



Employability: A review of the literature 2012 to 2016

A report for the Higher Education Academy

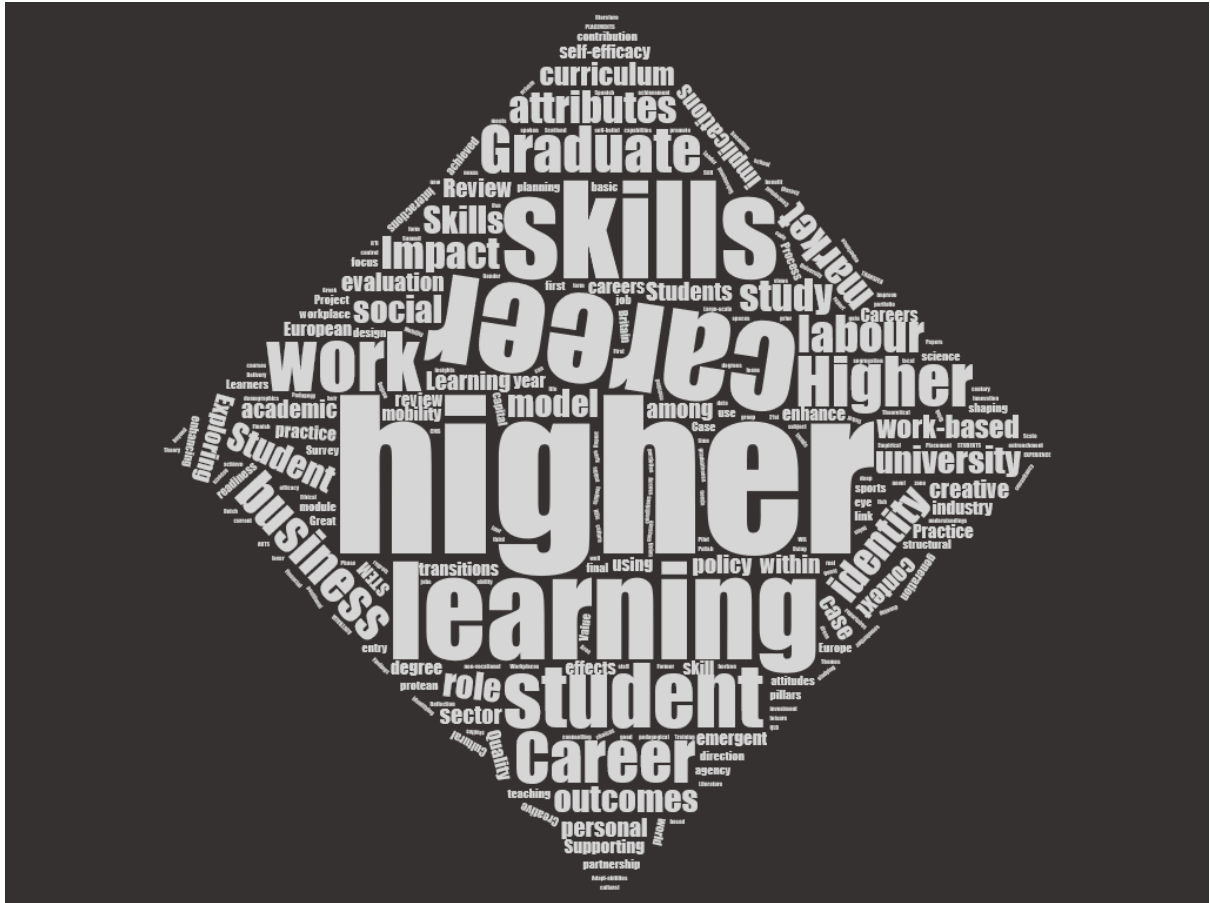
Jane Artess, Tristram Hooley, Robin Mellors-Bourne

In partnership with:



UNIVERSITY
of DERBY

CRAC
The Career Development Organisation



Contents

Section	Page
Contents	3
Foreword	5
Executive summary	6
Policies, ideologies and models of employability	6
Practice in supporting employability development	7
Higher education providers' responses to employability	8
Discussion and conclusions	8
1. Introduction	9
1.1. Defining employability	10
1.2. Report structure	10
2. Methodology	11
2.1. Aims and objectives	11
2.2. Search strategy	11
3. Policies, ideologies and models of employability	13
3.1. Employability and the political economy	14
3.2. Employability and the labour market	15
3.3. Critiques of employability	15
4. Practice in supporting employability development	16
4.1 Graduate behaviours, attributes and skills	16
4.1.1 Attributes and capabilities	16
4.1.2 Specialist, technical and transferable skills	18
4.1.3 Knowledge and application	19
4.1.4 Behaviours, qualities and values	20
4.1.5 Self, social and cultural awareness	21
4.1.6 Confidence, resilience and adaptability	22
4.2 Experience and networks	22
4.2.1 Experiences of work	22
4.2.2 Impact of structured work placements during HE	23
4.2.3 Graduate internships and other informal work experiences	24
4.2.4 Other business interactions and extra-curricular activities	24
4.2.5 Networking	25
4.3 Enterprise and entrepreneurship	25
4.3.1 Policy context for enterprise in HE	25

4.3.2	Enterprise and entrepreneurialism in action	27
4.4	Internationalisation	28
4.4.1	Student mobility	28
4.4.2	Transnational education (TNE)	29
4.4.3	Internationalisation at home	30
4.5	Reflection and articulation	30
4.6	Career guidance and management	31
4.6.1	Shifting understandings of career	32
4.6.2	Career management skills	33
4.6.3	Graduate identity	34
4.6.4	Career guidance	34
4.7	Concluding on practice in supporting employability	36
5.	Higher education providers' responses to employability	36
5.1	Strategies	37
5.2	Building frameworks to shape institutional responses	38
5.3	Pedagogies for employability	38
5.4	Conclusions about higher education providers responses	38
6.	Discussion and conclusions	39
7.	References	41
8.	Appendix 1: HEA literature review – search framework	51

Foreword

While students are at university they are engaged in building a life beyond their degree. Graduates lives include a wide range of roles as workers, citizens, community members and lifelong learners. The focus on employability in higher education (HE) is about preparing students to transition into all of these roles and more.

At the Higher Education Academy (HEA) we would like to thank the authors of this paper. They have produced a fascinating summary of current thinking and evidence on employability in higher education.

At the HEA we are committed to building evidence-informed policy and practice. We have already produced the *Embedding employability in higher education* framework in partnership with the sector. This framework sets out a process by which higher education providers can engage all stakeholders and develop high quality and evidence-based employability provision.

The research set out in this paper aligns well with the approach that we have taken in the framework. It shows that while there is much lively debate around employability in higher education, there is a growing consensus around its importance and a number of the key approaches that are set out in the framework. Employability provision needs to be multi-dimensional, experiential and embedded in the curriculum, other institutional processes and provision.

There is much within the review and within our framework that will help you as you go through your institution's process of defining what employability means to you, auditing and mapping your provision, prioritising and planning and then measuring impact. We hope that you will find this review invaluable.

Doug Cole

Head of Academic Practice, Higher Education Academy

Executive summary

This paper examines 187 pieces of research published between 2012 and 2016.¹ It describes how the subject of employability has been addressed during this period and draws out some of the key implications for higher education providers (HEPs), academics and employability practitioners. Employability is notoriously complex to define, but for the purposes of this review we have looked at research that uses the term 'employability' and which intersects with one of the key concepts which are contained within the Higher Education Academy's (HEA's) *Framework for embedding employability*. The framework was used both to provide keywords for the literature review, and to help in structuring our report.

Higher education providers are under considerable pressure from policymakers, students and employers to ensure that graduates emerge from higher education ready for the labour market. The imminent implementation of the Teaching Excellence Framework (TEF) looks set to increase this pressure.

It is also possible to argue that a focus on employability is a moral duty for higher education providers. Students invest their time and money in accessing higher education with the expectation that it will offer them access to greater life chances than they would have obtained if they had not attended HE. For the most part, this expectation is fulfilled with graduates generally doing better in the labour market than non-graduates. However, it is not simply holding a degree that results in these outcomes (although there is an important signalling effect), rather it is critical that higher education develops students in ways that support them to be successful in the future.

Policies, ideologies and models of employability

There is an extensive literature that looks at the politics and ideology of employability. Much of this literature pre-dates the period on which this study is focused, but many of the themes that are addressed in this earlier literature are of perennial concern. During the period addressed by this review the literature describes employability as a key debate within higher education and one that is linked to wider debates about the place of higher education within society. Key arguments made by this literature include the following:

- > the size and structure of the graduate labour market means increasing graduates' employability will not necessarily lead to enhanced employment opportunities as the number of graduates is not necessarily closely aligned to the number of graduate jobs;
- > employability is a critical part of the public policy rationale of higher education;
- > in a marketised higher education system, employability is likely to be a key motivator for student choice making;
- > employability can be viewed through a range of different lenses related to the needs of different stakeholders (government, employers, students, universities, etc.).

Some writers have also articulated a range of criticisms of the employability agenda. However, despite the range of critical perspectives that exist, much of the literature argues there is value in engaging with employability and sets out a range of models and concepts through which it is possible to intervene in students' employability.

¹ The executive summary highlights some of the main findings from the review. Full references are offered in the main report.

Practice in supporting employability development

The review found a substantial literature that looked at the practice and impact associated with employability. There is a range of diverse approaches and practices through which employability is delivered within higher education. Disparate activities are taking place across the sector, underpinned by a range of pedagogic and ideological perspectives.

The Higher Education Academy's *Framework for embedding employability* provides a summary of good practice within the area. This framework emerged from a tradition of research and enquiry led by the HEA over the previous decade and beyond. The research that was published between 2012 and 2016 explores some of the key concepts articulated in the framework and provides further evidence, which can inform the development and implementation of the framework. However, many of the studies from this period are small-scale or confined to a particular disciplinary context. There is a clear need for systematic work to further define and evidence 'what works' in this space.

There are some patterns in the findings reported within the literature published between 2012 and 2016 that might be useful in guiding the development of HEPs' approaches to employability. Many of these patterns echo key points made in the HEA's framework, and include emphasising the importance of:

- embedding employability in the curriculum and ensuring that students are able to make a connection between employability outcomes and their discipline;
- providing a range of co-curricular and extra-curricular opportunities for students to enhance their employability;
- building links with the labour market and encouraging students to do the same. The literature finds value in a wide range of connections between HEPs and employers. In particular, there is evidence of the impact of providing students with real connections to employers and actual experience of the labour market;
- supporting students to increase their confidence, self-belief and self-efficacy through their studies;
- encouraging reflection and increasing students' capacity to articulate and communicate their learning to employers;
- encouraging student mobility and fostering a global perspective;
- using institutional career guidance services as organising and co-ordinating structures for HEPs' employability strategies. However, in order to achieve this, the role of the services needs to be broadly conceived.

The literature also includes an interesting discussion on the nature of graduate attributes, employability skills, and/or career management skills. Considerable effort has been devoted to developing lists of skills and attributes that graduates should be encouraged to develop. For the most part, such lists move considerably beyond lists of what graduates should know (knowledge) and be able to do (skills), and include a wide range of personal attributes and characteristics. Many of the concerns highlighted by the literature in this period align well with those identified in the HEA's framework.

One interesting approach has been to move away from the discussion of employability as a list of skills and attributes towards a more subtle discussion of 'identity'. In such an analysis, the question becomes not simply about encouraging the acquisition of skills, but rather in helping students to transition from the identity of a student towards that of a graduate worker and citizen.

Higher education providers' responses to employability

Higher education providers clearly have a range of options as to how they respond to these policy drivers and frame those responses. While it would be possible for institutions to take an overtly critical stance on employability the literature suggests that most HEPs do seek to address employability and to signal their commitment to it to policy makers, employers, students and their parents.

Many higher education providers are actively creating strategies, frameworks and other kinds of institutional narratives that set out how they plan to address employability. These include the following:

- > *changing the structures* seeks to reorganise the institution to make it more effective in delivering employability. This might include changes to staffing, resourcing, curriculum and institutional mission;
- > *changing the programme mix* focuses on the development of the range of programmes and qualifications offered. For example, this may include the development of programmes that have a strong vocational focus, placement years and an increase in employer involvement;
- > *curriculum development* explores how changes to the current curriculum such as the introduction of employability modules or employability elements can support graduate employability;
- > *extra-curricular* provision focuses on what institutions can do outside of the core curriculum through the provision of career and employability services and other provision designed to enhance the student experience while co-curricular provision emphasises provision which complements or extends the curriculum;
- > *networking* explores way in which institutions can involve external stakeholders in the development of student employability.

Discussion and conclusions

Academic interest in employability appears to be growing. Academics are wrestling with the nature of employability, its political implications, the ways in which it is delivered and the relative efficacy of each of them. Academics approach these questions from a range of political, theoretical, methodological and professional perspectives.

The literature outlines a number of different ideas about how higher education providers can best deliver employability provision. These can provide useful insights about the different approaches that are being used and the relative evidence for each of them. Much of this evidence aligns well with the kinds of themes and approaches identified in the HEA employability framework.

The employability agenda offers huge opportunities for HEPs, academics and students. Employability offers HEPs the opportunity to help individuals to realise their potential, to enhance their, skills, attitudes, attributes and knowledge, to become successful workers and citizens, and through this helps to increase the political legitimacy of higher education. This review has shown that there is a lively and critical academic field that exists around the employability agenda. We believe that the continued growth and maturation of this field is essential to the ongoing development of employability in higher education.

1. Introduction

This paper explores recent research on the subject of employability in higher education (HE). It examines 187 pieces of research published between 2012 and 2016 to describe how the subject of employability has been addressed and to draw out some of the key implications for higher education providers (HEPs), academics and employability practitioners.

The research reviewed in this paper builds on a much longer history of research and thinking about employability in higher education. There are a number of existing literature reviews and commentaries that provide useful insights into this tradition (e.g. Lees 2002; Matherly and Tillman 2015; Tomlinson 2012). Critically, there have been a series of papers published by the Higher Education Academy (HEA), most notably in the Enhancing Student Employability Co-ordination Team series, which have substantially defined the nature of policy and practice on employability in UK higher education (HE). In many ways, the *Embedding employability in higher education* framework, created by Cole and Tibby in 2013, draws together the practical implications of this tradition and continues to operationalise it within the sector. For this reason we used this framework as the conceptual basis for this study.

Government and other key stakeholders are keen to emphasise that there should be a strong relationship between higher education and economy prosperity (BIS 2016). Successive governments have also argued that higher education should be available to all who have the ability to benefit from it, and that participation in higher education should be a springboard for individuals to access satisfying careers and achieve social mobility.

The Government is currently in the process of introducing a new Teaching Excellence Framework (TEF), which will enable institutions to link a range of institutional metrics associated with teaching with higher student fees. The TEF will comprise a range of outcomes metrics including retention, student satisfaction and engagement, and employment and progression. Not all commentators are happy with the way in which the TEF is framed, and it remains possible that it will continue to develop as it is finalised and implemented (Scott 2016). However, it is likely that the theme of employability will be an important element within the TEF, although there is likely to be debate about how the concept of employability is best defined and measured within such a framework (Rich 2016). Shifts in technology and data linkage (especially the linkage of data from the education system and the tax and benefit systems) will also make it possible for the relationship between education and employment to be more clearly understood. Consequently, employment and employability look set to remain top priorities for all higher education providers.

In addition to these policy drivers, it is also possible to articulate a focus on employability as a moral duty for higher education providers. Students invest their time and money in accessing HE with the expectation that it will offer them access to greater life chances than they would have obtained if they had not attended. For the most part, this expectation is fulfilled with graduates generally doing better in the labour market than non-graduates (Naylor, Smith and Telhaj 2015). However, it is not simply holding a degree that results in these outcomes (although there is an important signalling effect). Rather, it is critical that higher education develops students in ways that make them more employable (Pericles Rospigliosi *et al.* 2014). Furthermore, there is also a close alignment between employability and wider questions of personal effectiveness and citizenship (Quendler and Lamb 2016; Schmidt and Bargel 2012). This means that the benefits of employability are considerable wider than those that can be defined by employment rates or salary.

HEPs have a responsibility to engage with student expectations about higher education. For the most part, this is interpreted as supporting students to increase their employability via the embedding of opportunities for work-related learning, personal development and other interventions that enhance human, social and cultural capital.

1.1. Defining employability

Defining employability is more difficult than might be imagined. Williams *et al.* (2015) note that the definition of employability has shifted throughout history, and continues to be contested. A key issue is how far employability is a distinct concept from employment. In other words, it is possible to be employable but still unemployed. What is more, debates on the meaning of employability are not simply questions of academic interest. Rather a wide variety of stakeholders including Government, graduate employers, higher education providers (HEPs), and of course students and graduates themselves may have an interest in defining employability. The HEA's (2013) employability framework represents an important and influential attempt to define employability in a way that could unite all of these stakeholders in a common conversation.

There is a strong consensus (Cole and Tibby 2013) that employability is about more than obtaining employment, and that HEPs should not focus simply on supporting students to get their first job but instead support them to building positive and meaningful careers and to participate meaningfully in society.

An influential and important definition of employability was developed by Yorke and colleagues in the Enhancing Student Employability Co-ordinating Team (ESECT) established by the HEA. This definition has spawned several models for embedding employability in the HE curriculum, notably the Understanding, Skills, Efficacy beliefs and Metacognition (USEM) model developed by the HEA (Yorke and Knight 2006), and the CareerEDGE model (Dacre, Pool and Sewell 2007). In Yorke and Knight (2006), employability is defined as:

A set of achievements – skills, understandings and personal attributes – that make individuals more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy. (Yorke and Knight 2006, p. 8)

The value of this definition lies chiefly in the way it positions employability as a personal state that individuals occupy. It includes the notion that employable individuals are more likely to gain employment, but does not suggest that employment is the only indicator, thus implicitly recognising that the availability of jobs is not necessarily a function of the employability of individuals. This definition also articulates that greater employability benefits not only individuals (in this case students and graduates) but also the economy and society. What this definition does not do is to declare that the achievements, skills, understandings and personal attributes that constitute employability are exclusively developed in HE. Indeed, Yorke (2006) makes very explicit that employability is a work in progress throughout one's working life.

1.2. Report structure

The literature about employability in higher education is extensive and approaches the topic from a range of perspectives: for example, students and graduates, institutions, and policy-makers. In order to make sense of the diversity of material reviewed, we have adopted the following structure, which draws heavily on key components of employability identified by the HEA's *Framework for embedding employability* (2013), referred to as 'the framework', hereafter. The framework describes the key aspects of employability under the following headings:

- confidence, resilience and adaptability;
- experience and networks;
- attributes and capabilities;
- specialist technical and transferable skills;
- knowledge and application;
- behaviours, qualities and values;
- enterprise and entrepreneurship;
- career guidance and management;
- self, social and cultural awareness;
- reflection and articulation.

We found that the framework provided a useful organising device for the review but that the categories used in the framework are not mutually exclusive and are designed as a jigsaw of inter-related elements.

We preface the review with an executive summary, and in section two describe the aims, objectives and methodology used to conduct the review and demonstrate how the framework has shaped the searches, coding and reporting of literature sources for review.

In section three, we set the scene by identifying key policies, ideologies and models of employability. This is necessary at the outset of any review of literature but is particularly important here in light of the relatively large number of conceptual literature sources identified in the preliminary searches.

Section four focuses on reports of practice that support the development of employability in higher education. It most closely adheres to the framework. Section five elaborates on higher education providers' responses to the 'employability agenda' and in section six we identify key messages arising from the research. Section seven concludes the review and offers suggestions for future enquiry.

2. Methodology

2.1. Aims and objectives

The aim of the review is to support the HEA to maintain an up-to-date evidence base and to better understand the practices and policies that have a demonstrable positive impact on employment outcomes. This has resulted in a focus on employability initiatives that are embedded within the HE curriculum, and in particular whether there is evidence that such initiatives work in practice.

The objectives of the review are to:

- > address the relationship between theory and practice and to assess whether there is scope to strengthen this relationship through the capture of key concepts and ideas drawn from research literature;
- > include topics that are emergent or which may not typically be associated with graduate employment;
- > review seminal research literature from within the UK and other English-speaking countries;
- > to identify interventions and practices where there is evidence which supports their efficacy;
- > to identify recent developments in the higher education sector's response to employability developments, including identifying new and promising practices;
- > to synthesise and summarise the evidence base in a way that makes it useful and accessible to a wide range of stakeholders.

2.2. Search strategy

There has been a vast amount published about employability in higher education between 2012 and 2016. This report seeks to synthesise this material using a rapid evidence assessment approach (see Table 1).

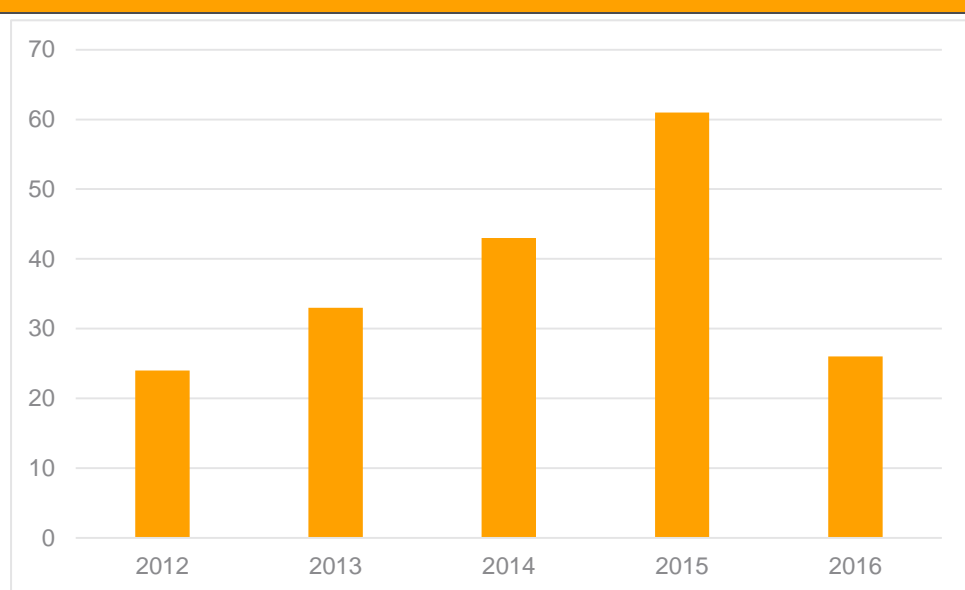
Table 1: Rapid evidence review

Phase	Number of results
Initial scoping search using Library Plus. ² The following keywords were used: `employability` `employability+higher education`	5,275 1,522
Results were refined using a series of search terms, which drew on the key concepts in the <i>Framework for embedding employability in higher education</i> (HEA 2013). These terms are set out in detail in Appendix 1.	>200
Abstracts were reviewed and coded. The following codes drawn from the framework (HEA 2013, p. 2) were used: i. Confidence, resilience and adaptability ii. Experience and networks iii. Attributes and capabilities iv. Specialist technical and transferable skills v. Knowledge and application vi. Behaviours, qualities and values vii. Enterprise and entrepreneurship viii. Career guidance and management ix. Self, social and cultural awareness x. Reflection and articulation. Three additional codes were also defined at this stage as: xi. Concepts and models xii. Policy-related xiii. Internationalisation	143 (following the removal of duplicates and items that appeared not to meet the objectives of the review).
In depth review of the documents by category by the research team was undertaken. During this phase some papers were rejected and others added to the coding frame based on searches of the grey literature and the researchers' own knowledge.	213
Following review the paper was written including all relevant materials NB: some papers included in the list of references below were out with the time-frame of the review and are therefore not included in this total.	187

The final database is available as a separate download <https://www.heacademy.ac.uk/resource/employability-review-literature-2012-2016>. Figure 1 sets out how the identified papers break down by year and suggests that interest in employability is continuing to rise.

² Library Plus is a meta search engine which searches over a hundred databases including the British Education Index, British Library EThOS, Business Source Premier, Education Resource Information Centre, Australian Education, PsychINFO, etc.

Figure 1: Number of results in the final database by year



3. Policies, ideologies and models of employability

A key aim of this literature review was to look at current employability practice and to consider the evidence for its efficacy. However, much of the literature we found demonstrates that there continues to be discourse about the nature of employability and how it relates to the role of higher education (Tomlinson 2012). In this section we pull back to look at this bigger picture.

There are a range of ideas about the role of higher education within society. A key fault line in the debate is between those who argue that higher education's primary purpose is the pursuit of knowledge for its own sake, and those who argue that higher education serves a research and development function for the country along with the development of a skilled workforce (Kettis *et al.* 2013; Rich 2015). In terms of the student experience, this distinction reappears between those who focus on higher education as a route to knowledge accumulation and personal actualisation and those who view it as a training ground for industry. This is a polarising way to represent the debate, many people operate somewhere between these two poles, and argue that it is possible to combine them or contend that the dichotomy is not meaningful (Rust 2016). Nonetheless the development of an agenda around 'employability' relates directly to these debates about what people believe individuals should gain from, and contribute to, higher education.

Much of the literature reviewed in this study has either expressly or peripherally examined these debates around the purpose of higher education, the ideology of the employability agenda and the implications of these different positions for the delivery of employability learning. For example, Speight *et al.* (2013) examines how this debate manifests within HEPs and argue that many stakeholders in higher education perceive employability as a threat to disciplinary learning. They argue that there is a need to revise the employability agenda in a way that both takes account of stakeholder concerns and which integrates academic and employability learning more carefully, this was one of the initial drivers for the creation of the HEA framework in 2013.

3.1. Employability and the political economy

An employability agenda has developed in higher education systems across the world (Kalfa and Taksa 2015; Pavlin and Svetlik 2016). Govender and Taylor (2015) argue that this focus on employability is on the increase internationally. This agenda is often led by policy makers, but is also articulated by a wide range of other stakeholders including HEPs, parents, students and graduates (Govender and Taylor 2015). Within the UK, the employability discourse has become central to much policy discussion about the nature of higher education (Andrews and Russell 2012; Rutt *et al.* 2013; Wilton 2014). However, different policy drivers, economic climates and cultures influence the way in which employability is articulated in different countries (Tran 2015).

Some authors seek to contextualise the focus on graduate employability within wider changes in the global political economy (Hill, Walkington and France 2016; Kalfa and Taksa 2015; Pavlin and Svetlik 2014), for example, arguing that interest in employability has grown following the financial crisis of 2008 (Arora 2015). Within this narrative, universities have been assigned both some share of the blame for the crash (not producing the right skills), and some responsibility for driving skills and innovation to bring the economy out of recession. For some countries, the consequences of the financial crisis have resulted in a reframing of the discourse around graduate employability as large numbers of graduates have found themselves unemployed or under-employed (Cerdeira *et al.* 2016). Even in countries where the impact of the crisis has been less marked, there have still often been consequences for the buoyancy of the graduate labour market (Jackson 2014b).

Within the UK, the focus on employability has also been highlighted by the introduction of higher student fees and the increasing marketisation of higher education (Blackmore *et al.* 2016; Pemberton *et al.* 2013; Wilton 2014). In some rhetoric, employability is viewed as essentially what students are paying for within such a marketised system (Jackson 2014b; Jameson *et al.* 2012). It is clear that career and employability outcomes are very important motivators for prospective higher education students and something that students expect will be developed during their time at university (QAA 2016). Consequently, the transfer of the financial responsibility for higher education to the student is likely to have implications for both their participation in higher education and in the graduate labour market (Pemberton *et al.* 2013).

Rich (2015) draws out the important distinction between employment (labour market status) and employability (skills and preparedness) within the institutional and public policy discourses. Ensuring that graduates are employed once they complete their studies represents one kind of policy goal, and ensuring that their skills are effectively used is another, but Rich argues that there is a need to take a longer term perspective and to ask whether higher education supports graduates to establish a career. Such a position reframes employability as more about ensuring that citizens have access to satisfactory livelihoods than simply increasing Gross Domestic Product (GDP). Much of the public policy discourse scrambles these different goals by frequently moving from a short-term focus on getting graduates into a job to broader questions about what higher education offers graduates and society in both economic and cultural terms.

One consequence of the public policy debates about the purpose of higher education is an institutional question about the attributes that a graduate should be able to evidence, to what extent such attributes are disciplinary or generic, to what extent they are about successful participation in higher education, and to what extent they are about employability (Hill, Walkington and France 2016; Smith and Worsfold 2014). Employers are often keen to set out the attributes that they believe that graduates should have, or at least to bemoan their absence in the current generation of graduates (Pegg and Caddell 2016; Tran 2015). Such debates about the desired outcomes of higher education also raise pedagogic questions and questions about wider institutional processes and values. This will be discussed further in section four, some of which focuses on the nature of graduate attributes.

Much research seeks to highlight the public policy benefits of higher education (Pegg and Caddell 2016; Rich 2015). Within this discourse employability is viewed as a mechanism through which higher education can deliver value to policymakers and to the economy. For example, the Higher Education Funding Council for England's (HEFCE's) current work to investigate learning gain (Hoareau McGrath 2015) includes two pilot projects focusing on employability related measures. Higher education is seen as a producer of talent that can support economic growth and a range of other desirable policy

goals (Bridgstock and Cunningham 2016; Tran 2015). However, such writers also recognise the various impediments that sit between higher education and the labour market. This typically leads to recommendations about changes that can be made either at the systemic level (e.g. stronger incentives for employers to engage with education) or at the institutional level (e.g. building employability into the curriculum) (Bridgstock and Cunningham 2016; Tran 2015).

Some research also introduces the importance of social mobility as a policy goal alongside skills development and economic development. Gordon (2013) notes that class distinctions endure in the UK throughout higher education and into the graduate labour market. Similarly, Lee (2016) notes that in Hong Kong the growth of higher education has not led to social mobility at least in part because increased access to higher education has not led to enhanced employability. However, Jackson (2014b) argues that one of the places that social mobility is frustrated is during the transition that students make to the workplace. Some graduate recruiters appear to favour high status HEPs that can exacerbate social inequality.

3.2. Employability and the labour market

Some writers seek to use employment outcomes as a measure of graduates' employability. However, others make a distinction between *employment*, being *employable* (which is specific to a job role), and *employability*, which can be used to describe a general set of students attributes and qualities which are not directly related to their current employment status. This distinction is important because both employment and being employable are strongly related to labour market conditions and to the perceptions of employers while it is possible to define employability in broader and less contingent ways.

Tholen (2012, 2015) argues that the graduate labour market should be conceived as an arena within which different individuals and groups are struggling to gain power and advantage over others. Employability can offer some labour market power to those who are able to develop it, as well as some broader benefits that are not immediately dependent on labour market status. However, increased employability does not necessarily lead to an improved labour market position (Britton *et al.* 2016). Employability, like education, is to some extent a positional good in terms of its labour market value. Such positional goods acquire labour market value due to their scarcity and therefore become less valuable as they become less scarce. The massification of higher education has not been accompanied by a corresponding increase in the number of graduate jobs. This presents serious problems for graduates' chances of finding a financially rewarding career and leads to some graduates becoming under-employed or unemployed (Mavromaras *et al.* 2013; Verhaest and Van der Velden 2013). However, also like education, it is possible to articulate a range of other benefits that those with greater employability may be able to access which are not directly related to short-term positionality.

Cai (2012) notes that employers' attitudes towards graduates are dynamic and part of an ongoing process of trial and error. Employers seek to signal the skills and attributes that they desire from graduates in order to encourage graduates to align their development with the labour market. Conversely HEPs, and to some extent graduates, signal in turn, thus also shaping employers' expectations of graduates.

3.3. Critiques of employability

Many writers are critical of this strong policy focus on employability (Arora 2015; Hooley 2015; Jameson *et al.* 2012; Kalfa and Taksa 2015; Reid 2016; Rooney and Rawlinson 2016; Rutt *et al.* 2013; Tran 2015). Their reasons for taking a critical stance vary but include arguing that employability:

- > is poorly defined and that as such it becomes a meaningless buzzword that justifies a wide range of activities;
- > reduces the space for academic integrity and autonomy as it puts academics in service of particular kinds of outcomes with which they may not agree;
- > asks HEPs to take on a responsibility for vocational training which is more appropriately situated with employers;

- > is an ideological tool which is used to justify the status quo and induct students into the capitalist hegemony;
- > only reflects the needs of employers (often filtered through policymakers and HEPs) and ignores the needs of students and graduates;
- > plays into a discourse of the student as consumer of higher education who is entitled to demand a particular financial and employment outcome from their studies.

It is possible to contest the way that many of these radical critiques define employability. The distinction discussed above between employment, being employable and employability means that it is possible to make a distinction between employability as an agenda within higher education and attempts to re-engineer higher education in direct service of employers. The HEA employability framework takes a broader and more inclusive perspective, and does not prioritise the perspectives of employers above those of students or academics, it specifically brings these groups together to develop a mutually agreed and combined perspective. In this way, it is actually in line with those critical writers who argue that educators need to inhabit this agenda and imbue it with more radical and critical content (Hooley 2015; Jameson *et al.* 2012; Kalfa and Taksa 2015; Reid 2016; Rooney and Rawlinson 2016).

4. Practice in supporting employability development

4.1 Graduate behaviours, attributes and skills

Many of the ten focus areas at the core of the HEA (2015) *Framework for embedding employability in higher education* are essentially groupings within a wide range of graduate attributes, behaviours and skills associated with employability. We review literature that addresses these aspects of employability in this section 4.1 – using the framework elements as sub-section titles – and attempt to draw out some of the implications for employability programmes. The remaining sections (4.2 to 4.6) also derive from the framework, but are issues, we believe, that merit more discrete treatment.

4.1.1 Attributes and capabilities

This section will explore how the literature describes those attributes that support students in their transition to work and broader life and career building. Such attributes are often relevant to students' academic studies, to their working life and to their wider life as citizens and members of families, communities and societies. The literature often uses a range of terminology to refer to such attributes. Sometimes the language of 'skills' is employed, at other times capabilities, capacities, attitudes and attributes are used to describe the range of personal abilities and features that students and graduates possess. We have mainly used the term 'attributes' as it is broad and inclusive.

The research reviewed in this section demonstrates that there is a range of interpretation as to what constitutes these graduate or employability attributes. The HEA offers some guidance in this area through its publication *Towards a competency-based framework for work-based learning* (Jones and Warnock 2014), which proposes a range of competencies and benchmarks for different levels of HE study. However, it focuses on the context of work-related learning and the range of competencies is relatively narrow in comparison with some others' conception of the attributes associated with employability. Other studies that examine graduate attributes include:

- > Osmani *et al.*'s (2015) literature review of 39 relevant studies in the subject areas of business and management, accounting, and computer science and synthesises them;
- > Coetzee's (2014) validation of the 'Graduate Skills and Attributes Scale', which provides a tool that can measure one version of graduate attributes.

Kalfa and Taksa (2015) and Daniels and Brooker (2014) take more critical approaches to defining and developing graduate attributes. Kalfa and Taksa (2015) are critical of the idea that employability should focus on skills or human capital and argue that that it is more useful to view employability as the accumulation of the cultural capital, the understanding of the cultural norms and expectations of

the workplace that students need in order to make an effective transition. Cutts, Hooley and Yates (2015) make a similar argument, focusing in on the importance of appearance and dress as a carrier of cultural capital that can facilitate graduate transitions. Similarly, Daniels and Brooker (2014) also question the value of an approach to employability that is based on students being taught a particular set of skills, and argue that an alternative approach would focus on building students' identities.

As the above discussion shows a significant theme emerging in the literature is a focus on defining the graduate attributes that constitute employability and forming them into various frameworks that can underpin action within HEPs to enhance it. There can be disagreement between students, academics and graduate employers as to which graduate attributes are most important, relevant, how such attributes should be enacted, and how far graduates typically possess such attributes (Cavanagh *et al.* 2015). Nonetheless, there are repeated attempts to define employability skills with frameworks (Andrews and Russell 2012; Cavanagh *et al.* 2015; Jackson 2014c, Kalfa and Taksa 2015; Kumar 2015). Such frameworks often draw on an overlapping list of attributes. Oria (2012) notes that the skills and qualities that are included within graduate attributes frameworks are likely to vary across different countries.

A composite list of graduate attributes follows, which is drawn from the frameworks identified by this review (cited above), as well as from the wider literature on graduate attributes during this period.

Graduate attributes:

- > Aspiration
- > Autonomy
- > Career management
- > Communication skills
- > Creativity
- > Critical thinking skills
- > Customer awareness
- > Digital literacy
- > Efficiency
- > Emotional intelligence
- > Enterprise and entrepreneurship
- > Ethics
- > Flexibility and adaptability
- > Giving and receiving feedback
- > Independent thinking
- > Initiative and self-direction
- > Inter-personal skills
- > Language skills (particularly second language skills)
- > Multi-tasking
- > Numeracy
- > Opportunity awareness
- > Positive attitude
- > Presentation skills
- > Problem solving
- > Professional knowledge
- > Research skills
- > Resilience
- > Self-management
- > Social intelligence
- > Team-working
- > Time management
- > Willingness (and capability) to learn
- > Work ethic
- > Writing skills

As can be seen from the list above, such graduate attributes represent more than simply 'employability skills'. Rather they describe a range of skills, attributes, attitudes and behaviours that have a relevance to the workplace, but also frequently relevance to other contexts such as higher education, family life or citizenship. Rust (2016) argues that while it is not possible to dismiss the idea of 'skills' altogether, this term does not get to the heart of what is being developed through employability programmes. Rather, he suggests that employability could be the synthesis of attributes but will only be manifested if the student is aware of the attributes they have and how they work together, and can articulate them – so personal literacy (the ability to read oneself) is necessary to transform attributes into valuable personal capital. (The importance of reflection upon one's activities in order to recognise and be able to articulate your employability is considered in section 4.5.)

Other research on graduate attributes focuses on exploring their distribution across the student population. Jackson (2014c) sought to measure a range of graduate attributes (described as employability skills) and found that they varied across the student population by geographical origin, sex, work experience, engagement with the skills agenda, stage of degree studies, scope of relationships and activities beyond education and work, and the quality of skills development in the

learning programme. While work with graduate engineers (Jollands *et al.* 2012) suggests that the pedagogy of the programme also drives differences in employability attributes with students from more project-based and work-related courses being judged more positively by their managers a few months after starting work. Wilton (2014) adds an interesting perspective by noting that the complexity of employers' understanding of what they are looking for from graduates means that graduates are often unclear as to what they are expected to demonstrate. The study identifies multiple facets of employability that are the explicit or implicit focus of recruitment processes, and highlights that these criteria are subjective, shifting and often unknown to students. Such research potentially supports the project of defining and articulating graduate attributes, as long as HEPs and employers can reach a consensus as to what these mean, again a key feature of stage one of the HEA framework.

There may also be a useful parallel offered by the Quality Assurance Agency for Higher Education (QAA) (2012), and by similar work by Smith and Paton (2014), which describes a broad framework that HEPs can use to articulate enterprise learning outcomes. This includes a range of behaviours, attributes and skills that it believes constitute an enterprising graduate (see also 4.3) and a range of indicators through which they could potentially demonstrate this. A number of these resonate closely with the attributes and skills highlighted within the revised HEA (2015) framework, such as resilience, confidence, personal awareness, networking and communication.

Other work looks at the pedagogies required to develop employability attributes. For example, France *et al.* (2016) argue that mobile learning and fieldwork contribute to graduate employability. While Scottish HEPs have identified a set of generic attributes that they consider necessary for graduate employability in the 21st century. Stewart *et al.* (2016) highlight the importance of peer feedback and building the confidence of students.

4.1.2 Specialist, technical and transferable skills

Much of the discussion around graduate attributes in general is picked up in work that looks more specifically at skills. From this literature it is clear that despite the efforts of higher education to produce graduates who are potentially 'work-ready', many employers perceive graduates to be lacking in the ability to demonstrate the non-technical skills required to carry out many day-to-day workplace operations (Roepen 2015). However, these skills continue to be important to employers. Braun and Brachen (2015) analysed application forms and transcripts from employer interviews and a survey of 10,000 graduates to identify 49 generic job-related activities and requirements within eight conceptual skill areas. These included planning and organising work processes; promoting others; leadership; working autonomously with challenging tasks; information processing; numeracy; foreign language communications; and personal performance. Similarly, Pollard *et al.* (2015) found that while some employers did seek specific knowledge and skills developed by HEPs, many were more interested in generic skills, and saw a degree as indicative of intellectual capacity and the ability to learn. Yet, both Roepen (2015) and Morrison (2014) find that many students lack confidence about mobilising transferable and non-technical skills in the workplace.

The poor alignment between graduates' confidence and capability and employers' desires is illuminated by a small scale study published by the HEA (Tyrer *et al.* 2013) which explored the relationship between retail employers' skills demands and the curricula of a sample of non-vocational subjects, chosen to reflect the subject backgrounds of recent graduate recruits in the retail sector. They demonstrated a lack of alignment between the skills developed by HE courses and those desired by employers. This suggests a need for greater commonality of understanding about HEPs' efforts to develop graduates' professional skills and capabilities, and suggests that some assistance in 'translating' these between HE and industry could prove beneficial. The HEA framework is designed as a tool to support exactly this kind of translation activity.

To address these alignment issues Jackson (2015) highlights the value of strong work-related elements in the classroom and including work-placement opportunities within courses. A further study by Jackson (2016) explores skill transfer as part of graduates' transitions from university to the

workplace. Based on 674 business graduates, three areas of characteristics were found to influence skills transfer: the learner, the learning programme, and the workplace characteristics. Jackson's model highlights a need for a more process-oriented approach to the acquisition and transfer of skills in graduates, and for shared responsibility for transfer among the stakeholder groups involved. Jones' (2014) work with accountancy employers also highlights the importance of recognising graduate transition as a process of skills accumulation that continues once the graduate moved into a professional setting.

4.1.3 Knowledge and application

While some of the key generic aspects of what might constitute employability (i.e. a range of attributes and/or skills that might be attained by graduates irrespective of discipline) are covered in other sections of this review, this section focuses on the role of more specialist knowledge that can usefully be applied in certain professions and thereby contribute to employability for a subset of graduates.

There are a range of programmes and initiatives that have sought to re-examine core subject knowledge through the lens of employability. Examples below are drawn from the field of Psychology, creative disciplines and Business Studies. However, the broader point that can be drawn from all of these examples is that it is possible to connect academic subjects to the labour market in a range of meaningful ways, and that in doing so there is a need to move beyond the discourse of 'generic' or 'transferable' skills.

British Psychological Society accreditation of Psychology courses has incorporated increasing attention to the development of psychological literacy as a means to help students to apply their degree knowledge critically and innovatively, both to enhance their chances in a competitive job market and to give them the skills valuable to practice. Skipper and Kent (2015) describe the design, implementation and evaluation of a module that boosts psychological literacy in final year undergraduates. It was also designed to help students explore the psychology behind job hunting. They found that the module did have a beneficial impact on students' learning and skills and the external partners involved found the students' ideas arising during work within the module useful and innovative. The model is shared in the hope that other academics may find it useful to develop their own teaching in other areas.

The creative industries tend to be characterised either as a location for careers that are 'precarious' and insecure, or as one of the engine rooms of the modern economy. However, the creative workforce is highly heterogeneous, and creative careers are far more complex and diverse than many have suggested. In a journal special issue Bridgstock *et al.* (2015) explore the nuances of graduate-level creative work, the kinds of value that graduates of the creative disciplines can add to this work, and identify graduate employability issues for creative graduates. These include emerging and developing creative career identities and the implications for educators tasked with developing a capable creative workforce. Together, the articles in the special issue contribute to a more multi-faceted picture of creative education and the lives and career trajectories of graduates from creative degrees.

Clements and Cord (2013) look at a programme that specifically aims to help students attain graduate qualities that will enhance competitiveness in business. An experiential learning programme built on work-related learning principles is described, with a focus on assessment and design around students' own learning so that they can apply the knowledge gained in their own practical context. It is thought that the combination will result in them being better equipped to compete in a competitive business marketplace.

4.1.4 Behaviours, qualities and values

As has already been discussed, students' employability cannot easily be reduced to a list of skills. There are a range of behaviours, values and qualities that exert a strong influence on students' capacity to make effective transitions to employment or self-employment. Key areas highlighted by the literature include decision-making capability, values, self-belief or self-efficacy, proactivity and confidence.

In study of students' use of extra-curricular activities as a way of enhancing their employability, Greenbank (2015) notes that "transformative pedagogies", which encourage students to reflect on their values, could be used by HEPs to help students critically re-examine past decisions and behaviour as this "motivates them to consider alternative approaches to the ones they normally adopt". (Greenbank 2015, p. 197). He advocates that careers education is provided in groups and argues that small group discussion is more likely to promote change in behaviour.

In an evaluation of an intervention aimed to develop unemployed graduates employability, Hazenberg *et al.* (2015) drew upon the work of Bandura (1997) and others and found a relationship between increased self-efficacy and successful job-seeking behaviours, and also that perceived self-control precedes self-efficacy. Hazenberg *et al.* refer to "behavioural plasticity" as the tendency of those with low scores at the outset to achieve more following an intervention than those who had higher scores at the outset. The intervention provided was an assessed MBA module undertaken alongside a work placement that combined theory based work with practical mastery experiences in order to boost self-efficacy. They found that participants displayed a statistically significant increase in their levels of general self-efficacy over the period of the intervention but that this was not necessarily positively related to employment success.

Self-belief is argued to be a key aspect of employability development but it is not always clear how it can be developed pedagogically through HE study. Turner (2014) asserts that self-belief can be developed within the context of disciplinary knowledge and that in order to foster self-belief HEPs need to support students to believe that: (i) ability can be improved; (ii) that one's goals can be achieved; and (iii) that the environment will allow for goal attainment.

Taking the first tenet – that ability can be improved – and drawing on earlier research, Turner argues that self-belief is a necessary pre-condition for employability action and should be developed "alongside and through the development of skills within the context of the disciplinary curriculum" (Turner 2014, p. 593). This means in practice that much resulting employability action in students will be subject-specific or context-specific and, moreover, curricular experiences that enable students to experience success or mastery of tasks will contribute to their employability by reinforcing the idea that goals can be achieved:

Mastery experiences will move beyond the perception of control (I can do it) to experiencing that control in action (I am doing it) (Turner 2014, p. 595).

In this research, there is a strong argument for subject disciplines being the primary site of the development of self-belief (leading to self-efficacy or agency) and employability by demonstrating to students Turner's second tenet – that goals can be achieved. The third tenet of Turner's thesis – the belief that the environment will allow for goal attainment – revisits the notion of control. Turner asserts that a lack of perceived control can lead students to feel helpless and passive. Increasing students' perceived control, on the other hand, adds employability value by encouraging the belief that one has control over the outcome of life events. Further, where HEPs provide mastery experiences (Bandura 1997) that link to students' career goals and values, employability is more likely to be enhanced as students' experience control of their careers directly. Control is presented here as a force for *agentic* behaviour that counter-balances more employment-centric notions of employability in which students are presented as needing to acquire, "the right set of characteristics or needing to be 'fixed'" (Turner 2014, p. 598).

On a practical level, this suggests that HEPs should provide students with early opportunities to experience control, success, and improvement in order to develop self-belief and agentic behaviour, and that these activities should be embedded in the specific context of the subject of study.

If developing self-belief in this way tends to avert passivity and helplessness about the future, then it might be expected that students would be motivated to become engaged in employability activities while in higher education. Yet the review had identified only limited evidence on students' views of employability provision (e.g. Tate *et al.* 2015). One reason for this is the diverse terminology that is used to describe employability activities, for example, soft skills, qualities, values, competences, professional skills, etc. (Tymon 2013). The development of the HEA framework, therefore, offers a valuable way to bring further clarity to the sector.

Qenani *et al.* (2014) investigated students' perceptions and found that students who showed self-responsibility as expressed in undertaking an internship during HE study, and exhibiting self-managed career behaviour were nearly 2.5 times and 1.8 times respectively more likely to feel confident in their employability. They also found that other student characteristics appear to impact on students' perceptions – predictably that those expecting high grades are more confident, but women are less confident – those reporting outgoing, trusting personalities view themselves as more employable than students who self-report as being sensitive. This research concurs with other research (e.g. Gardiner 2015, Kinash *et al.* 2015) that students who take ownership of their own development are more likely to be able to face the challenges of their chosen labour market.

4.1.5 Self, social and cultural awareness

Rust (2016) has suggested that the ability for a student to articulate their strengths and weaknesses, in terms of their graduate attributes, is key to employability. Rust considers the key to this is 'personal literacy' or the ability to read oneself. The importance of self-awareness in developing employability, and, especially, being able to articulate it, is raised by several other authors (discussed below). Jackson (2014a) examines self-assessment of capabilities in certain employability skills by Australian business undergraduates, and how student self-assessments differ from those of academics.

Clark and Zukas (2013) present a case study of an information technology (IT) student progressing to a graduate role in the IT industry, using Bourdieu's 'thinking tools', habitus, field and capital, to discuss the importance to graduate employability of individual positions and dispositions and the social contacts developed as part of student life. They argue that employability needs to be understood in relational terms, so the value of relevant skills and knowledge depends not only on the student's awareness of them but also their understanding of the work and workplace to which they might progress.

Awareness of different social and cultural settings is a key facet of the development experienced by students who undertake international mobility (often referred to as inter-cultural awareness, see section 4.4), and is recognised by employers who overtly seek an intellectual and global 'mind-set' that goes beyond disciplinary competencies and national boundaries. Although there is significant research investigating the impact of mobility experiences, Lilley *et al.* (2015) suggest limited attention has been paid to the theoretical process of student development which could inform how domestic students could have comparable learning experiences (i.e. "internationalisation at home"). They report a conceptual model identifying facilitators and manifestations of "student change" including reflexivity, social awareness and criticality, as key capacities in a global mind-set.

Being able to contribute to a strong, healthy and equitable society are increasingly being seen by students as important issues in their lives. Social and cultural awareness and equity are important themes under the broader umbrella of sustainable development, student attitudes to which have been monitored through research by the NUS and HEA (Drayson *et al.* 2014). These are also skills that students aspire to take into their employment, as is reflected by the increasing importance that they attribute to sustainability when they rate potential employers. This suggests that enhanced social and cultural awareness, and self-awareness related to these, are likely to increase in importance as the concept of employability in a global labour market develops.

4.1.6 Confidence, resilience and adaptability

The literature highlights a number of issues that relate to the confidence, resilience and adaptability terms that are used in the HEA framework. These terms are conceptually distinct but closely aligned. Many of them are also closely aligned to the themes discussed in 4.1.4 where we looked at issues of value and behaviour.

The notion of career adaptability derives from earlier developmental theories of career and includes the notion that careers are socially constructed and that individuals need to make a series of transitions as they progress through the labour market. Wright and Frigerio claim that career adaptability is a better way to conceptualise employability than the current emphasis on outcomes, such as jobs and salaries, because it helps to articulate “something that can reside within, and be led by, the individual” rather than the volatilities of the increasingly global labour market (Wright and Frigerio 2015, p. 10).

The idea of career adaptability draws on Savickas’s career construction theory (Savickas 2013). A number of scholars have sought to develop and utilise instruments to measure students’ level of career adaptability (Wright and Frigerio 2015; Zacher *et al.* 2014). Such instruments help to define career adaptability and clarify what kinds of interventions might enhance it. Zacher *et al.* (2014) found that developing students’ curiosity and encouraging them to be positive about change will improve their levels of career adaptability and help them to avoid getting stuck in unfulfilling occupations.

Self-insight or self-awareness has long been accepted as an important element of employability. Dacre Pool and Qualter (2012) assert that emotional self-efficacy, or beliefs in one’s emotional functioning capabilities, has been shown to be as important in graduate employability as well-being and academic achievement. They describe emotional intelligence as: knowledge of emotions and strategies to deal with emotional situations; actual abilities in relation to emotional functioning; personality in dealing with emotions; and self-efficacy in relation to emotional functioning (Dacre Pool and Qualter 2012, p. 307). They find that an intervention of 11 two-hour emotional intelligence classes could improve students’ understanding of and ability to manage emotion. In particular, the researchers felt that the intervention may have particular value with students who are at the lowest end of the emotional intelligence spectrum at the outset.

In a study of students undertaking part-time work, Gbadamosi *et al.* (2015) found an association with self-efficacy and belief in the capacity for change in Business Studies students. Their findings support the view that the wider community of the workplace provides opportunities for career identity development, and foreshadows a need for more research about the role employers might play in that.

There appears to be evidence in the literature that broad notions of career construction and adaptability; emotional intelligence and self-efficacy; and socially constructed career identity can be combined usefully to drive employability support in HE. These notions have the capacity to not only help students and graduates better understand their own developing employability, but also to help curriculum designers to develop opportunities for employability learning by helping them to recognise that employability is owned by the individual and is more than the acquisition of skills and attributes thought to be demanded by the labour market.

4.2 Experience and networks

4.2.1 Experiences of work

The Wilson review (Wilson 2012) suggested that in order to enhance graduate skills levels, and ensure smooth and effective transitions between university and the labour market, there was a need to increase opportunities for students to acquire relevant work experience during their studies. He indicated that sandwich degree programmes, internships and work-based degree programmes all had roles to play in achieving this. What seems to have been lacking in many policy statements, however, is the potential role that other experiences of work, not structurally integrated within degree

programmes, can play – such as placements or other work organised directly by the student, casual or 'subsistence' work, or other related experiences.

The importance of graduates gaining both short-term informal and long-term formal work experience has also been endorsed in the more recent Wakeham and Shadbolt reviews (Wakeham 2016; Shadbolt 2016), which have considered employability and degree accreditation in Science, Technology, Engineering and Mathematics (STEM) subjects and Computer Science respectively. The Wilson review also gave rise to the launch of UK's National Centre for Universities and Business (NCUB), which has provided a number of reports on the extent and value of work experience activity by HE students (e.g. National Centre for Universities and Business 2015, 2016) including employers' attitudes and activities. It reports that over one-quarter of employers directly consider work experience as a tool in the recruitment of graduates, as well as variations in the availability of work experience by discipline and sector. NCUB reports, unequivocally, that students who undertake work experience are more likely to find employment, do so faster, and at the graduate level (compared with those who did not undertake a placement). However NCUB also point out that this could partly be because higher achievers at university are more likely to undertake placements.

4.2.2 Impact of structured work placements during HE

In a study using German data, Weiss and Klein (2014) address the question of whether work experience pays off upon labour market entry, and compare the labour market benefits of different types of work experience. This suggested that HE students benefit more from work experience that is voluntary than a mandatory part of their programme, yet they benefit more where there is a stronger link to the field of their study (i.e. relevance). They demonstrated that such experience helps with faster transition and integration into the labour market, but did not find that this benefit persisted into the longer term when earnings or perceptions of social standing were assessed.

An analysis of paid and unpaid work undertaken by students (BIS 2013) examines the effect of different forms of work experience on respondents' graduate outcomes (i.e. class of degree; salary; obtaining a graduate job; self-confidence; and risk of unemployment). The results show that respondents who had undertaken both work-based learning and paid work tended to have the most positive outcomes in terms of transitions into the labour market, while those who had undertaken no work had the least positive.

There is a significant literature considering the impact of work experience but it is interesting to note the extent to which this evidence base has until recently relied on studies of business and management students, for whom work experience could arguably be considered as more aligned or embedded in their course than for some other disciplines. While, in recent years, the disciplinary coverage of these studies has tended to widen somewhat, some studies look at the impact of work experience on academic attainment rather than employability directly. Binder *et al.* (2015), for example, used a large longitudinal sample ($n > 15,000$) across an extensive range of undergraduate disciplines and found effects on attainment from both student background characteristics and what they termed "internship" (work placement) experiences.

Wilton (2012) explores the value among graduates of a work placement undertaken by business and management students on a sandwich course. Drawing on a longitudinal study of the 2003 graduate cohort from this course, the article explores the value of a placement in contributing to the development of generic skills and also providing a head start for graduates at the transition from higher education to employment. Qualitative data provided a positive assessment of the benefits that ensued, but quantitative analysis found that the relationship between the work placement, skill development and employment outcomes was more complex.

Moore and Reddy (2012) worked from the top-level finding that Psychology graduates who had undertaken a placement programme were significantly more likely to be in employment, and in graduate-level employment, six months after graduation than Psychology graduates who had not undertaken a placement programme. However, their detailed analysis of outcome and other survey data revealed that this difference only persisted for those with higher academic attainment (degree class). There was evidence to suggest that those who had undertaken a placement were more satisfied in their career, and possibly earned more highly (but this did not have statistical significance). Their conclusion was that the placement experience could offer measurable and

persistent benefits, but this was not universal for all students and could not be proven to outweigh the additional costs involved.

Mahmood *et al.*'s (2014) context was also Psychology students enrolled on a programme with an integrated work placement. They reported the pre-placement and post-placement attitudes of 49 students. Although employability benefits were widely perceived, and there were differences in how these were articulated pre-placement and post-placement, the authors concluded that emphasis needed to be placed on training students how to demonstrate their employability to potential employers.

A small sample of students in the creative sector was studied by Allen *et al.* (2013) – along with HE staff and employers – to investigate how an “employable student” and/or ideal “future worker” were prefigured in this context. They found that evaluations of what constitutes success in terms of employment outcomes were implicitly related to gender, race and social class. They also argue that work placements are a key domain in which these inequalities are reproduced and sustained, raising questions of how such inequalities might be countered.

4.2.3 Graduate internships and other informal work experiences

Although not an embedded part of a higher education programme, an internship scheme for recent graduates who studied a business degree at a university in north-east England was examined by Helyer and Lee (2014). They found positive outcomes for all parties (graduates, the employers, and the institution) including positive impacts on progression into employment, particularly for those with lower attainment. They reported value in both developing and articulating several transferable skills, and a perceived advantage in learning these in an “authentic” setting (i.e. a real workplace). The authors reflected that there would be benefit in integrating this post-graduation activity within the degree programme somehow.

The Royal Academy of Engineering (2016) reports differences in access to graduate internships with the profile of recent graduates, initially identified in a 2011 evaluation of the ‘Graduate Talent Pool’ (a national Government-backed graduate internship scheme). This had identified lower levels of success in securing an internship by recent graduates of black and minority ethnic minority background, compared with white graduates, although internships appeared to be particularly attractive to the former group. These variances were confirmed in a further research study undertaken for the Royal Academy, including after accounting for factors such as university type or attainment. The research suggests a need for further research into how employers recruit and select graduates for internships and long-term employment, and to understand whether current application processes, or assessment and selection criteria, unintentionally discriminate against certain groups of applicants (Pollard *et al.* 2015). These studies both also confirmed the positive impact of undertaking an internship upon transition to employment and graduates’ confidence and perceptions of employability.

This review does not include the impact of unpaid work experiences on employment outcomes, as it is understood that participation levels are generally low and reported that there has been little systematic investigation of unpaid work on graduate outcomes (Purcell *et al.* 2012).

4.2.4 Other business interactions and extra-curricular activities

Reibe *et al.* (2013) considered the impact of incorporating guest speakers from industry into the curriculum of a leadership unit focused on employability skills development. Based on survey and in-depth research, they found that an appropriately briefed, qualified, interesting and engaging guest speaker played an important role in active learning by exposing the students to the real experience of the workplace and reinforcing the importance of employability. They noted that this could be influenced by learning styles and also cultural factors, with differences emerging in the expectations and perceptions of domestic and international students.

Roulin and Bangerter (2013) present data from 66 interviews with Swiss business students about their use of extra-curricular activities in relation to the labour market, as a strategy to provide a positional advantage in transitions to the labour market (i.e. to differentiate themselves from others). This is based on the assumption that participation in these activities provides an opportunity to demonstrate competencies that would not be visible otherwise in their CV perhaps due to a lack of

work experience. Most students participated in extra-curricular activities for personal rather than career-related reasons, although many did understand that there could be career benefit in doing so. They did tend to incorporate them into their CVs, but tended to do this purely to illustrate what they had done at university rather than using them to articulate the development of particular competences.

Using British Household Panel Survey data, Paine *et al.* (2013) found that volunteering has a significant but weak effect on employment, and analysed this in terms of entry into work. They also found that the frequency of volunteering made a difference to its effects on employment outcomes, and that affects vary with demographics. They found it had little impact once in the labour market, however, with a zero or even negative effect on wage progression. However, other research by the Chartered Institute for Personal Development (CIPD) (2015) is more positive about the role of volunteering, its capacity to develop employability, and contribute to positive employment outcomes. This research finds that both individuals and employers value volunteering, and believe that it leads to positive social and economic impacts.

A large survey of Taiwanese business school graduates was used by Lau *et al.* (2014) to evaluate the skills they associated with in various extra-curricular activities, including student council membership or governance, volunteering and participation in sport, music and art clubs. Those who had been core members in extra-curricular activity tended to positively evaluate their communication, leadership, creativity and self-promotion skills. Different types of extra-curricular activity influenced the development of different aspects of students' employability. For example, leadership skills were found to be developed most strongly from involvement in sports clubs, while creativity was developed most from involvement in music clubs.

4.2.5 Networking

Many universities, and other employment support services, recommend the development of networking skills in order to enhance students' or graduates' prospects of gaining employment, and offer skill development in this area. Networking using social media tools, including social networking sites such as Facebook and LinkedIn, is also thought to offer valuable utility to students or graduates seeking to enhance their employment outcomes (e.g. see Longridge, Hooley and Staunton 2013). However, there seems comparatively little literature that tests the efficacy or impact of networking as a skill in relation to other aspects of the development of employability.

Mowbray *et al.* (2016) have analysed the key aspects of the networking behaviours of young jobseekers, online and offline, and suggest three discrete areas of research: (1) social network theory and the use of informal channels of information during job search, (2) the role of networking behaviours in job search, and (3) the adoption and use of social media tools.

In summary, experiences of work are an increasingly common part of higher education programmes and are vital to employability development overall. However, there seems to be scope to make more of 'informal' experiences of work, in addition to the better understood role of work experience that is embedded within an HE programme (such as a work placement), and also to do more to help students articulate the value of these experiences in terms of competencies which will support employment transitions. Nonetheless, there are as yet few efforts to quantify the broader developmental aspects of employability enhancement through work experiences, as most studies have focused on whether it increases employment outcome measures.

4.3 Enterprise and entrepreneurship

There is a rich literature about the value of enterprise education as a way of preparing students for working life spanning several decades; this section updates on the relationship between enterprise and entrepreneurship learning and employability.

4.3.1 Policy context for enterprise in HE

The development of enterprise and entrepreneurial skills in students has been the focus of much policy making and curricular development over many years. Enterprise education has a long history in pre-HE institutions where enterprise projects have been used to simulate the world of work and develop business/commercial awareness. Enterprise education in HE has been focused around subject

disciplines, particularly Business Studies (O'Leary 2012), and subjects such as the creative arts where graduates might be expected to enter self-employment (Hjelde 2015). The rationale for this appears to derive from the popular conception of entrepreneur as initiator of new products or services on behalf of self-owned businesses. More recently, the notion that enterprise education primarily supports self-employment has been replaced by a consensus that entrepreneurialism is a generic graduate attribute or transferable skill (Smith and Paton 2014) that can be utilised within any business. The term "intra-preneurialism" is used to denote a person who deploys "entrepreneurial effectiveness" in the development of products and services as an employee, thus locating enterprise education at the centre of the employability discourse. Enterprise education, currently heavily promoted by the Government, fosters a wide range of employability attributes including the entrepreneurial mind-set (Pollard and Wilson 2014) thought necessary to thrive in an enterprising culture (QAA 2012).

The QAA (2012) distinguishes enterprise and entrepreneurial education in HE as follows:

enterprise education is defined as the process of equipping students (or graduates) with an enhanced capacity to generate ideas and the skills to make them happen. Entrepreneurship education equips students with the additional knowledge, attributes and capabilities required to apply these abilities in the context of setting up a new venture or business. (QAA 2012, p. 2)

Enterprise education in HE takes many forms, from co-curricular and extra-curricular activities at one extreme, to embedded modules at the other. Here we are defining co-curricular as those activities that extend or complement the curriculum, and extra-curricular as those activities that are additional and separate from the curriculum; although in practice these notions overlap. Enterprise education may be formally recognised through personal development planning (PDP) initiatives or the Higher Education Achievement Record (HEAR). The QAA (2012) offers a model for the development of entrepreneurial effectiveness comprising three inter-related components: enterprise awareness; developing an entrepreneurial mind set; and developing entrepreneurial capability, founded on the ability to think and act creatively, make decisions based on critical analysis, and implemented through leadership and management. These are all closely aligned to learning and teaching as well as employability.

Moon (2014) maps the QAA model to the delivery of three subjects and advocates more multi-disciplinary and multi-media teaching and assessment is required to replace traditional academic teaching in this area as:

With enterprise and entrepreneurship education there is a need for current universities to integrate their provision both vertically and horizontally. That is, internally between subject disciplines and externally with practitioners. (Moon 2014, p. 640).

In a larger transnational study, Kucel *et al.* (2016) tested the hypothesis that graduates with entrepreneurial skills are better equipped for the labour market. They found that countries with innovative labour markets are better able to utilise entrepreneurial knowledge and capabilities (defined as scanning and search, association and connection, evaluation and judgement) by providing graduates with appropriate jobs. The policy implication of this finding is that HEPs need to build closer partnerships with businesses and invest in supporting innovation in businesses as well as enterprise capabilities in students and graduates.

Henry (2013) questions whether policy makers might be expecting too much from enterprise and entrepreneurial education in HE. She advocates a more realistic and measurable expectation of what it could achieve and how it could be assessed. Henry argues that there is a danger that enterprise education develops from a "competence for everyone" (Henry 2013, p. 843) into that of a device concerned with competitiveness and productivity in the economy. Importantly, this study argues for research to identify precisely how enterprise capabilities might impact graduates' participation in the workforce – in other words, on their long-term employability.

4.3.2 Enterprise and entrepreneurialism in action

The literature is well served with papers on enterprise and entrepreneurialism that demonstrate delivery of employability through enterprise learning (e.g. Bell 2016; Hjelde 2015; Crayford and Fearon 2012; Azam 2013; Pollard and Wilson 2014; O'Leary 2015; Moon 2013; Burrows and Wragg 2013), and space does not permit exposition of them all. However, the following papers illustrate two contemporary themes: the first two papers concern curriculum development initiatives and the third considers the relationship between entrepreneurialism and employment outcomes.

Clements (2012) reported that one of the first policy imperatives of the incoming coalition government was to place higher education as a key driver of local economic development. He argued that the Student Placements for Entrepreneurs in Education (SPEED) programme was one response to that call that impacted positively on both students and the local economy by supporting a paradigm shift in employability preparation: from thinking to doing. SPEED was a Higher Education Innovation Funding (HEIF) funded experiential-based learning model (also referred to as enquiry based learning, action learning and learning by doing) aimed at encouraging students to start their own businesses while in higher education. SPEED enabled students to test their enterprise skills in the safe environment. To participate, students were required to pitch their business idea to a selection panel comprising university and business people. Support provided included separate accommodation, taught sessions, online materials, mentoring by local business people and assessment was via student presentation and mid-session review. The goal was to create a realistic business environment within HE.

One impact of SPEED is that a high proportion of businesses set up continued after the students completed their degrees. Another, perhaps more significant impact, has been the way the university conceptualises enterprise, entrepreneurship and employability learning holistically, and has made a commitment to offer opportunities for enterprise development to all undergraduates.

O'Leary (2015) reports on an initiative to introduce client consultancy projects as an alternative to final year dissertations and as a platform for both enterprise provision and the enhancement of employability. Based on an earlier study, O'Leary argued that enterprise and employability can be enhanced through the three 'Cs':

content – accumulation of relevant knowledge and information networks; capability – direct application in a relevant employment context; and character – working alone and in teams (O'Leary 2015, p. 462).

This thinking influenced the design of the consultancy project that replaced the largely individual dissertation work with projects undertaken on behalf of clients involving small groups of students working in teams as consultants.

In an investigation of the relationship between enterprise traits and graduate employment outcomes, Bell (2016) used a quantitative approach to measure entrepreneurial drive in undergraduate students. The focus of the investigation was to tease out what makes entrepreneurial students more successful in the labour market. He observes that employers often seek entrepreneurialism in applicants, and:

Since many of the enterprise skills can be regarded as entrepreneurial behaviours, this would suggest that students with a higher entrepreneurial spirit would be more enterprising, more employable, and consequently more likely to obtain higher level graduate employment. (Bell 2016, p. 5)

The attributes associated with entrepreneurial drive based on the work of Florin *et al.* (2007) encompass a wide range of behaviours (i.e. preference for innovation, self-efficacy, non-conformity, proactive disposition, and achievement motivation). In order to capture and measure entrepreneurial drive, a 42 item 'self-rate' questionnaire was designed for undergraduates in years one, two and three. Those completing the survey in their final year were also asked to complete an employment questionnaire measuring the level of their employment six months following graduation. Occupational data provided in response to the employment questionnaire were categorised in the same manner as data collected for the Destinations of Leavers from HE (DLHE) survey; that is, categorised as

professional/managerial or non-professional/managerial. Binary logistic regression was used to explore the relationship between entrepreneurial drive and employment outcomes. Bell found that:

Proactive disposition and achievement motivation were statistically significant for having an influence on the likelihood of individual graduates being employed in managerial or professional employment. The preference for innovation, self-efficacy, and non-conformity constructs were found to be statistically insignificant. (*Bell 2016, p. 10*)

Bell inferred that this finding might reflect the approach taken by students/graduates in finding work (e.g. being proactive, opportunistic, etc.) rather than the preferences of employers. Further, Bell infers that hirers of graduate professionals/managers may not be seeking all entrepreneurial traits, for example, non-conformism, and so the embedding of such skills in the curriculum through enterprise education might need to be accompanied by strategies to support graduates navigate recruitment processes.

In summary, a well-developed policy context exists for the development of enterprise and entrepreneurial education within HE that is closely associated with employability enhancement. Enterprise education that enhances employability requires a different approach to traditional learning and teaching pedagogies. The literature reports a range of curricular initiatives (Owens and Tibby 2014) arising from the delivery of enterprise and entrepreneurialism including those that have the capacity to change institutional culture or practice.

Policy makers have high expectations of HE for enterprise and entrepreneurship learning in respect of outcomes for both the economy and for individual students and graduates.

There is early evidence that suggests enterprise learning does confer labour market advantage although more research is needed to identify what employers seek in entrepreneurial graduates.

4.4 Internationalisation

Internationalisation is a currently dominant theme in higher education and for universities across the globe. There are a number of aspects to it: provision of programmes in the UK to international students ('inward mobility'); providing opportunities for UK students to experience 'outward mobility' to other countries; provision of programmes to overseas students through transnational education (TNE); and 'internationalisation at home'. The intersection of employability and internationalisation can potentially be reviewed through all these angles.

4.4.1 Student mobility

International mobility enhances students' employability in a range of ways. Most obviously international mobility supports students to gain or enhance second language skills that are valued by some employers. In addition, to this focus on language skills, Jones (2013) has highlighted that a range of attributes, which she divides into those concerned with self-sufficiency/self-efficacy and personal effectiveness, are developed through studying or working abroad. She makes the key point that "many of the skills developed through international student mobility initiatives are precisely those generic transferable skills sought by graduate employers (p. 102)."

Research on the impact of the Erasmus programme (European Commission 2014) found that 85% of Erasmus students were motivated by a wish to enhance their employability, and that 81% believed that they had improved their 'transversal' skills. Almost two-thirds of the employers consulted believed that international experience was important for recruitment, and over 90% were looking for many of the transversal skills that are enhanced through mobility, such as confidence, tolerance towards others, problem-solving and an openness or curiosity about taking on new challenges. It also cited both lower unemployment rates among Erasmus students, and a significantly higher proportion moving to another country to take up employment.

The findings from the evaluation of the Erasmus programme are supported by a range of other studies on student mobility from Poland (Pawel 2015) and Finland (Centre for International Mobility 2014). In the UK, a survey of nearly 3,000 students about their experiences of short-term mobility (i.e. a year or less, within a degree programme) (Mellors-Bourne *et al.* 2015a) revealed that that nearly all the students perceived a positive link between mobility programmes and their academic,

career, and personal development. Developing independence and inter-cultural understanding, and an increased likelihood of working abroad long-term were key perceived benefits. The principal motivations for participation in mobility were a desire for enjoyable and interesting experiences, to broaden horizons, and to enhance employability and career prospects.

Studies of mobility impact have tended to focus on academic benefits as well as personal impacts for students, although many of these benefits are widely understood to contribute to enhanced employability. Jacobone (2015), for example, reports an evaluation of what Erasmus students gain from credit mobility (i.e. a period abroad embedded within a degree programme) in relation to certain specific skills and aspects of personal growth. Erasmus students reported significant perceived outcomes in relation to cultural enhancement, personal development, and foreign language proficiency, and an increased European identity.

Brooks *et al.* (2012) specifically consider the issue of outward mobility, and particularly the extent to which higher education overseas is considered as a strategy on the part of UK students to distinguish themselves from others in an increasingly congested graduate labour market. This reflects a number of earlier studies that focused on students from Asian countries who chose to study abroad in pursuit of distinction in the labour market.

There have also been discipline-focused studies of this type. In a very focused study of microbiology students and academic staff, Standley (2015) reviews the impact of research placements overseas undertaken by students, highlighting the benefits of heightened inter-cultural awareness, enhanced employability, and practical strategies to foster such mobility and embed such benefits. Cherry (2013) considers the impact of 'Erasmus Intensive Programmes' and their value for Law students at a particular UK university, suggesting that they offer a particularly useful function in enabling students to enhance employability by participating in an international collaborative project without extending their degree length.

The effect of mobility in enhancing employability seems to be borne out by comparison of mobile and non-mobile student employment outcomes, using Higher Education Statistics Agency (HESA) data from the 2012-13 graduating cohort of UK undergraduates. This showed that six months after graduating, a lower proportion of graduates who were mobile were unemployed (5.4% compared to 6.7%); a higher proportion of those in employment were working abroad (11% compared with 2%); and, on average, graduates earned more if they remained in the UK to work after they had been mobile (UUK 2015).

There is a wealth of literature across the globe relating to student mobility and its benefits, including from North America and Australia. However, as it largely reinforces the messages stated here in relation to its impact in terms of enhanced employability (and improved employment outcomes), it is considered unnecessary to review it here. It should also be noted that one form of mobility is a work placement (or volunteering) undertaken abroad, so there could be employability enhancements through both the mobility and the experience of work itself.

4.4.2 Transnational education (TNE)

Mellors-Bourne *et al.* (2015b) reviewed for the HEA recently the extent to which employability development is a feature of transnational education (TNE). Although it takes the form of numerous delivery models, TNE is essentially a form of education where the learner entirely, or mostly, remains located in a different country from the body that is providing the education and/or qualification. The HEA's literature review of TNE more generally (O' Mahony 2014) found that teaching and learning issues have received much less attention in TNE research than themes such as globalisation, trade, quality and regulation. In the more than 200 items (since 2005) reviewed by O' Mahony, none concerned employability. Her research did find that transferable skills development is perceived by TNE staff as one of the potential benefits of TNE programmes.

The HEA commissioned a project specifically to consider employability development within TNE programmes, not least in recognition of the quality assurance requirement on UK institutions providing TNE programmes that they offer learning and development (academically and through other experiences) comparable to that available in their UK programmes. Any enhancement of employability through a UK programme should also be provided in an equivalent TNE programme. Mellors-Bourne *et al.* (2015b) review the sparse literature in this area, but also describe empirical

work with alumni of UK TNE programmes. There was evidence from some UK institutions of employability development initiatives in their overseas TNE provision, but examples of embedded transferable skill development in the curriculum seemed to be relatively rare. Few of the alumni interviewed understood concept of employability well and many believed it was solely the qualification that was important. Employability development (including transferable skills) embedded in the curriculum was rarely reported by the alumni, other than that taking place at international campuses (where provision appeared to be quite similar to that in the UK), and those who as distance learners had undertaken specific online modules. They were somewhat more familiar with the co-curricular support, such as careers advice, help with CV writing, and employer interaction, but this was by no means common in partnership provision. Extra-curricular activity, work placements or volunteering were also rare. The evidence suggested that employability development was less widespread in TNE programmes than UK domestic programmes, but the somewhat distinctive profile of many TNE students (many of whom study while in employment) could impact on their understanding of and need for employability enhancement.

4.4.3 Internationalisation at home

While many studies point to evidence that transferable skills and capabilities are developed through international mobility, it may be the case that international mobility programmes appeal to students who already possess, or have an advantage in developing, these attributes. In order to extend the range of students who might benefit from internationalisation, the concept of 'internationalisation at home' has increasingly been recognised in recent years. This involves developing the home curriculum and learning experience (i.e. for all students) in such a way to foster some of the outcomes gained through student mobility. This can explicitly include utilising the international and professional experiences of the students themselves. Riley (2012) describes an approach to this for language learning, through development of a student-centred 'professional syllabus' which takes account of the students' contexts and experiences, but also explicitly aims to develop language and communications skills and competencies that will enable students to work effectively and efficiently in a professional working environment and thereby increase their employability. Killick and Dean (2013) also report on work at one university to embed employability and "a global outlook" as being important for students, alongside highlighting the importance of digital literacy.

In summary, the literature reviewed here suggests that there is a strong intersection between the internationalisation and employability 'agendas' in HE currently and, despite not inconsiderable differences in practical support, it is likely that international mobility will continue to provide an important vehicle for employability learning. However, as the most popular form of mobility currently is through the Erasmus programme, it will be important to maintain momentum on developing outward mobility once the UK has left the European Union.

4.5 Reflection and articulation

Reflection in education is a process through which learners look back on learning experiences and articulate them in some depth in order to extract the maximum learning gain. Authors such as Kolb (1984), Schon (1991) and Moon (2004) are presented as architects of the impetus to use experiential learning, professional practice and employability development, respectively, as vehicles for reflection on learning. The requirement for HE students to look back upon their learning is embedded in innumerable course specifications, personal development planning (PDP) devices as well as the Higher Education Achievement Report (HEAR).

Jarvis *et al.* (2012) report on a staff–student partnership in which students used reflective logs as means of recording data on the development of their employability. Students, as co-researchers, were involved in designing an employability skills portfolio to capture their own and others' employability that enabled learning to be mapped against the university's expectations.

In a study of students' use of reflective essays on work placement experiences, Eden (2014) documents how students' accounts reflected emotional aspects of their learning more than the employability they developed.

These students' emotionally rich reflections suggest that they identified their experiential learning on placements to be more about coping with the challenge of non-academic ways of working, as well as recording and reflecting on the transformational aspects. (Eden 2014, p. 274)

Eden concludes that employability support should be more holistic and that employability should be acknowledged as a process of "becoming employable", which enables students to move from the relative shelter of academic life towards a more personally reflective form of learning in the workplace. The diversity of students' accounts leads Eden to suggest that searching for a single model or template for employability support (Pegg *et al.* 2012) is no longer sufficient. Instead, HE institutions need to be aware that work-based learning will take students out of their comfort zones and students should be prepared by via discussing expectations before such experiences take place as "reflective learning must begin before the experience itself"(Eden 2014, p. 275).

In the next example, Simatele (2015) shows how e-portfolios can be used as instruments to embed transferable, employability learning. Two main findings are reported: the first is that "embedded approaches to teaching transferable skills are more effective than bolt-on methods" ... and secondly that ... "e-portfolios can encourage the transfer of skills." (Simatele 2015, p. 872). Further, Simatele notes that e-portfolios provide an accessible platform for students to showcase their career development by enabling reflection on practice.

In these three examples, reflection is used as a device to help students manage and assimilate their employability learning. Importantly, they also point to the need to see reflection as a means of making sense of employability – in its anticipation, during and following learning – and is more than a device for simply looking back. This suggests that the writing of Schon (1991) in which he distinguishes "reflection-on-action" and "reflection-in-action" remain relevant today. Given that Schon's focus was on reflection as a device to enhance professional practice, he might not have been too surprised to see his ideas used to support the transition into graduate employment.

In summary, reflection and articulation in employability learning can be present-oriented, future-oriented, and retrospective. Reflection on aspects of learning is a well-embedded notion in higher education. Finding innovative ways to inspire students to engage deeply with it in respect of employability learning involves a variety of in-course approaches, including use of reflective logs, reflective essays, and e-portfolios. Rust (2016) goes as far as to suggest that students who are unable to articulate their strengths and weaknesses may not yet have become fully employable. The ability to articulate one's attributes is considered to be an essential part of 'personal literacy' – the ability to read (and write about) oneself.

Reflection and articulation are aspects of employability that capture more than the acquisition of skills. Reflection may be a particularly useful vehicle for the collection and assimilation of affective or emotional aspects of work-related learning and thus provide for a more holistic approach to employability.

4.6 Career guidance and management

There is some research that has sought to explore career decision-making and career building following higher education. This research notes that students and graduates do not always make rational career decisions (Greenbank 2014). However, until recently, such thinking about rational career decision-making has dominated writing on high education career decision-making (Mellors-Bourne *et al.* 2014). The research often concludes that students need to be supported to become better users of information and career building, in effect to become more rational (Greenbank 2014; Jackson 2012). Such conclusions transform career decision-making into an area that the higher education curriculum can focus on, and seek to foster, by helping students to enhance their career management skills.

Career management is the process by which individuals exercise agency over their careers (Hooley *et al.* 2013; Mackay *et al.* 2015; Neary, Dodd and Hooley 2015). The term 'career management skills' (CMS) is then used to describe the personal capacities that enable people to effectively manage their

careers. The ability to manage one's career skilfully is therefore an integral component of becoming and being employable.

CMS can be used to provide a series of learning outcomes for career guidance or employability development programmes.

4.6.1 *Shifting understandings of career*

As with the term 'employability', the term 'career' is also contested. In general, within this review we have sought to keep the definitions of both broad. In this section we focus on 'career' and generally use the term to describe the individual's passage through life, learning and work. In the review we found a number of papers that discussed the shifting nature of career and sought to describe the way in which careers are now working. We will briefly discuss these different ideas to provide some background for this sections focus on career guidance and career management.

One commonly articulated narrative about career is that the way in which careers are enacted has gone through a fundamental shift between the modern and postmodern periods. Such narratives stress increasing contingency and fluidity arguing that career was previously defined by hierarchical progression within a single organisation but is increasingly characterised by a lack of sectoral and organisational boundaries (Minten and Forsyth 2014). Graduates, as typically mobile individuals with high levels of human capital, are often seen as exemplifying this 'new' or 'boundaryless' career with the consequence that the discourse of employability needs to be reframed around the acquisition of human and social capital and a positive orientation towards flexibility and adaptability rather than on choosing a career or an organisation to work for (Kalfa and Taksa 2015).

Lin (2015) identifies individuals with protean career attitudes as those who are driven by their own values and are self-directed, flexible, and for whom continuous learning and goal-setting are typical. Such individuals could be argued to have a strong sense of career identity and capacity to adapt. Lin demonstrates that a protean attitude is a significant predictor of employability and shows how protean individuals move across career boundaries and invest in their own development through goal setting. Leach (2015) argues that notions of the employer–employee relationship have become more protean and boundary-less in response to decreases in job stability and security caused by global economic and technological change.

Minten and Forsyth (2014) trace some of the intellectual antecedents of this postmodern view of careers. They cite Arthur and Rousseau's (1996) concept of the "boundaryless career" that highlights the changing labour market context within which careers are pursued, and Hall's (1996) concept of the "protean career" that focuses the responsibility for employability and career development on the individual. Williams *et al.* (2015) argue that this conception of career as 'boundaryless' and 'protean' has become increasingly influential in the study of graduate employability and careers (see also 4.1.6).

Artess (2014) also highlights the importance of building individual responsibility and capacity for employability and career development, but in this case drawing on Savickas' (2013) concept of career adaptability which highlights the importance of individuals building their own narratives about their careers, and accepts the analysis that the "boundaryless career" popularised about the shift in the labour market.

The narrative around the 'new' career has not gone uncontested. Inkson *et al.* (2012) and Leach (2015) challenge these theories, arguing that boundaries (organisational, national and geographical) remain of critical importance to people's careers. They also caution against attempts to individualise careers as a protean undertaking and highlight the way in which careers are embedded in the social and economic structures. They argue that the literature around the "protean career" is overly focused on the "winners" in the labour market, and as a consequence ignores the actual career experiences of the majority. Tholen (2012) suggest that this critical position is more in tune with most social research, which generally highlights the ways in which structures and the exercise of power limit and shape the exercise of 'protean' agency. He also highlights that the graduate labour market does not always operate in a meritocratic fashion and that investments in human capital, through participation in higher education, do not therefore always pay off.

4.6.2 Career management skills

There is no clear agreement about what constitutes career management skills (CMS). CMS are often tacitly understood and weakly defined. However, some researchers have sought to define CMS by identifying a series of sub-constructs and concepts such as the following list (Jackson and Wilton 2016; Hooley *et al.* 2013; Kumar 2015; Mackay *et al.* 2015; Neary, Dodd and Hooley 2015; Pettinen, Skaniakos and Lairio 2013; Sidiropoulou-Dimakakou *et al.* 2015; Taylor and Hooley 2014):

- > Career adaptability
- > Career planning
- > Career resilience
- > Career self-efficacy
- > Curiosity and an inquiring attitude
- > Commitment to lifelong learning
- > Decision-making
- > Inter-personal and group work skills
- > Networking skills and managing social capital
- > Opportunity awareness
- > Personal effectiveness/management
- > Professional or occupational identity formation
- > Reflection
- > Self-awareness and self-reflection
- > Self-management
- > Transition skills
- > Understanding how to ask for and access career support

The terminology of 'skills' is often used, but it is questionable how far CMS are best understood as skills (Sultana 2012). Rather, it is probably more useful to recognise CMS as an overarching term that includes a range of skills, personal attributes and attitudes. It is also worth noting that the distinction between CMS and broader definitions of employability is often poorly defined.

It is possible to sequence these lists of skills into frameworks and skills taxonomies (Hooley *et al.* 2013; Neary, Dodd and Hooley 2015; Sultana 2012). Some writers suggest that HEPs should utilise such frameworks as part of the delivery of employability provision (Hooley, Hutchinson and Neary 2012). It is unclear how frequently this is actually done in practice, although Neary and Biezsley (2012) recount an interesting pilot of the Blueprint for Career within higher education. There are also reasons to be cautious about the idea that frameworks of CMS can be easily transported from one national and/or institutional context to another as the loss of cultural specificity may result in a weakening or undermining of the framework (Hooley *et al.* 2013; Sultana 2012).

Interest in CMS can be found internationally, although implementation of CMS learning is often patchy (Hooley *et al.* 2013; Neary, Dodd and Hooley 2015; Sultana 2012). There is a strong consensus in the literature on the following issues (Carneiro Pinto and do Céu Taveira 2013; Chin and Shen 2015; Jackson and Wilton 2016; Jones, Torezani and Luca 2012; Sidiropoulou-Dimakakou *et al.* 2015):

- > it is possible to develop CMS through purposeful interventions;
- > it is important to develop students' CMS while they are in higher education;
- > CMS can help students to manage their careers.

Jackson and Wilton (2016) outline the evidence that the development of CMS can support a range of positive lifelong outcomes.

Much of the literature argues that the development of CMS is more important than ever, in particular due to the perception that the labour market is increasing in complexity and, therefore, requires greater skill to navigate (Neary, Dodd and Hooley 2015; Sidiropoulou-Dimakakou *et al.* 2015; Sultana 2012). Penttinen and Vesisenaho (2013) argue that this labour market dynamism is even greater in some sectors such as IT that are characterised by their engagement with technological change.

There is some evidence to suggest that CMS are not equally distributed across the HE population (Jackson and Wilton 2016). Demographic factors such as age, gender and social class as well as subject choice may pattern students and graduates CMS. In addition it is also clear that CMS vary according to students' personalities and social groups (Chin and Shen 2015).

4.6.3 Graduate identity

In contrast to the focus on career management skills, Holmes (2014) emphasises the development of a graduate identity or of “becoming a graduate”. In other words, the way that new graduates experience, negotiate and make sense of their emerging career identity.

Holmes presents a model of becoming a graduate comprising four zones or modalities –indeterminate identity; failed identity; agreed identity; and imposed identity – in which graduates’ career identity is claimed by them and affirmed by employers and others. A fifth zone of under-determined identity represents movement into or through occupations that are temporary or non-graduate. Holmes demonstrates how three individuals progress through the zones in development and design their own career identities. Like ideas about career adaptability, the emergence of career identity is powerfully associated with career development as an intrinsic process that is not dependent on external skills that need to be acquired. In this approach, students and graduates are portrayed as proactive rather than deficient.

In a larger study of 667 students career identity is described as “a network of meanings in which individuals consciously link their own interests, motivation and competencies with acceptable career roles” (Praskova *et al.* 2015, p. 145). Praskova *et al.*’s research sought to tease out the complex relationships between notions of career construction, career identity and career exploration. They found that students who engaged in more career exploration and planning reported clearer career identity; those with clearer career identity reported positive perceptions of employability and less career distress.

These results support the career development argument that taking initiatives in career preparation (i.e., collecting information about careers and the self; thinking about, visualizing, and planning for one’s career future) is a critical motivational and adaptive strategy during the transition to adult working life. These strategies increase knowledge about, and competency in, young adults’ career choices, and enhance their awareness of who they are in terms of their future careers. (Praskova *et al.* 2015, p. 151)

Interestingly, they also noted that more career exploration was associated with higher levels of career distress, which suggests that as students become more aware of choices they can experience uncertainty and anxiety. However, developing career identity, particularly a career calling, appears to mediate these effects. The researchers assert that career identity is a “central cognitive mechanism in the agency of career development” (Praskova *et al.* 2015, p. 151) and advocate interventions that encourage students in career preparation activities, the setting of personally meaningful career goals, and clarifying where they want to be occupationally.

4.6.4 Career guidance

The HEA (2015) framework identifies “career guidance and management”. Career management has already been discussed (see 4.6.1), and so this section will now turn to discuss career guidance. The Organisation for Economic Development (OECD) (2004) define career guidance broadly to describe a wide range of interventions that support individuals to think about their future and particularly to consider the educational and occupational paths that they will take:

Career guidance refers to services and activities intended to assist individuals, of any age and at any point throughout their lives, to make educational, training and occupational choices and to manage their careers. Such services may be found in schools, universities and colleges, in training institutions, in public employment services, in the workplace, in the voluntary or community sector and in the private sector. The activities may take place on an individual or group basis, and may be face-to-face or at a distance (including help lines and web-based services). They include career information provision (in print, ICT-based and other forms), assessment and self-assessment tools, counseling interviews, career education programmes (to help individuals develop their self-awareness, opportunity awareness, and career management skills), taster programmes

(to sample options before choosing them), work search programmes, and transition services. (OECD 2004, p. 10)

Within higher education, career guidance is typically associated with the activities of the institutional career service, but the use of the OECD definition means that it is possible to view this term much more broadly.

The literature on career guidance suggests that there is a wide range of purposeful interventions that can be made to support students to build their CMS. Here we are discussing these interventions under the collective term 'career guidance' but elsewhere in the literature they are also described as career management learning, career development learning, career education, or work-integrated learning (Jackson and Wilton 2016). Career guidance is an international field that is well represented within the higher education systems of a wide range of countries, particularly in Europe and the English-speaking world (Simon 2014; Sultana 2012). Consequently, it is possible to draw evidence from a wide range of countries (Hooley 2014).

The literature highlights promising and effective interventions that it is possible to group under curricular, extra-curricular and employer engagement (see Table 2). Most of this provision is focused on the period when students are studying at university, but there was also some evidence that HEPs are extending this and providing both pre-study and post-study career guidance (Hooley 2014).

Table 2: Career guidance approaches in higher education

Curricular	Extra-curricula	Employer engagement
<p>Career support within the curriculum (Blackmore <i>et al.</i> 2015; Bradford 2013; Kumar 2015). This can include both viewing CMS as a curriculum in its own right, which requires dedicated curriculum space (Sultana 2012; Taylor and Hooley 2014), and building career learning into the learning outcome of subject disciplines (Hooley, Hutchinson and Neary 2012).</p> <p>Personal development planning processes for students (Hooley 2014). For example by encouraging students to engage in writing and journaling to aid their career reflections (Mackay <i>et al.</i> 2015).</p> <p>Professional development opportunities for academics to enhance their understanding of career management and employability (Hooley, Hutchinson and Neary, 2012; Jackson and Wilton, 2016).</p>	<p>Information and resources such as websites and career libraries (Hooley 2014; Mackay <i>et al.</i> 2015).</p> <p>Career counselling and group career counselling (Hooley 2014; Penttinen and Vesisenaho 2013). It is important that such counselling activities help individuals to assess their career goals and offer them feedback (Mackay <i>et al.</i> 2015)</p> <p>Student peer-to-peer career support (Jones, Torezani and Luca 2012; Penttinen and Vesisenaho 2013).</p> <p>Employability and careers awards (Hooley 2014).</p>	<p>Careers fairs and employer talks (Hooley 2014; Jackson and Wilton 2016).</p> <p>Employer mentoring and e-mentoring (Haddock-Miller, Rigby and Sanyal 2015; Spence and Hyams-Ssekasi 2015).</p> <p>Placements and other forms of work-experience (Hooley 2014; Jackson and Wilton 2016).</p>

Broadly, the evidence seems to favour a multi-faceted approach to the delivery of career guidance in higher education (Hooley 2014; Mackay *et al.* 2015). However, there is a strong indication that embedding work in the curriculum and involving employers is critical (Blackmore *et al.* 2016;

Pettinenen, Skaniakos and Lairio 2013; Taylor and Hooley 2014). Mackay *et al.* (2015) also argue that interventions that are more structured, and which include more contact with careers professionals, are more effective in developing CMS and employability. The evidence suggests that the provision of effective career guidance within higher education can contribute to social mobility, improved retention, attainment and progression to employment as well as to enhanced career management skills (Blackmore *et al.* 2016; Christie 2016; Hooley 2014; te Wierik, Beishuizen and van Os 2015; Taylor and Hooley 2014).

Not all of this literature relates specifically to institutional careers services. Indeed some studies suggest that institutional careers services can easily be marginalised (Andrews and Russell 2012). QAA (2016) found that institutional careers services often find it difficult to engage students in their service provision. However, there is a substantial range of literature that suggests that such services play a critical role in the delivery of curriculum development, extra-curricular, and employer engagement provision (Blackmore *et al.* 2016; Christie 2016; Hooley 2014, QAA 2016). However, Simon (2014) argues that there is a need for a more consistent approach to the definition and assurance of quality in such institutional careers services.

QAA (2016) summarise the services provided by higher education careers services as typically including: information services, such as being a source of job vacancies; assistance with CVs and application form completion; skill development, such as helping to develop communication/presentation skills; work experience, such as helping with graduate internships/student placements; recording achievement, such as providing employability awards and supporting institutional provision of the HEAR and PDP; and services aimed specifically at postgraduates.

4.7 Concluding on practice in supporting employability

This review used the *Embedding employability in higher education* framework (HEA 2015) to structure our searches and reporting. This has necessarily highlighted publications that fall within its component parts. The framework provides a useful organising device for practitioners and policy-makers to think about how students' employability might be developed through HE.

This section has demonstrated the breadth and scope of literature about employability in HE. It is clear that employability as a notion and a practice is manifest in many aspects of the student experience, and the literature reviewed suggests that institutions support employability development in students in a wide variety of ways. In the next section we will move on to look at how HEPs combine these activities and practices into institutional strategies.

5. Higher education providers' responses to employability

Higher education providers clearly have a range of options as to how they respond to these policy drivers and frame those responses. While it would be possible for institutions to take an overtly critical stance on employability, the literature suggests that most HEPs do seek to address employability and to signal their commitment to it to policy makers, employers, students and their parents (Pavin 2014). Grotkowska, Wincenciak and Gajderowicz (2015) suggest that, internationally, HEPs are moving away from an "ivory tower" conception of their role towards a view of themselves as "market-orientated educational enterprises". Employability typically has a strong role within this conception. For example, Andrews and Russell (2012) recount the example of one institution carefully benchmarking their employability provision against other institutions with similar graduate destinations.

The evidence suggests that employability serves a number of immediate institutional goals. For example, there is evidence that students are positive about opportunities to increase their employability and that employability predicts student and graduate satisfaction with HEPs (Andrews and Russell 2012; Eurico *et al.* 2015; Smith and Worsfold 2014).

5.1 Strategies

HEPs can adopt a range of strategies to embed employability in their offer. It is possible to describe these strategies as structural approaches; changing the programme mix; curriculum development; extra-curricular provision; and networking:

- *changing the structures* examines employability issues through an institutional lens. They note that there are features about the structural organisation of HEPs that influence employability. For example, Lee and Chung (2015) argue that students who have been to HEPs that provide higher levels of resourcing per student experience better employability outcomes. While Tran (2015) argues that the under-resourcing and poor development of the Vietnamese higher education system has a detrimental impact on the system's capacity to respond to the labour market. Sims (2012) also found that the culture, resourcing and relative positioning of the HEP strongly influences the pedagogy used in ways that have implications for students employability. For example, more elite institutions typically offer different curricula and pedagogies that better prepare students for more elite forms of work. Other work has looked at the way in which students' experiences in higher education are accredited, often arguing that the current qualification system has limited utility for signalling graduate attributes to employers (HEA 2015). QAA (2016) noted that there was some current practice in UK HEPs to develop more subtle and granulated student records;
- *changing the programme mix* focuses on the development of the range of programmes and qualifications that are offered by HEPs. Andrews and Russell (2012) point out that some academic programmes naturally include a greater employability element either because they have a vocational focus or because they require the development of a range of work-relevant skills and knowledge. Such work suggests that it may be by changing their programme mix that HEPs will be best able to support students' employability. For example, the development of programmes that have a strong vocational focus, placement years and employer involvement may offer a way to enhance graduate employment. Ferrández-Berruero, Kekale and Devins (2016) have defined an evidence-based approach for the development of higher education work-based learning programmes, which provides a useful resource for HEPs through outlining a series of key principles and illustrating these with case studies;
- *curriculum development* explores how changes to the current curriculum such as the introduction of employability modules or employability elements can support graduate employability (Pegg and Caddell 2016). The HEA (2013) framework offers considerable value in this area through the development of a process through which institutions can develop their curricula in partnership with key stakeholders and link this to their extra curricula provision. The alignment of curriculum learning outcomes and graduate attributes is one of the main ways by which institutions seem to embed employability into curriculum although some commentators argue that it can be challenging for such curriculum changes to deliver the anticipated outcomes (Hill, Walkington and France 2016) note that such attempts rarely lead to the anticipated outcomes. An alternative/complementary approach focuses on the introduction of a range of work-related features within a curriculum (Byrom and Aiken 2014; Kettis *et al.* 2013; Pegg and Caddell 2016; Smith and Worsfold 2014; Wilton 2014);
- *extra-curricular* strategies focus on what institutions can do outside of the core curriculum through the provision of career and employability services and other provision designed to enhance the student experience (Blackmore *et al.* 2016; QAA 2016) while co-curricular provision emphasises provision which complements or extends the curriculum. The HEA framework is also beneficial here, and can help to draw together curricular and extra-curricular initiatives and form them into a combined approach;
- *networking* strategies explore the way in which institutions can involve external stakeholders in the development of student employability. For example, Blackmore *et al.* (2016) discuss the involvement of alumni in employability provision in HEPs.

5.2 Building frameworks to shape institutional responses

It is common for those seeking to enhance graduates' employability to develop frameworks, models or other kinds of codified approaches; the HEA occupies a unique position from which to develop and promote these (HEA 2015, Pegg *et al.* 2012). Sometimes this is done at a national level, sometimes by groups of HEPs, and sometimes by single HEPs.

The HEA framework has been referred to throughout this paper and has been introduced to over fifty institutions both here in the UK and internationally. This work has included how to systematically adopt and embed the framework at an institutional level, thus impacting on the practice of all programmes and potentially the experiences of all students.

Govender and Taylor (2015) also set out an institutional process by which a work-related framework for employment can be development through five phases: design and approve; prepare for implementation; implementation; evaluation; and review.

Other frameworks can include a range of different elements including the following (Cavanagh *et al.* 2015; Kumar 2015; Pettinenen, Skaniakos and Lairio 2013):

- > a description of graduate attributes (see also 4.1 and 4.6.1);
- > pedagogic approaches, for example, the use of a variety of assessment methods including presentations and team work;
- > a role for co-curricular and extra-curricular activities.

5.3 Pedagogies for employability

Another component of employability strategies is thinking about how existing higher education teaching and learning supports or inhibits students in the development of their employability. Rutt *et al.* (2013) describe how they successfully used social constructivist pedagogies that stress participation, active learning and social interaction to support the development of student employability. Kumar (2015) also draws on a similar theoretical pallet in her Strengths, Opportunities, Aspirations and Results (SOAR) model.

One area of pedagogic development is in looking at the way in which employability can be embedded in particular subjects or for those students who are pursuing a vocational pathway towards a particular sector or occupation. For example, there are papers looking at approaches to employability in financial planning degrees (Teal 2013) and music technology degrees (Thorley 2014). Although Grotkowska, Wincenciak and Gajderowicz (2015) highlight strong disciplinary differences in orientation to employability with some disciplines more strongly committed to an 'ivory tower' conception of the role of higher education.

Another key development is the use of portfolios to support student learning, accredit achievement both within and without the curriculum, and to provide a vehicle through which a student can engage with an employer (Thorley 2014).

5.4 Conclusions about higher education providers responses

To conclude this section, it is clear that institutions can respond to current policy drivers and to the expectations of key stakeholder in a variety of ways. Employability provision in HE is multi-faceted and necessarily has to be tailored to respond to the needs of students. Some of the most effective approaches may include a combination of different elements sequenced together in a coherent institutional narrative around employability. The HEA framework may offer a useful process through which these elements can be combined and implemented.

6. Discussion and conclusions

This review has identified that there has been a lot of research on employability published between 2012 and 2016. The research describes how policy drivers for HEPs to attend to employability continue to grow. HEPs understand that student employability is a key part of the public policy interest in what they do and that delivering on employability is a key aspect of ensuring their legitimacy as public institutions. However, in responding to these policy drivers HEPs will need to think carefully about how they are defining 'employability' and how this integrates with their wider mission.

Despite the centrality of employability to higher education's public mission there is a very lively debate about what employability means, whether the development of employability is compatible with the other missions of higher education, what employability initiatives should seek to achieve and how they should go about this. Our review has sought to map some of this terrain as it is represented in the academic literature.

Academic interest in employability has been extensive during the period examined and our study appears to suggest that interest has grown across the period studied. Academics are wrestling with the nature of employability, its political implications, different models for delivering it and the relative efficacy of each of them. The literature has been drawn from a wide range of different disciplines, yet there is not much evidence that an inter-disciplinary conversation is being conducted. Much of the work on employability is being conducted within disciplinary silos. This leads inevitably to duplication and missed opportunities to build on findings elsewhere. We believe that the HEA can play an important role in improving inter-disciplinary dialogue on employability and hope that this literature review can play a role in this.

In particular, we believe that there is a major opportunity to bring together the literatures on career guidance and employability in higher education. Both are centrally concerned with the kinds of purposeful interventions that can be built within education to help individuals to self-actualise, transition to the labour market, make the best use of their skills and knowledge and live happy and fulfilled lives. At present, there are few points of connection between these two literatures, but we have drawn on both in the creation of this review. We believe that academics working in both fields would find it beneficial to engage around these mutual interests.

The HEA framework provides a clear summary of the practical implications of previous research prior to 2012. Much of the research that we have reviewed between 2012 and 2016 aligns well with this. However, it is also clear that many of the studies that we have reviewed recently are small scale or confined to a particular disciplinary context. There is a clear need for systematic work on efficacy. However, key patterns in the literature suggest that effective strategies include:

- > embedding employability in the curriculum and ensuring that students are able to make a connection between employability outcomes and their discipline;
- > providing a range of co-curricular and extra-curricular opportunities for students to enhance their employability;
- > building links with the labour market and encouraging students to do the same. The literature finds value in a wide range of connections between HEPs and employers. In particular, there is evidence of the impact of providing students' with real connections to employers and actual experience of the labour market;
- > supporting students to increase their confidence, self-belief and self-efficacy through their studies;
- > encouraging reflection and increasing students capacity to articulate and communicate their learning to employers;
- > encouraging student mobility and fostering a global perspective;

- using institutional career guidance services as organising and co-ordinating structures for HEPs employability strategies. However, in order to achieve this, the role of the services need to be broadly conceived.

The literature also includes an interesting discussion on the nature of graduate attributes/employability skills/career management skills. Considerable effort has been devoted to developing lists of skills and attributes that graduates should be encouraged to develop. For the most part, such lists move considerably beyond lists of what graduates should know (knowledge) and be able to do (skills) and include a wide range of personal attributes and characteristics.

One interesting approach has been to move away from the discussion of employability as a list of skills and attributes towards a more subtle discussion of 'identity'. Research that uses this perspective is often influenced by Bourdieu (e.g. 1986, 1990) and employs ideas about 'habitus' (the way in which individuals internalise cultural norms) and capital (the social, cultural and economic resources that individuals possess). In such an analysis the question become not simply about encouraging the acquisition of skills, but rather in helping students to transition from the identity of a student towards that of a graduate worker. This seems to us a promising line of thinking, but one for which, at present, there has been little consideration of what the practical implications would be for HEPs.

This review has demonstrated the richness that employability offers as a field of study. At one end it offers a vehicle for discussions about the global political economy, while at the other there are intensely practical discussions about how we can get students to think about their lives beyond education. Academics approach these questions from a range of political, theoretical, methodological and professional perspectives. We have tried to draw out some of the main perspectives that exist and to point out some patterns that emerge from the literature which offer HEPs clues for action. Ultimately, we believe that diversity is a strength in the practice and theory of employability, but we would argue that there is a need to increase awareness about the breadth of research that exists on employability and to encourage researchers to locate themselves within this broader debate.

Ultimately we believe that the employability agenda offers huge opportunities for HEPs, academics and students. If we can locate employability as being about realising individual potential, supporting the utilisation of the skills, attributes and knowledge acquired within higher education and increasing the political legitimacy of higher education we believe that it will be in the interests of all stakeholders. This review has shown that there is a lively and critical academic field that exists around the employability agenda. We believe that the continued growth and maturation of this field is essential to the ongoing development of employability in higher education.

7. References

- Allen, K., Quinn, Hollingworth, S. and Rose, A. (2013) Becoming employable students and 'ideal' creative workers: exclusion and inequality in higher education work placements. *British Journal of Sociology of Education*, **34** (3) 431–52.
- Andrews, G. and Russell, M. (2012) Employability skills development: strategy, evaluation and impact. *Higher Education, Skills and Work-Based Learning*, **2** (1) 33–44.
- Arora, B. (2015) A Gramscian analysis of the employability agenda. *British Journal of Sociology of Education*, **36** (4) 635–48.
- Artess, J. (2014) Changing conceptions of students' career development needs. In: Lazic, M. *Serbia within European paradigm of career guidance – recommendations and perspectives*. International Careers Conference: University of Niš, Serbia: 24 October 2013, pp.18–24.
- Arthur, M.B. and Rousseau, D.M. (1996) *The boundaryless career*. New York: Oxford University Press.
- Azam, M. (2013) Enterprising and entrepreneurship in higher education: A private sector perspective. *Business and Management Review*, **4** (2) 257–67.
- Bandura, A. (1997) *Self-efficacy: The exercise of control*. New York: W. H. Freeman.
- Bell, R. (2016) Unpacking the link between entrepreneurialism and employability. *Education and Training*, **58** (1) 2–17.
- Binder, J.F., Baguley, T., Cook, C., and Miller, F. (2015) The academic value of internships: Benefits across disciplines and student backgrounds. *Contemporary Educational Psychology*, **41** (April) 73–82.
- Blackmore, P., Bulaitis, Z.H., Jackman, A.H. and Tan, E. (2016) *Employability in higher education: A review of practice and strategies around the world*. London: Pearson.
- Bourdieu, P. (1986) The forms of capital. In: Richardson, J.G. (ed.) *Handbook of theory and research for the sociology of education*. New York: Greenwood.
- Bourdieu, P. (1990) *The logic of practice*. Stanford, CA: Stanford University Press.
- Bradford, J. (2013) *A qualitative exploration examining the enhancement of students' personal and professional development through an employability focused curriculum*. PhD Thesis. Liverpool: Liverpool John Moores University.
- Braun, E.M.P. and Brachen, J-C. (2015) Requirements HE graduates meet on the labour market. *Peabody Journal of Education*, **90** (4) 574–95.
- Bridgstock, R., Goldsmith, B., Rodgers, J. and Hearn, G. (2015) Creative graduate pathways within and beyond the creative industries. *Journal of Education and Work*, **28** (4) 333–45.
- Bridgstock, R. and Cunningham, S. (2016) Creative labour and graduate outcomes: implications for higher education and cultural policy. *International Journal of Cultural Policy*, **22** (1) 10–26.
- Britton, J., Dearden, L., Shephard, N. and Vignoles, A. (2016) *How English-domiciled graduate earnings vary with gender, institution attended, subject and socio-economic background* (IFS Working paper W16/06). London: Institute for Fiscal Studies.
- Brooks, R., Waters, J. and Pimlott-Wilson, H. (2012) International education and the employability of UK students. *British Educational Research Journal*, **38** (2) 281–98.
- Burrows, K., and Wragg, N. (2013) Introducing enterprise – research into the practical aspects of introducing innovative enterprise schemes as extra curricula activities in higher education. *Higher Education, Skills and Work-based Learning*; **3** (3) 168–79.
- Byrom, T. and Aiken, V. (2014) Doing it differently. *Higher Education, Skills and Work-based Learning*, **4** (3) 271–283.
- Cai, Y. (2012) Graduate employability: a conceptual framework for understanding employers' perceptions. *Higher Education*, **65** (4) 457–69.

- Carneiro Pinto, J. and do Céu Taveira, M. (2013) Developing career self-management skills: A study in higher education. *International Journal of Management Science and Information Technology*, **8** (April-June) 28–53.
- Cavanagh, J., Burston, M., Southcombe, A. and Bartram, T. (2015) Contributing to a graduate-centred understanding of work readiness: An exploratory study of Australian undergraduate students' perceptions of their employability. *International Journal of Management Education*, **13** (3) 278–88.
- Cerdeira, L., Machado-Taylor, M., Cabrito, B., Patrocínio, T., Brites, R., Gomes, R., Lopes, J.T., Vaz, H., Peixoto, P., Magalhães, D., Silva, S. and Ganga, R. (2016) Brain drain and the disenchantment of being a higher education student in Portugal, *Journal of Higher Education Policy and Management*, **38** (1) 68–77.
- Cherry, J. (2013) Enhancing the QLD: internationalisation and employability: the benefits of Erasmus Intensive Programmes. *Law Teacher*, **47** (1) 64–82.
- Chin, W.S. and Shen, Q.L. (2015) Factors affecting individual career management among undergraduates in higher education institutions. *International Journal of Academic Research in Business and Social Sciences*, **5** (10) 56–68.
- Christie, F. (2016) Careers guidance and social mobility in UK higher education: practitioner perspectives. *British Journal of Guidance and Counselling*, **44** (1) 72–85.
- Centre for International Mobility (2014) *Faktaa – facts and figures: Hidden competences* [Internet]. Helsinki: Centre for International Mobility. Available from: http://www.cimo.fi/instancedata/prime_product_julkaisu/cimo/embeds/cimowwwstructure/32427_Faktaa_1_2014_Hidden_Competences.pdf [Accessed 1 December 2016]
- CIPD (2015) *From big society to the big organisations?* London: Chartered Institute of Personnel and Development.
- Clark, M. and Zukas, M. (2013) A Bourdieusian approach to understanding employability: becoming a "fish in water". *Journal of Vocational Education and Training*, **65** (2) 208–19.
- Clements, M. (2012) Contribution of the SPEED programme to the enhancement of an enterprise culture in a UK university. *Industry and Higher Education*, **26** (2) 101–106.
- Clements, M.D. and Cord, B.A. (2013) Assessment guiding learning: developing graduate qualities in an experiential learning programme. *Assessment and Evaluation in Higher Education*, **38** (1) 114–24.
- Coetzee, M. (2014) Measuring student graduateness: reliability and construct validity of the graduate skills and attributes scale. *Higher Education Research and Development*, **33** (5) 887–902.
- Cole, D. and Tibby, M. (2013) *Defining and developing your approach to employability: A framework for higher education institutions*. York: Higher Education Academy.
- Crayford, J. and Fearon, C. (2012) Contribution of the SPEED programme to the enhancement of an enterprise culture in a UK university. *Industrial and Commercial Training*, **44** (4) 187–93.
- Cutts, B., Hooley, T. and Yates, J. (2015) Graduate dress code: How undergraduates are planning to use hair, clothes and make-up to smooth their transition to the workplace. *Industry and Higher Education*, **29** (4) 271–82.
- Dacre Pool, L. and Qualter, P. (2012) Improving emotional intelligence and emotional self-efficacy through a teaching intervention for university students. *Learning and Individual Differences*, **22** (3) 306–12.
- Dacre Pool, L. and Sewell, P. (2007) The key to employability: developing a practical model for graduate employability. *Education and Training*, **49** (4) 277–89.
- Daniels, J. and Brooker, J. (2014) Student identity development in higher education: implications for graduate attributes and work-readiness. *Educational Research*, **56** (1) 65–76.

- BIS (2013) *Learning from Futuretrack: The impact of work experiences on higher education student outcomes* (BIS Research Paper 143). London: Department for Business, Innovation and Skills.
- BIS (2016) *Success as a knowledge economy: teaching excellence, social mobility and student choice* (Cmnd 9258). London: Department for Business, Innovation and Skills.
- Drayson, R., Bone, E., Agombar, J. and Kemp, S. (2014) *Student attitudes towards and skills for sustainable development*. York: Higher Education Academy.
- Eden, S. (2014). Out of the comfort zone: enhancing work-based learning about employability through student reflection on work placements. *Journal of Geography in Higher Education*, **38** (2) 266–76.
- Eurico, S.T., da Silva, J.A.M. and do Valle, P.O. (2015) A model of graduates' satisfaction and loyalty in tourism higher education: The role of employability. *Journal of Hospitality, Leisure, Sport and Tourism Education*, **16** (June) 32–42.
- European Commission (2014) *The Erasmus impact study: effects of mobility on the skills and employability of students and the internationalisation of higher education institutions*. Luxembourg: European Commission: Education and Culture.
- Ferrández-Berruenco, R., Kekale, T. and Devins, D. (2016) A framework for work-based learning: basic pillars and the interactions between them. *Higher Education, Skills and Work-Based Learning*, **6** (1) 35–54.
- Florin, J., Karri, R. and Rossiter, N. (2007) Fostering entrepreneurial drive in business education: an attitudinal approach. *Journal of Management Education*, **31** (1) 17–42.
- France, D., Powell, V., Maunchline, A.L., Welsh, K., Park, J., Whalley, W. B. and Rewhorn, S. (2016) Ability of students to recognize the relationship between using mobile apps for learning during fieldwork and the development of graduate attributes. *Journal of Geography in Higher Education*, **40** (2) 182–92.
- Gardiner, C.M. (2015) From certificate chasing to genuine engagement: The contribution of curriculum design to students' career intent in a subfield. *Australian Journal of Career Development*, **24** (1) 53–63.
- Gbadamosi, G., Evans, C., Richardson, M. and Ridolfo, M. (2015) Employability and students' part-time work in the UK: does self-efficacy and career aspiration matter? *British Educational Research Journal*, **41** (6) 1086–107.
- Gordon, D.A. (2013) *Employability and social class in the graduate labour market*. PhD Thesis. Cardiff: Cardiff University.
- Govender, C.M. and Taylor, S. (2015) A work integrated learning partnership model for higher education graduates to gain employment. *South African Review of Sociology*, **46** (2) 43–59.
- Greenbank, P. (2014) Career decision-making: 'I don't think twice, but it'll be all right'. *Research in Post-Compulsory Education*, **19** (2) 177–93.
- Greenbank, P. (2015) Still focusing on the 'essential 2:1': Exploring student attitudes to extra-curricular activities. *Education and Training*, **57** (2) 184–203.
- Grotkowska, G., Wincenciak, L. and Gajderowicz, T. (2015) Ivory-tower or market-oriented enterprise: the role of higher education institutions in shaping graduate employability in the domain of science. *Higher Education Research and Development*, **34** (5) 869–82.
- Haddock-Miller, J., Rigby, C. and Sanyal, C. (2015) Evidence on education to career transition in the financial and accountancy sector. *Business Education and Accreditation*, **7** (2) 89–100.
- Hall, D.T. (1996) Protean careers in the 21st century. *Academy of Management Executives*, **10** (4) 8–16.
- Hazenbergh, R., Seddon, F. and Denny, S. (2015) Programme recruitment and evaluation: the effect of an employability enhancement programme on the general. *Journal of Education and Work*, **28** (3) 273–300.

- Helyer, R., and Lee, D. (2014) The role of work experience in the future employability of higher education graduates. *Higher Education Quarterly*, **68** (3) 348–72.
- Henry, C. (2013) Entrepreneurship education in HE: are policy makers expecting too much? *Education and Training*, **55** (8/9) 836–48.
- HEA (2013) *Framework for embedding employability in higher education*. York: Higher Education Academy.
- HEA (2015) *Grade point average: report of the GPA pilot project 2013-14*. York: Higher Education Academy.
- Hill, J., Walkington, H. and France, D. (2016) Graduate attributes: implications for higher education practice and policy. *Journal of Geography in Higher Education*, **40** (2) 155–63.
- Hjelde, A. (2015) Paradox and potential: Fine Art employability and enterprise perspectives. *Art, Design and Communication in Higher Education*, **14** (2) 175–88.
- Hoareau McGrath, C., Guerin, B., Harte, E., Frearson, M. and Manville, C. (2015) *Learning Gain in Higher Education*, Cambridge: RAND.
- Holmes, L. (2015) Becoming a graduate: the warranting of an emergent identity. *Education and Training*, **57** (2), 219–38.
- Hooley, T. (2014) *The evidence base on lifelong guidance*. Jyväskylä, Finland: European Lifelong Guidance Policy Network.
- Hooley, T. (2015) Who wins the rat race? Social justice and the graduate labour market. *Graduate Market Trends*, Autumn, 8–9.
- Hooley, T., Hutchinson, J. and Neary, S. (2012) *Supporting STEM Students into STEM careers: A practical introduction for academics*. Derby: International Centre for Guidance Studies (iCeGS), University of Derby.
- Hooley, T., Watts, A. G., Sultana, R. G. and Neary, S. (2013) The 'blueprint' framework for career management skills: a critical exploration. *British Journal of Guidance and Counselling*, **41** (2) 117–31.
- Inkson, K., Gunz, H., Ganesh, S. and Roper, J. (2012) Boundaryless careers: Bringing back boundaries. *Organization Studies*, **33** (3) 323–40.
- Jackson, D. (2012) Business undergraduates' perceptions of their capabilities in employability skills: implications for industry and higher education. *Industry and Higher Education*, **26** (5) 345–56.
- Jackson, D. (2014a) Self-assessment of employability skill outcomes among undergraduates and alignment with academic ratings. *Assessment and Evaluation in Higher Education*, **39** (1) 53–72.
- Jackson, D. (2014b) Factors influencing job attainment in recent Bachelor graduates: evidence from Australia. *Higher Education*, **68** (1) 135–53.
- Jackson, D. (2014c) Testing a model of undergraduate competence in employability skills and its implications for stakeholders, *Journal of Education and Work*, **27** (2) 220–42.
- Jackson, D. (2015) Employability skill development in work-integrated learning: Barriers and best practice. *Studies in Higher Education*, **40** (2) 350–67.
- Jackson, D. (2016). Modelling graduate skill transfer from university to the workplace. *Journal of Education and Work*, **29** (2) 199–231.
- Jackson, D. and Wilton, N. (2016) Developing career management competencies among undergraduates and the role of work-integrated learning. *Teaching in Higher Education*, **21** (3) 266–86.
- Jacobone, V. (2015) Evaluating the impact of the Erasmus programme: skills and European identity. *Assessment and Evaluation in Higher Education*, **40** (2) 309–28.
- Jameson, J., Strudwick, K., Bond-Taylor, S. and Jones, M. (2012) Academic principles versus employability pressures: a modern power struggle or a creative opportunity? *Teaching in Higher Education*, **17** (1) 25–37.

- Jarvis, J., Dickerson, C., and Stockwell, L. (2013) Staff-student partnership in practice in higher education: The impact on learning and teaching. *Procedia – Social and Behavioral Sciences*, **90** (October) 220–25.
- Jollands, M., Jolly, L., and Molyneaux, T. (2012) Project-based learning as a contributing factor to graduates' work readiness. *European Journal of Engineering Education*, **37** (2) 143–54.
- Jones, E. (2013) Internationalization and employability: The role of intercultural experiences in the development of transferable skills. *Public Money and Management*, **33** (2) 95–104.
- Jones, H., and Warnock, H. (2014) *Towards a competency-based framework for work-based learning*. York: Higher Education Academy.
- Jones, N., Torezani, S. and Luca, J. (2012) A peer-to-peer support model for developing graduate students' career and employability skills. *Intercultural Education*, **23** (1) 51–62.
- Jones, R. (2014) Bridging the gap: Engaging in scholarship with accountancy employers to enhance understanding of skills development and employability. *Accounting Education*, **23** (6) 527–41.
- Kalfa, S. and Taksa, L. (2015) Cultural capital in business higher education: reconsidering the graduate attributes movement and the focus on employability. *Studies in Higher Education*, **40** (4) 580–95.
- Kettis, A., Ring, L., Gustavsson, M. and Wallman, A. (2013) Placements: an underused vehicle for quality enhancement in higher education? *Quality in Higher Education*, **19** (1) 28–40.
- Killick, D. and Dean, L. (2013) Embedding internationalisation, and employability through graduate attributes [Internet]. *Brookes E-journal of Learning and Teaching*, **5** (1). Available from: http://bejlt.brookes.ac.uk/paper/embedding_internationalisation-2/ [Accessed 1 December 2016].
- Kinash, S., Crane, L., Judd, M., Knight, C., Dowling, D. (2015) What students and graduates need to know about graduate employability: Lessons from national OLT research [Internet]. *Learning and Teaching Papers*. Available from: <http://ePublications@bond> [Accessed 6 July 2015].
- Kolb, D.A. (1984) *Experiential learning: Experience as the source of learning and development*. New Jersey: Prentice-Hall.
- Kucel, A., Robert, P., Buil, M. and Massferrer, N. (2016) Entrepreneurial skills and education-job matching of higher education graduates. *European Journal of Education*, **51** (1) 73–89.
- Kumar, A. (2015) *Enabling all learners to SOAR for employability*. York: Higher Education Academy.
- Lau, H.H. Hsu, H.Y., Acosta, S. and Hsu, T.L. (2014) Impact of participation in extra-curricular activities during college on graduate employability: an empirical study of graduates of Taiwanese business schools. *Educational Studies*, **40** (1) 26–47.
- Leach, T. (2015) Graduates' experiences and perceptions of career enactment: identity, transitions, personal agency and emergent career direction. *Research in Post-Compulsory Education*, **20** (1) 50–63.
- Lee, K.W. and Chung, M. (2015) Enhancing the link between higher education and employment. *International Journal of Educational Development*, **40** (January) 19–27.
- Lee, S. (2016) Massification without equalisation: the politics of higher education, graduate employment and social mobility in Hong Kong. *Journal of Education and Work*, **29** (1) 13–31.
- Lees, D. (2002) *Graduate employability: literature review*. York: LTSN Generic Centre.
- Lilley, K., Barker, M., and Harris, N. (2015) Exploring the process of global citizen learning and the student mind-set. *Journal of Studies in International Education*, **19** (3) 225–45.
- Lin, Y. (2015) Are you a protean talent? The influence of protean career attitude, learning-goal orientation and perceived internal and external employability. *Career Development International*, **2015** (7) 753–72.
- Longridge, D., Hooley, T. and Staunton, T. (2013) *Building online employability: A guide for academic departments*. Derby: International Centre for Guidance Studies, University of Derby.

- Mackay, S., Morris, M., Hooley, T. and Neary, S. (2015) *Maximising the impact of careers services on career management skills: A review of the literature*. London and Derby: SQW and International Centre for Guidance Studies, University of Derby.
- Mahmood, L., Slabu, L., de Mource, G. R. and Hoptthrow, T. (2014) Employability in the first degree: The role of work placements on students' perceptions of graduate employability. *Psychology Teaching Review*, **20** (2) 126–36.
- Matherly, C.A., and Tillman, M.J. (2015) Higher education and the employability agenda. In Huisman, J., de Boer, H., Dill, D.D., Souto-Otero, M. (eds.) *The Palgrave International Handbook of Higher Education Policy and Governance*. London: Palgrave Macmillan UK, pp. 281–99.
- Mavromaras, K., McGuinness, S., O'Leary, N., Sloane, P. and Wei, Z. (2013) Job mismatches and labour market outcomes: panel evidence on university graduates. *Economic Record*, **89** (286), 382–95.
- Mellors-Bourne, R., Hooley, T. and Marriott, J. (2014) *Understanding how people choose to pursue taught postgraduate study*. Bristol: Higher Education Funding Council for England.
- Mellors-Bourne, R., Jones, E. and Woodfield, S. (2015b) *Transnational education and employability development*. York: Higher Education Academy.
- Mellors-Bourne, R., Jones, E., Lawton, W. and Woodfield, S. (2015a) *Student perspectives on going international* [Internet]. Universities UK International Unit. Available from: <http://www.go.international.ac.uk/sites/default/files/Student%20Perspectives%20Report.pdf> [Accessed 1 August 2016].
- Minten, S. and Forsyth, J. (2014) Academic papers: The careers of sports graduates implications for employability strategies in higher education sports courses. *Journal of Hospitality, Leisure, Sport and Tourism Education*, **15** (July) 94–102.
- Moon, C.J. (2014) Enterprise and entrepreneurship education: Implications for innovation in delivery. *Proceedings of the European Conference on Innovation and Entrepreneurship*. 630–41.
- Moon, J. (2004) *Reflection and employability*. York: Learning and Teaching Support Network/Higher Education Academy.
- Moon, R., Curtis, V. and Dupernex, S. (2013) How enterprise education can promote deep learning to improve student employability. *Industry and Higher Education*, **27** (6) 433–48.
- Moore, E. and Reddy, P. (2012) No regrets? Measuring the career benefits of a psychology placement year. *Assessment and Evaluation in Higher Education*, **37** (5) 535–54.
- Morrison, A.R. (2014) 'You have to be well spoken': students' views on employability within the graduate labour market. *Journal of Education and Work*, **27** (2) 179–98.
- Mowbray, J., Hall, H., Raeside, R. and Robertson, P. (2016) The role of networking and social media tools during job search: an information behaviour perspective. In: *Conceptions of Library and Information Science (CoLIS)*: Uppsala, Sweden, 27-29 June 2016.
- Naylor, R., Smith, J. and Telhaj, S. (2015) Graduate returns, degree class premia and higher education expansion in the UK. *Oxford Economic Papers, Conceptions of Library and Information Science*, **2**, 525–45.
- National Centre for Universities and Business (2015) *Increasing the offer of work experience in STEM subjects: can demand match supply?* London: National Centre for Universities and Business.
- National Centre for Universities and Business (2016) *Work experience as a gateway to talent in the UK: Assessing business views*. London: National Centre for Universities and Business.
- Neary, S. and Beizsley, C. (2012) I am here to learn biology, not 'personal development': Testing the blueprint for careers. In: *ADEHEMS Second International Conference: Employability of Graduates and Higher Education Management Systems*, Ljubljana, 27-28 September 2012.
- Neary, S., Dodd, V. and Hooley, T. (2015) *Understanding career management skills: Findings from the first phase of the CMS leader project*. Derby: International Centre for Guidance Studies, University of Derby.

- NESTA (2014) *What will the collaborative economy look like in 2025?* [Internet]. Available from: <http://www.nesta.org.uk/news/collaborative-economy-2025/about-our-scenarios#sthash.eaazzbC8.dpuf> [Accessed 28 July 2016].
- O' Mahony, J. (2014) *Enhancing student learning and teacher development in transnational education*. York: Higher Education Academy.
- O'Leary, S. (2012) Impact of entrepreneurship teaching in higher education on the employability of scientists and engineers. *Industry and Higher Education*, **26** (6) 431–42.
- O'Leary, S. (2015) Integrating employability into degree programmes using consultancy projects as a form of enterprise. *Industry and Higher Education*, **29** (6) 459–68.
- OECD (2004) *Career guidance and public policy: Bridging the gap*. Organisation for Economic Co-operation and Development. Paris: OECD.
- Osmani, M., Weekkody, V., Hindi, N., Al-Esmail, R., Eldabi, T., Kapoor, K. and Irani, Z. (2015) Identifying the trends and impact of graduate attributes on employability: a literature review. *Tertiary Education and Management*, **21** (4) 367–79.
- Owens, J. and Tibby, M. (2014) *Enhancing employability through enterprise education: examples of good practice*. York: Higher Education Academy.
- Paine, A.E., McKay, S. and Moro, D. (2013) *Does volunteering improve employability? Evidence from the British Household Panel Survey*. Birmingham: Third Sector Research Centre Working Paper 100.
- Pavlin, S. (2014) The role of higher education in supporting graduates' early labour market careers. *International Journal of Manpower*, **35** (4), 576–90.
- Pavlin, S. and Svetlik, I. (2014) Employability of higher education graduates in Europe. *International Journal of Manpower*, **35** (4) 418–24.
- Pawel, B. (2015) The impact of international student mobility on subsequent employment and professional career: A large-scale survey among polish former erasmus students. In: *International Educational Technology Conference (IETC) 2014: Procedia – Social and Behavioral Sciences*, **176**, 633–41.
- Pegg, A. and Caddell, M. (2016) Workplaces and policy spaces: insights from third sector internships Scotland. *Higher Education, Skills and Work-Based Learning*, **6** (2), 162–77.
- Pegg, A., Waldock, J., Hendy-Isaac, S. and Lawton, R. (2012) *Pedagogy for employability*. York: Higher Education Academy.
- Pemberton, J., Jewell, S., Faggian, A. and King, Z. (2013) Higher education as a portfolio investment: students' choices about studying, term time employment, leisure, and loans. *Oxford Economic Papers*, **65**, 268–92.
- Penttinen, L. and Vesisenaho, M. (2013) Career repertoires of IT students: A group counselling case study in higher education. *International Journal for Educational and Vocational Guidance*, **13** (3) 203–13.
- Penttinen, L., Skaniakos, T. and Lairio, M. (2013) Supporting students' pedagogical working life horizon in higher education. *Teaching in Higher Education*, **18** (8) 883–94.
- Pericles Rospigliosi, A., Greener, S., Bourner, T. and Sheehan, M. (2014) Human capital or signalling, unpacking the graduate premium. *International Journal of Social Economics*, **41** (5) 420–32.
- Pollard, E., Hirsh, W., Williams, M., Buzzeo, J., Marvell, R., Tassinari, A., Bertram, C., Fletcher, L., Artess, J., Redman, J. and Ball, C. (2015) *Understanding employers' graduate recruitment and selection practices: BIS Research paper 231*. London: Department for Business, Innovation and Skills.
- Pollard, V. and Wilson, E. (2014) The 'entrepreneurial mindset' in creative and performing arts higher education in Australia. *Artivate: A Journal of Entrepreneurship in the Arts*, **3** (1) 3–22.
- Praskova, A., Creed, P. and Hood, M. (2015) Career identity and the complex mediating relationships between career preparatory actions and career progress markers. *Journal of Vocational Behavior*, **87**, 145–53.

- Purcell, K., Elias, P., Atfield, G., Behle, H., Ellison, R., Luchinsaya, D., Snape, J., Conaghan, L. and Tzanakou, C. (2012) *Futuretrack stage 4: transitions into employment, further study and other outcomes*. Manchester: Higher Education Careers Services Unit.
- Qenani, E., MacDougall, N., and Sexton, C. (2014) An empirical study of self-perceived employability: Improving the prospects for student employment success in an uncertain environment. *Active Learning in Higher Education*, **15** (3) 199–213.
- Quendler, E. and Lamb, M. (2016) Learning as a lifelong process meeting the challenges of the changing employability landscape: competences, skills and knowledge for sustainable development. *International Journal of Continuing Engineering Education and Life Long Learning*, **26** (3) 273–93.
- Reibe, L., Sibson, R. Roepen, D. and Meakins, K. (2013) Impact of industry guest speakers on business students' perceptions of employability skills development. *Industry and Higher Education*, **27** (1) 55–66.
- Reid, J. (2016) Redefining 'Employability' as something to be achieved. *Higher Education, Skills and Work-Based Learning*, **6** (1) 55–68.
- Rich, J. (2015) *Employability: Degrees of value*. London: HEPI.
- Riley, C. (2012) Learning from the learners: a student centred syllabus in preparation for the real world. *Quality Assurance Review*, **4** (1) 50–60.
- Roepen, D. (2015) Business graduate perceptions of the development and application of non-technical skills within higher education and the workforce [Internet]. Edith Cowan University Research Online. Available from: <http://ro.ecu.edu.au/theses/1634/> [Accessed 1 December 2016].
- Rooney, S. and Rawlinson, M. (2016) Narrowing participation? Contesting the dominant discourse of employability in contemporary higher education. *Journal of the National Institute for Career Education and Counselling*, **36**, 20–9.
- Roulin, N., and Bangerter, A. (2013) Students' use of extra-curricular activities for positional advantage in competitive job markets. *Journal of Education and Work*, **26** (1) 21–47.
- Royal Academy of Engineering (2016) Diversity Programme Report 2011–2016. London: Royal Academy of Engineering.
- Rust, C. (2016) Shifting the focus from skills to 'graduateness'. *Phoenix*, 148, 8–10.
- Rutt, L., Gray, C., Turner, R., Swain, J., Hulme, S. and Pomeroy, R. (2013) A social constructivist approach to introducing skills for employment to Foundation Degree students. *Research in Post-Compulsory Education*, **18** (3) 280–96.
- Savickas, M.L. (2013) Career construction theory and practice. In: Lent, R.W. and Brown, S.D. (eds.) *Career development and counselling: Putting theory and research to work*. New Jersey: John Wiley and Sons.
- Schon, D.A. (1991) *The reflective practitioner*. Aldershot: Ashgate.
- Scott, P. (2016) Three reasons why the Teaching Excellent Framework won't work [Internet]. *The Guardian*. Available from: <https://www.theguardian.com/education/2015/nov/02/why-teaching-excellence-framework-tef-metrics-university-fees> [Accessed 13 November 2016].
- Schmidt, M. and Bargel, T. (2013) *Beyond employability: citizenship and responsibility in higher education*. Presentation to the University of Konstanz, Research Group on Higher Education, 15-17 November 2012.
- Shadbolt, N. (2016) *Shadbolt review of computer sciences degree accreditation and graduate employability*. Department for Business, Innovation and Skills.
- Sidiropoulou-Dimakakou, D., Argyropoulou, K., Drosos, N., Kaliris, A. and Mikedaki, K. (2015) Exploring career management skills in higher education: Perceived self-efficacy in career, career adaptability and career resilience in Greek university students. *International Journal of Learning, Teaching and Educational Research*, **14** (2), 36–52.
- Simatele, M. (2015) Enhancing the portability of employability skills using e-portfolios. *Journal of Further and Higher Education*, **39** (6) 862–74.

- Simms, S. (2012) Exploring a potential correspondence between the structural conditions of universities and stratified graduate work. PhD Thesis. Cardiff: Cardiff University.
- Simon, A. (2014) Quality assurance in university guidance services. *British Journal of Guidance and Counselling*, **42** (2) 181–98.
- Skipper, Y. and Kent, A. (2015) Making a difference with psychology: Reporting on a module to develop psychological literacy in final year undergraduates. *Psychology Teaching Review*, **21** (2), 35–47.
- Smith, A.M. and Paton, R.A. (2014) Embedding enterprise education: A service based transferable skills framework. *International Journal of Management Education*, **12** (3), 550–60.
- Smith, C. and Worsfold, K. (2014). WIL curriculum design and student learning: a structural model of their effects on student satisfaction. *Studies in Higher Education*, **39** (6) 1070–84.
- Speight, S., Lackovic, N. and Cooker, L. (2013) The contested curriculum: Academic learning and employability in higher education. *Tertiary Education and Management*, **19** (2) 112–26.
- Spence, S. and Hyams-Ssekasi, D. (2015) Developing business students' employability skills through working in partnership with a local business to deliver an undergraduate mentoring programme. *Higher Education, Skills and Work-Based Learning*, **5** (3) 299–314.
- Standley, H. (2015) International mobility placements enable students and staff in higher education to enhance transversal and employability-related skills. *FEMS Microbiology Letters*, **362** (19) 1–5.
- Stewart, J., Shanmugam, S. and Seenam, C. (2016) Developing 21st century graduate attributes: incorporating novel teaching strategies in a physiotherapy curriculum. *European Journal of Physiotherapy*, **18** (3) 194–200.
- Sultana, R.G. (2012) Learning career management skills in Europe: a critical review. *Journal of Education and Work*, **25** (2) 225–48.
- Tate, K.A., Caperton, W., Kaiser, D., Pruitt, N.T., White, H. and Hall, E. (2015) An exploration of first-generation college students' career development beliefs and experiences. *Journal of Career Development*, **42** (4) 294–310.
- Taylor, A.R. and Hooley, T. (2014) Evaluating the impact of career management skills module and internship programme within a university business school. *British Journal of Guidance and Counselling*, **42** (5) 487–99.
- te Wierik, M.L.J, Beishuizen, J. and van Os, W. (2015) Career guidance and student success in Dutch higher vocational education. *Studies in Higher Education*, **40** (10) 1947–61.
- Teal, J. (2013) Improving financial planning graduate employability through enterprise education. *Australasian Accounting, Business and Finance Journal*, **7** (3) 91–106.
- QAA (2012) *Enterprise and entrepreneurship education: Guidance for UK higher education providers*. The Quality Assurance Agency for Higher Education. Gloucester: Quality Assurance Agency for Higher Education.
- QAA (2016) *Evaluating the impact of higher education providers' employability measures*. The Quality Assurance Agency for Higher Education. Gloucester: The Quality Assurance Agency for Higher Education.
- Tomlinson, M. (2012) Graduate employability: A review of conceptual and empirical themes. *Higher Education Policy*, **25** (4) 407–31.
- Tholen, G. (2012) The social construction of competition for graduate jobs: A comparison between Great Britain and the Netherlands. *Sociology*, **47** (2) 267–83.
- Tholen, G. (2015) What can research into graduate employability tell us about agency and structure? *British Journal of Sociology of Education*, **36** (5) 766–84.
- Thorley, M. (2014) Graduate meets employer – a model for embedding industry professional involvement in the development and assessment of student portfolios. *Journal of Music, Technology and Education*, **7** (3) 325–29.

- Tran, T.T. (2015) Is graduate employability the 'whole of-higher-education-issue'? *Journal of Education and Work*, **28** (3) 207–27.
- Turner, N.K. (2014) Development of self-belief for employability in higher education: ability, efficacy and control in context. *Teaching in Higher Education*, 19 (6) 592–602.
- Tymon, A. (2013) The student perspective on employability. *Studies in Higher Education*, **38** (6) 841–56.
- Tyrer, G., Dray, T., Ives, J. and Yorke, M. (2013) Professional capabilities in non-vocational subject disciplines. York: Higher Education Academy.
- UUK (2015) *Gone International: mobile students and their outcomes: Report on the 2012-13 graduating cohort* [Internet]. Universities UK. London: Universities UK International Unit. Available from: <http://www.international.ac.uk/media/3207989/Gone-International-mobile-students-and-their-outcomes.pdf> [Accessed 1 December 2016].
- Verhaest, D. and Van der Velden, R. (2013) Cross-country differences in graduate over education. *European Sociological Review*, **29** (3) 642–53.
- Wakeham, W. (2016) *Wakeham Review of STEM degree provision and graduate employability*. Department for Business, Innovation and Skills.
- Weiss, F. and Klein, M. (2014) The effects of work experience during higher education on labour market entry: learning by doing or an entry ticket? *Work, Employment and Society*, **28** (5) 788–807.
- Williams, S., Dodd, L.J., Steele, C. and Randall, R. (2015) A systematic review of current understandings of employability. *Journal of Education and Work*, **29** (8) 877–901.
- Wilson, R., Beaven, R., May-Gillings, M., Hay, G. and Stevens, J. (2014) *Working futures 2012-2022: evidence report 83*, Wathe-on-Dearne: UK Commission for Employment and Skills.
- Wilson, T. (2012) *A review of business–university collaboration*. Department for Business, Innovation and Skills.
- Wilton, N. (2012) The impact of work placements on skills development and labour market outcomes for business and management graduates. *Studies in Higher Education*, **37** (5) 603–20.
- Wilton, N. (2014) Employability is in the eye of the beholder: Employer decision-making in the recruitment of work placement students. *Higher Education, Skills and Work-based Learning*, **4** (3) 242–55.
- Wright, T. and Frigerio, G. (2015) *Career adapt-abilities pilot project*. York: Higher Education Academy.
- Yorke, M. and Knight, P. (2006) *Embedding employability into the curriculum*. (Learning and employability series 1). York: Higher Education Academy.
- Yorke, M. (2006) *Employability in higher education: What it is – what it is not*. (Learning and employability series 1). York: Higher Education Academy.
- Zacher, H., Ambiel, R.A.M. and Noronha, A.P.P. (2015) Career adaptability and career entrenchment. *Journal of Vocational Behavior*, **88** (June) 164–73.

8. Appendix 1: HEA literature review – search framework

First term		Second term		Third term		Fourth term
(higher AND education)	AND	employability	AND	career	AND	adaptability
(higher AND education)	AND	employability	AND	career	AND	development
(higher AND education)	AND	employability	AND	career	AND	guidance
(higher AND education)	AND	employability	AND	career	AND	identity
(higher AND education)	AND	employability	AND	enhancement		
(higher AND education)	AND	employability	AND	skills		
(higher AND education)	AND	employability	AND	enterprise		
(higher AND education)	AND	employability	AND	entrepreneurship		
(higher AND education)	AND	employability	AND	personal	AND	attributes
(higher AND education)	AND	employability	AND	personal	AND	qualities
(higher AND education)	AND	employability	AND	student	AND	outcomes
(higher AND education)	AND	employability	AND	graduate	AND	employment
(higher AND education)	AND	employability	AND	transversal	AND	skills
(higher AND education)	AND	employability	AND	work	AND	ethics
(higher AND education)	AND	employability	AND	work	AND	experience
(higher AND education)	AND	employability	AND	work	AND	learning
(higher AND education)	AND	employability	AND	curricular		
(higher AND education)	AND	employability	AND	extracurricular		
(higher AND education)	AND	employability	AND	impact		
(higher AND education)	AND	employability	AND	evaluation		
(higher AND education)	AND	employability	AND	student		
(higher AND education)	AND	employability	AND	graduate		

Contact us

+44 (0)1904 717500 enquiries@heacademy.ac.uk
Innovation Way, York Science Park, Heslington, York, YO10
5BR
Twitter: @HEAcademy www.heacademy.ac.uk

© Higher Education Academy, 2017

Higher Education Academy (HEA) is the national body for learning and teaching in higher education. We work with universities and other higher education providers to bring about change in learning and teaching. We do this to improve the experience that students have while they are studying, and to support and develop those who teach them. Our activities focus on rewarding and recognising excellence in teaching, bringing together people and resources to research and share best practice, and by helping to influence, shape and implement policy - locally, nationally, and internationally.

HEA has knowledge, experience and expertise in higher education. Our service and product range is broader than any other competitor.

The views expressed in this publication are those of the author and not necessarily those of the Higher Education Academy. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any storage and retrieval system without the written permission of the Editor. Such permission will normally be granted for educational purposes provided that due acknowledgement is given.

To request copies of this report in large print or in a different format, please contact the communications office at the Higher Education Academy: 01904 717500 or pressoffice@heacademy.ac.uk

Higher Education Academy is a company limited by guarantee registered in England and Wales no. 04931031. Registered as a charity in England and Wales no. 1101607. Registered as a charity in Scotland no. SC043946.

The words "Higher Education Academy" and logo should not be used without our permission.