raft of vocational outcomes which were desirable to students and aligned with the UK government’s emphasis on knowledge economy became available to the expanded neoliberal university sector. Courses that had been offered by technical colleges such as fashion, design, software engineering and music technology

were successful at attracting student enrolment. These courses produced graduates who were employable, and addressed a number of skills gaps of concern to the government and industrial leaders (Treasury, 2002). These creative and cultural industry courses were often delivered by practitioners whose credibility with students rested on their career experience rather than their academic credentials. Indeed the author of this chapter entered academia as a lecturer in e-commerce, based on my industry experience as an IT Professional at that time (in the year 2001). Some tension arose as vocational trainers (such as fashion teachers) had to become assimilated into the Academy and adopt a more academic approach, while at the same time higher education was encouraged to promote a more vocational and entrepreneurial approach (McRobbie, 2003). The emphasis on a more entrepreneurial image of work was part of the broader move by universities to align their development of vocational capabilities in the students towards what Gill & Pratt characterised as precarious work in a the neoliberal context of working life as lived in a “*social factory*” (2008).

The expansion of higher education in the UK to include the creative and cultural industries had significant implications for vocational education. Neoliberal universities incorporated skills and practices that became credentialised markers of professional capability. Technical training that had been provided by colleges of further education became honours degree courses at UK universities. The next section will reflect on how FE colleges played a short and limited role in UK vocational education.

3 Vocational education and training in colleges of further education

So far, this chapter has focused entirely on the role of UK universities in vocational education. For a more complete picture of the historical delivery of vocational education and training (VET) in the UK, some discussion of the roles of further education colleges is needed. In the UK it is further education colleges that have been explicitly tasked with delivering skills based vocational education and training since the 1940 s (Johnson, 1979). VET, tends to focus on a narrow set of job specific skills and competencies rather than the broader development of transferable knowledge and polyvalent leaning favoured by universities (Collins, 1991). From the start of the industrial revolution there had been various working men’s colleges, intended for self-improvement (Lovett, 1988), but it was not until the comprehensive reform of schooling in the UK in the closing years of the Second World War that further education colleges both formally mandated by the state (Butler, 1944). This progressive structuring of

education had the retrograde step of separating excellence in academic education from technical skills. The Butler act as it came to be known divided children at the age of 11 into either a more academic stream who studied at grammar schools and went on to university, or those who went to technical or secondary modern schools where vocational skills were emphasised, and went on to colleges of further education. This separation between academic and technical education contributed to the perception of two cultures of different worth by the 1950 s, as discussed above, and relegated scientific and technical training to a less prestigious route. When polytechnics became universities in 1992, some of this cultural snobbery persisted, in the lower status accorded the “*new unis*” (Boliver, 2015). Meanwhile the remaining further education colleges started a 30-year decline in funding (Lucas and Crowther, 2016).

There have been numerous attempts in the last 30 years to revitalise the further education sector, but the inexorable trend for a university education to be the preferred route for the majority of school leavers has continued. Despite the introduction of online provision (LearnDirect, 2000), Foundation Degrees (2003) and Degree Apprenticeships (2015) there has been no significant growth in the number of young people choosing to go to college (Lucas and Crowther, 2016). In the immediate aftermath of the global financial crisis while university students were being offered substantial loans for their living costs the Education Maintenance Allowance for college students was withdrawn in 2010 in the name of austerity (Murray, 2010).

Recently the Auger report recommended a change in the funding offered to post 16 studies (Augar, 2019). It advocated more money and more prestige for technical vocational education and training delivered through colleges of further education. This report gained substantial support and seemed likely to realign funding in the UK away from university degrees and towards more college-based VET courses. The distractions of BREXIT and the change of government in the UK, and more recently the impact of the Covid 19 pandemic have delayed or derailed these changes and colleges of further education remain underfunded and unpopular with most school leavers. Meanwhile the numbers choosing to go to university have continued to grow.

4 Analysis of approaches to vocationalism in UK universities

The previous sections have reviewed the history of UK universities and their varying forms of engagement with vocational education. We have considered recent trends in the role of professionalism, the growing importance of the creative and cultural industries and the shrinking place of further education colleges. This section will draw out some key themes highlighted in the pol-

valent nature of this relationship between academic and professional-scientific education and vocational outcomes in the UK.

The mediaeval university primarily focused on teaching capabilities for the Latin Church to develop scholars, clerics and priests but also lawyers, doctors and teachers. The vocational skills required were for reading and writing in Latin and in the close analysis of the Bible, which was believed to literally contain the words of God (McGrath, 2001). Latin was both a skill and power, as communication with educated people throughout Europe relied on Latin (Waquet, 2001).

Early modern universities moved away from a primarily skills-based focus towards the development of more polyvalent knowledge. Basic clerical capabilities of reading and writing had become widespread during this era, and the benefit of attending university was to develop the humanistic and aesthetic sensitivities deemed desirable in the ruling classes. Rather than a focus on learning to write, the emphasis was on writing well and building the social skills needed in roles such as diplomacy and governance. These changes responded to England's role in a larger world beyond the boundary of the church and reflected colonialism and the expansion of England's interests abroad.

The modern university focused on the development and pursuit of knowledge. For the first time science played a significant part in university education (Ashby, 1974). Vocational skills developed across a wide range of specialisms. Different subject areas prepared students to work in a wide range of fields, as the modern state grew in complexity and the bureaucracy, which underpinned it, burgeoned (Weber, 1905). Across the many disciplines that emerged in the modern university two shared skills developed which came to characterise university education in the 20th century. These were critical thinking and specialist subject knowledge,

Critical thinking was prized above other skills in the modern university as indicating the shift away from old forms of deference to acknowledged authority, and a move towards evidence-based knowledge. This emphasis on critical thinking was indicative of the centrality of scientific thinking in the modern university, and highlighted how different it was from the mediaeval and early modern universities. The importance of critical thinking to the modern UK university was summed up by Douglas Hague, chair of the Economic and Social Research Council during the 1980 s who said:

“Academics must believe that acquiring the ability to test ideas and evidence is the primary benefit of a university education.”(Hague, 1991, p. 64)

The other skill important in the modern university was specialist subject learning. This focus contrasts with the mediaeval and the early modern universities where a narrow range of subjects were studied. In the modern university, a clearly defined hierarchy of subjects and sub-subjects delineated what was to be learned, and what practical skills were needed for that learning.

Economists needed statistics; chemists needed laboratory skills and historians needed an ability to interrogate archives.

Building on this analysis we can see that the modern university was changed by the admission of science. Science builds knowledge on empirical evidence, leading to the critique of existing explanations being a highly valued skill. Science and the accumulation of recorded knowledge develops the need for more learning and produces vocational skills related to the production and dissemination and application of new knowledge. This trend can be seen in the tendency for graduates of the modern university to become part of the education system, which by the 1960s was the career outcome of around two thirds of graduates (Bourner and Rospigliosi, 2008). This self-reinforcing process can be seen as part of the trend which led to the emergence of the knowledge economy.

When we review the changes of the vocational focus of the neoliberal university education in the UK in the 21st-century several significant trends are apparent. The role of the student has become closer to a consumer, preparing for work in the knowledge society and seeking entry to the creative classes. The professional-scientific education they seek has shifted demand towards entrepreneurship and an academic polyvalence suited to the accepted precarity (Casey, 2011). There is no longer any expectation of a job for life, which characterised the era of the modern university (Boltanski & Chiapello, 2018). Rather students entering the neoliberal university recognise academic polyvalence as a necessary capacity for most jobs.

With the introduction of student tuition fees and the lifting of the cap on numbers, students are increasingly treated as customers, and courses as commodities. New courses with names that align with perceived market demand have proliferated. The fees students are charged have become loans to the students creating a financialised graduate class. Regulation in the UK has moved from The Higher Education Funding Council (HEFCE) which explicitly regulated higher education, to the Office For Students (OFS), which acts on behalf as students as consumers. Concerns about grade inflation, expansive university investment in attractive estates, and marketing loss leaders such as free laptops all point to a new relationship between student and university (Casey, 2011). Within the academy rankings of student satisfaction, research excellence and individual academics' "H-index" have become signifiers of the quality of the "product" (Burrows, 2012).

Increasingly courses at the Neoliberal University are evaluated with reference to the likely employment outcomes of graduates. This includes careful monitoring of levels of graduate employment, and complex calculations of lifetime earnings associated with each degree (Brown et al, 2004). Students across all courses are expected to develop a set of polyvalent academic practices labelled "employability skills" in addition to specialised professional-scientific subject knowledge. These so-called "employability skills" emphasise soft

skills, self-branding and instrumental networking, as a means to develop market value and are pervasive in the contemporary UK neoliberal university (Casey, 2011).

Against this backdrop of academic polyvalence, entrepreneurship and employability skills the labour market has become far more precarious. Students do not expect to go into jobs for life, but are more likely to anticipate portfolio work, with the gig economy underpinning an aspiration to self-employment. While the legacy of the modern university is an ever-increasing range of subject specialisations, mass higher education in the neoliberal university has emphasised the need for students to integrate learning, apply knowledge and become reflective practitioners and professional-scientifically educated creatives. Students are expected to turn their polyvalent academic learning to whatever opportunity that knowledge economy offers regardless of their specialist professional-scientific education. In the final section, this chapter will propose ways that the forms of flexible employability required by the neoliberal economy gives hope of a new vocational value for UK higher education, or a new vocationalism.

5 A new vocationalism

The preceding section has identified a range of trends in the vocational focus of higher education in the UK. As we have seen, recent developments have responded to the growth of the service economy, and the increasing importance of the concept of knowledge work as an explanation to changes in the nature of work. The tendency over the last 50 years has been for there to be less graduates staying in the field of education and instead for there to be a wider range of graduate career outcomes. This broadening range of subject specialisations, which are often linked explicitly to graduate jobs, is also seen in the processes of the professionalisation of more occupations, as explored earlier in this chapter. Despite the linking of courses to careers, many of the new graduate jobs are in sectors such as retail, wholesale, financial services and other forms of commerce and administration where the match between the specialised subjects studied and the vocational outcomes have become less clearly linked over time. That is, graduates entering those occupations or becoming professionals in those fields may not have studied a related specialism at university. In this final section some ideas about the relationship between the vocational value of a degree will be considered, that is, how UK students gain lifetime earning benefits even when most graduates do not draw on their subject specific professional-scientific learning in their employment. This will attempt

to link UK higher education with the wide range of vocational outcomes characteristic of a contemporary neoliberal economy.

During the years of rapid growth in numbers of those studying at UK universities since the 1990 s, there were attempts to theorise an approach to employability labelled new vocationalism. New vocationalism at that point was an attempt to identify attributes desirable to employers such as the use of office “productivity” software, teamwork, soft skills and the ability to make presentations (Symes and McIntyre, 2002). This was not the first theorising of a new vocationalism, see for example Bates’ highly critical “*Schooling for the dole*” (1984), and as this section will go on to claim, it was not the last. The capacity for universities to develop practical employability skills is limited as workplace needs are highly contingent and dependent on many factors, for example on the established custom and practices and the specific systems used in any particular workplace. Though some of the various new vocationalism initiatives attempted to address the list of skills employers suggested were valuable, many employers continued to bemoan the lack of such skills (Tomlinson, 2012). Nonetheless, employers have continued to seek out graduates, and though diminished, the graduate premium of lifetime earnings, and the relative stability of graduate employment do still distinguish graduate outcomes from those of most non-graduates. This persistent difference in earnings and employment patterns is known as “*the graduate premium*” (Elias & Purcell, 2004). But for most employers it is not any subject specific learning that they demand. Around two thirds of jobs that are advertised as requiring a degree do not specify a specific discipline. This acceptance of the polyvalent academic value of professional-scientific education is widespread, it will vary by sector, and the specific needs of employers. For example, local government and corporate employers are less likely to require a named subject specialism whereas employers in the health sector or engineering may do so.

As most employers do not require a specific professional-scientific degree we might ask, what are the characteristics of graduates that generate the graduate premium? What enhances the earning capacity of graduates? The proceeding review of the vocational value of professional-scientific higher education highlighted two specific features of university education which are often cited as important to employers: critical thinking and subject specific knowledge. If most of the jobs that are on offer, can be filled by graduates of any subject, then subject specific knowledge is unlikely to be what is valued. There are of course many exceptions. Employers will seek specific scientific subject knowledge where it is a core component of the work, but this is applicable only to a minority of graduate level jobs. If it is not subject specific learning, then is it critical thinking employers seek? While critical thinking may add value for employers, it is unlikely to be the primary attribute they seek. In the workplace context critical thinking is not often highly valued. Far more frequently characteristics like commitment, dependability, motivation and

teamwork are ranked highly by employers, see *Table 1: 62 items ranked in terms of importance by graduate employers* (Bourner et al., 2011, p. 9).

What higher education does assure an employer of is that the graduate has an enhanced capacity and disposition for learning. This enhanced capacity to learn matches both of the well-established economic explanations of why higher education is valued in the labour market: human capital theory and signalling theory (Rospigliosi et al., 2014). The new vocationalism, which the neoliberal university delivers, is an enhanced capability to learn; in the knowledge economy, which creates value for employers and employees. In the more precarious service industries, a workforce with a capacity to learn increases flexibility, which also creates value for employers and employees.

In this understanding of new vocationalism identified here the core difference between graduates and non-graduates is that graduates have developed their capacity and disposition for learning. While all neoliberal economies require workers capable of lifelong learning, the UK highlights the importance of a polyvalent education. Graduates are attractive to employers as polyvalent academic professionals equipped with a capacity for learning complex approaches in a wide variety of contexts. In the list above, of attributes employers said were desirable, the top item is willingness to learn (Table 1). This willingness to learn is the new vocational skill of the neoliberal university education. It is not dependant on any subject specific knowledge, or on the practical skills of academic writing, referencing and the other formal skills of higher education. Going to university indicates a willingness to learn as most university students have gone through many years of intense schooling and then three or more years of learning at university. These years of learning have developed capacities in reading, writing, assimilating new ideas and accommodating them in existing schemas. A degree will generally include a set of core learnings, and some optional choices. Most university degrees encourage self-directed learning as the degree progresses, typically culminating with a dissertation. In the dissertation, the student will have both chosen their topic, and will make choices about the approach to researching and analysing their chosen subject. By the end of a degree, a graduate will have developed their ability and willingness to learn over many years of practise. An employer can be certain that a graduate will be more able and willing to learn than a non-graduate will, and this is the new vocational value of a degree in the UK today.

The relationship between higher education in the UK and scientific and professional skills is very different from the situation across much of Europe. Standardised comparisons of competencies such as the Tuning Project (Lokhoff et al, 2010) are less aligned with UK employer recruitment practices than might be expected. Rather as entrepreneurialism and self-employment grow in importance in the UK economy, the relationship between subject specific learning and earnings is weakening. In this regard, the UK is indicative of a direction of travel for graduate employment and the neoliberal university. In a precarious

work environment, the necessity for workers to continually reskill and expect to engage in lifelong learning has become the new normal.

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The Author

Pericles 'asher' Rospigliosi is an economic sociologist. He is principal lecturer in e-commerce, digital marketing and the digital economy at Brighton University School of Business and Law. For twenty years he has researched the impact of information communication technologies on business, society and learning. He has published widely on graduate employability, the history of higher education and the role of technology. For many years asher has been a firekeeper at the tipi field at Glastonbury Festival.