Occupations and skills of Arts, Humanities and Social Sciences Graduates and Postgraduates

A report prepared for the

The British Academy

By

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Table of Contents

Acronyms

A&H	Arts and Humanities
AHSS	Arts, Humanities and Social Sciences
ANOVA	Analysis of Variance
AGR	Association of Graduate Recruiters
B&A	Business and Administration
B&M	Business and Management
BIS	Department for Business, Innovation and Skills
BEIS	Department for Business, Energy & Industrial Strategy
CAD	Creative Arts and Design
COMB	Combined Studies
DLHE	Destinations of Leavers from Higher Education
DT	Digital Technology
HECSU	Higher Education Careers Services Unit
HESA	Higher Education Statistics Authority
HEIs	Higher Education Institutions
HMRC	HM Revenue and Customs
H&P	Historical and Philosophical Studies
JACS	Joint Academic Coding System
Lang	Languages
LDLHE	Longitudinal Destinations of Leavers from Higher Education
LEM	Law, Economics and Management
LEO	Longitudinal Education Outcomes
MCD	Mass Communications and Documentation
NCEE	National Centre for Entrepreneurship in Education
OECD	Organisation for Economic Co-operation and Development
OSSAH	Other Social Sciences and Humanities
PAYE	Pay As You Earn
PGR	Postgraduate research
PGCE	Post Graduate Certificate of Education
RCUK	Research Councils UK
SAS	Survey of Adult Skills
SIC	Standard Industrial Classification
SOC	Standard Occupational Classification
SS	Social Sciences
STEM	Science, Technology, Engineering and Math
UG	Undergraduate
UG/PGTs	Undergraduate/taught postgraduates
UKCESS	UK Commission's Employer Skills Survey

Executive Summary

This study brings together a range of data sources on the skills and labour market outcomes of AHSS graduates: a literature review; a detailed secondary analysis of the most pertinent recent national data sets (DLHE, LDHLE and Futuretrack); focus groups with AHSS graduates and qualitative interviews with employers.

The literature review:

- Evidence from the literature review demonstrates that although previous studies have tended to focus on particular degree subjects, it is possible to draw out some common themes from the findings. AHSS graduates are generally resourceful, and the skills learned and developed during their degree courses allow them to adapt to many different types of jobs, even when these are not related to their degree. Although some of these skills vary by degree subject, they include creativity, innovation, analytical and critical reasoning, problem-solving, working independently, good time management, working to deadlines, self-discipline, juggling priorities, persistence, self-motivation, literacy, written and oral communication skills, effective learning and the aptitude for learning new skills, as well as working effectively with others, taking initiative and personal responsibility in work;
- In an examination of the evidence on skills gaps and future skills requirements, social and interpersonal skills were frequently identified and cut across a range of occupations and sectors. Skills which appeared to be less well-developed through AHSS degrees included numerical, technical and IT skills. Employers of the future will be seeking a high level of technical competency and people management skills, alongside more creative and softer skills, whereas particular sectors may require increasing evidence of a blend of skills (e.g. softer skills are likely to play an increasingly important role, alongside strong leadership skills, organisational and communication skills);
- Many AHSS graduates take time to settle into a 'graduate' job, often undertaking further study, and even when they do enter the labour market, their salaries may not be comparable with non-AHSS graduates. There is also some evidence of a gender pay gap within some AHSS graduate occupations;
- Many AHSS graduates move into teaching as a source of stable employment and a regular salary, while simultaneously subsidising their other degree-related activities. Many other graduates work in several jobs at once, or work freelance, often for relatively poor salaries.

The quantitative and qualitative evidence on AHSS graduates and postgraduates:

- In brief, the evidence showed that AHSS degree courses are diverse, as are the occupations into which graduates eventually move. Some AHSS graduates take longer than others (and those from other broad degree groupings such as STEM and Education/Combined degrees) to move into a graduate job and there are differences between the value attached to, and the development of, certain skills. Supporting the literature review evidence, it was found that AHSS graduates appear to earn less, on average, than other graduates, with some evidence of a gender pay gap;

- The interviews with employers highlighted that jobs are likely to change in the future, and employers are more likely to require flexible and adaptable employees who bring a range of skills: good communication and people management skills are particularly important and will be increasingly important in the future, along with good technical skills. Creativity and innovation also appear to be important skills for future employees;
- Employers also focused upon the need for improved communication skills, given the importance of communication and the changing nature of communication more generally. Those with narrow skill sets are more likely to struggle in the labour market, except in niche areas where there may be a shortage of particular skills;
- The quantitative and qualitative data analysis demonstrated that most AHSS graduates are confident of their communication, interpersonal and softer skills, but are less confident than other graduates of their numerical skills. There are large variations between AHSS subjects, however;
- In some contrast to the employer interviews and the literature review evidence which focused on the importance of softer skills, and especially good communication skills, in the future, AHSS graduates and postgraduates felt that IT and digital skills were those most likely to be required in the future and all graduates in the focus groups commented on the increasing use of social media in future jobs. On the other hand, employers felt that all current graduates are 'digital natives' and the majority did not feel that such skills should or could be taught at university;
- A higher proportion of AHSS graduates move into self-employment or freelance work (especially those graduating in particular subjects and those with portfolio careers). Entrepreneurial skills do not appear to be taught at university or within the workplace, and similar findings emerged from the literature, particularly for Creative and Crafts graduates who felt that entrepreneurial skills were under-developed;
- A large majority of AHSS postgraduates move into teaching professions, mostly in higher education where a PhD is a requirement for progression, but the skills taught at AHSS doctorate level are also highly transferable, combining independent and critical thinking with problem-solving abilities and the ability to work independently. The qualitative data highlighted some of the difficulties of using doctoral-level skills on a more practical, applied level in the workplace, however.

1. Background to the study

The research outlined in this report forms part of the British Academy's important flagship project on the skills inherent to the study of Arts, Humanities and Social Sciences (AHSS), their value to the individual, and the contribution they do make and could make in future to society, as well as those that are important for educators of AHSS students. Much has been reported on the skills of certain types of graduates, most notably STEM (Science, Technology, Engineering and Maths), often overlooking the skills of graduates specialising in other fields of study. This project will contribute to a deeper understanding of current AHSS skills and any skills gaps, those skills which may need modernising or updating, and the kinds of skills required by AHSS graduates in the future.

The report begins with a literature review of extant research on the skills that AHSS graduates have developed and their current and future contribution to UK society and the economy, including studies which have attempted to mine existing data sets (Section 2). Section 3 describes the methodology employed throughout the study. The next section (Section 4) reports on analysis of both quantitative and qualitative data for undergraduates (UG) and taught postgraduates (PGT), including the roles that AHSS graduates are employed in and the skills required, whether there are any further skills requirements for AHSS graduates and what both employers and graduates themselves think of their skills. Where possible, comparisons are provided for AHSS graduates and STEM and Education/Combined graduates. Section 5 provides a separate analysis of postgraduate research (PGR) AHSS graduates. Section 6 provides a summary and conclusions drawn from the overall findings.

2. Literature Review

2.1. Introduction

The following sections include extant research on graduates' assessments of their skills, both in terms of those developed as a result of their degree course and those used within the workplace; the assessment of graduate skills by both employers and the academics who teach them, as well as the skills they are lacking; any further study and training undertaken by graduates after their university degree course; and evidence on future skills requirements. The next section covers research on graduate career destinations and salaries, followed by a section on any extracurricular activities and employment outcomes and a final section on evidence relating to the benefits of AHSS graduates to the economy and to society. The literature review methodology is outlined in Appendix I.

The literature review identified a number of studies dating back to the early 2000s. Meanwhile, there have been changes in the labour market (notably the 2007/08 recession), in higher education (e.g. the increase in tuition fees since the early 2010s) and in the role that information and communication technologies play in our lives. This has to be borne in mind when reading the key findings of these studies. IT skills, for example, is one of the items frequently included in skills assessments. Where skills gaps have been identified in older studies, it is more than likely that the curriculum has since been adapted and that skills levels have improved (c.f. Nicholls, 2005). On the other hand, ICT skills also evolve over time, with for example, social media and cloud computing becoming more important.

Typically, the studies are presented in the following order: (a) subject-specific studies, with the grouping following the Joint Academic Coding System (JACS) at the 'principal subject' level, as much as possible, but starting with those subject studies that attracted most publications; (b) studies covering all subject areas, with (some) subject-specific information being provided; and (c) in some cases, pertinent studies presenting non subject specific findings.

2.2. Skills of AHSS graduates

2.2.1. Introduction

The development of the skills of the workforce has been a major part of UK policy for a number of years (Leitch, 2006). As a consequence, and particularly since the introduction of student fees, the importance of making graduates more employable, either through increasing course quality or introducing 'employability skills' into the curriculum, has been a particular concern of HE policy (e.g. BIS, 2009, 2011), and something that to a large extent has been accepted by UK HEIs (Tholen and Brown, forthcoming). In this context, the concept of 'skill' adopted might be seen as falling into the 'skill in the person' approach, whereby skills are considered as qualities that individuals 'possess' and that can be gained through education, training and experience (Noon, Blyton and Morrell 2013). This is an approach that has to a large extent been adopted by policy and research and has been referred to as 'possessive instrumentalism' (Holmes, 2006). Whilst this conception of skills is not without its critics (see, for example Holmes, 2006; Grugulis, Warhurst and Keep, 2004), it is not the objective of this report to engage in debate about the precise nature of skills. Rather, in the context of this research, graduates' and employers' assessments of 'skills' are seen as a heuristic concept to elicit reflections about the extent to which graduates feel they have developed the capacity to be able to perform certain types of behaviours. In this section of the literature review we review

research that examines the extent to which an education in AHSS prepares graduates for the workplace and enables them to develop the necessary capacities to perform various sorts of work-related tasks.

2.2.2. Graduates' assessments of skills – skills development and skills use

Given the importance of employability skills and the ongoing policy debate, it is not surprising that the literature review found many studies exploring the views of graduates from different subject areas or working in different sectors of the economy on how well their degree course nurtured or further developed these employability skills. In contrast, few studies or surveys looked specifically at the extent to which graduates use these (employability) skills at work, notable exceptions being Futuretrack and the DLHE and LDHLE respectively, which have been deployed for a secondary data analysis in Section 4, and Purcell et al. (2005).

Some of the studies included in the review focus on particular AHSS subjects, while others cover a wide range of subject areas, presenting subject-specific information for pertinent variables, although often not in a way that would allow us to easily compare AHSS and STEM subjects, given the nature of their research. The review starts with AHSS-specific studies (grouped by subject areas, in line with the Joint Academic Coding System (JACS), as much as possible) and moves to studies that also cover other subject areas at the end of the section.

Creative Arts and Design graduates

Several studies have focused upon AHSS graduates' assessments of their own skills, the focus of this section of the review. Two studies focused specifically upon skills developed by **Fine Arts** graduates (Carey, 2015; NESTA, 2008). Carey (2015) found that participants expressed 'an ability to approach non-creative tasks more creatively, to be more concerned with aesthestics than their non-artist colleagues and to be able to manage their time well' (2015: 415). There were reported examples of being able to apply their 'design literacy' to their work, even when not working in a creative environment. The self-led nature of Art and Design courses may equip graduates with the confidence and the discipline required for entrepreneurial activity, although there appeared to be a lack of some business skills necessary for economic success.

'Aesthetic appreciation' was also listed among the top skills developed during the studies of **Fine Arts** graduates (NESTA, 2008). Despite some variation, overall cognitive skills were perceived to be more developed than technical skills. Recent graduates also listed 'analytical and critical reasoning', 'theoretical skills', and 'working independently', but perceived technical skills to be less well developed through their education. 'Thinking' skills and attitudes were perceived to be most valuable when crossing into areas outside of creative work. Graduates' responses also suggest that lifelong learning skills were developed during their studies as a result of the way that education and training was delivered and these skills impacted on the graduates' work practice and seem to be an essential part of sustaining work in areas outside of creative work.

A large-scale survey of **Creative** graduates conducted by Ball, Pollard and Stanley (2010) 4 to 6 years after graduation found that graduates had generally positive assessments of the skills and attributes developed during their course. 'Core creative and intellectual skills' such as 'creativity/innovation', 'visual skills' and 'presenting your work/ideas' were the top 3 skills,

also seen as important for career development. The least well developed skills included using IT software, understanding client needs, networking and entrepreneurial skills. In spite of differences between subject areas, there was greater congruence in the assessment of the importance of skills for career development, with self-confidence, self-management and understanding client needs often considered to be most important. Suggestions for skills development included IT-related and technical skills.

A separate analysis for **Crafts** graduates (Hunt, Ball and Pollard, 2010), found that making/technical/design skill was more developed during the course and also more relevant for their career development than all other creative graduates. Working to deadlines, self-discipline and juggling priorities were felt to be important professional requirements, fostered through their studies, as were key career survival skills such as: independence, persistence, self-motivation and a strong work ethic. Survival skills felt to be less well developed included understanding client needs, networking, IT and entrepreneurial skills.

A small-scale study (Spruce and Evans, 2011) of early-career **Product Design** graduates indicated that graduates had to adapt to the pace, the volume and responsibility of work in a commercial context and would have appreciated closer links between university and industry to help them better prepare for the world of work, e.g. though work placements. On the other hand, there was acknowledgement that the skills developed at university had helped them in their jobs, such as problem-solving and creative skills, and communication and presentation skills, including digital visualisation skills. The authors concluded that 'a design degree provides graduates with the basics' and that 'the learn-to-learn approach often tacitly embedded within design degrees is an important yet underestimated competency' (2011: 5).

In one of a series of articles reporting on different subject groups, Comunian and colleagues (2015a) examined **Music** graduates using DLHE and LDLHE data and noted some interesting assessments of their skills outside of the music sector (many worked in 'supportive' roles, i.e. in a non-creative occupation within the creative industries). Two graduates articulated how the skills that they learned specifically in their music degree were also valuable in other areas of work:

> '…the focus, to practice six to eight hours a day it takes some dedication, it is a mind- set, that practice takes a lot, there are a lot of tests along the way that push your buttons, it is managing the frustration of not being able to get it done straight away, the expectation of what is to come at the end, those skills were things I could take out into this role…the performance aspect of it, helps you in meeting…there is an air of confidence that is apparent.'

> 'Musicians are very good at working in a team, very motivated and disciplined…our skills are more broadly applicable in life in most jobs, musicians have to be very organised with time and very efficient with your time…the punctuality for training and rehearsal is definitely trained in and expected…the idea of efficiency comes at that high level of study'. (2014: 174).

Humanities graduates

One study focused specifically on the skills of **Humanities** graduates. Drawing on 50 interviews with Oxford Humanities students who graduated 20-50 years ago, Kreager (2013)

presented case studies on the careers and the (transferable) skills learned at university and later on. The transferable skills fostered through Humanities education, and specifically through tutorials, a unique feature of Oxford higher education, served graduates well in their careers. Among those transferable (or mobile) skills are 'literate, critical, and communication skills' and also the aptitude for learning new skills. The latter are key for helping graduates move into new areas of work as most graduates may take a couple of years after graduation before settling into an occupational sector. Kreager concluded by reporting that:

> 'Knowledge skills at the core of Humanities-based higher education were consistently cited as the basis of this capacity, especially the ability for succinct and persuasive written and verbal communication, coupled with the capacity for critical analysis and synthesis. These core skills enable ready tackling of new problems and tasks, assessment of risks, due account of ethical issues, and conduct of negotiations, all of which shape effective leadership.' (2013: 3)

Historical Studies graduates

Nicholl's (2005) study explored the skills individuals had developed at different stages of their education and career, and the contribution that **History** education specifically made to their skills development at each stage of their education and career respectively. While the skills list drew on previous studies, it was reduced to 19 plus 5 IT skills. Overall, more than 540 graduates participated, working in a wide range of jobs: about 6 were in 10 in 'professional jobs' and 15 per cent in jobs they considered temporary; a few were unemployed. Compared to national figures, more had engaged in some form of postgraduate education, such as a Master's degree, PGCE or a postgraduate diploma. While the study offers a wealth of information, a few of the key findings are reported here:

- There was a substantial increase in mean score for all skills developed at university compared to school and a slight increase when comparing employment and university. However, looking at individual skills, graduates' level of skills improved in those areas identified as competency gaps below.
- The skills graduates thought were most required in the workplace were multitasking, time management, working independently and an ability to reflect.
- Comparing the level of skills at graduation with those required in employment, the study found the biggest gaps related to IT skills (creating spreadsheets, using databases, creating databases), teamwork and leadership (although skills levels were found to be improving).
- Data for all four groups showed reading and writing skills to be well developed while numeracy skills were poorly developed throughout, although skill levels improved in employment, presumably through the demands of the job.

Social Studies graduates

One study on the skills of Social Studies graduates were included in the review (Gedye; Fender and Chalkley, 2004). **Geography** graduates who completed their degree 4-10 years ago reported that too little emphasis was placed on job searching skills, verbal presentation

and leadership (mentioned by at least 50% of participants), followed by IT literacy, the ability to prioritise, time management and laboratory skills (Gedye et al., 2004). Comparing the results with an earlier study by Clark and Higgitt (1997), the authors noted some similarities (more attention required for ICT skills, verbal presentation and problem solving) but also differences in terms of which skills were considered more in need of development.

Business and Administrative graduates

A few relevant studies focused on Business or Business and Management graduates specifically, described by Wilton as 'semi-vocational' (Wilton, 2012). Using the data of the *Class of 99* study (Purcell et al. 2005), Wilton (2008) explored the employability skills of **Business and Management** (B&M) graduates 4-6 years after graduation. Graduates had developed a wide range of employability skills at university, whereas in other disciplines employability skills corresponded at least partially with their study programme (e.g. the development of creativity among arts graduates or IT skills among mathematics and computing graduates). However, a much higher proportion of B&M graduates reported that they were using problem-solving skills, spoken communication and basic computer literacy 'a lot' at work than they had developed 'a lot' during their degree course. Interviews with graduates suggest that they saw the B&M degree as a 'foundation' or 'basis' for subsequent skill developments. While some interviewees valued the development of specific technical skills, transferable skills featured more prominently in their assessment. A higher proportion of B&M graduates reported, however, that they had developed management skills, leadership skills and entrepreneurial skills a lot and that, compared to other graduates, they were more often using those skills a lot, particularly management skills and leadership skills. The findings also suggest that these skills are used by B&M graduates in a range of occupations. On the other hand, focusing on those in managerial positions, academic skills (e.g. written, communication and research skills) were much more developed at university than were used at work, suggesting that those seeking out managerial careers are less well served by programmes that place great importance on academic skills. Using the same data, Wilton (2011) focused on the impact of employability skills on labour market outcomes for **Business and Management** graduates. Specialist B&M graduates reported the highest employability levels and combined studies graduates the lowest. However, the study found that these differences did not translate into labour market achievements (e.g. being in a job that requires a degree, application of knowledge acquired during their degree, salary in first job or satisfaction with their career).

Using the graduate employability skills list, Nabi (2003) explored whether recent **Business Studies** graduates in graduate jobs and those in non-graduate jobs where a degree was not required differ in terms of their skills use, their personal skills levels and their career success. Results showed that those in jobs that did not require a degree had (i) moderately, but significantly, lower personal skill levels in 10/23 skill items (including literacy, critical analysis and time management) than those in jobs that required a degree, and (ii) moderately, but significantly lower skill requirements in 9/23 skill requirements at work compared to their counterparts (including written communication, IT skills and critical analysis). Graduates in jobs that did not require a degree were significantly less satisfied with their job, their career and life, and earned significantly less.

Webb and Chaffer (2016) explored the opportunities for the development of skills during an **Accounting** degree course, and subsequent formal and informal training, using a list of

generic skills and interviewing accounting employers, professional bodies and graduates, most having completed their degree 2-5 years ago. According to the study, 5/16 opportunities for skills development were 'fully exploited' during the degree programme. Four of these were written communication, effective learning, problem-solving and presentation skills; commitment to life-long learning and oral communication were just below the threshold of 'fully exploited' and one (time management) was a skill found important by other stakeholders; vision, resilience and ethical awareness were not fully exploited. The study found that the degree course exploited opportunities for skills development better than a professional qualification (except for vision and ethical awareness where the professional qualification fared better). Accounting graduates' mean values were significantly higher than those of their counterparts in five skills areas (presentation skills, ethical awareness, vision, conflict management skills and effective delegation). Comparing their results with international studies on accounting degrees, the authors found some similarities in terms of graduates' and employers' dissatisfaction with generic skills development and perceived weaknesses in oral communication and vision.

All graduates

Purcell et al. (2005) found that 'all kinds of graduates tend to be more likely to use the generally less discipline-focused skills developed as undergraduates than the subject knowledge acquired' (p. 33). Their study also showed that graduates who studied more vocational courses (particularly Medicine and related courses) were more likely to use subject knowledge acquired at work than those who chose non-vocational courses (particularly Humanities). Similarly, graduates who studied more vocational courses tended to be more likely to use 'graduate skills' (i.e. the less discipline-focused skills) than others; however, subject-specific differences in 'graduate skills' tended to be far less pronounced when compared to subject-specific differences in the use of graduate knowledge, particularly at around four years after graduation.

A recent Universities UK study (2016) described **all graduates'** perspectives on higher education provision and skills development, largely drawing on the LDHLE 2010/11 cohort. The vast majority of all graduates domiciled in the UK reported that their ability to innovate, problem solve, communicate effectively, make good decisions at work, work effectively with others, take initiative and personal responsibility in their work, and work effectively with numbers, had either developed to a 'great' or to 'some extent' during higher education. The exception was working effectively with numbers where figures were lower overall, particularly those of most AHSS graduates (ranging from 25% for Languages to 72% for Business and Administrative studies), in comparison to STEM graduates (with figures ranging from 69% for Computer Sciences to 94% for Mathematical Sciences).

2.3 Employer and academics' assessments of graduates' skills and skills requirements

There has been much interest in employers' assessments of graduates' skills and their ongoing skills requirements. Here we focus on those relevant to AHSS graduates only. The UKCES (2015) examined the skills and performance challenges in the **Digital** and **Creative** sector, including: telecommunications; computer programming and consultancy; publishing; films and music; programming and broadcasting; design and photography; and creative arts

and entertainment. The sector has grown rapidly in recent years, but there are some concerns about the education sector's ability to supply the quantity – and quality – of digital workers required. In spite of some differences, 'the boundaries between digital and creative are becoming increasingly blurred and employers increasingly seek a fusion of creative and technical skills, combined with business and softer skills' (2015: 10). Reflecting this increasing convergence, employers felt that technological trends will be the most important influence on the future development of the digital and creative sector and its skills needs. Those workers who can adapt and respond to technology are likely to be highly valued. Employers will also seek those who can 'think strategically to identify ways to best exploit and adapt new technologies' (2015: 11). The authors concluded that there will be an increased need for digital skills across the digital and creative sector, not only for those in more technical roles. Some specialised knowledge will be sought in cyber security, mobile and cloud computing, big data, and social media, but more generally, workers across the sector will need a degree of knowledge of these issues and their implications. The sector will also need the expertise to anticipate how markets and consumers may respond to new business models, and regulatory and legal expertise to help shape and comply with new rules on IP and data protection. Stronger people management skills may also be needed as older workers who retire later find themselves working alongside 'digital natives' with different skill sets. Furthermore, global economic integration suggests a growing need for those able to develop international networks, to promote and sell UK outputs overseas, to identify competitive threats and to develop strategies to maximise the UK's share of the global market for digital and creative outputs.

Ahmed (2003) reported on a survey of **Accounting** educators, teaching or undertaking research in Information Technology (IT) and/or Information Systems (IS), to ascertain the IT/IS skills which Accounting graduates in the UK should possess, which of these skills employers expect them to have, and which of these skills employers would prefer them to have. The author highlighted that organisations increasingly require the skills of a special kind of accountant, or a 'hybrid accountant' (combining IT/IS competencies and mainstream accounting capabilities). A so-called hybrid accountant blends different skills and knowledge of business management and information management. It was generally felt that today's accounting education process fails to develop such accountants and that skills need to be further developed.

Jackson and Chapman (2012) reported on a survey study of 291 Australian and UK business academics on the required 'non-technical competencies' of entry level **Business** graduates. Results were generally very similar: UK academics were slightly more likely to favour softer competencies (emotional intelligence, political skills, confidence, working effectively with others, and communication). However, there was broad agreement on the three 'types' of graduates considered most important: the 'Manager' was believed to be the type most required by employers (having strong leadership skills, organisational and formal communication skills, a propensity for managing change and a strong work ethic), alongside the 'People Person' and the 'Business Analyst'. There was also significant alignment between industry and academic perceptions on the non-technical competencies required (the authors discussed whether this may lie in the academic teaching of such competencies or graduates' ability to effectively transfer their competencies to the workplace).

Azevedo and colleagues (2012) similarly examined the competencies of **Business** graduates in four European countries, including England. Using a survey with a large sample of

employers (representing a range of different industries) and Business graduates (graduating within the past 5 years), the authors assessed 8 key 'generic' competencies which were selected as being valuable for graduates' current job performance and relevant for their future careers: Influencing and Persuading; Teamwork and Relationship Building; Critical and Analytical Thinking; Self and Time Management; Leadership; the Ability to see the bigger picture; Presentation; and Communication. Findings showed high consistency across the four countries in the employers' competency ratings of Business graduates, particularly in communication, teamwork and relationship building, and self and time management. Employers' assessment of graduates' capability in the different competencies indicated the importance of a focus on Leadership, Presentation and Ability to See the Bigger Picture (seen as needing significant improvement).

In a study which set out to examine employers' views on recent UK **Travel and Tourism** graduates, Major and Evans (2008) used survey data from 181 respondents covering airlines, tour operators, travel agents, the tourist board, car rental and coach rental operators. Although most had recruited a graduate at some point, only 8 per cent had recruited a graduate with a Travel and Tourism degree. Around 50 per cent of respondents said that degree subject was important for working in the industry, but 23 per cent disagreed, suggesting that a degree is 'still valued by some on the basis of its academic merits, as opposed to its delivery of specific knowledge and skills' (2008: 417). The skills most widely perceived as being gained by undertaking such a degree were problem-solving (65 per cent agreeing/strongly agreeing), planning (70 per cent) and research (75 per cent). Social skills also scored well (59 per cent).

Using a matrix developed from previous literature and a content analysis of 250 online person specifications for a range of entry-level and early career marketing posts, the employability attributes of new **Marketing** graduates were assessed (Wellman, 2010). Like attributes were grouped into clusters to provide profiles of common requirements. Only 21 per cent of advertised posts required a marketing degree, although 49 per cent required 'a degree or equivalent.' Of these, 25 per cent did not specify a subject, 9 per cent preferred a business or related degree and 8 per cent an alternative named degree. A total of 24 per cent reported that a professional qualification would be desirable and language skills were noted by 8 per cent of employers. A large majority (76 per cent) reported that experience within the sector, and/or of marketing and/or of the specific work role would be required. The top 8 attributes reported were: work planning and prioritisation; general and written communications; office ICT applications; team-working; the use of databases and spreadsheets; numeracy and data analysis; creativity and innovation. Others, cited by 20 per cent or more of the sample, included attention to detail, project planning, business relationships, oral communications and working to deadlines. In terms of personal traits, two traits clearly stood out: creativity and innovation (24 per cent) and attention to detail (22 per cent).

Tholen et al (2016) conducted a study on the demand for and deployment of graduate skills in previously non-graduate jobs, notably residential sales **Estate Agents**, and argue that 'possessing graduate skills has become necessary to get a job, regardless of whether or not these skills relate to doing the job' (2016: 511). A majority of employees (88 per cent) and employers (91 per cent) thought a university degree was 'not at all necessary' when recruiting, although many spoke about 'graduateness', believing that a degree signalled the possession of particular characteristics, skills and abilities. However, the emphasis was on soft skills, based around personality (analytical skills and subject knowledge were regarded as irrelevant to employers). When examining the skills needed, 'motivational' soft skills included

confidence, commitment and determination, patience and focus. 'Interactional' soft skills cited included empathy, being liked, charm, assertiveness, manners, presenting skills and calmness (98 per cent of employees and 95 per cent of employers thought that 'social and interpersonal skills' were either essential or very important). Again, having a degree was not necessary and the work of non-graduates and graduates was identical, with no reported differences in competence between the two groups. A total of 42 per cent of graduates and non-graduates felt they had more knowledge and skills than were required for the job. However, graduates explained that their university experience helped them to develop their confidence and life experience. With regard to the soft skills required, only 28 per cent of estate agents and 26 per cent of employers thought these skills were acquired through HE.

Stephens and Hamblin (2006) undertook a survey study on the employability of **Library and Information Management (LIM)** graduates. Employers highlighted a continuing need for graduates with the core skills of the profession: the organisation of information, collection management and enquiry work, still very much in demand. The survey also confirmed that customer care and awareness of technology were also required. Skills such as negotiation and user education were also necessary and those which appeared to be lacking in recent graduate applicants were experience of online sources; theory of information retrieval; awareness of sector; use of information for business; soft skills, persuasion, influencing; competitive awareness; and knowledge of content of information sources. It was thought that jobs unfilled were more due to pay and location, rather than a lack of the appropriate skills among graduates, however. Future skills required to meet emerging employment trends were perceived to be: online skills; basic skills; research skills; awareness of legislation; web development; records management; application of IT within an organisation; and awareness of the library and information sector as a whole.

2.4 Further study and skills development

Some of the studies above included information on numbers going into further study or training and this evidence is presented below, followed by a section on postgraduate study more generally, given the small number of subject-specific studies. This covers information on scope of further study, type of qualification and rationale for engaging in further study.

In one study, a total of 22 per cent of **Music** graduates were found to go onto further study, more than double the figure for other creative students. Graduates (especially those who aim to become performers) understand that their education will have to include a postgraduate qualification and potential lifelong training (Comunian et al., 2015a).

On the other hand, Ball, Pollard and Stanley (2010) showed that around three quarters of **Creative** graduate respondents had taken part in some form of continuing professional development and about half in formal studies (mainly at Master's level, followed by a Post Graduate Certificate of Education (PGCE), a prerequisite for a teaching career). Within this number, 51 per cent had spent some time since graduating in developing their creative practice, doing studio work or developing a portfolio, 47 per cent had engaged in formal study, education or training, and 35 per cent had studied more informally. Formal study was often undertaken while working. The most important reasons to engage in further study were further skills/knowledge development, enhancing job opportunities, pursuing personal interest/fulfilment and developing creative practice. However, the importance varied by type

of further study undertaken and subject discipline. For a small group undertaking short courses (17 per cent), this was at the request of the employer.

In an additional qualitative part of the study, Ball, Pollard, Stanley and Oakley (2010) reported that graduates want to continue to engage in professional development to further their career, to embark on training for their current job and future jobs, to update their IT skills and address any perceived skills gaps. Graduates' interest included 'new digital technologies, business skills (leadership, management, branding/e-marketing, presentation skills), additional creative and technical skills/processes, and professional training that would enhance their standing (generally outside of creative roles)' (2010: 42).

Compared to Creative graduates overall, Hunt, Ball and Pollard (2010) found that **Craft** graduates engaged more in formal further learning, and when studying at postgraduate level they engaged more in a PGCE than in a Master's degree, perhaps reflecting gender-specific career choices (91 per cent of respondents were female). The authors concluded that Creative graduates are - and continue to be - 'lifelong learners' and that this learning is also key to developing their portfolio careers.

In their study of **Geography** graduates, Gedye, Fender and Chalkley (2004) reported that some graduates commented on the need for specialised training at postgraduate level to enter their desired careers, e.g. those related to the environment or planning. The authors referred to the earlier study by Clark and Higgitt (1997) which found that 70 per cent of Geography graduates had obtained another qualification. Given that Geography graduates found employment in a wide range of areas, Gedye and colleagues (2004) hypothesised that most graduates were likely to use their transferable skills, rather than their subject-specific skills, in their job.

HECSU et al. (2013) presented detailed statistical information on further study among different graduates. Some of the key findings included: a reduction in the proportion of **Geography** graduates undertaking a PGCE; **Law** graduates were much more likely than other graduates to be undertaking further study and professional qualifications; around 20 per cent of **Politics** graduates were undertaking further study in 2015, much higher than other graduates, and many specialised in areas of Politics such as International Relations; **Psychology** graduates were also very likely to be undertaking further study, mostly due to the requirements of clinical pathways; Psychology graduates were also those most likely to be undertaking a PhD (6 per cent); there was a rise in the proportion of **Sociology** graduates undertaking further study, with 59 per cent of those studying undertaking a Master's degree; because a high proportion of **Fine Art** graduates pursue a portfolio career, 31 per cent were working part-time and of those going on to further study, 21 per cent were studying for a qualification in Education; only 4 per cent of **Design** graduates were in further study, the lowest proportion within this cluster; similar figures were shown for **Marketing** graduates; only around 20 per cent of **English** graduates went on to further study (of these, 31 per cent were studying for a qualification in Education).

Bowman (2005) studied the decisions of graduates (mostly from **AHSS** subjects) entering full-time Master's degrees, including vocational, semi-vocational and non-vocational Master's degrees. Examining their decisions, the study identified 3 groups of students:

- *Staying on*, i.e. going straight from a first degree to a Master's degree at the same university and in closely related subject areas (11 interviewees). This was motivated by maintaining their lifestyle; continuing their educational careers, pursing their

interests and developing their subject knowledge; a conception of limited opportunities in the labour market with a first degree; wanting to pursue a specific career and a desire to study now rather than later where it was felt that possibilities may be limited;
- *Moving on* (4 interviewees), i.e. continuing with a Master's degree but changing institution or subject that better aligns with their changed interests;
- *Coming back* (9 interviewees), i.e. taking up a Master's degree after some time in the labour market, motivated largely by a dissatisfaction with the type of job they got (including one student who found during his job search with big companies that they required at least a Master's degree for this type of job).

Across these three groups the authors found four cross-cutting key themes: (1) 'seeking distinction' in the labour market to help them to get 'good jobs' and seeking to develop their own expertise; (2) pursing available opportunities (with parental support); (3) exploiting resources; and (4) disposition.

In a similar exercise, Brooks and Everett (2009) drew on a sample of 90 university graduates from six universities (including **AHSS graduates**) and found that 'as a whole there appeared to be a widespread belief that a degree was only a 'basic minimum' (2009: 337), with a substantial number feeling that further study and/or training after the first degree was necessary. Graduates' understanding of the relationship between higher education and the labour market led them to pursue three main strategies to improve their employability:

- *Compensating for poor performance in the first degree* (7 respondents): these graduates wanted to prove to themselves that they could do better than a 2:2 and wanted to improve their labour market prospects at the same time;
- *Specialising in their chosen career or sector,* either directly after graduation or a few years later (a quarter of respondents), with many of these graduates taking the view that first degrees often do not prepare adequately for work, even in vocational subjects;
- *Gaining the edge* (18 respondents): these graduates want to stand out from their competitors by embarking on a further qualification.

Similarly, Shury et al. (2017) found that some groups engaged in further study 2.5 years after graduation to improve their career prospects, notably those who graduated with a 2:2 and those who were unemployed 6 months after graduation.

Focusing on data for three subject areas that represent the spectrum from vocational to non-vocational courses, Purcell et al. (2005) found that **Business Studies** graduates were much more likely than Humanities or Medicine and related graduates to have gained a professional qualification, likely to reflect the requirements of the types of jobs they have chosen (with more than one in two having done so, compared to one in four or less in the other two subject areas). **Humanities** graduates, on the other hand, were more likely to have undertaken a PGCE teacher training qualification (like Arts and Language graduates) or a Master's degree than the other two groups. The Master's qualification, the authors argue, may help improve their job prospects or it may be a necessary requirement for a desired job.

Another study examined those returning to postgraduate study after a few years in the labour market ('returners') (D'Aguiar and Harrison, 2016). The authors hypothesised that their return 'could be seen as a marker for either low work-readiness or structural factors in underemployment' (2016: 590). However, they acknowledged that there could be range of other reasons, e.g. specialising in their chosen career, preparing for a career change or saving for further studies while in employment. Using DHLE and LDHLE data and focusing on the

10.5% of returners who engaged in a taught postgraduate degree course (i.e. excluding research degrees and PGCEs), the authors explored whether certain demographic, study-related and job entry characteristics impacted on the likelihood of being a returner or continuing to engage in the labour market ('leaver') and whether results differed for **STEM and non-STEM** graduates. Among the key results were that:

- Returners were significantly less likely to have undertaken a placement year, attended a post-1992 university and studied a STEM subject, yet they were significantly more likely to come from an ethnic minority community;
- The likelihood to return was higher for women, and particularly high for female STEM graduates and for male non-STEM graduates. The findings for ethnic minority communities and gender, the authors argued, may indicate that they experienced disadvantages in the labour market and were seeking ways to counter these;
- Those with 'a low status job' and first degree were more likely to be returners. According to the authors, this may indicate a lack of 'work readiness' which the postgraduate study may seek to address;
- For STEM graduates, the likelihood of returning was most strongly determined by 'a low status job' (but not by class of degree) whereas for non-STEM graduates, class of degree (1st and 2nd) increased the propensity for returning (but less so the type of first job); age also played a role, as mature non-STEM students were less likely to return.

A survey undertaken by Pollard et al (2004) followed up students who entered higher education in 1998, one to two years after their degree, and included a detailed description of the type of study and type of most significant further study undertaken. Focusing on the latter, the following key findings included:

- Just over half of the respondents studied outside of their subject area (particularly former Arts and Humanities students), with the remainder studying within their previous subject area (particularly former Health, Medicine, and Business and Administrative subjects);
- *Postgraduate certificate and diploma courses* (18%): were largely about 'gaining a license in a particular field' (the course was more likely to be outside of the broad area they studied before, focusing largely on AHSS subjects, particularly Education (PGCE) and Social Sciences);
- *Master's degree courses* (18%): along with PhDs, these were largely about 'trading up one's initial qualification' and partly about postponing labour market entry (AHSS subjects were found to be more prominent, particularly Social Sciences, Business and Administrative studies);
- *Other professional qualifications* (18%): focusing particularly on Business and Administration and Social Sciences, were said 'to combine a license to practice with increasing one's employability'; a substantial subgroup (41%) was pursuing an employer-financed part-time course;
- *Short skills courses* (15%): these were 'largely about topping up employability skills', with courses more likely to be in a different area (e.g. Business and Administration, Mathematics, Engineering, Health and Medicine);
- *PhD programmes (11%):* these were about 'trading up one's initial qualification', largely in their areas of specialization and were largely undertaken in STEM areas, particularly in Biological and Physical sciences.

Key reasons for further study included, in order or importance, to 'develop specialist skills/knowledge', 'follow personal interest' (both particularly relevant for PhD students), 'broaden experience' (more relevant for short courses and Master's degrees) and 'gain advantage in the labour market' (articulated more often by Master's students). About a quarter reported that the further study was required by the employer, particularly those studying for other professional qualifications.

The Postgraduate Taught Experience Survey 2015, undertaken annually since 2010, provides a rich source of data, although the questions of most interest (e.g. motivation to study) were not fully exploited in this report. Leman (2015) reported that the top four motivations were 'progress in current career', 'improve employment prospects', 'personal interest' and 'progress to higher qualification' and that motivation varied by type of qualification. Full-time Master's degree students wanted to improve their employment prospects, followed by personal interest and a desire to achieve a higher level qualification, while part-time students pursuing a certificate or diploma mainly wanted to progress in their career (about a quarter studied because this was a requirement of their current job). For full-time Master's degree students, STEM students were much more motivated to progress in their current career than AHSS students (except Social Work students), while Arts and Humanities students were much more motivated by personal interest than their STEM counterparts. Overall, relatively few reported that they engaged in further study because the employer 'advised or encouraged' them, although among AHSS graduates this was slightly higher in Education and Social Work.

In a study including all subject areas, Purcell et al. (2005) identified the odds of a range of factors impacting on studying for a Master's degree. The analysis found that the following factors increased these odds: father had a degree; graduate had attended grammar school; age of the graduate; ambition ('extremely ambitious'); studied at an old/1960s university; had better degree results; subject studied (with increased odds especially in Humanities, Social Sciences, Natural Sciences or Engineering) and no repayable debt.

Qualitative interviews with graduates suggested that there was both a 'strong recognition of the importance of continuing professional development and an acceptance of the need for ongoing training and education to further their careers' (Purcell et al., 2005: 157; see also Kreager, 2013; Comunian et al., 2015a).

2.5 Future skills requirements

Studies reporting on the future of skills are typically generic and so only a selection are reported here. With regard to the overall scale of demand for various skills in 2020, The World Economic Forum (2016) reported that 36 per cent of all jobs across all industries are expected to require complex problem-solving as a core skill, compared to less than 1 in 20 jobs (4 per cent) that will need physical strength or dexterity. However, complex problem-solving skills will be more important in industries such as Professional Services and Information and Communication Technology, which are expected to become more complex and analytical. Overall, social skills (e.g. persuasion, emotional intelligence and teaching others) will be in higher demand across industries than narrow technical skills, such as programming or equipment operation and control. Content skills (including ICT literacy and active learning), cognitive abilities (e.g. creativity and mathematical reasoning) and process skills (e.g. active listening and critical thinking) will be a growing part of the core skills requirements for many

industries. The daily routine of many frontline roles will change, requiring a much higher level of technology literacy than in the past. Similarly, Sales and Related jobs may require creative skills. The skills with the most stable demand are technical skills: 44 per cent of all jobs requiring these skills today will have a stable need for them in the coming years.

In a call for a new industrial strategy, Green and Mason (2014) referred to the 2013 UK Commission's Employer Skills Survey (UKCESS), where 71 per cent of UK establishments reported that some of their employees required new skills or knowledge, and many of these derived from innovation-related factors such as the introduction of new goods or services and new work practices and new technologies (Winterbotham et al. 2014). These needs were reported across a wide range of occupations but were particularly important for professionals, personal service workers, managers and skilled trades workers. Across all occupations the main skills needing improvement included technical and practical skills, planning and organising skills and problem-solving skills. Other priority skill updating needs included advanced IT/software skills for managers, professionals, associate professionals and administrative and clerical workers and customer-handling skills for workers in sales and elementary occupations (Winterbotham et al. 2014).

On the other hand, the OECD's Survey of Adult Skills (SAS) showed that 32 per cent of UK firms in 2013 reported skill improvement and updating needs among their managerial staff. Many generic skills are considered to be highly relevant to innovation in different workplaces and industries. In addition to technical and practical skills, a wide range of these skills, such as mathematical, communication, problem-solving and managerial skills, are needed to support innovation in different industries.

2.6 Employment outcomes of AHSS graduates

2.6.1 Introduction

As has been noted by a number of researchers, the introduction of student fees and their subsequent raising to £9,000, predominantly paid for by students themselves rather than by government, along with the policy focus on upskilling the workforce as a route to economic competitiveness, has led to an increasing focus on graduate employability and skills (Tholen, Relly, Warhurst and Commander, 2016; Tholen, 2014), so much so that the extent to which graduates are able to secure employment on leaving university has been incorporated into higher education Key Information Sets (KIS). Current government policy sees the role of HE as developing the skills needed to prepare individuals for an economy where higher level skills are thought to be in increasing demand and of increasing benefit to the UK economy (Leitch, 2006; BIS, 2011). While there is continuing debate about how employability is conceptualised, particularly in relation to its relationship with skills and the extent to which it is seen as an attribute possessed by individuals (e.g. Holmes, 2006; Brown and Hesketh, 2004), a common definition relates to the extent to which individuals are able to gain and maintain employment (Hillage and Pollard, 1998). In this section we examine the relative value of an AHSS higher education by looking at two common indicators of employability used in research, namely: pay and occupational outcomes, e.g. whether graduates are in jobs that might be deemed suitable for individuals with a higher level of qualification. While the main aim of this section of the literature review is to examine the relative performance of AHSS graduates by reviewing research that has adopted such measures, it should be noted that these measures are not without criticisms. For example, there continues to be a debate about what sorts of

occupations might genuinely be considered as 'graduate' jobs (James, Warhurst, Tholen and Commander, 2013; Purcell et al., 2012), and whether there has been an eroding of the concept (e.g. Ware, 2015a, 2015b). Similarly, debates also continue about whether the 'graduate premium' associated with a higher education is declining, how this premium should be measured and whether or not the value of a university education should be measured in these terms at all (e.g. O'Leary and Sloane, 2011; Walker and Zhu, 2011, 2013; Conlon and Patrignani, 2011). While these debates are not discussed in detail here, it is worth bearing these issues in mind when considering the value of a university education in the Arts, Humanities and Social Sciences in the wider sense. Although the Futuretrack study conducted at IER has produced many reports on graduate outcomes, we will not cover these here as we are using Futuretrack data in the later data analysis sections. For more on Futuretrack outputs, see: http://www2.warwick.ac.uk/fac/soc/ier/futuretrack

2.6.2 Destinations

This section predominantely focuses on information on job roles / occupations and sectors of employment. In large-scale studies, this information is often coded using official classifications, such as the Standard Occupational Classification (SOC) and the Standard Industrial Classification (SIC), with information presented at various levels of detail. In some studies, the first 3 major groups in the SOC 'major groups' (covering managers, directors and senior officials; professional occupations; associate professional and technical occupations) are used as a rough indicator of 'professional jobs' or graduate level jobs (e.g. Pollard et al., 2004; Smith and White, 2016; Shury et al., 2017) and the others may be referred to as 'non-professional jobs'[1]. Exceptions are novel classifications of graduate and non-graduate jobs, based on classifying each four digit occupational category (the most detailed classification available) according to set criteria (Purcell et al., 2005: SOC(HE); Purcell et al, 2013: SOC(HE) 2010_EP – see section 4)[2]. Other studies may use different coding for either occupation or sector, such as a listing of most frequently mentioned occupations (e.g. Gedye, Fender and Chalkley, 2004) or combining information on occupation and sector for creative jobs (NESTA, 2008).

Overall, there are a number of largely descriptive studies that present statistical data on graduate destinations for different populations and at different stages of graduates' careers for different purposes (e.g. HECSU et al., 2016; Campaign for Social Sciences (2013) for Social Sciences; Kreager (2013) for Humanities graduates, Nicholls (2005) for History graduates). One claim being made for some degree subjects (e.g. Nicholls, 2005; Kreager, 2013, Campaign for Social Sciences, 2013) is that graduates have been able to enter a wide range of sectors, and that their skills have played a role in this.

The following sections examine further evidence relating to the career destinations of AHSS graduates and, where possible, the salaries they receive in their early careers. As one of a series of publications using DLHE and LDLHE data, Comunian and colleagues (2015b)

[1] These are: administrative and secretarial occupations; skilled trades occupations; caring, leisure and other service occupations; sales and customer service occupations; process, plant and machine operatives; and elementary occupations.

[2] Another classification of graduate jobs has also recently been developed by Green and Henseke (2016) but the publication does not provide subject breakdowns.

examined the career patterns of **Digital Technology (DT)** and **Creative Arts and Design (CAD)** graduates who graduated in 2005 (with employment data for 2006). Findings showed that although the creative industries employ many different creative graduates, CAD and DT graduates were most likely to enter a creative job. DT graduates formed a large constituent of the software sector (77 per cent), with a minor presence in other creative sectors such as film and TV. DT graduates also worked in other creative jobs outside of the creative industries. However, findings also highlighted the potential lack of digital skills of DT graduates across the creative industries (excluding the software sector). CAD graduates were the most likely to be in specialist roles (creative occupations in creative industries). The authors concluded that DT skills can be seen as being more broadly relevant to the wider economy than creative arts skills.

Following Nesta (2008), Comunian and colleagues (2014) classified a creative job as being one of the following:

- specialised—in a creative occupation within the creative industries;
- supported—in a non-creative occupation within the creative industries;
- embedded—in a creative occupation outside the creative industries.

Their results suggested that **Arts and Humanities (A&H)** graduates were strongly embedded in the UK creative economy, three times more likely to be in a creative job than non-A&H graduates. However, only 25 per cent of A&H graduates found work in the creative sector. Graduates from some sub-disciplines (e.g. Architecture, Building, and Planning; Mass Communication; and Creative Arts) were strongly present in specialised jobs within the creative economy. Others (e.g. Historical and Philosophical studies and Law graduates) were more likely to be in supported roles. Mass Communication, Creative Arts and Design, and Language graduates were more likely to be in embedded positions. The authors noted that this 'highlights a degree of flexibility amongst A&H graduates—especially as often their career patterns are not as structured as in other fields' (with the exception of Law, Architecture, Building and Planning).

A recent survey 2.5 years after graduation found that 26% of **Creative Arts** graduates worked in culture, media and sports occupations (covering occupations such as artists, authors, writers and translators, musicians, graphic designers or sports coaches), 13% worked in teaching and educational roles, 12% in administrative occupations and 12% in business and public service associate roles (Shury et al., 2017).

Comunian et al (2015a) also explored early **Music** careers using 2004/5 DLHE data and 2006/7 LDHLE data. Six months after graduation, Music students were less likely to be in full-time work and more likely to be in part-time work, and particularly more likely to be self-employed/freelance than other students. Music students had a lower unemployment rate than other Creative students but only 21 per cent found jobs in the music and performing arts sector. There was also a high concentration in non-creative sectors (only 9 per cent entered other creative jobs). 37 per cent of Music graduates entered the education sector (a much larger proportion than other Creative and non-Creative graduates), the most popular sector overall for Music graduates. 3.5 years after graduation, the proportion of Music students in music and performing arts sector jobs increased slightly to 20 per cent, but the proportion in education increased more dramatically from 20 per cent to 31.5 per cent. There was also a distinct increase in the proportion of Music graduates working in the south-east. Networks were very

important: graduates highlighted how the contacts established during higher education (often during extracurricular activities) were still important in their current work, allowing them to mobilise opportunities. Teague and Smith (2015) similarly examined professional **musicians**. Participants were five professional musicians who were teaching at a school known to the authors. Participants described their portfolio careers, in which teaching was an important element, and explained that the work most suitable to fit with having a family was teaching, West End musical theatre work, and other entrepreneurial activity such as running one's own company, but touring was least suited to balancing one's family life. The authors expanded upon this finding, as touring appeared to be an increasingly lucrative source of income for musicians, especially since the decline of record sales.

An earlier article by Faggian and colleagues (2011) examined the characteristics and location determinants of **Creative (Bohemian)** graduates. Three specific subgroups were examined: Creative Arts and Design (CAD) graduates; Creative Media graduates; and Other Creative graduates. London and the South East emerged as hubs for studying and providing these graduates with more labour market opportunities: London was associated with higher chances of full-time work for both Bohemians and non-Bohemians but, while non-Bohemians were less likely to enter unpaid/voluntary jobs in London, Bohemians were about 27 per cent more likely to enter voluntary/unpaid work in London than elsewhere. The authors argued that this might be part of their 'portfolio building' strategy. 'Internship and unpaid work experiences in high-end organizations and companies could be more important for Bohemians than other graduates' (2013: 191). The findings also suggested that the 'Creative Arts and Design' group was the most vulnerable in the labour market (in contractual terms and also in reference to earnings). Creative Media and Other Creative graduates seemed to experience better job prospects. The authors argued that this could reflect a general policy trend away from a generic creative industries/creative economy framework, towards greater investment in and promotion of the media and technological subsectors of the creative industries.

A longitudinal study undertaken on graduates in **Art, Design, Crafts and Media** subjects (Ball et al., 2010) found that almost half of the respondents had been involved in portfolio working since graduating, but added that 'this is becoming an important feature of work in all sectors' (2010: 93). When asked what they were doing currently (in 2008), 89 per cent were in paid work, although 39 per cent were studying at the same time; 58 per cent of graduates were in permanent work and relatively few were in temporary or fixed-term contracts; 18 per cent were running a business and 23 per cent were working freelance. Only 5 per cent were unemployed (Fine Artists were most likely to be unemployed and Fashion and Textile designers the least likely). Four out of five graduates were working part-time in at least one of their work-related activities. Overall, one third of graduates had experience of teaching since graduating but only a few appeared to enter an academic career, corresponding to a similar small proportion undertaking further study at doctorate level. One in four graduates were working in a non-creative role, often alongside more creative activities. 67 per cent of graduates' jobs/work activities were located in the creative industries, 14 per cent in education and 19 per cent were in non-creative sectors. Fourteen per cent lived in London prior to their studies, 25 per cent studied in London, and, in 2008, 26 per cent were living in London. Those living in London were the most likely to be working in a creative occupation or in the creative industries. A high proportion (77 per cent) of working graduates were satisfied with their work situation and were able to be creative in their work, and 79 per cent felt that their work related significantly to art, craft, design and media.

Drawing on the Ball et al. (2010) study, Hunt and colleagues (2010) explored the early careers of more than 600 graduates in **Crafts** subjects six years after graduation. 91 per cent of respondents were female, representing the high proportion of women in the crafts employment sector. Finding work was challenging and word of mouth was an important way of getting jobs. Crafts graduates tended to create their own opportunities which evolved into paid work at a later date. Most Crafts graduates were working in paid permanent employment, and half were engaged in multiple activities or portfolio working at the time of the survey. Careers were diverse: two-thirds of Crafts graduates were in creative occupations and 14 per cent in non-creative roles. A quarter of Crafts graduates were teaching in at least one of their work roles, but this was often combined with a creative occupation (teaching was seen as a positive career choice, offering the opportunity to stay close to creative practice, and enabled individuals to pass on their passion for craft and provide a secure income). Self-employment was also popular, compared with graduates in general: more than one in three Crafts graduates had worked freelance, and at the time of the survey one in five were running a business and one in seven were working freelance. Double this proportion said that running a business was likely as their careers progressed. Four to six years into their careers, unemployment was low at three per cent, although one in three had experienced unemployment since graduating.

The NESTA study (2008) of **Fine Arts** graduates from the 1950s onwards found that just over 40 per cent worked primarily in the arts and cultural industries, with another 6 per cent working in publishing and media and 11 per cent in design, crafts and new media (i.e. a total of almost 60 per cent worked in the wider cultural and creative industries; a further 20 per cent or so worked in education, 4 per cent in health care and the rest in 'other sectors'). In analysing changes over time, the authors noted that increasing numbers of graduates were working in the arts and cultural industries than previously. However, almost 40 per cent of respondents had a second job, highlighting the importance of portfolio working among Creative graduates. The authors found that there was a high degree of 'crossover' between the creative economy and other sectors during the careers of Fine Arts graduates. Respondents tended to work in other sectors to pay for their more creative work, which was typically poorly-paid.

Although not AHSS-specific, the UUK (2016) report on graduate destinations using DLHE data found that degree subjects have a role to play in the pace at which graduates find work: for example, nearly all Medicine and Dentistry graduates were in professional-level employment within 6 months of leaving higher education, whereas 53 per cent of **Arts** graduates were in professional employment 6 months after graduating and only 65 percent after 40 months. For **Law** graduates, the figures were 51 per cent at 6 months and 79 per cent after 40 months.

A survey undertaken by Pollard et al. (2004) found a greater concentration of Health and Medicine graduates, Mathematics and Engineering graduates and Education graduates in certain occupational groups (typically those with a related name), while for other graduates there was a greater spread across a range of occupational groups. Pollard et al. reported that significantly fewer graduates from **Business and Administrative Studies** and **Arts and Humanities** worked in graduate-level occupations at the time of the survey.

A report produced by the Campaign for Social Sciences (2013) presented LDHLE data on graduate destinations, comparing data for **Social Sciences** graduates with STEM and **Arts and Humanities** graduates. The authors asserted that Social Sciences graduates working across a range of sectors bring valuable skills to their jobs:

'Graduates in social science subjects offer a wide range of skills that are enormously valuable to employers across the public, private and third sectors. These include the ability to

understand complex issues holistically, on individual and cultural and societal levels; research, analyse and evaluate data critically; question assumptions; understand people, institutions and their relationships; understand processes of change; make reasoned arguments; communicate concisely and clearly and solve problems' (2013: 4).

Focusing on all those who completed their degree in 2008/09, the report found that:

- Relatively more Social Sciences graduates were in employment 3.5 years after completing their degree than either of the other groups, and relatively fewer were in further study (particularly compared to STEM graduates);
- Seven in ten Social Scientists in employment held 'professional' or 'associate professional and technical' occupations; and a relatively larger share of employed Social Scientists (notably those with a Business and Administrative Studies degree) were already in positions classed as 'managers, directors and senior officials', particularly when compared to STEM graduates;
- Like other graduates, they worked in a range of sectors, with professional, scientific and technical activities, human health and social work activities and education being the quantitatively most important. However, Social Sciences graduates worked comparatively more often than the other two groups in professional, scientific and technical activities and public administration and defence, far less often than STEM graduates in human health and social work but more often than Arts and Humanities graduates, and less often in education, finances and insurances and information and communication than either of the other groups.

Gedye, Fender and Chalkley (2004) found that **Geography** graduates entered a wide range of jobs/careers, most often teaching (16 per cent), banking/finance/accounting (12 per cent) and project management (9 per cent), as well as a wide range of other jobs. The survey also indicated that undergraduate students overestimated the likelihood of their degree substantially improving their job prospects, compared to the actual experiences of graduates (97 per cent and 60 per cent, respectively).

Nicholls (2005) presented statistical data on the employment of **History** graduates 6 months after graduation and data on the wider field of **Humanities** graduates 3 years after graduation. Despite the substantial increase in History graduates during the 1990s (and the dominance of female graduates) more than 50% were employed 6 months after graduation and around a third were engaged in further studies during 1989 to 2002 (selected years). The figure for the latter was reported to be similar to other Arts and Humanities graduates, while overall figures were much lower (19%). Nicholls also reported that History graduates worked in a wide range of fields, notably in managerial or other lead roles. Their role in industry was illuminated by another study (Barry, 1998, cited in Nicholls, 2005) which showed that 9 per cent of company directors of FTSE 100 companies with a first degree were History graduates (with STEM subjects in first and second place, and Economics and Law in third and fourth place respectively).

In his study on Oxford **Humanities** graduates, Kreager (2013) found that over a 30-year period, education and management were by far the largest destinations, followed by media/literature/arts, law and finance. However, the importance of those sectors changed over the years, with the percentage working in education dropping and the percentage working in the growing finance sector increasing threefold (from a low base), more than doubling in law

(again from a low base) and rising modestly in media, with management experiencing rises and falls.

Against a background of media concerns about STEM shortages, Smith and White (2016) researched the labour market destinations of STEM graduates six months after graduation and how this compared to all graduates and graduates from selected non-medical STEM disciplines, using DHLE data for the years 2002/03 – 2010/11. At an aggregated level, the study reported that labour market outcomes for STEM graduates were fairly similar to those of all or non-medical STEM graduates, e.g. in terms of the percentage in employment, the percentage in unemployment (for most STEM areas, with Computer Sciences graduates having one of the highest rates) and the percentage in graduate level positions, here defined as those falling into the first 3/9 SOC level 1 groups. However, the STEM aggregation, the authors argued throughout the report, masked differences within STEM subject areas, e.g. with Engineering graduates faring markedly better in terms of securing graduate-level jobs than Biological Science graduates, and the latter faring less well than Languages and Social Science graduates, for example.

For occupational outcomes at 6 months (% with 'professional jobs') De Vries (2014) found that graduates of STEM subjects tended to do better than **AHSS graduates** on the whole. Economics and Business and Administration graduates fared better on average and some STEM graduates did not fare so well. Overall, Creative Arts and Design, History and Philosophy, Law, English, Biological Sciences, Psychology and Linguistics graduates tended to fare the least favourably.

Purcell et al. (2005) applied a novel SOC(HE)_EP classification to the categorisation of occupational data of graduates to differentiate graduate from non-graduate jobs. This was based on the percentage of younger and middle-aged people in each occupation who reported in the Labour Force Survey (LFS) that their degree was a requirement for their job and resulted in five categories: traditional occupations (with the highest percentage of those reporting that the degree was a requirement, such as medical practitioners or solicitors), modern graduate occupations (e.g. primary school teachers; authors/writers/journalists), new graduate occupations (e.g. management accountants; welfare, housing, probation officers), niche occupations (e.g. retail managers; nurses and midwives) and non-graduate jobs (with the lowest percentage reporting that the degree was a requirement for the job).[3] Drawing on this classification, Purcell et al. (2005) found that graduates from some disciplines (Medicine and related; Education; Engineering; Mathematics and Computing) were far less likely to be employed in non-graduate jobs after graduation and four years later than other graduates (particularly Humanities), and graduates of more vocationally-oriented degrees were less likely to be employed in non-graduate jobs. However, the study also showed a general decline in the proportion of graduates in non-graduate jobs between completing the degree and four years on, and that the fall was particularly pronounced in subject areas with an initially high percentage of non-graduate jobs (for example, for Humanities the figures were 68% at time of graduation and 23% four years later). A similar trend (albeit at a lower level) could be observed for Business Studies graduates, with new and niche graduate occupations expanding over the four years, while traditional and modern graduate occupations increased slightly from a low level.

[3] For further details see Elias and Purcell (2004)

Overall, there was an indication that those who had clearer career plans when they entered higher education, or when they completed university, were more likely to be employed in 'professional jobs' (defined as the first 3 levels of the one-digit SOC classification) or in further study 2.5 years after graduation. On the other hand, as may be expected, those studying vocational or semi-vocational degrees had clearer career plans when leaving university than those in non-vocational degrees (Arts, Social Studies and Communications graduates were least likely to have well developed plans, although one in two did) (Shury et al. 2017).

Further updated data on the destinations of AHSS graduates is provided in Section 4.

2.6.3 Salaries

The following section reports on evidence relating to salaries, mainly focusing on **Creative Arts and Design** graduates, with some additional information found on **Humanities** graduates. The UUK (2016) report described above goes on to describe the career outcomes and salaries of all graduates, using DLHE and LDLHE data. All graduates saw median salary increases of 15-50 per cent in the first three years after completing their degree (e.g. the median wage of **Creative Arts** graduates rose 41 per cent 3.5 years after leaving). The median salary of **Law** graduates rose 47 per cent at 40 months, whereas the salaries of Medicine and Dentistry graduates rose 37 per cent.

Comunian et al (2011) described how **Creative** graduates are more likely to experience lower salaries and be in part-time or freelance occupations, and a lower percentage entered graduate occupations compared to other graduates. In their later analysis of **DT** and **CAD** graduates, using DLHE data, Comunian and colleagues (2015b) found that graduates in DT earned more than CAD graduates and gained more by being in a creative job. Within creative jobs, DT graduates earned the most, whereas CAD graduates earned the least. This is perhaps unsurprising, as DT graduates are more likely to enter the software sector which is the highest paid industry, on average, and architecture and advertising pay more than non-creative industries. On the other hand, while their earnings were better, they also had a higher level of unemployment than CAD graduates. The authors suggested that 'DT graduates earn more than CAD graduates, and earn more by being in a creative job, which is where they naturally find their best fit. Furthermore, they are more likely to be in embedded jobs, which were also emerging as being more lucrative' (2015: 364). In a similar analysis of **Arts and Humanities (A&H)** graduates using DLHE data, Comunian et al (2014) found that, even when A&H graduates gained access to creative jobs, their salaries were lower than non-A&H graduates in the same jobs. The authors argue that 'it is puzzling that graduates in non-A&H subjects are paid higher than those in A&H subjects, whose skills should be a better match for the sector' (2014: 446). In addition, A&H graduates found jobs more often in sectors of the creative economy which performed worse or equal to the national average.

Faggian et al (2013) also examined salary levels of '**Bohemians' (Creative graduates)** and found that female graduates earned less than men. The highest gender gap was for Other Creative graduates (8.2 per cent), followed by Creative Arts and Design (CAD) graduates (5.4 per cent). Age (used here as a proxy for experience) had a positive impact on all graduates' salary, although not as much for the CAD and Creative Media graduates. A first class degree had a slightly positive effect for all graduates but did not affect the salary of CAD and Creative Media graduates, supporting the literature which suggests that for these graduates, formal qualifications (and their level) are far less important than their portfolio (Ball, 2003).

Freelancing and self-employment were associated with lower salaries only for CAD graduates, with no effect for other graduates. Working in London had a salary advantage of about 14 per cent for all graduates on average, although CAD graduates had a lower salary advantage. The authors noted that if the higher cost of living of the capital was also considered, graduates in London were no better off than other graduates, although there was some advantage for Creative graduates in having greater networking opportunities within a large city.

Some similar findings were shown in the large-scale study of **Art, Design, Crafts and Media** graduates by Ball et al. (2010). Around 67 per cent of graduates earned above the average graduate starting salary for their cohort. Graduates in creative occupations more likely to be on lower incomes than those not in creative work, however. Women were much more likely than men to be on a low income and graduates over 40 were much more likely to be on a low income. Forty-eight per cent of those with at least three work-related jobs earned less than £15,000, compared with 22 per cent of those with one job.

Large-scale studies looking at income data found that at 6 months and 3.5 years after graduation, STEM graduates tended to earn higher salaries, compared to **AHSS graduates**, with notable exceptions in both groups (De Vries, 2014; Chevalier, 2011). Differences in earnings by subject largely carried through to lifetime earnings (Chevalier, 2011; Walker and Zhu, 2011, using aggregated data for particular subject groups). If estimated lifetime graduate earnings, net of educational costs and taxes (Conlon and Patrignani; 2011), or lifetime graduate premiums net of educational costs and taxes (Walker and Zhu; 2013), are taken into account, many AHSS subjects were also found at the lower end of the scale. It has been shown that degree holders still earn a premium over non-degree holders overall (a 28 per cent gap for men and 53 per cent for women (Walker and Zhu, 2013).

Using the LDLHE data for **all graduates** from the 2003 cohort three years after graduation, Chevalier (2011) reported that, among those in full-time employment, Medical graduates were the top earners, followed by Subjects Allied to Medicine, Mathematics, Engineering and also Economics (the top earner among AHSS graduates). At the lower end of the salaries were Biology, Veterinary and Agriculture; Psychology; Communications; Linguistics and Classics; and Creative Arts. Overall, there was reported to be a 25 per cent difference between the highest and the lowest subject average earnings, excluding the Medical graduates. Overall, these findings showed that while STEM subject groups were leading the salary scale, other STEM subject groups could also be found at the bottom end, along with a number of AHSS subject areas. Chevalier's analysis also showed that earnings were affected by a range of other variables (e.g. type of degree, quality of the higher education institution and gender). While relatively small gender pay differences existed (with women earning 3 per cent less than men), this masked larger gender pay differences at subject level, with men earning a premium in some subject areas (Economics, Law, IT and Subjects Allied to Medicine) and women earning higher salaries in other areas (including, e.g. Education, Linguistics and Classics, and History and Philosophy). Based on an analysis of pooled data from the Labour Force Survey, Chevalier assumed that, for men until the age of 50, 'the subject wage differential are constant over the life time of graduates' (2011: 1197), while for women this varied by subject.

A study by the Sutton Trust (De Vries, 2014), using data on graduates' employment situation 6 months and 3.5 years after graduation, found that subject of study, institution studied at and social background all had an impact on occupational and earnings outcomes. In terms of raw differences in earnings by subject of study, with the exception of Economics graduates, graduates who studied STEM subjects tended to earn more than graduates of AHSS subjects

on average at 3.5 years. There were some exceptions to this. For example, Social Work and Business and Management graduates fared reasonably well, while Agriculture, Biological Sciences and Architecture graduates performed relatively poorly on average.

Salary data are also being provided by the government as part of experimental statistics on Longitudinal Education Outcomes (LEO). Following recent changes in the law, LEO will provide salary information 1, 3, 5 and 10 years after graduation through matched data from HM Revenue and Customs (HMRC) and the Department for Work and Pensions. While these data provide sensitive information for a large sample, they have some limitations, e.g. they do not allow breakdowns by full-time and part-time graduates, as such data are unavailable through Pay As You Earn (PAYE). Currently, data also exclude information from a relatively small, but in some subject areas substantial, group of graduates who are self-employed and thus submit self-assessment returns (the largest group among AHSS graduates being **Creative Arts and Design** graduates) and graduates under the Lower Earnings Limit (until 2013). Having said that, subject-based salary data are provided separately for men and women one and five years after graduation, respectively, for the 2008/09 cohort. Salary data for men, where part-time work is likely to play a much smaller role than for women, show that AHSS graduates tended to achieve lower mean salaries than STEM graduates at both one and 5 years after graduation, with notable exceptions such as Biological Science graduates and Economics graduates, as other studies have shown. **Economics** graduates were the top earners among male AHSS graduates, and achieved the second highest overall mean salary five years after graduation, sharing this place with Veterinary Science graduates. The interquartile range, i.e. the salaries within the middle 50 per cent, showed a large dispersion of salaries for male Economics graduates, with the top earners in this interquartile range even overtaking Medicine and Dentistry graduates, who achieved the highest overall median salary, by £500. A fairly similar trend applied to female Economics graduates; however, their mean salaries were lower than those of their male counterparts and they did not overtake female Medicine and Dentistry graduates in the upper interquartile range (DfE, 2016).

Walker and Zhu (2011) used data from the UK LFS estimated lifetime earnings of male and female graduates from STEM, combined studies (COMB), Law, Economics and Management (LEM) and Other Social Sciences and Humanities (OSSAH) subjects. They found that on average LEM and STEM offered the highest returns, while graduates from OSSAH subjects were estimated to earn the least on average.

2.6.4 Work experience, extracurricular activities and employment outcomes

Very little information was found on extracurricular activities specifically, and their relationship with employment outcomes, focusing on AHSS graduates. The two studies reported here both focus upon **Business and Management (B&M)** graduates. Wilton's (2008) survey data showed that work placements helped to support the development of some employability skills, such as ability to work in teams, management skills and leadership skills. Moreover, the study found that the interviewees were very positive about the value of work placements for labour market advantage in securing employment, preparing them for work in terms of dealing with responsibility, shaping attitudes to work, development of self-confidence or development of particular skills, e.g. client-facing and specialist ICT skills.

Using the same data, Wilton (2012) explored the benefits of work placements for **B&M** graduates on the development of employability skills and labour market outcomes, focusing on those who were under 24 when graduating. The survey results showed that those who had undertaken a work placement had slightly, but significantly, higher employability skills than their counterparts without such work placement experience. Wilton suggests that the development of self-confidence and an appreciation for understanding how things work in practice may be key to understanding the benefits of work placements, rather than greater development of skills as such. Those who had undertaken a work placement fared significantly better with regards to a degree being required for the job and applying degree-relevant knowledge and skills or higher levels of job satisfaction, but this was not always the case for specialist graduates. Specialist graduates with work placement experience earned significantly less in their first and current job than their counterparts, which, the author suggests, may be explained by the fact that they differ from the other two types of B&M graduates and that these differences (likely to be women and studying at a post-1997 university) were associated with lower levels of achievement.

However, a number of studies have shown that, overall, graduates who had gained work experience (either operationalised as work-based learning, work experience placements and /or (career-related) paid work) tended to have better employment outcomes than those who did not (e.g. Purcell et al., 2005; BIS, 2013; Shury et al., 2017). Paid work during term time can, however, negatively impact on degree outcomes (cf. Purcell et al., 2005). Shury et al. (2017) also reported that for a sizeable group (27%), work experience resulted in a job offer from the same employer, which the majority of these graduates accepted. While this study found that all forms of work experience led to favourable outcomes, unpaid work experience and paid work unrelated to their career was less beneficial. There was also an indication that engaging in a range of 'CV-building activities' (including, for example, volunteering) had a positive impact: those in full-time 'professional jobs' and in further study were more likely to have engaged in such activities (particularly in society committees or in university competitions) (Shury et al., 2017).

2.7 Benefits of AHSS graduates to the economy and to society

Only a few articles noted the wider benefits of AHSS graduates to the economy and to society more generally. 'The working musician' (DHA Communications, 2012) used an online survey and interviews with **musicians**, officials of the Musicians' Union and a representative with expertise in copyright and piracy. Although 61 per cent of respondents had studied at a dedicated music college, university or conservatoire, only 40 per cent had a degree in music. The vast majority had a portfolio career and worked in a number of roles, including music arranger, producer, bandleader, fixer, community musician/mentor, conducting community choirs, 'singing for health' groups, musical director, music therapist, author of books on music, music typesetting and editing, academic research and music copyist. This indicates that 'musicians are often working in ways that use their music skills to produce social, health and academic outcomes'. Musicians were also 'employing entrepreneurial skills, with 64 per cent using web-based technologies to produce, promote and distribute their music'. The authors highlighted that 'the examples cited above provide a taste of the breadth of skills required to sustain a portfolio career in music' (2012: 11).

The NESTA (2008) study examined 'the working lives of **Fine Arts** graduates and the ways in which they contribute to innovation, both within the arts and in the wider economy'. The authors refer to literature which showed that there are at least three ways in which artistic labour is absorbed into the wider economy and 'linked into processes of innovation':

- Fine Arts graduates have attitudes and skills that are conducive to innovation; many graduates describe themselves as 'brokers across disciplines'; they are lifelong learners, frequently embarking on informal and formal training throughout their working lives; they also single out their own consumption of art as a stimulus for their own work;
- Artistic labour impacts on innovation in the way that it is organised: project work and portfolio working are the norm and there are very high rates of multi-jobbing in cultural and non-cultural sectors; 'crossover' therefore takes place throughout artists' working lives, as financial reasons force many artists to seek employment in non-cultural sectors. However, crossover also brings opportunities for learning new skills;
- Artistic labour impacts on innovation through the widespread 'culturalisation' of activities' but Fine Arts graduates remain keen to stress the distinction between cultural and non-cultural pursuits; however, they do not see creativity as the exclusive preserve of the arts.

Kreager (2013) conducted a study specifically to highlight the wider benefits of **Humanities** graduates, and in the final section of the report discussed Citizenship: 'a further basic value of Humanities higher education: that the knowledge and aptitudes it fosters have wider social and humanitarian value, and open up opportunities for graduates to participate in civil society and contribute to the country in a great many ways' (2013: 50).

Graduates' wider contributions to society often have limited visibility but Kreager outlined some of the many wider activities of the Humanities graduates included in the study: 'The long term picture…reveals considerable occupational mobility and new skills development across occupational sectors, which play a crucial role in individual and national economic performance' (2013: 52).

2.8 Summary and Conclusions

The literature is varied and fragmented, often focusing on specific degree subjects and/or small samples of graduates, with differing methodologies. Nevertheless, it is possible to draw out some common findings which will be explored further in the quantitative and qualitative data analysis presented in the later sections of the report. While it is necessary to bear in mind the variety of graduates included under the common classification of Arts, Humanities and Social Sciences, the summary provided here takes a broad approach to synthesising the evidence. For example, there is evidence that AHSS graduates are resourceful, using their graduate skills and their networks to provide them with opportunities within the labour market. For some Arts graduates (e.g. musicians and artists) this may involve moving to London in order to be closer to a hub of artistic activity and a wider network of colleagues.

Some skills learned and developed during their degree courses allow AHSS graduates to adapt well to a variety of jobs, even when working in non-degree related occupations. Examples include creativity, innovation, analytical and critical reasoning, problem-solving, working independently, good time management, working to deadlines, self-discipline and juggling priorities. Other identified skills developed by AHSS graduates include independence,

persistence, self-motivation, literacy, written and oral communication skills, effective learning and the aptitude for learning new skills, as well as working effectively with others, taking initiative and personal responsibility in work. In some subjects such as Business, management skills, leadership skills and entrepreneurial skills were well developed, compared to other graduates.

When assessing skills gaps and the skills required in the future, social and interpersonal skills are those which cut across a range of occupations and sectors, and AHSS graduates would appear to be in a strong position to succeed in such roles. On the other hand, numerical, technical and IT skills appeared to be less well developed through an AHSS degree. Employers of the future will be seeking a high level of technical competency and people management skills, alongside more creative and softer skills. Sectors such as Accountancy and Business will similarly be seeking a blend of skills in the future, with softer skills having an increasingly important role, alongside strong leadership skills, organisational and communication skills. Problem-solving, attention to detail, good communications and working to deadlines, as well as more 'personal' skills such as creativity and innovation, appear to be highly valued, both now and in the future, and these are skills which AHSS graduates need to capitalise upon and develop even further for future employment opportunities.

Many graduates take time to settle into a 'graduate' job, often undertaking further study, and even when they do enter the labour market, their salaries may not be comparable with non-AHSS graduates. There is also some evidence of a gender pay gap within some AHSS graduate occupations. Many graduates, especially in some subjects, appear to use teaching as a source of stable employment and a regular salary, while simultaneously subsidising their more artistic activities. Many others work in several jobs at once, or work freelance, often for relatively poor salaries. This reflects a high degree of resourcefulness and flexibility in their job searching strategies, but also a high level of commitment to their chosen field. Applying creativity and flair, even when working within a non-degree related occupation, can be a valuable asset for employers and for colleagues, highlighting the skills which AHSS graduates can offer on a broader scale.

The following sections focus on the methodology employed in the data analysis (Section 3) and the main findings from both quantitative and qualitative research methods (Sections 4 and 5), supported by additional material in the Appendices.

3. Methodology

3.1. Quantitative data collection and analysis

3.1.1 The Destinations of Leavers from Higher Education (DLHE) survey

The DLHE is an annual statutory survey of recent graduates from UK higher education institutions (HEIs). The survey is a census of all graduates from undergraduate and postgraduate courses, although the data presented in this research is limited to graduates who were domiciled in the UK and other EU countries[4]. The survey is conducted by HEIs themselves on behalf of the Higher Education Statistics Authority (HESA) and captures information about graduates' employment situation at six months after completing their course. The mixed-mode survey achieves a high response rate each year and provides a snapshot of graduates' early employment and further study related activities, using a combination of postal, telephone and online data collection methods. The survey for 2014/15 leavers achieved a response rate of 78.7 per cent for UK and EU domiciled graduates and was broadly representative of the 2014/15 graduating cohort, although response rates were slightly higher among UK graduates and those from full-time courses. The survey asks up to 32 questions on current activity (work, study or other), number of current jobs and details of 'main' job, details of any current further study, and general feedback on graduates' course. The definition of 'main' job is left up to graduates to decide, but the question wording suggests it should be the one they spend most time on, the one they earn most from or the one they feel is most related to their future plans. For respondents' main job the survey asks: job title and duties; contract type or employment basis; pay; hours; and details about the employer. The survey also asks graduates how they found out about their job, their reasons for taking the job and whether their qualification was needed to get the job. Graduates' responses can be linked to their student record, thus allowing for investigation of employment experiences by a range of personal and study characteristics. Thus, for the current research, the data allowed us to examine AHSS graduates' early employment experiences, skills use, and engagement in further study.

3.1.2 The Longitudinal Destinations of Leavers from Higher Education (LDLHE) survey

The LDLHE is the follow-up survey to the six month DLHE and looks at the destinations of leavers up to 3.5 years after they qualified. In contrast to the earlier survey, the LDLHE is not a census survey but is instead based on a sample of the students who responded to the six-month DLHE. The survey is conducted by IFF Research using a combination of probability and non-probability sampling methods and is collected using a mixture of online and telephone questionnaires. For the 2010/11 graduating cohort used in this study, no postal questionnaires were used. Invitations were sent out using a combination of emails, text messages, letter invitations and by directly telephoning graduates, depending upon what contact details were supplied by HEIs. The LDLHE collects much of the same information as the six-month survey.

[4] Although the Crown Dependencies of Guernsey, Jersey and the Isle of Man are not part of the UK or the EU, they are grouped with and assumed to be part of the UK in the HESA DLHE record.

However, it also asks respondents some more detailed questions about qualifications obtained since graduation, development and skills use, and there is an additional section for PGR (postgraduate research) graduates asking them the extent to which they feel their course helped develop various skills and to which they are able to use these in their current job. As with the DLHE data, responses to the LDLHE can be linked to the student record, allowing for investigation of employment experiences by a range of personal and study characteristics.

3.1.3 Definitions and data coding

Subjects were coded using version three of the Joint Academic Coding System (JACS 3.0)[5]. The JACS system is a standard way of categorising the subject areas of courses that is widely used in HE and in research. Graduates' subject of study was provided in the data at the 'principal subject' level. In the analysis presented here, individual AHSS subjects are presented at the 'subject area' level for: Social Studies (SS); Law; Business and Administrative Studies (B&A); Mass Communications and Documentation (MCD); Languages (Lang); Historical and Philosophical Studies (H&P); and Creative Arts and Design (CAD). Together these subject areas were combined to make Arts, Humanities and Social Sciences (AHSS). The STEM category used in the analysis was created by combining Medicine & Dentistry, Subjects allied to medicine, Biological sciences, Veterinary science, Agriculture & related subjects, Physical sciences, Mathematical sciences, Computer science, Engineering and technology, and Architecture, building and planning. The remaining two subject areas, Education and 'Combined' were grouped together to form Education/combined because of their relatively small size, compared to the other two broad subject groupings. It is worth bearing in mind that this final grouping will be predominantly comprised of Education graduates.

3.1.4 Occupations, industries and graduate level jobs

Both the DLHE and LDLHE ask respondents to give their job title and to say a few words about what they do in their 'main' job. As noted previously, this can be the job they spend most time on, the job they earn most from or the one they feel is most relevant to their career goals. Using this information HESA codes graduates' occupations based on the most recent version of the Standard Occupation Classification structure (SOC2010). In this report, SOC codes are then used to classify graduates' occupations in three ways. Firstly, broad occupations are presented at the 'major group' level of SOC and more detailed occupations are presented at the 'sub-minor' (4-digit) level. Secondly, SOC major groups one to three (i.e. 'Managers, directors and senior officials', Professional occupations' and 'Associate professional and technical occupations') are grouped up to create what HESA terms 'Professional jobs'. This categorisation is the one used by HESA in its standard reporting of DLHE data and is commonly used by HEIs in their internal benchmarking. Finally, occupations are categorised using the 'SOC(HE)2010_EP' classification of graduate jobs proposed by Elias and Purcell (2012), which classifies occupations based on the types of skills that graduates commonly use in these jobs. Graduates' jobs are then classified as 'Expert', 'Strategist/Orchestrator', 'Communicator' or 'non-graduate' based on where their SOC code fits into the classification system as follows:

[5] https://www.hesa.ac.uk/support/documentation/jacs/jacs3-principal

- *Expert*: knowledge-intensive occupations that use specialist HE knowledge and skills on a daily basis. Appointment to these jobs and capacity to carry out the tasks and responsibilities required is directly related to possession of specialist knowledge and/or high level skills;
- *Strategist (more recently termed orchestrator):* jobs that require individuals to draw on and orchestrate their own and others' knowledge to evaluate information, assess options, plan, make decisions and co-ordinate the contributions of others to achieve objectives (not many recent graduates are likely to be found in these occupations, since they normally require extensive experience);
- *Communicator:* jobs requiring interactive skills that may be based on interpersonal skills, creative skills or high-level technological knowledge, capacity to access and manipulate information and/or an understanding of how to communicate information effectively to achieve objectives.

All other occupations are classified as 'non-graduate'. Although there is a certain amount of overlap between the two classifications outlined here, it is worth noting that there are some occupations classified as 'professional jobs' that would be categorised as 'non-graduate' using the SOC(HE)2010_EP system. In addition, whilst it is recognised that there continues to be debate about what sorts of occupations might genuinely be considered as 'graduate jobs' in the traditional sense (James et al., 2013), it is not the objective of this study to enter into this debate. Rather the aim was to provide some sort of indication of whether graduates were engaged in jobs that were of a level requiring a higher level of education and/or by and large tend to be occupied by graduates.

Industries that graduates were working in at the time of the survey were coded using the latest version of the Standard Industrial Classification system (SIC2007). Data in this report is presented at the 'section' and 'division' level (1- or 2-digit SIC).

3.1.5 Futuretrack data

Futuretrack is a longitudinal tracking study of 2005-6 UCAS applicants for full-time undergraduate courses in the UK. Data has been collected over six years using a series of online, primarily quantitative, surveys.

Recruitment for the first wave was via a link sent out by UCAS. The participants in Waves 2 to 4 were largely drawn from this Wave 1 cohort, with some new entrants joining the study at each stage via recruitment through social media, HEI careers services and alumni associations, employer organisations and other bodies. A unique identifier was used to link participants across Waves to form the linked longitudinal dataset and prevented multiple responses from a single individual. As the initial Futuretrack survey was sent to all UCAS applicants, UCAS data was used to compare the Futuretrack respondent profile to the profile of all HE applicants to understand the impact of differential non-response and to weight the data using key variables.

- Wave 1 of Futuretrack was conducted in Autumn 2006, as applicants were preparing to enter higher education, and had 121,368 participants. The data from the online survey was linked to data drawn from the respondent's UCAS application form, including their age, gender, ethnicity, social class, area of residence, A-level subjects, HEIs applied for and expected grades.

- Wave 2 took place in Summer / Autumn 2007 when most respondents were coming to the end of their first year in HE. The Wave 2 survey had 49,555 respondents.

- Wave 3 was split into two parts to account for the different years that graduates on three and four year courses completed their undergraduate degrees. Wave 3 surveys were conducted in Spring / Summer 2009 (20,206 participants) and at the same point in 2010 (6,348 participants).

- Wave 4 was conducted in Autumn / Winter 2011/12 and examined the early careers of the Futuretrack cohort. In total, 17,075 took part in the Wave 4 survey, of whom 14,912 had taken part in at least one of the previous Waves.

The data used in the current study is predominantly taken from responses to Wave 4 of the survey. More information on the Futuretrack survey methodology can be found at: http://www2.warwick.ac.uk/fac/soc/ier/futuretrack/

3.1.6 Data analysis and significance testing

As noted above, the DLHE is a census survey and, as such, any differences reported in the text are true differences in the population figures and significance testing (which is based on central limit theorem and known properties of random samples) is not required.

The LDLHE and Futuretrack surveys, on the other hand, are sample surveys and therefore significance testing was used in order to test whether differences found in the data were likely to be a true reflection of the wider population from which the samples were drawn. Bivariate associations between categorical variables were tested using chi-square tests of association and z-tests of column proportions. Similarly, group differences in average scores on scale variables were tested using t-tests or Analysis of Variance (ANOVA) statistical tests with post-hoc testing, as appropriate. Any differences highlighted in the text were found to be significant at the $\alpha = .05$ level of significance.

All figures presented in this report from the DLHE and LDLHE conform to the HESA Services Standard Rounding Methodology, as follows:

- All base numbers and raw frequencies were rounded to the nearest '5' or '0';
- Percentages based on fewer than 22.5 individuals were suppressed;
- Averages based on 7 or fewer individuals were suppressed.

3.2. Qualitative data collection and analysis

3.2.1 Focus groups and employer interviews

Three online focus groups were conducted between June and July 2017, using the VisionsLive platform. Two of these were for undergraduate/taught postgraduates only (UG/PGTs), whereas the third was for those having completed a postgraduate research degree (PGRs) (see Table 1 below). Each focus group lasted around 90 minutes and was led by a member of the research team using a structured interview guide. A second researcher moderated responses and supported the discussion with follow-up questions and prompts. Prompts were used to probe for further detail and create a comprehensive understanding of the issues raised

during the discussions. The focus group data were recorded and downloaded for analysis at the end of each session.

The focus group guide included questions on: current jobs; skills used at work; skills developed at university; skills gained/skills lacking; and personal development. The guide was revised and adapted during the early phase of development, which involved shortening and simplifying some questions, creating visual stimuli and reproducing some questions as online polls.

Online focus groups were chosen due to the time constraints and requirements of the project. They provided the opportunity to reach a geographically dispersed population of students and graduates, as well as offering the same benefits as face-to-face groups, such as the ability to use visual stimuli. Unlike face-to-face focus group sessions, the online focus groups enabled multiple conversations to take place at the same time. For example, individual participants could communicate with each other and focus group moderators could probe both the group and individuals (with private messaging) around meanings, interpretations and decision-making processes. The online focus groups also enabled individuals to participate at a location convenient to them and offered an environment in which participants could feel comfortable and open to sharing views. Participants were also able to participate anonymously.

3.2.2 Sample of focus group participants

Table 1: Details of focus group participants

Demographic profile		UG/PGT number	PGR number
Gender	Male	5	3
	Female	9	5
	Other		
Age	20-25 years	10	
	26-30 years	1	1
	31 and over	1	7
	Prefer not to say	2	
Subject studied/ discipline	Sociology	1	
	Law/Criminal Law	3	1
	Philosophy and Sociology	1	
	Social Sciences/Applied Social Sciences	4	
	Business Management/ Business Studies	2	
	Drama and Performance	1	
	Classics	1	
	Economics	1	
	English/English Literature/ English and Theatre Studies		3
	History of Art		2
	Marketing and Retail		1
	Philosophy		1

Source: IER AHSS employer interviews

Participants also came from a variety of universities and included English, Scottish and Irish graduates (nobody identified as Welsh). There were also graduates from other countries. They

were initially asked which sector they were currently working in, with a series of options. These options were based on earlier quantitative analysis which showed the most popular occupational sectors of AHSS graduates and postgraduates.

The sectors in which UG/PGT participants were employed included Education (2), Financial Service Activities (5), Legal and Accounting (3), Public Administration and Defence (1) and Retail (1). Three reported being in 'other' sectors. When probed on what occupational sector they were in, one was in Facilities Management; one was in sales in an advertising agency and another worked in a University, but worked in administration/professional services.

PGR participants worked in Education (5) and 3 others; those who recorded 'other' reported being head of policy at an independent policy association; museum curator; and a policy officer in risk and audit.

3.2.3 Sample of employer interviews

After several attempts were made to contact a variety of employers, covering a range of sectors identified from the quantitative data analysis, a total of six interviews were conducted with employers of AHSS graduates (see Table 2).

Questions focused upon how employers perceive AHSS graduates' skills, including any skills gaps and whether there is a need for 'modernisation' of these skills. Individual questions focused upon graduate recruitment and the skills required, graduate employability and the role of universities, and a more general view of graduates.

Table 2: Breakdown of AHSS employer interviews

Sector	Total number of staff	Main work	Graduates recruited
Education	120	Primary school teaching	All subjects
Professional services	250	Advertising	All subjects
Information and Communication	50	Games development	Computer Science, Games Design, Environment Design, Animation, Art, Graphic Design
Professional, scientific and technical activities	300-350	Fashion design	Fashion, Design, occasionally others
Professional services	300	Digital consulting	All subjects
Professional, scientific and technical activities	40	Research activities	Economics, Social Sciences (broad range)

Source: IER AHSS employer interviews

3.2.4 Qualitative data analysis

The data were coded and analysed using a framework approach according to themes that emerged. The coding and analyses were undertaken by the research team. The findings were synthesised for the final report and anonymised verbatim quotes were used to highlight key themes. The following findings sections will incorporate qualitative data findings, as well as those from the quantitative data analysis. A separate section on PGRs is presented in Section 5.

4 Undergraduates (UG) and Postgraduate Taught (PGT) data findings

4.1 Introduction and background to employment status of AHSS graduates

The following sections provide a snapshot of AHSS graduates at the current time by analysing the employment outcomes of graduates up to 3.5 years after graduation, using the most recent DLHE and LDLHE data, as well as Futuretrack data collected at IER. The analysis provides information on:

- The sectors in which AHSS UG/PGT graduates are employed;
- The roles that graduates fulfil;
- The sorts of tasks that graduates undertake in their jobs;
- The skills that graduates use/demonstrate in their jobs;
- The top up-qualifications undertaken by graduates;
- How employers perceive AHSS graduates' skills; and
- How AHSS graduates perceive their own skills and any skills gaps.

(For a detailed breakdown of the UG/PGT sample included in the analysis, see Appendix III, Tables A1 to A3).

Comparisons between AHSS, STEM and Education/Combined graduates at 6 months showed that AHSS graduates were:

- More likely to be in self-employment (7.5 per cent, compared with 3 per cent of STEM and 2 per cent of Education/Combined graduates);
- Less likely to be on a permanent or open-ended contract (59 per cent, compared with 65 per cent for STEM and 62 per cent for Education/Combined);
- Less likely to be temping (2.5 per cent) than Education/Combined (5 per cent; 2 per cent STEM);
- Slightly more likely to be on a zero-hours contract (3 per cent) than STEM (2 per cent) or Education/Combined (1 per cent).

When comparing between AHSS degree subjects at 6 months after graduating:

- Mass Communications and Documentation (MCD) and Creative Arts and Design (CAD) graduates were much more likely to be self-employed/freelance (11 per cent and 20 per cent, respectively) than Social Studies (SS, 3 per cent) and Business and Administration (B&A, 3 per cent);
- CAD graduates were less likely to be on a permanent contract (47 per cent) than SS (62 per cent) and B&A (70 per cent) graduates;
- Internships were higher among MCD (5 per cent), Languages (5.5 per cent) and Historical and Philosophical Studies (H&P, 5 per cent) graduates;
- Temping was also higher among H&P graduates (4 per cent), as was working on a zero hours contract (4 per cent); CAD graduates were also more likely than other AHSS graduates to be working on a zero hours contract (4 per cent).

After 3.5 years, AHSS graduates were settling into more permanent careers, similar to other graduates. For example:

- 76 per cent of AHSS graduates were now on permanent contracts, compared with 79 per cent of STEM and 80 per cent of Education/Combined graduates;
- 6 per cent of AHSS graduates were self-employed or freelance, compared with 4 per cent of STEM and 2.5 per cent of Education/Combined graduates.

When comparing between AHSS subject areas at 3.5 years:

- The proportions of both MCD and CAD graduates on permanent contracts had risen over time (76 per cent and 66 per cent, respectively) but both were still lower than Business and Administration graduates (84 per cent);
- The proportions of both MCD and CAD graduates in self-employment or freelance work had dropped, but were still high (7 per cent and 16 per cent, respectively). The proportions of other AHSS graduates in self-employment or freelance work remained low (between 3 and 5 per cent).

(For more detail on these figures, see Appendix III, Tables A4-A11).

4.2 In which sectors do AHSS UG/PGT graduates work?

Analysis then focused upon the occupational sectors in which AHSS UG/PGT graduates were employed at 6 months (DLHE, Table 3) and 3.5 years (LDLHE, Table 4); see also Figure 1.

Table 3: Industry sections of main job at 6 months, AHSS subject areas (%)

	SS	Law	B&A	MCD	Lang	H&P	CAD
Section A: AGRICULTURE, FORESTRY AND FISHING	0.1	0.0	0.1	0.1	0.1	0.1	0.1
Section B: MINING AND QUARRYING	0.1	0.4	0.7	0.1	0.0	0.1	0.0
Section C: MANUFACTURING	1.9	1.7	7.6	2.2	2.4	2.5	5.3
Section D: ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY	0.4	0.4	0.7	0.4	0.4	0.3	0.2
Section E: WATER SUPPLY; SEWERAGE, WASTE MANAGEMENT AND REMEDIATION ACTIVITIES	0.2	0.1	0.4	0.2	0.1	0.2	0.1
Section F: CONSTRUCTION	0.7	1.4	1.7	0.7	0.7	0.8	0.8
Section G: WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND MOTORCYCLES	8.7	8.3	14.4	15.7	13.1	14.2	**21.6**
Section H: TRANSPORTATION AND STORAGE	1.4	1.5	3.0	1.0	1.4	1.5	0.9
Section I: ACCOMMODATION AND FOOD SERVICE ACTIVITIES	4.2	3.6	6.4	7.0	7.1	7.3	8.9
Section J: INFORMATION AND COMMUNICATION	4.0	3.3	7.1	**28.0**	10.3	6.2	9.5
Section K: FINANCIAL AND INSURANCE ACTIVITIES	7.8	6.6	10.3	2.9	4.8	6.2	1.5
Section L: REAL ESTATE ACTIVITIES	1.7	1.6	2.3	1.0	1.3	1.2	0.7
Section M: PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES	9.8	**43.4**	14.8	12.3	12.5	11.0	13.8
Section N: ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES	5.1	4.4	7.6	5.0	6.4	6.7	3.5
Section O: PUBLIC ADMINISTRATION AND DEFENCE; COMPULSORY SOCIAL SECURITY	21.7	8.3	4.4	2.0	3.3	6.2	1.1
Section P: EDUCATION	10.6	4.9	5.7	8.3	**22.8**	16.1	11.1

	SS	Law	B&A	MCD	Lang	H&P	CAD
Section Q: HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	**16.7**	6.6	8.7	3.7	5.9	6.6	3.3
Section R: ARTS, ENTERTAINMENT AND RECREATION	2.0	1.6	2.8	7.8	4.8	7.7	**16.0**
Section S: OTHER SERVICE ACTIVITIES	1.9	1.2	1.1	1.5	1.9	4.7	1.5
Section T: ACTIVITIES OF HOUSEHOLDS AS EMPLOYERS; UNDIFFERENTIATED GOODS- AND SERVICES-PRODUCING ACTIVITIES OF HOUSEHOLDS	0.1	0.1	0.0	0.1	0.2	0.2	0.2
Section U: ACTIVITIES OF EXTRATERRITORIAL ORGANISATIONS AND BODIES	0.7	0.6	0.1	0.2	0.3	0.1	0.0
Total	100	100	100	100	100	100	100
Total, N	22,960	8,030	32,210	7,010	11,650	8,480	23,410

Base: AHSS graduates of working age in employment (not studying), DLHE data
Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.
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Code:

SS = Social Sciences
B&A = Business and Administration
MCD = Mass Communications and Documentation
Lang = Languages
H&P = Historical and Philosophical Studies
CAD = Creative Arts and Design

Table 4: Industry sections of main job at 3.5 years, AHSS subject areas (%)

	SS	Law	B&A	MCD	Lang	H&P	CAD
Section A: AGRICULTURE, FORESTRY AND FISHING	0.1	0.1	0.2	0.0	0.0	0.1	0.1
Section B: MINING AND QUARRYING	0.3	0.5	0.9	0.1	0.2	0.0	0.1
Section C: MANUFACTURING	2.1	2.2	9.8	4.0	2.8	2.7	6.6
Section D: ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY	0.6	0.2	0.8	0.4	0.2	0.5	0.1
Section E: WATER SUPPLY; SEWERAGE, WASTE MANAGEMENT AND REMEDIATION ACTIVITIES	0.2	0.1	0.5	0.3	0.1	0.2	0.2
Section F: CONSTRUCTION	0.6	0.6	1.7	0.6	0.7	0.8	0.7
Section G: WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND MOTORCYCLES	4.6	4.1	10.4	9.6	6.8	7.3	**13.2**
Section H: TRANSPORTATION AND STORAGE	1.2	1.0	2.9	0.7	1.2	1.4	0.8
Section I: ACCOMMODATION AND FOOD SERVICE ACTIVITIES	0.6	0.6	2.7	2.2	2.4	2.3	3.0
Section J: INFORMATION AND COMMUNICATION	4.1	3.1	6.7	**27.2**	10.2	6.3	11.7
Section K: FINANCIAL AND INSURANCE ACTIVITIES	8.8	7.0	**11.0**	3.8	5.4	6.1	1.7
Section L: REAL ESTATE ACTIVITIES	1.9	1.6	1.8	1.2	1.0	1.2	0.7
Section M: PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES	13.5	**50.0**	17.8	12.7	15.1	15.7	15.3
Section N: ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES	2.5	2.3	5.7	4.4	4.1	3.7	3.4
Section O: PUBLIC ADMINISTRATION AND DEFENCE; COMPULSORY SOCIAL SECURITY	12.5	12.0	8.3	4.7	4.6	8.7	1.9
Section P: EDUCATION	14.8	6.0	8.8	12.5	**31.3**	**23.6**	**20.7**
Section Q: HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	**27.8**	6.7	6.4	7.9	7.1	8.4	5.9
Section R: ARTS, ENTERTAINMENT AND RECREATION	1.1	0.2	2.5	6.2	4.6	6.8	12.3
Section S: OTHER SERVICE ACTIVITIES	2.1	1.0	1.0	1.3	1.9	3.9	1.4
Section T: ACTIVITIES OF HOUSEHOLDS AS EMPLOYERS; UNDIFFERENTIATED GOODS- AND SERVICES-PRODUCING ACTIVITIES OF HOUSEHO	0.2	0.1	0.1	0.0	0.1	0.1	0.2
Section U: ACTIVITIES OF EXTRATERRITORIAL ORGANISATIONS AND BODIES	0.5	0.4	0.1	0.1	0.5	0.2	0.0
Total	100	100	100	100	100	100	100
Total, N	6,150	2,710	7,890	1,970	3,290	2,790	5,380

Base: AHSS graduates of working age in employment (not studying), LDLHE data

Source(s): HESA DLHE Long Record 2010/11. Copyright Higher Education Statistics Agency Limited.
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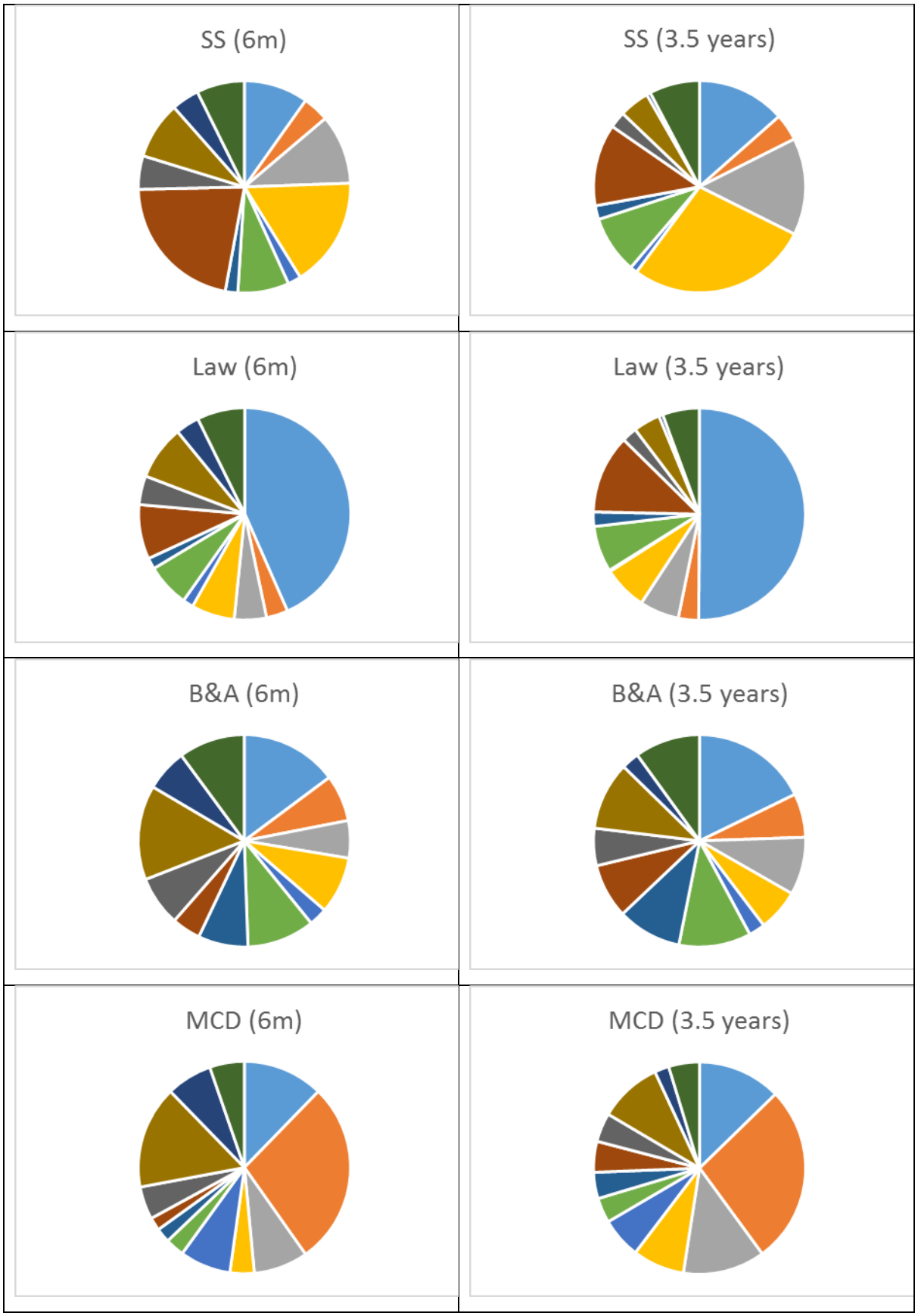
Unsurprisingly, there were clear differences by degree subject in terms of the sectors in which graduates work and differences over time in the proportions of graduates working in particular sectors. This suggests that many AHSS graduates take some time to settle into a career, supporting some of the literature highlighted in Section 2. For example, the proportions of those from Mass Communications and Documentation, Languages, Historical and Philosophical Studies and Creative Arts and Design working in retail were much lower 3.5

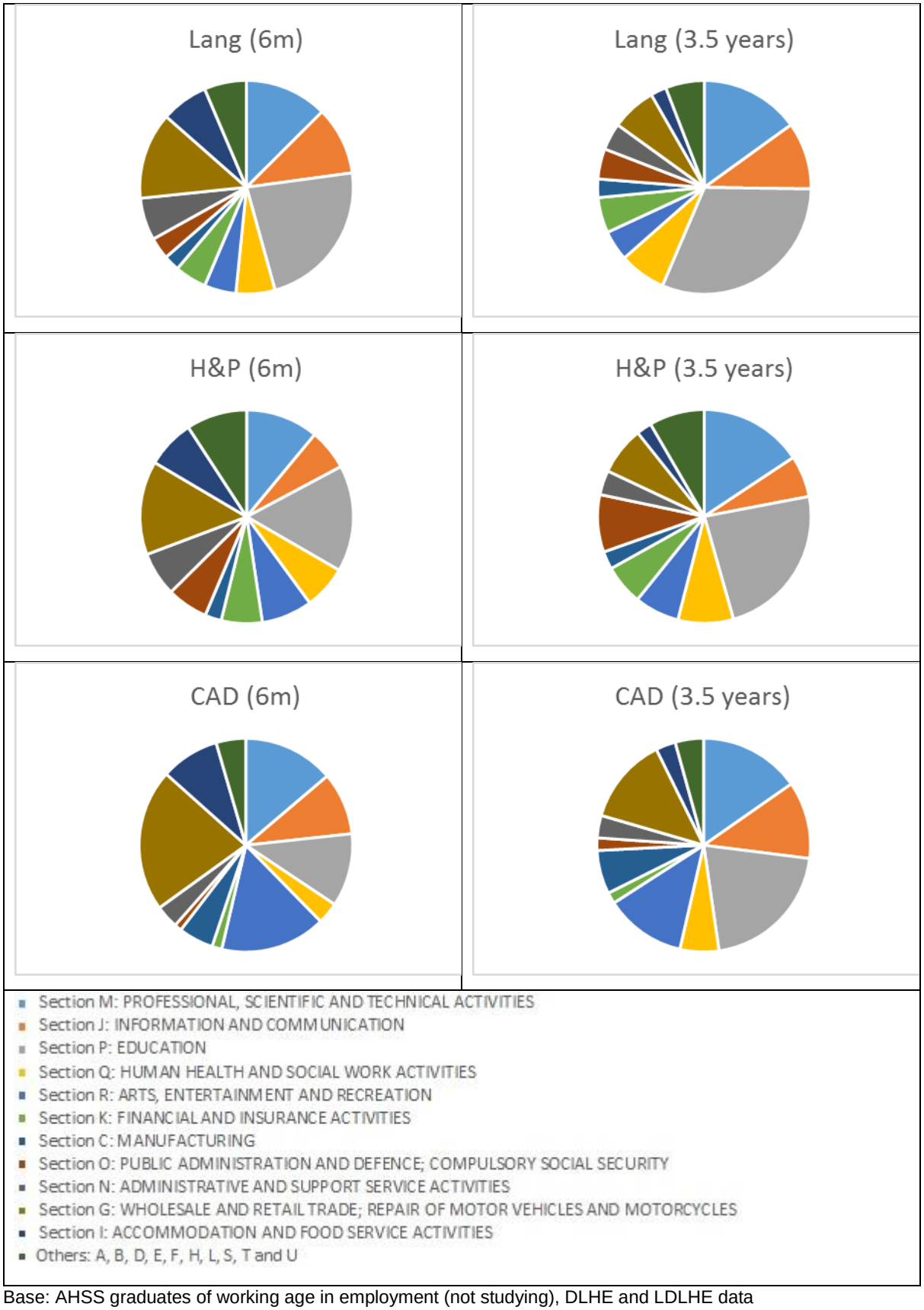
years after graduating than at 6 months (many of these graduates were likely to have been working in transitional jobs immediately after graduation but will have since moved into different sectors). However, a large proportion of MCD graduates were already working in Information and Communication at 6 months and continued to do so at 3.5 years (28 per cent and 27 per cent, respectively), suggesting that these graduates find subject-specific jobs fairly rapidly after graduating. Like MCD graduates, Law graduates appeared to be less likely to find transitional jobs, with 43 per cent already working in Professional, Scientific and Technical activities 6 months after graduation, rising to 50 per cent at 3.5 years. Twenty-two per cent of Creative Arts and Design graduates were working in retail at 6 months but, at 3.5 years, this proportion had dropped to 13 per cent, whereas the proportion working in Education had increased from 11 per cent to 21 per cent. Indeed, there were increases in the proportions of all subject groups moving into Education at 3.5 years. Only 6 per cent of Law graduates were working in Education at 3.5 years, however. Only a small proportion of Social Studies graduates were working in Human Health and Social Work activities at 6 months (17 per cent) but this had risen to 28 per cent at 3.5 years.

Although on initial inspection CAD graduates appear to be working in a range of sectors at 3.5 years, on closer inspection many of the graduates working within these industry sections were working in creative industries. For example: nine-tenths (92 per cent) of CAD graduates in section R industries were working in creative arts and entertainment or libraries, museums or cultural activities; 85 per cent of CAD graduates in section M were working in advertising and market research, architectural, engineering and related, or other professional activities (including design and photography); and 96 per cent of CAD graduates in section J were working in film, TV and sound/music, computer programming, publishing, or programming and broadcasting activities. Interestingly, for CAD graduates working in arts, entertainment and recreation (section R) at 3.5 years, self-employment and freelance working were particularly common, with nearly half (48 per cent) of CAD graduates in this industry section working on this type of contract. For CAD graduates working in sections M and J, the proportion that were self-employed/freelance was much closer to the all-sector average for CAD graduates of 16 per cent (18 and 19 per cent respectively).

(For comparisons between AHSS, STEM and other graduates, see Appendix III, Tables A12 and A14).

Figure 1: Industry section of 'main' job at six months and three and a half years, AHSS subject areas (%)





Base: AHSS graduates of working age in employment (not studying), DLHE and LDLHE data
Source(s): HESA DLHE Record 2014/15 and HESA DLHE Long Record 2010/11. Copyright Higher Education Statistics Agency Limited. Neither the Higher Education Statistics Agency Limited nor HESA Services Limited can accept responsibility for any inferences or conclusions derived by third parties from data or other information supplied by HESA Services.

4.3 What roles to AHSS UG/PGT graduates fulfil?

Occupational sector does not provide much information on the kinds of roles undertaken by AHSS graduates so this was explored in more detail. Evidence from the DLHE and LDLHE reveal that the majority tend to do jobs that in one way or another might be seen as suitable for graduates. Three-fifths (59 per cent) were doing a graduate job as their main job 6 months after graduation and 69 per cent were doing a 'professional' job, using the HESA definition. In this respect, though, they fared less well than graduates from STEM subjects, of whom 73 per cent had a graduate job and 83 per cent had a 'professional' job. Education/Combined graduates were even more likely to be in a graduate job at 6 months (86 per cent) and 89 per cent had a 'professional' job. Many of these will be in teaching jobs, however.

However, these figures mask some of the variation in the sorts of jobs that AHSS, STEM and other graduates do. For example, AHSS graduates were more likely than other graduates to be 'Managers or Senior Officials' and 'Associate Professionals' at 6 months, whereas other graduates were much more likely to be in 'Professional occupations', using SOC major groupings (see Appendix III, Table A24). Once more, this masks large variations by subject area within the AHSS group: for example, 13 per cent of Business and Administration graduates were Managers and Senior officials, reflecting the nature of the work that they would likely choose to enter after graduation (this compares with only 3 to 5 per cent of all other AHSS graduates in these jobs). Similarly, 35 per cent of Social Studies graduates and 30 per cent of Law graduates were in Professional occupations after 6 months, compared with only 11 per cent of Creative Arts and Design graduates. On the other hand, 48 per cent of CAD graduates were in Associate Professional and Technical occupations at 6 months, again reflecting the nature of the work that many would be likely to choose after graduating.

4.4 What sorts of tasks do AHSS UG/PGT graduates perform?

Using the SOC(HE)_EP groupings developed to examine the relationship between the knowledge and skills developed during HE participation and the use of these capabilities in employment, and comparing by AHSS degree subject, the 6-month data showed that Historical and Philosophical Studies graduates appeared to fare worst at this stage, with 50 per cent in non-graduate jobs and only 58 per cent working in 'professional' jobs (Table 5). However, after 3.5 years, even these graduates saw an increase in 'professional' jobs (up to 73 per cent), bringing them more into line with other AHSS graduates and even overtaking CAD graduates (69 per cent). Law and Social Studies graduates did particularly well by this stage, with over 80 per cent of both groups working in 'professional' jobs (Table 6).

Table 5: Professional and Graduate jobs (SOC(HE)_EP), broad subject grouping, 6 months after graduation

	SS	Law	B&A	MCD	Lang	H&P	CAD
Professional/associate professional or managerial (1-3)	71.9	75.0	75.2	66.9	62.2	58.2	62.2
Non-professional job (4-9)	28.1	25.0	24.8	33.1	37.8	41.8	37.8
Total	100	100	100	100	100	100	100
Total, N	22,995	8,050	32,265	7,020	11,670	8,480	23,500
Expert	43.8	37.0	29.2	15.8	24.1	24.9	29.6
Strategist	8.3	5.5	15.8	2.7	4.8	6.4	2.3
Communicator	9.0	4.9	20.1	43.6	27.4	19.0	24.8
Non-graduate	38.8	52.7	34.9	37.9	43.7	49.7	43.4
Total	100	100	100	100	100	100	100
Total, N	22,995	8,050	32,265	7,020	11,670	8,480	23,500

Base: AHSS graduates of working age in employment (not studying), DLHE data
Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.
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Table 6: Professional and Graduate jobs (SOC(HE)_EP), broad subject grouping, 3.5 years after graduation

	SS	Law	B&A	MCD	Lang	H&P	CAD
Professional/associate professional or managerial (1-3)	81.5	82.0	79.4	73.3	74.8	73.0	69.2
Non-professional job (4-9)	18.5	18.0	20.6	26.7	25.2	27.0	30.8
Total	100	100	100	100	100	100	100
Total, N	6,140	2,710	7,885	1,975	3,295	2,790	5,400
Expert	45.2	47.3	27.4	19.1	28.1	33.6	29.9
Strategist	11.2	7.9	18.8	5.7	6.5	8.3	4.2
Communicator	13.2	7.4	20.4	43.9	33.5	21.9	26.9
Non-graduate	30.4	37.3	33.4	31.3	32.0	36.2	39.0
Total	100	100	100	100	100	100	100
Total, N	6,140	2,710	7,885	1,975	3,295	2,790	5,400

Base: AHSS graduates of working age in employment (not studying), LDLHE data
Source(s): HESA DLHE Long Record 2010/11. Copyright Higher Education Statistics Agency Limited.
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At 3.5 years, figures showed that AHSS graduates continued to lag behind other graduates: 77 per cent were in professional jobs, compared with 87 per cent of STEM and 90 per cent of Education/combined graduates (the high proportion of Education/combined graduates working in professional jobs at 6 months could reflect the number going straight into teaching careers). Nevertheless, when we examine the kinds of skills employed in these jobs using the Elias and Purcell categorisation, we see that, although AHSS graduates were less likely to be classified in 'expert' jobs (33 per cent) than STEM (60 per cent) or Education/Combined graduates (49 per cent) at 3.5 years, they were more likely to be strategists (10.5 per cent) and three times more likely to be communicators (22 per cent) than STEM graduates, although Education/Combined graduates were those most likely to be communicators (32 per cent). Over a third of AHSS graduates remained in non-graduate employment 3.5 years after

graduation, however. The relatively large discrepancy between the proportion that are classified as 'non-professional' and 'non-graduate' is due to differences in the two classification systems, as noted previously. Some examples of the sorts of jobs held by AHSS graduates at 3.5 years that were classified as 'professional' in one system but categorised as 'non-graduate' in the other include: legal associate professionals; financial and accounting technicians; vocational and industrial trainers and instructors; managers and proprietors in other services not elsewhere classified; and financial accounts managers.

Table 7: Professional and Graduate jobs (SOC(HE)_EP), broad subject grouping, 3.5 years after graduation

	AHSS	STEM	Ed/Combined	All subjects
Professional/associate professional or managerial (1-3)	76.8	86.8	89.9	82.1
Non-professional job (4-9)	23.2	13.2	10.1	17.9
Total	100	100	100	100
Total, N	30,190	19,610	8,820	58,620
Expert	33.4	59.7	48.6	44.4
Strategist	10.5	6.5	2.1	7.9
Communicator	22.0	7.4	32.3	18.7
Non-graduate	34.1	26.5	17.0	29.0
Total	100	100	100	100
Total, N	30,190	19,610	8,820	58,620

Base: All graduates of working age in employment (not studying), LDLHE data
Source(s): HESA DLHE Long Record 2010/11. Copyright Higher Education Statistics Agency Limited.
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4.5 What skills do AHSS UG/PGT graduates demonstrate in their work?

4.5.1 Quantitative data analysis on the skills demonstrated by AHSS graduates

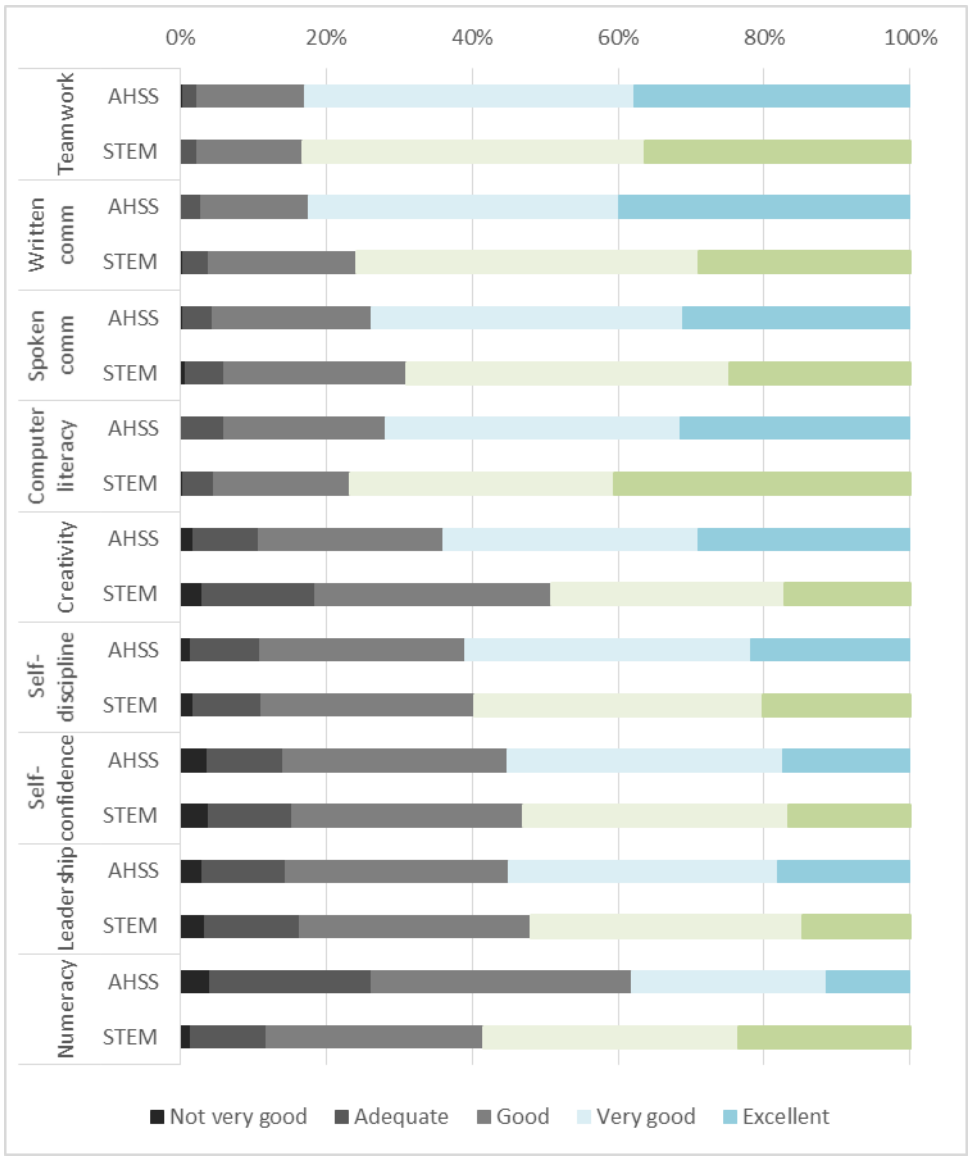
Futuretrack graduates were asked to indicate how often they used various skills and abilities in their current job (Figure 2 and Appendix III, Tables A30 and A31). The most commonly used skills reported by AHSS graduates were:

- Spoken communication;
- Time management;
- Independent working;
- Team working; and
- Written communication.

More than half of graduates reported that they use these skills 'a lot'. Entrepreneurial skills were the least likely to be used in graduates' current main job with more than half (53 per cent) saying they did not use these skills at all and only 15 per cent saying they used these skills 'a lot'. There were very few differences in reported skills use when comparing AHSS and STEM graduates. However, AHSS graduates were slightly less likely than STEM graduates to use numerical analysis, critical evaluation and team working skills, but were comparatively more likely to use entrepreneurial skills, and to use presentation and research skills 'a lot'.

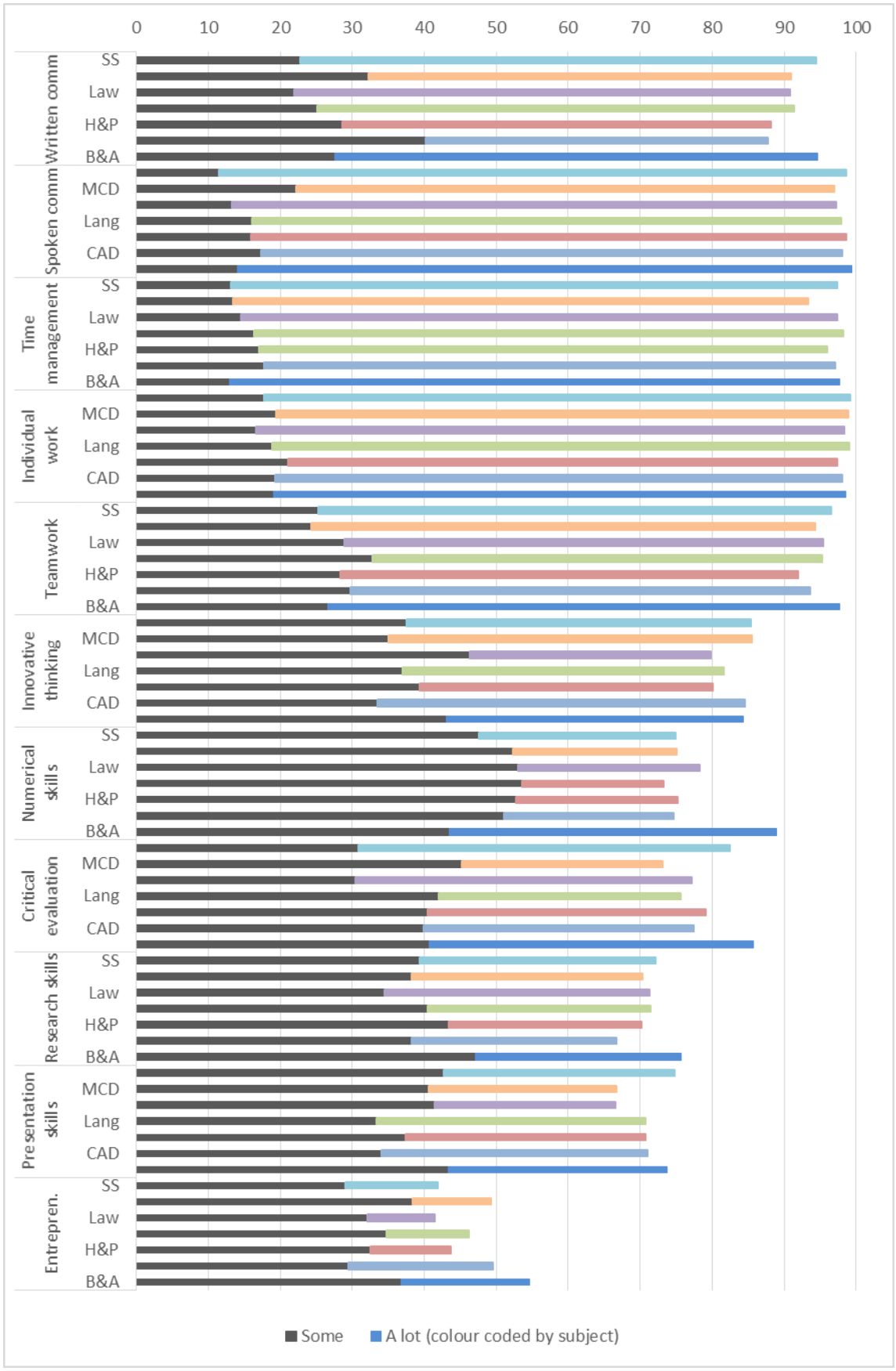
Skills use was broadly similar among AHSS graduates from different subject areas (Figure 3). As with AHSS more widely, the most commonly used skills tended to be: spoken communication, time management, independent working, team working and written communication. Critical evaluation skills were relatively more frequently used by graduates of Social Studies, Business and Administration and Law, while innovative thinking was more often used by graduates of Creative Arts and Design, Mass Communications and Documentation, Social Studies and Languages. Entrepreneurial skills were the least commonly used among AHSS graduates. However, these skills were more important for graduates of Business and Administration, Creative Arts and Design, and Mass Communications and Documentation.

Figure 2: To what extent are you required to use the skills and capabilities listed below in your current job? By broad subject area (%)



Base: AHSS and STEM graduates in employment
Source: Futuretrack wave 4 survey

Figure 3: Skills use in current job, by individual AHSS subjects (%)

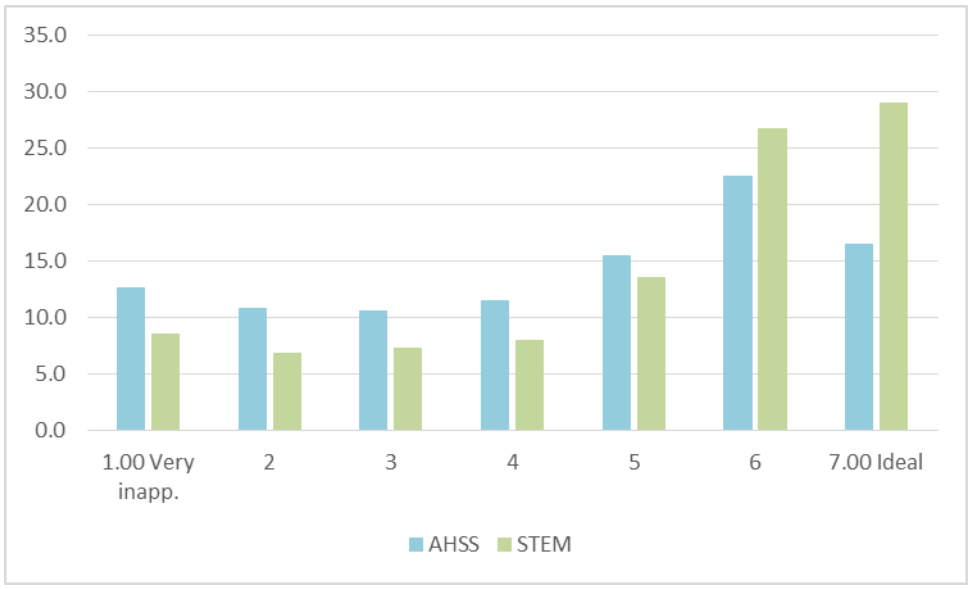


Base: AHSS graduates in employment Source: Futuretrack wave 4 survey

4.5.2 Do graduates feel their job is suitable for their level of qualification?

At one to two years after graduation, the majority of AHSS graduates in the Futuretrack survey felt that their current main job was suitable for their level of qualification (55 per cent rated their job suitability above the mid-point of 4 on a scale of 1-7). However, they were less likely to do so than STEM graduates, 69 per cent of whom rated their job suitability positively, and were much less likely than STEM graduates to rate their current job as 'ideal' for their qualification level (17 per cent, compared to 29 per cent; Figure 4 and Appendix III, Table A32a).

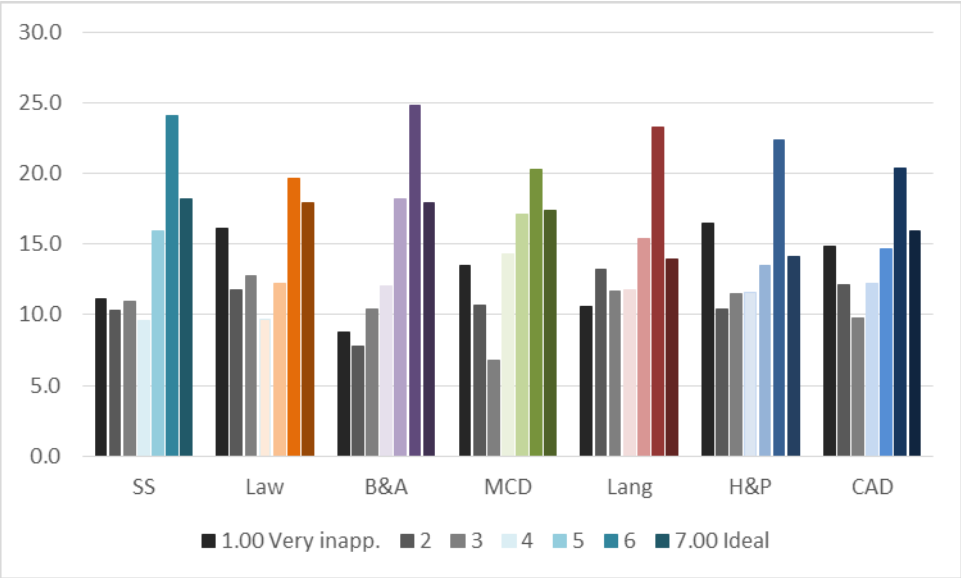
Figure 4: Extent current job is appropriate for skill level (scale of 1-7, %), AHSS vs STEM graduates



Base: AHSS and STEM graduates in employment
Source: Futuretrack wave 4 survey

When comparing AHSS subjects, those most likely to rate the suitability of their job for their qualification level positively were graduates of Social Sciences, Business and Administration, and Languages and related subjects (Figure 5 and Tables A32a and A32b). Graduates from Law, Mass Communications and Documentation, Historical and Philosophical Studies, and Creative Arts and Design were more split on their assessment of the suitability of their main job, either rating it as appropriate or very inappropriate.

Figure 5: Extent current job is appropriate for skill level (scale of 1-7, %), AHSS subjects



Base: AHSS graduates in employment
Source: Futuretrack wave 4 survey

4.5.3 Qualitative data analysis on tasks and skills used in current job

Participants in the online focus groups were also asked a series of questions about the kinds of tasks involved in their current jobs and reported a variety of tasks:

- '*Managing small team to direct all press office activity - journalist liaison, events, budgeting, marketing, launches, digital and social media' (Social Sciences);*
- *'I manage employee relations cases, succession planning, tribunal cases and organisational development projects. On a typical day I'm also on the road visiting managers I work with to align their HR activities to Group standards. A big part of my role is also talent management, producing tender responses and ad-hoc project work (Applied Social Sciences);*
- *'I cast productions, arrange venues, act as a producer and marketer, arrange for funding and keep the company books, go to meetings and arrange promos, direct shows, commission new writing and lead workshops, as well as devising and acting' (Drama and Performance);*
- *'Work with in the banking sector, involves looking over bank financial activity, analysing market trends' (Sociology);*
- *'Drafting documents such as letters, leases, witness statements, court applications and statutory notices. Liaising with clients, solicitors, tribunals and the Land Registry. Raising invoices, checking files are compliant with firm and SRA practices' (Law).*

A series of questions then focused on the kinds of skills which were required in participants' jobs, starting with an online poll (Table 8).

Table 8: The kinds of skills used in current job (tick all that apply), UG/PGT focus group participants

	UG/PGTs number	UG/PGTs %
Written communication	**13**	**100%**
Spoken communication	**13**	**100%**
Numerical analysis	9	69%
Critical evaluation	11	85%
Creativity/innovation	8	62%
Research skills	11	85%
Presentation skills	**12**	**92%**
Entrepreneurial skills	7	54%
Teamwork	10	77%
Independent working	11	85%
Time management	**12**	**92%**
Technical skills specific to your job or industry	9	69%
Other	0	0
TOTAL	13	100%

Source: IER AHSS graduate focus groups (UG/PGT).

Written and spoken communication were clearly skills which were required by all employers of UG/PGT participants. Presentation skills and time management were also very important. Entrepreneurial skills were those least likely to be required, followed by 'creativity/innovation'. These results tally with the quantitative data findings, as well as the literature review, which also showed the importance of written and spoken communication and time management skills.

4.6 The top up-qualifications undertaken by AHSS graduates

The DLHE and LDLHE report on any engagement in further study undertaken by participants. Table 9 shows the proportions of graduates continuing in further education or training, by degree subject, at both 6 months and 3.5 years.

Table 9: Engagement in further study, by subject area and broad subject groupings (%)

Subject area	Further study at 6 months, %	Total, N	Further study at 3.5 years, %	Total, N	Further study since graduation, %	Total, N
- Social Studies	19.4	33,390	12.5	7,500	41.1	6,220
- Law	**33.5**	14,115	10.2	3,215	57.3	2,745
- Business and Administration	11.7	41,690	7.2	9,140	34.1	7,990
- Mass Communications and Documentation	8.1	8,870	6.7	2,310	25.8	1,990
- Languages and related	25.7	18,915	15.8	4,270	51.4	3,320

Subject area	Further study at 6 months, %	Total, N	Further study at 3.5 years, %	Total, N	Further study since graduation, %	Total, N
- Historical and Philosophical Studies	28.5	14,570	19.3	3,830	49.5	2,820
- Creative Arts and Design	11.6	30,825	8.3	6,720	29.5	5,465
AHSS	**18.0**	**162,375**	**11.0**	**36,975**	**39.5**	**30,555**
STEM	**18.0**	**145,060**	**15.4**	**24,675**	**38.6**	**19,775**
Education/other	**9.3**	**43,850**	**5.7**	**9,990**	**27.0**	**8,970**
All subjects	**16.9**	**351,280**	**11.8**	**71,640**	**37.3**	**59,300**

Base: All graduates of working age on graduation.
Source(s): HESA DLHE Record 2014/15;HESA DLHE Long Record 2010/11

AHSS and STEM graduates were broadly similar in terms of the proportion of graduates undertaking further study at 6 months (both on 18 per cent), whereas STEM graduates were slightly more likely to be studying at 3.5 years (15 per cent), when compared with AHSS graduates (11 per cent) and other graduates (6 per cent). A high proportion of all AHSS graduates had done some form of further study after graduating, with the highest proportion being in Law (57 per cent) and Languages (51 per cent). Law graduates were also the most likely to be undertaking further study at 6 months (33.5 per cent), which supports the literature review findings (see e.g. HECSU 2013, which found that Law graduates were much more likely than other graduates to be undertaking further study and professional qualifications). The lowest proportions of graduates undertaking any form of further study after graduating were in Mass Communications and Documentation (26 per cent) and Creative Arts and Design (29.5 per cent).

Perhaps unsurprisingly, most graduates undertaking further study were continuing to study in their original degree subject, although there were distinct differences by degree subject. For example, 87 per cent of Law graduates doing further study at 6 months were still studying Law, compared with 56 per cent of Creative Arts and Design graduates and 44 per cent of Social Studies graduates continuing in their chosen undergraduate field. A high proportion of those graduates moving into a different field were pursuing Education in further study, perhaps reflecting the high number going into teaching careers; this was especially the case for Languages (25 per cent) and Creative Arts and Design (21 per cent). This supports the literature, which highlighted the high number of Creative graduates going into teaching, often as a means to pursue their own artistic endeavours while simultaneously earning a regular income. At 3.5 years, relatively high proportions of graduates were also moving into Business and Administration (19 per cent of all AHSS graduates). For more detail, see Appendix III, Tables A34 to A36).

4.7 How do employers perceive AHSS graduates and their skills?

4.7.1 Interviews with employers on recruitment and AHSS graduate skills:

Because of the lack of direct evidence available from quantitative data sources, the interviews with employers undertaken as part of this study allowed us to probe on whether or not

employers felt that graduates had the skills that they required. When asked initially about what they looked for when recruiting graduates, two Advertising and Digital Consulting employers told us that they had graduate recruitment programmes, and they had a broader approach to the skills required, tending to focus more on the person and their softer skills than on the qualification and the degree subject. For example, one told us that within the new group of 6 graduates on their graduate programme, one came from Philosophy, one from Arts and one from Business (she couldn't remember the others): she described their intake as '*quite mixed'. 'General types'* of degrees (e.g. English, History, Marketing and Economics) were considered good. The roles they were hired to do '*do not require a particular degree, it's more of a personality thing'*. Another told us that they did not consider particular qualifications and in fact, there was less of a focus in the current year on a First or Upper Second class degree as they '*might miss more diverse candidates or miss good people that way'*. On the other hand, they did require their recruits to be '*bright and capable'; 'sometimes there is a correlation between someone's degree and how they perform in the role*' but one employer stressed that this was not always the case.

Some employers, however, looked for very particular qualifications and degree subjects when recruiting: for example, a games development SME tended to use particular institutions or courses as a means to recruit people. As a result, recruits nearly always had a degree, unless they applied directly with very good experience or a good portfolio. The employer also used grades as a filter. For example, for Computer Science and Computer Programming they tended to look at particular universities or colleges which are considered the best for these subject areas (these are established and have high entry standards). For 'Games design', it was slightly harder to identify good courses as this is a new and emerging subject. For Animation graduates, there are fairly established film schools and animation schools. Artists may come from a range of backgrounds, such as fine art, game art, to people with CAD skills. Graphic design or interface designers will tend to be people with previous experience rather than graduates straight from university, however.

A fashion design organisation told us that applicants came from all over, with many from outside the UK: '*inundated with applications'*. There are currently people in the Design department without a fashion degree (e.g. one female graduate with a degree in Egyptology) but this was rare. When asked about hiring postgraduates, she said that anyone with '*talent and passion'* would be considered but a postgraduate research degree was not a requirement for the job. In fact, the only employer who considered a postgraduate research degree to be an asset was the research organisation (an MSc or higher qualification was not required for some jobs, but would be an 'advantage'; economists employed within the organisation did require an MSc or higher, however. There was no requirement for a PhD but around 7 staff had a doctorate).

4.7.2 Employer views on skills required

Employers of all types tended to look for a high level of self-confidence, independent thinking and intuition, as well as communication skills and general 'sociability' skills in many cases (i.e. how they fit in to the organisation). Others had more job-specific requirements, especially those in smaller organisations. Examples included:

- Self-learning (i.e. motivated to improve and develop themselves), energy, sociability and friendliness (Games Design);

- Enthusiasm for the school's values, ethos and vision; thinking on their feet, strong interpersonal skills, can relate well to children, conflict resolution, team-working skills, resilience, ability to respond to problems. They look for the same 6 qualities in their staff as they are trying to instil in children through their teaching ethos: resilience, resourcefulness, reflectiveness, curiosity, creativity, collaborative (Education, Primary School);
- Competent researchers ('*practical research methods with a wide range of techniques'*); experience in quantitative methods desirable, plus an understanding of social policy and substantive issues. For economists, numeracy and an understanding of statistical work packages; experience in the work environment (Professional Services, research organisation);
- '*Passion and creativity; potential to be a great designer…also on the softer side, they have to be phenomenally resilient…it can be a brutal environment*'. In the creative industry, '*people thrive on being stretched but there is a tipping point*'. They need to be able to '*push back'*, and this needs self-confidence, '*to be constructively assertive'*. Strong interpersonal skills, managing different stakeholders, dealing with ambiguity, a need for emotional intelligence (Fashion Design);
- Initiative, collaboration, presentation skills, ability to listen to other opinions (Professional Services, Digital Consulting);
- Drive and resilience, intelligence (not necessarily academic), '*a general level of savvy-ness and street smart; very strong communication skills'*…a level of expertise but not necessarily experience – '*we can train people in the technicalities of the role'* (Professional Activities, Advertising).

These findings support much of the literature highlighting the importance of softer skills, both now and in the future.

4.7.3 Employer views on the need for modernisation of skills

The data presented here is based on employers' assessments of recent graduates more generally, rather than on AHSS graduates in particular. In most cases, this was because participants placed less importance upon degree subject and were often unaware of the degree subjects of their graduates.

All employers pointed to particular skills which may be lacking in recent graduates. However, there was a general feeling that some of these skills deficiencies were expected and that employers needed to take the time to invest in their new recruits. Universities were not necessarily to blame for a lack of these skills. Even smaller organisations were well aware of this and were prepared to invest in such skills.

For example, a games development organisation reported that they were in a fast-moving industry where the packages and software tools that they use change all the time (sometimes overnight) and that this was unrelated to a lack of skills taught at university. They need people to be understanding and have the motivation to be able to adapt to these changes.

A Fashion design employer also reported that the world of work is changing very rapidly, e.g. in the Digital and Artificial Intelligence environment. Graduates are '*digital natives'* now and this may not need to be taught at university.

However, many also reported that the ability to communicate has changed. The Fashion Design representative asked: '*is this just evolving or does it need to be addressed in education*?' For example, the ability to write, the use of technology, sending emails, etc. can be a real barrier to good connection and communication. In a business context, she had seen lots of problems with poor communication skills – '*do we need to look at this if it isn't effective*? *If an undergraduate curriculum could help those skills, it would be brilliant'*.

Similarly, an advertising agency reported that communication and writing skills are sometimes lacking (communications in email, presenting, on the phone, which are all important). She reflected that it is mostly '*quieter*' communication now (less talk, less phone conversation and more written communication) which may be client-driven. Also, '*initiative and the ability to think creatively*' are important but can be hard for universities to teach, apart from ensuring some self-direction is built into assignments.

A Primary School Head focused more on applying for jobs: he said that he had tried to get the (local) university to incorporate training on filling in job applications but noted that students still do not seem to do this. He felt that universities should include a whole section focused on preparing graduates for employment (e.g. making sure they ask to go on a tour of the prospective school, what questions to ask when they get there, etc. – i.e. '*how to look keen*').

A Digital Consulting organisation reported that many graduates do not have '*simple skills*' such as knowing how to use an online calendar and how to set up meetings, '*how to act in an office'*. Soft skills and emotional intelligence are key. Of their current graduates, '*100% need developing*'. They need to be placed with the right manager or on the right client account to help them succeed (often managers do not understand the '*lack of work-readiness'* of the graduates, however).

A research organisation told us that being able to come in and prioritise their own work was important in their new recruits, rather than needing a lot of guidance (line managers know that they need guidance but '*having initiative, juggling work'* can be a struggle for some at entry level).

Almost all employers were confident that their recent graduates could learn these skills. Very few commented on any differences between skills according to the degree subject (e.g. STEM versus AHSS) and felt that skills differences were often down to individual personality differences.

In spite of the diversity between the subjects of graduates employed within these organisations, some of the qualitative findings reflect those from the literature review, whereas others pointed to a greater focus on strong communication skills both now and in the future. For example, the literature suggested a need for strong social and interpersonal skills, as well as creative and softer skills, borne out by the interviews with employers, but the interviews also suggested a lack of good communication skills in recent graduates, even among those who have been selected after rigorous recruitment processes.

4.7.4 Employer views on the wider benefits of (AHSS) graduates

When asked 'Is there anything which you think (AHSS) graduates bring to the workplace, above and beyond so-called employability skills?' participants were generally very positive, although many focused on graduates in general, rather than AHSS graduates in particular. Examples included:

- '*Young people bring digital skills which is very powerful' ('reverse mentoring', i.e. teaching older people some of their skills);*
- *Youth, vitality, different energy, different perspectives;*
- *'A huge amount of enthusiasm', as well as passion, energy and a desire to learn which 'can be energizing. That's why we hire them, not because of what degree they've done'.*

A games development employer reflected on the benefits of having a mixed-discipline team: '*Different ways of thinking. I think that's the interesting thing that different disciplines bring in general. People are taught to think in different ways on these courses and that adds to the group intelligence of the company. If you only have computer science graduates then they will tend to be trained to think in certain ways and you will miss a whole range of emotional and learned responses to problems. An artist may solve the same problem as a computer scientist but in a different way, and in interdisciplinary teams you need those different, varying perspectives.*'

The interviewee also noted that they may have different priorities, which can either be viewed as conflict or a useful energy that can be channelled to drive solutions. This can provide a challenge that can be channelled - the loop of technology and art: '*Art challenges technology and technology inspires art'*. When there is a conflict, it creates a tension that drives innovation. When there is conflict it is important that no one side 'wins'.

These latter findings reflect the literature review on future skills requirements, which highlighted the need for more adaptable and balanced individuals, with a range of skills, rather than a very narrow skill set. Flexible and adaptable graduates, many of whom have AHSS degrees, appear to be highly valued by employers, even when their degree is unrelated to the business.

4.7.5 Quantitative data analysis

Although the quantitative data cannot tell us directly how employers perceive AHSS graduates in terms of their skills and employability, it can provide an idea indirectly. For example, DLHE and LDLHE data asks graduates whether their qualification was a requirement for their main job at 6 months and at 3.5 years (for more detail, see Appendix III, Tables A37 and A38).

Futuretrack respondents were also asked whether different aspects of their course (subject, HEI, skills developed) had helped them secure employment and whether they feel they have the skills employers are looking for. More than half of AHSS graduates (55 per cent) agreed or agreed strongly[6] that they had the skills employers are looking for "when recruiting for the kind of jobs I want". In terms of the different aspects of their undergraduate qualification that had made them more employable, the skills developed on their course were most likely to have been seen as a help, though slightly fewer than half of AHSS graduates (48 per cent) agreed or agreed strongly with this statement. Considerably fewer (38 per cent) thought that the subject studied had been an advantage in finding work and even fewer (31 per cent) thought their institution had been an advantage.

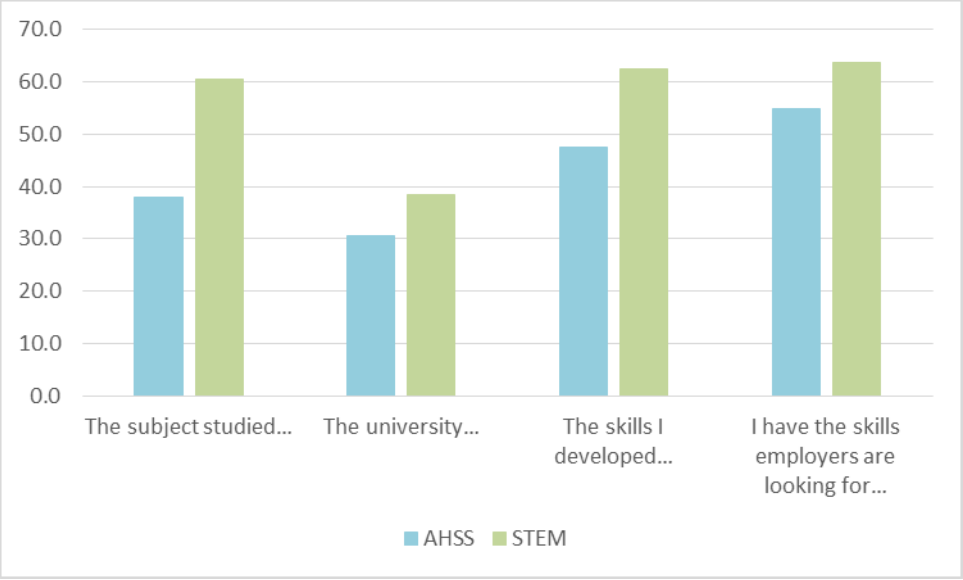
AHSS graduates were less positive in their assessments of their employability than STEM graduates, nearly two-thirds (64 per cent) of whom felt that they had the skills employers were

[6] By ticking 1 or 2 on a scale of 1-7 where 1= 'agree strongly'.

looking for (Figure 6 and Appendix III, Table A41). STEM graduates were also much more likely than AHSS graduates to agree that the skills from their undergraduate course had been an advantage (63 per cent) and that the subject studied had been an advantage (61 per cent), but only marginally more likely than AHSS graduates to say that their university had made them more employable (38 compared to 31 per cent).

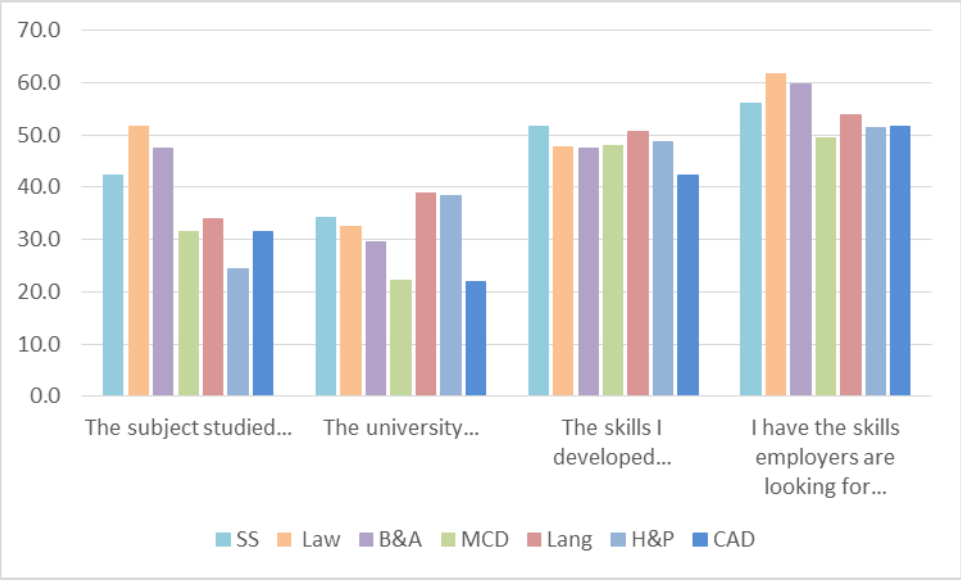
Graduates' assessments of whether they had the skills that employers are looking for were broadly similar across different AHSS subjects, although those who studied Law (62 per cent), Business and Administration (62 per cent) or Social Studies (56 per cent) were slightly more likely to agree with the statement than were graduates from other subjects (Figure 7 and Appendix III, Table A42). Similarly, the extent to which graduates agreed that the skills developed on their course were an advantage in finding work did not differ substantially across AHSS subjects, although Creative Arts and Design graduates were slightly less likely to see their skills as an advantage (42 per cent). Conversely, there was some variation between subject areas as to the extent to which they saw the subject studied or the institution attended as an advantage in finding work. For example, while the subject studied was relatively more likely to be seen as an advantage by graduates of Law (52 per cent), Business and Administration (47 per cent) and Social Studies (42 per cent), it was relatively less likely to be seen as an advantage among graduates of Historical and Philosophical studies (24 per cent). Similarly, the institution attended was more likely to be seen as an advantage by Language (39 per cent) and Historical and Philosophical studies (38 per cent) graduates, and relatively less likely to be seen as an advantage by Creative (22 per cent) and Mass Communications and Documentation (22 per cent) graduates.

Figure 6: Whether graduates feel they have the skills employers are looking for, and whether different aspects of their qualification have made them more employable (AHSS Vs STEM, agree 1-2 out of 7 where 1='Agree strongly')



Base: AHSS and STEM graduates in employment
Source: Futuretrack wave 4 survey

Figure 7: Whether graduates feel they have the skills employers are looking for, and whether different aspects of their qualification have made them more employable (AHSS subjects, agree 1-2 out of 7 where 1='Agree strongly')



Base: AHSS graduates in employment
Source: Futuretrack wave 4 survey

4.8 How do AHSS graduates perceive their own skills, including skills gaps?

4.8.1 Quantitative data analysis on graduates' assessment of their own skills

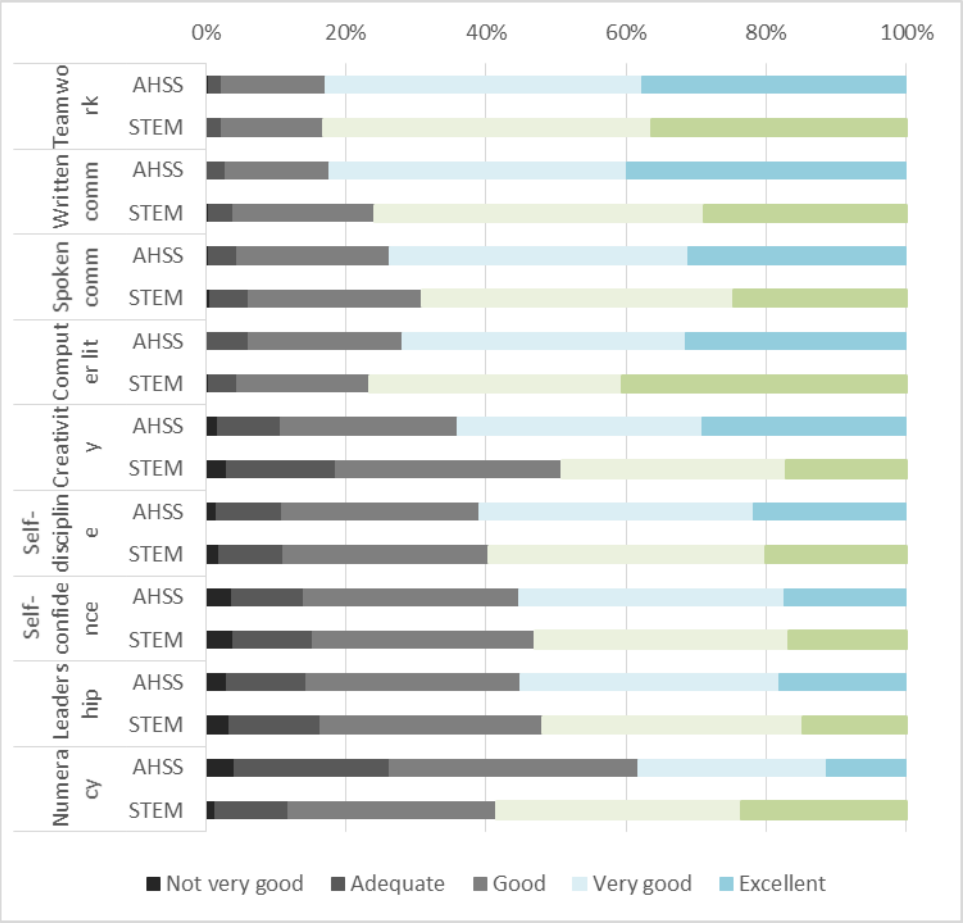
Futuretrack respondents were asked to rate their skills on a scale of one to five with one 'not very good' to five 'excellent'. On nearly all of the areas listed the majority of AHSS graduates rated their skills as at least 'very good' (Figures 8 and 9, Appendix III, Tables A47 and A48). The only area where fewer than half rated their skills level as at least very good was in numeracy skills (only 38 per cent did so, compared with 59 per cent of STEM graduates). The skills most likely to be rated highly were: written communication, team working and spoken communication. When compared to STEM graduates, AHSS graduates were relatively more likely to rate highly their written communication, spoken communication and creativity skills, but relatively less likely than STEM graduates to rate their computer literacy and numeracy skills highly. These findings support much of the literature on skills development among AHSS graduates, in comparison with other graduates.

When comparing graduates from different AHSS subjects, their assessments of their skills levels were broadly similar, although graduates from some subject areas had particular strengths, relative to graduates from other subject areas, which reflects the broad range of skills and competencies of graduates included within AHSS. For example:

- Written communication skills tended to be rated more highly among Language, Law and Historical and Philosophical studies graduates;
- Spoken communication skills were rated more highly by graduates of Law and Languages;
- Numerical skills were rated more highly by Business and Administration graduates;

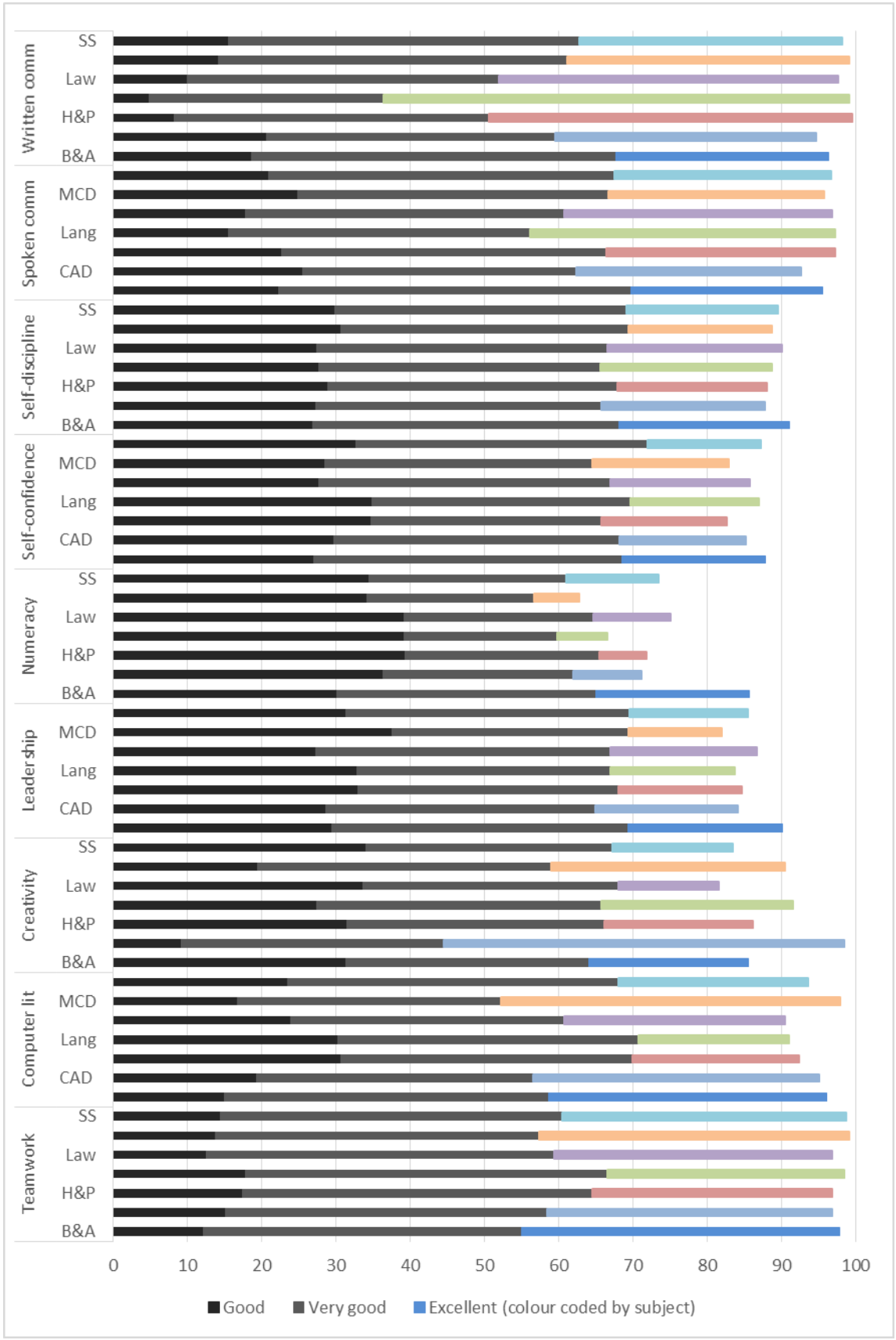
- Computer literacy skills were rated more highly among Business and Administration, Mass Communications and Documentation, and Creative Arts and Design graduates;
- Leadership skills were rated more highly among Law and Business and Administration graduates;
- Creativity skills were rated more highly among Creative Arts and Design graduates.

Figure 8: In terms of your own views about your strengths and weaknesses now, how do you rate yourself in the following areas? (AHSS Vs STEM graduates, %)



Base: AHSS and STEM graduates in employment
Source: Futuretrack wave 4 survey

Figure 9: In terms of your own views about your strengths and weaknesses now, how do you rate yourself in the following areas? (Individual AHSS subjects, %)



Base: AHSS graduates in employment Source: Futuretrack wave 4 survey

4.8.2 Quantitative analysis on how well an AHSS degree prepared graduates for life outside university

The DLHE asked graduates how well their courses prepared them for business, study and work (Appendix III, Tables A43 and A44). There were some interesting differences between AHSS, STEM and Education/Combined graduates. For example, 6 months after graduating, AHSS graduates were more likely than other graduates to say that their course prepared them well (36 per cent) or very well (18 per cent) for business, whereas they were less likely than other graduates to say that their course prepared them very well for work (27 per cent). Social Studies and Historical and Philosophical Studies graduates were more likely than other AHSS graduates to think that their degree did not prepare them well for business at all (32 per cent and 31 per cent, respectively), whereas Language and Historical and Philosophical Studies graduates were more likely to think it prepared them very well for study (48 per cent and 51 per cent, respectively). Business and Administration graduates were more likely than other AHSS graduates to think that their degree prepared them well or very well for work (51 per cent and 31.5 per cent, respectively).

LDLHE data also allowed for an analysis of the extent to which higher education allowed graduates to do various things at work to a great extent (Appendix III, Tables A45 and A46; Table 10). After 3.5 years, AHSS graduates were less likely than STEM graduates to say that their HE experience enabled them to:

- Progress their career aspirations (24 per cent vs 32 per cent STEM);
- Make good decisions in the workplace (27 per cent vs 33 per cent STEM);
- Work effectively with numbers (17.5 per cent vs 35 per cent STEM);
- Use the skills gained during their HE experience (30.5 per cent vs 41 per cent STEM).

On the other hand, they were slightly more likely than other graduates to say that their higher education experience had enabled them to communicate effectively in their work and as likely as other graduates to say that it had enabled them to take initiative and personal responsibility in their work to a great extent.

Analysis by subject area showed that Creative Arts and Design graduates were more likely than other AHSS graduates to say that their HE experience allowed them to be innovative in the workplace (31 per cent), work effectively with others (45 per cent) and take initiative and personal responsibility in their work (47 per cent). Law and Social Studies graduates were more likely than other AHSS graduates to say that their HE experience allowed them to solve problems in their work (30 per cent) and Language graduates were more likely to say they could communicate more effectively at work as a result of their HE experience (53 per cent; Table A46).

Table 10: To what extent did your HE experience enable you to… at work? (%, broad subject groupings), 3.5 years after graduating

Extent higher education experience prepared you for/enabled you to…		AHSS	STEM	Ed/ Combined	All subjects
Progress your career aspirations?	Very well	**24.2**	32.1	43.0	29.7
	Quite well	49.2	49.0	44.2	48.4
		30,170	19,600	8,905	58,675
Be innovative in the workplace?	A great extent	22.3	24.9	32.9	24.8
	Some extent	60.9	61.8	58.2	60.8
		29,545	19,270	8,800	57,620
Solve problems in your work?	A great extent	27.0	35.5	28.0	30.0
	Some extent	58.5	55.2	60.2	57.6
		29,860	19,510	8,795	58,165
Communicate effectively in your work?	A great extent	41.1	40.1	38.4	40.4
	Some extent	49.2	49.1	53.0	49.7
		30,100	19,510	8,845	58,460
Make good decisions in your workplace?	A great extent	**27.1**	33.2	33.8	30.1
	Some extent	58.4	56.6	56.7	57.5
		29,720	19,395	8,800	57,920
Work effectively with others?	A great extent	**38.3**	42.2	41.0	40.0
	Some extent	48.9	47.9	49.1	48.6
		29,875	19,485	8,805	58,165
Take initiative and personal responsibility in your work?	A great extent	42.5	43.3	42.1	42.7
	Some extent	46.3	47.3	48.5	47.0
		30,025	19,490	8,835	58,350
Make effective use of information and communication technology in your work?	A great extent	32.3	**40.9**	31.4	35.1
	Some extent	48.5	47.4	53.3	48.9
		29,450	19,355	8,735	57,535
Work effectively with numbers?	A great extent	**17.5**	35.2	21.7	24.2
	Some extent	35.4	45.0	47.5	40.5
		27,765	18,905	8,410	55,080
Use the skills you gained during your higher education experience?	A great extent	**30.5**	41.3	58.9	38.5
	Some extent	54.0	48.4	34.8	49.1
		27,890	18,615	8,480	54,980

Base: Working age graduates in employment (no study)

4.8.3 Qualitative data analysis on how the AHSS degree helped in skills development

Focus group participants were also asked how their degree prepared them for their current job. Responses varied, with many thinking that the degree provided some relevant skills but that other, more applied skills, were learned while on the job:

- *'It prepared me to a certain level. The rest you can't really learn unless you are faced with it - e.g. client work, cold calling/emailing. What uni taught me was how to research and get things done' (Business Studies);*
- *'I think my degree gave me key communication, problem solving and people skills, however it did not prepare me for the technical aspects of my role, e.g. labour law, etc'. (Applied Social Sciences);*
- *'It was of use in as much as it gave me a basic knowledge of the law, but not in terms of learning how to apply it practically and specific processes that are to be followed. Also, it didn't teach me the communication skills or compliance knowledge my job requires' (Law);*
- *'Not directly relevant but critical thinking, time management, presentation skills, team working and communication skills' (Social Sciences);*
- *'Responsibility for myself - self management. Global acumen. Specific analytical skills. General ability in written and verbal communication including presentation' (Economics);*
- *'Relatively well - taught me much about time management and critical thinking. Learning lots in a short amount of time really transferred well to picking up necessary skills for the job' (Classics).*

In one focus group, participants were specifically asked whether on-the-job training was more important than what was learned at university. One participant told us:

'A blend of both is key, I believe. A lot of what I do is process driven, however I wouldn't be able to effectively map out processes and coordinate cases if I didn't have the problem solving skills from my degree. Likewise, without strong communication skills gained from university I wouldn't be able to write complex letters or have difficult conversations which require a high level of emotional intelligence' (Applied Social Sciences).

Others were more negative:

'Throwing yourself into deep water is more important, it feels more real. Unless universities have 60% simulated business-related activities (when studying business studies), only reading theory can't prepare you' (Business Studies).

When asked what sorts of skills their university course helped them develop, participants demonstrated the wide range of skills being applied to an equally wide variety of jobs undertaken by AHSS graduates:

- '*Definitely my research skills, analytical skills and self-evaluation skills. It also taught me about funding methods, how a theatre company works, how to do practical things like design sets and rig lights, stage manage and build props, as well as act and work in a team' (Drama and Performance);*
- *'Concise, analytical, pragmatic, time-keeping, prioritisation skills, written communication (within documents), research skills'* (Law).

4.8.4 Focus group findings on missing skills and modernisation of skills

Participants were asked: 'Are there any skills that you need in your job that university didn't help you prepare for? Why do you think this is?' UG/PGT participants gave a variety of responses, focusing on specific aspects of their jobs:

- *'How to balance "survival jobs" while trying to build an economically sustainable business in an area that isn't traditionally seen as a business venture, or even as a proper job a lot of the time'* (Drama and Performance);

A teacher told us:

> '*How to get children to focus on something which they may not enjoy, but is a requirement under national law. How to deal with child safeguarding issues and how to deal with poor behaviour. Apart from parenting, these aren't skills usually required in workplaces'* (Criminal Law).

Participants were also asked what general skills they felt they needed to develop after leaving university and the following represents a broad range of responses, not specifically differentiated by discipline or by current job:

- *'I needed to develop interpersonal skills and things like project management. I could probably do with some sort of crash course on assertiveness or saying 'no' if such a course exists';*
- *'I suppose something could be independence. I realise now that there can be too much reliance on Uni services from the Student's Union, etc., and students can then sometimes struggle to find those services elsewhere';*
- *'I think the whole area of man management skills, the art of negotiation, dealing with crisis, human psychology -how to manage the narcissist and psychotic boss!'*

Very few participants reported that they had either been rejected for a job because of a lack of skills or that they had been asked to undertake specific training whilst in the workplace because they were not competent in particular areas (in some cases, training courses were a pre-requisite for progression and so were not due to a lack of individual skills). One participant told us:

'*No, have been rejected based on experience rather than skills*'.

Similarly, when asked if they lacked certain skills in their job, participants tended to say that they lacked experience, rather than skills:

'*Not necessarily the skills, I feel like I lack experience that many of my co-workers have'*;
'General communication skills, but that comes with experience really'.

Some were positive about their own skills but acknowledged that they needed more time to develop:

'I think I have all the necessary skills to succeed, but always looking to improve and learn more to bring in new ways of thinking and working'.

4.8.5 The role of university in skills development and preparation for the workplace

Participants were asked what should be the role of university in terms of educating people and/or preparing them for the workplace. UG/PGT participants veered between thinking that university should prepare graduates for the world of work, as opposed to the development of independent learning and other skills. Many argued that both aspects were important:

- *'I believe uni should provide an equal balance between the two, as it's quite common for graduates to have no experience of the real working world prior to graduating and come across as being only book smart. Obviously uni is about allowing students to conduct independent learning, however, there should be an aspect of guidance in regards to work-related experience to prepare them for the workplace'* (Social Sciences);
- *'I think their primary role is to educate. For me, the actual degree didn't give me a huge amount of preparation for the workplace although my uni's career office was fantastic'* (Law);
- *'To provide modules which set the basic principles of the subject's focus before providing opportunities to allow students to investigate the different branches of the subject. In preparation for the workplace, the university should have a strong careers team in order to help students see the potential applicability of their subject areas in the world of work'* (Criminal Law).

4.8.6 Personal development

Focus group participants were finally asked about their how their degree course had helped in their personal development, starting with an online poll.

Table 11: What do you think you have gained from studying your degree course in terms of your personal development?

	UG/PGTs number	UG/PGTs %
Self-confidence	10	71%
Autonomy	11	79%
Independent thinking	**13**	**93%**
Well-being	8	57%
Seeing things from a broader perspective	12	86%
Meeting people and hearing views that you may not have come across otherwise	11	79%
Finding your way in the world	7	50%
Preparedness for the next steps	7	50%
Other	0	0
TOTAL	14	100%

Source: IER AHSS graduate focus groups (UG/PGT).

For UG/PGT participants, the most popular responses were independent thinking (93%) and seeing things from a broader perspective (86%). The least popular responses were finding your way in the world and preparedness for the next steps (both 50%). Wellbeing was also a relatively unpopular response (57%).

5 Postgraduate research degree holders in Arts, Humanities and Social Sciences

5.1 Introduction

The following section reports on a separate analysis of DLHE and LDLHE data focusing specifically on postgraduate research students (PGRs) in AHSS subjects, i.e. those who completed a PhD. A combination of quantitative and qualitative methodology was again employed (for details of the methodology and samples included, see Section 3 and Appendix IV, Tables B1 and B2).

5.2 In which sectors do AHSS PGRs work?

At 6 months, 64.5 per cent of AHSS PGRs were in full-time work, compared with 81 per cent of STEM and 76 per cent of Education/Combined PGRs. Following a similar pattern to the UG/PGTs, AHSS PGRs were also less likely to be on permanent contracts (43.5 per cent), compared with STEM (48 per cent) and Education/Combined PGRs (70 per cent), and were more likely to be self-employed or freelance (8.5 per cent) than STEM (2.5 per cent) or Education/Combined (5 per cent). Although only a small proportion of all PGRs, more AHSS PGRs were temping (2 per cent) and working on a zero hours contract (2 per cent) than other PGRs (Appendix IV, Table B5).

Comparisons were then made between AHSS degree subjects at 6 months after graduating (Table 12).

Table 12: Type of contract at 6 months after graduation, AHSS subject areas (%)

	SS	Law	B&A	MCD	Lang	H&P	CAD
Self-employed/freelance	4.1	7.0	8.5	4.9	7.4	8.5	**23.5**
Starting up own business	0.4	0.9	2.6	1.5	0.2	0.7	0.4
On a permanent or open-ended contract	41.7	52.4	66.5	55.8	**34.4**	**34.8**	45.3
On a fixed-term contract lasting 12 months or longer	37.0	22.0	15.1	21.4	30.1	33.1	14.3
On a fixed-term contract lasting less than 12 months	12.9	11.5	4.0	12.1	17.2	14.3	11.1
Voluntary work	0.3	0.9	0.0	0.0	0.2	1.3	0.2
On an internship/placement	0.0	1.8	0.0	0.0	0.0	0.5	0.0
Developing a professional portfolio/creative practice	0.3	0.0	0.7	0.0	0.9	0.2	0.9
Temping (including supply teaching)	1.1	1.8	1.1	2.6	**4.0**	2.1	1.8
Other	1.3	1.8	1.5	1.5	2.8	2.4	1.3
On a zero hours contract	0.9	0.0	0.0	0.0	**2.7**	**2.2**	1.3
Total	100	100	100	100	100	100	100
Total, N	600	115	275	65	425	425	235

Base: Working age PGRs in work without study.

Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.

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Creative Arts and Design (CAD) graduates were much more likely to be self-employed (23.5 per cent) than other graduates, and interestingly, Mass Communications and Documentation (MCD) PGRs were less likely to be self-employed (5 per cent), unlike the UG/PGT graduates. Both Language and Historical and Philosophical Studies PGRs were less likely to be on a permanent contract (just over a third of each group) and were also more likely to be working on a zero hours contract than other AHSS PGRs. Language PGRs were also more likely to be temping (although this includes supply teaching, an occupational sector in which many Language graduates work).

After 3.5 years, AHSS PGRs were settling into more permanent careers, similar to other graduates, although they were still less likely to be on permanent contracts and more likely to be self-employed than other graduates (Appendix IV, Table B9). For example:

- 59 per cent of AHSS PGRs were now on permanent contracts, a similar proportion to STEM (62 per cent) but a lower proportion than for Education/Combined graduates (75.5 per cent);
- 8 per cent of AHSS PGRs were self-employed or freelance, more than the 2 per cent of STEM but close to the 5 per cent of Education/Combined PGRs.

Numbers were too low to make any meaningful comparisons between AHSS subject areas at 3.5 years, (for more detail, see Appendix IV, Table B10).

The analysis then focused upon the sectors in which AHSS PGRs work at 6 months and 3.5 years after graduating.

Table 13: Industry sections of main job at 6 months, broad subject groupings (%)

	AHSS	STEM	Ed/Combined	All subjects
Section A: AGRICULTURE, FORESTRY AND FISHING	0.0	0.2	0.4	0.2
Section B: MINING AND QUARRYING	0.0	0.7	0.0	0.5
Section C: MANUFACTURING	0.4	**8.3**	0.0	5.9
Section D: ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY	0.0	0.3	0.0	0.2
Section E: WATER SUPPLY; SEWERAGE, WASTE MANAGEMENT AND REMEDIATION ACTIVITIES	0.0	0.3	0.0	0.2
Section F: CONSTRUCTION	0.3	0.3	0.0	0.3
Section G: WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND MOTORCYCLES	1.0	1.0	0.0	1.0
Section H: TRANSPORTATION AND STORAGE	0.6	0.4	0.0	0.5
Section I: ACCOMMODATION AND FOOD SERVICE ACTIVITIES	0.2	0.2	0.0	0.2
Section J: INFORMATION AND COMMUNICATION	3.2	5.5	0.7	4.7
Section K: FINANCIAL AND INSURANCE ACTIVITIES	1.7	1.3	0.4	1.3
Section L: REAL ESTATE ACTIVITIES	0.2	0.1	0.7	0.1
Section M: PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES	7.9	**15.3**	4.2	12.9
Section N: ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES	1.3	0.5	0.4	0.7
Section O: PUBLIC ADMINISTRATION AND DEFENCE; COMPULSORY SOCIAL SECURITY	3.2	3.5	6.2	3.5
Section P: EDUCATION	**68.6**	**44.9**	**80.9**	52.6
Section Q: HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	3.1	15.9	3.2	12.0

	AHSS	STEM	Ed/Combined	All subjects
Section R: ARTS, ENTERTAINMENT AND RECREATION	**5.5**	0.8	1.4	2.1
Section S: OTHER SERVICE ACTIVITIES	2.0	0.5	1.8	0.9
Section T: ACTIVITIES OF HOUSEHOLDS AS EMPLOYERS; UNDIFFERENTIATED GOODS- AND SERVICES-PRODUCING ACTIVITIES OF HOUSEHO	0.0	0.0	0.0	0.0
Section U: ACTIVITIES OF EXTRATERRITORIAL ORGANISATIONS AND BODIES	0.7	0.2	0.0	0.3
Total	100	100	100	100
Total, N	2,150	5,505	285	7,940

Base: All PGRs of working age in employment (not studying)
Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.
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At 6 months, STEM PGRs were more likely than either AHSS or Education/Combined PGRs to be working in Manufacturing or Professional, Scientific and Technical sectors, whereas AHSS graduates were more likely than STEM PGRs to be working in Education (69 per cent, compared with 45 per cent of STEM); 81 per cent of Education/Combined PGRs were working in Education. A further 5.5 per cent of AHSS PGRs were working in Arts, Entertainment and Recreation, much higher proportions than for other PGRs.

At 3.5 years after graduating, figures had not changed as dramatically as for UG/PGTs (Appendix IV, Table B13). For example, whereas 7.5 per cent of AHSS PGRs were working in the Professional, Scientific and Technical sector, 18 per cent of STEM PGRs did so. Just under 70 per cent of AHSS PGRs were working in Education, compared with 43 per cent of STEM and 79 per cent of Education/Combined PGRs, reflecting the high proportion of PGRs going into higher education occupations. At 3.5 years after graduating, only 4 per cent of AHSS PGRs were now working in Arts, Entertainment and Recreation. Numbers were too low to compare across AHSS subject areas (see Appendix IV, Table B14).

5.3 What roles to AHSS PGRs fulfil?

Analysis then focused more closely upon the types of jobs that AHSS PGRs were doing, in comparison with other PGRs. At 6 months after graduating, a very high proportion of all PGRs were working in professional jobs (98 per cent in total). A slightly higher proportion of AHSS PGRs were working in non-professional jobs, however (5 per cent). AHSS PGRs were more likely than other PGRs to be 'communicators' (7 per cent) although the vast majority of all PGRs were now classified as 'experts' (between 79 per cent for AHSS and 90 per cent of STEM PGRs), using the SOC(HE)_EP classifications (Appendix IV, Table B19).

Within AHSS subjects, Law graduates were more likely to be in a non-graduate job (12 per cent), perhaps reflecting the longer time taken to qualify in Law and the need for further certification. On the other hand, 99 per cent of Law PGRs were working in 'professional' jobs. Using the SOC(HE)_EP classification, Business and Administration PGRs were much more likely to be 'strategists' (15 per cent) than other AHSS PGRs. Between 71 per cent and 87.5 per cent of all AHSS PGRs were working as 'experts'.

Table 14: Professional and Graduate jobs (SOC(HE)_EP), broad subject grouping, 6 months after graduating

	SS	Law	B&A	MCD	Lang	H&P	CAD
Professional/associate professional or managerial (1-3)	97.8	99.1	98.9	95.4	92.4	91.2	96.2
Non-professional job (4-9)	2.2	0.9	1.1	4.6	**7.6**	**8.8**	3.8
Total	100	100	100	100	100	100	100
Total, N	605	115	275	65	425	430	235
Expert	87.5	81.9	75.0	80.0	75.3	71.3	84.0
Strategist	5.2	5.3	**15.3**	8.4	2.6	3.5	2.0
Communicator	2.6	0.9	1.8	3.0	12.3	14.4	8.5
Non-graduate	4.6	11.9	7.9	8.6	9.8	10.8	5.5
Total	100	100	100	100	100	100	100
Total, N	605	115	275	65	425	430	235

Base: AHSS PGRs of working age in employment (not studying)
Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.
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However, after 3.5 years broadly similar proportions of AHSS PGRs were working in the various different kinds of graduate jobs as were grauates from STEM or Education/combined subjects. With 80 per cent now working in 'expert' roles and six per cent working as 'strategists' and 'communicators'. Numbers were too small to compare across AHSS subjects at 3.5 years (Appendix IV, Table B22).

Table 15: Professional and Graduate jobs (SOC(HE)_EP), broad subject grouping, 3.5 years after graduating

	AHSS	STEM	Ed/ Combined	All subjects
Professional/associate professional or managerial (1-3)	95.7	98.0	97.9	97.4
Non-professional job (4-9)	**4.3**	2.0	2.1	2.6
Total	100	100	100	100
Total, N	260	680	50	990
Expert	79.7	84.8	86.3	83.5
Strategist	5.9	5.6	4.1	5.6
Communicator	6.0	3.0	4.9	3.9
Non-graduate	8.3	6.6	4.7	7.0
Total	100	100	100	100
Total, N	260	680	50	990

Base: All PGRs of working age in employment (not studying)
Source(s): HESA DLHE Long Record 2010/11. Copyright Higher Education Statistics Agency Limited.
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Analysis then focused on the actual jobs undertaken by AHSS PGRs. A very high proportion (39 per cent at 6 months and 43 per cent at 3.5 years) were working as teaching professionals, either in Higher Education (the vast majority) or as other teaching or educational professionals. Authors, writers and translators, and musicians, had dropped off the top 10 list at 3.5 years. Numbers were low at 3.5 years, however.

Table 16: Ten most common occupations (sub-minor group), by AHSS subject area, 6 months after graduating

AHSS	%
(2311) HIGHER EDUCATION TEACHING PROFESSIONALS	35.0
(2119) NATURAL AND SOCIAL SCIENCE PROFESSIONALS N.E.C.	13.3
(2114) SOCIAL AND HUMANITIES SCIENTISTS	4.9
(2426) BUSINESS AND RELATED RESEARCH PROFESSIONALS	4.0
(2312) FURTHER EDUCATION TEACHING PROFESSIONALS	3.7
(2319) TEACHING AND OTHER EDUCATIONAL PROFESSIONALS N.E.C.	2.7
(3412) AUTHORS, WRITERS AND TRANSLATORS	2.1
(2314) SECONDARY EDUCATION TEACHING PROFESSIONALS	2.0
(3415) MUSICIANS	1.5
(2423) MANAGEMENT CONSULTANTS AND BUSINESS ANALYSTS	1.4
Base, N	2,150

Base: AHSS PGRs of working age in employment (not studying)
Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.
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Table 17: Ten most common occupations (sub-minor group), by AHSS subject area, 3.5 years after graduating

AHSS	%
(2311) HIGHER EDUCATION TEACHING PROFESSIONALS	40.9
(2114) SOCIAL AND HUMANITIES SCIENTISTS	8.0
(2119) NATURAL AND SOCIAL SCIENCE PROFESSIONALS N.E.C.	7.0
(2317) SENIOR PROFESSIONALS OF EDUCATIONAL ESTABLISHMENTS	4.6
(2425) ACTUARIES, ECONOMISTS AND STATISTICIANS	2.2
(2426) BUSINESS AND RELATED RESEARCH PROFESSIONALS	2.3
(2429) BUSINESS, RESEARCH AND ADMINISTRATIVE PROFESSIONALS N.E.C	2.2
(2319) TEACHING AND OTHER EDUCATIONAL PROFESSIONALS N.E.C.	1.8
(2452) ARCHIVISTS AND CURATORS	2.0
(1139) FUNCTIONAL MANAGERS AND DIRECTORS N.E.C.	1.5
Base, N	260

Base: AHSS PGRs of working age in employment (not studying)
Source(s): HESA DLHE Long Record 2010/11. Copyright Higher Education Statistics Agency Limited.
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5.4 What skills do AHSS PGRs demonstrate in their work?

5.4.1 Quantitative data analysis on the skills demonstrated by AHSS PGRs

All PGRs were assessed for the roles, responsibilities and skills used in their jobs.

Table 18: Impact of research degrees on work, broad subject grouping, 3.5 years after graduating (%)

In the job you were doing on… how often did you…?		AHSS	STEM	Ed/ Combined	All subjects
Conduct research	Most of the time, %	37.7	47.0	21.0	43.3
	Some of the time, %	34.2	19.8	38.1	24.6
	Base, N	260	630	40	930
Interpret or critically evaluate research findings	Most of the time, %	39.7	48.0	38.9	45.3
	Some of the time, %	36.5	28.2	32.5	30.7
	Base, N	260	630	40	930
Draw on the detailed knowledge on which your research degree was based	Most of the time, %	**41.7**	40.7	38.4	40.9
	Some of the time, %	26.7	28.3	35.3	28.2
	Base, N	260	630	40	930
Use your general disciplinary knowledge	Most of the time, %	**60.8**	66.1	66.8	64.7
	Some of the time, %	22.5	24.3	24.5	23.8
	Base, N	260	630	40	930
Use the research skills you developed as a research student	Most of the time, %	55.2	55.8	42.5	55.0
	Some of the time, %	27.9	28.3	40.0	28.7
	Base, N	260	630	40	930
Use the generic skills you developed as a research student	Most of the time, %	58.2	63.6	52.9	61.6
	Some of the time, %	30.8	28.3	35.0	29.3
	Base, N	260	630	40	930
Work autonomously	Most of the time, %	**70.4**	68.0	64.7	68.5
	Some of the time, %	25.8	28.4	32.2	27.9
	Base, N	260	630	40	930
Work as part of a team	Most of the time, %	**34.1**	48.2	42.6	44.0
	Some of the time, %	49.6	43.2	42.5	44.9
	Base, N	260	630	40	930
Work under close supervision	Most of the time, %	4.1	5.2	2.4	4.8
	Some of the time, %	16.8	23.0	17.2	21.0
	Base, N	260	630	40	930
Have responsibility for supervising the work of others	Most of the time, %	**23.8**	29.1	32.3	27.8
	Some of the time, %	36.9	40.2	34.0	39.0
	Base, N	260	630	40	930

Base: Working age PGRs in employment (no further study)

There were some interesting differences between AHSS and other PGRs. For example, Table 18 shows that, at 3.5 years, AHSS PGRs were:

- Most likely to draw on the detailed knowledge on which their research degree was based most of the time;
- Least likely to use their general disciplinary knowledge;
- Most likely to work autonomously and least likely to work as part of a team;
- Significantly less likely to have responsibility for supervising the work of others.

5.4.2 Qualitative data analysis on the skills demonstrated by AHSS PGRs

There was little quantitative evidence on particular skills employed by AHSS PGRs. However, the PGR focus group provided some more detail. Five of the 8 participants were working in Education (mostly in academia but also including a teacher), 2 were working in policy and 1 was a museum curator. In examining the responses to the skills poll, written and spoken communication, critical evaluation and research skills were those most likely to be required in their jobs. Numerical analysis and entrepreneurial skills were those least likely to be required.

Participants were then asked how their PhD helped them for their current job. Those in Education varied in their opinions, with some positive and some more negative feedback:

- *'Prepared me well for research and teaching at PG level (supervising theses, etc.). But didn't prepare me well for teaching UG level, especially broad topics. The PhD encourages you to get really specific, then all of a sudden you have to broaden out and teach the entire study of western art'* (History of Art);
- '*Very well if you count all aspects of the PhD experience, I was a seminar tutor and a resident tutor, so the teaching experience, research skills, academic community and pastoral experience were real factors in both getting and being (moderately) successful as a teacher in a ….school which pursues academic excellence'* (Philosophy).

Another PGR participant responded:

'Fairly well - although in technical/learning/research skills rather than the subject knowledge. I don't use my subject knowledge at all but I do use my disciplinary skills'. When probed more on this, she added 'I mean the techniques of the discipline rather than the subject matter - so critical/analytical skills, synthesising information, communicating clearly to different audiences, summarising arguments' (English Literature).

A further question asked: 'What sorts of skills do you feel your doctorate helped you develop? Can you give any examples?' Participants from all disciplines were very vocal about the skills they had gained during their doctorate:

- '*Communication skills, research skills';*
- *'Independent thinking - putting together a large project and synthesising lots of detail';*
- *'Time management, writing for publication, conference presentation, working independently, intellectual confidence';*
- *'I think in terms of ability to critically evaluation of something. For example, when I do something now, I like to hear both sides of the coin';*

- *'Ability to read, synthesize and analyse sources; written and oral presentation skills; presenting material in powerpoint… being self-sufficient in terms of time management and self-motivation;*
- *Presentation skills, ability to problem solve, working with difficult individuals, written skills, time management, resilience and self-discipline'.*

A teacher told us:

'The experience of progressing such a large research project over the course of 5 years, as well as the viva process really developed my understanding of the universal skills and characteristics required in order to undertake research at any level. In my current role I am responsible for all extended pieces of research within the sixth-form which occur within all academic disciplines'.

5.5 Which top-up qualifications / training do AHSS PGRs undertake?

All PGRs were asked about any additional training or qualifications undertaken after completing the PhD. Perhaps unsurprisingly, given the high level of their qualification, only a relatively small proportion of PGRs went on to further study (around 20 per cent of all PGRs). Most of these were professional qualifications/other diplomas or certificates, most likely required in their chosen career paths. When examining working-age PGRs having done some study after graduating, 59 per cent of AHSS PGRs did further study in Education (compared with only 28 per cent of STEM PGRs and 47 per cent of Education/Combined PGRs; see Appendix IV, Table B31). Numbers were small, however.

5.6 How do employers perceive AHSS PGRs and their skills?

Although the quantitative data did not gather information directly on employers' perceptions of AHSS PGRs, and we did not include employer interviews in the qualitative research on PGRs, it was possible to examine whether the PhD qualification was a requirement for their job at both 6 months and at 3.5 years. AHSS PGRs (47 per cent) sat somewhere in between STEM PGRs (60 per cent) and Education/Combined (29 per cent) in saying that their qualification was a formal requirement for the job. However, almost a quarter said that their job at 6 months did not require a PhD. When comparing AHSS subjects, Social Studies PGRs were most likely to say that the PhD was a formal requirement (57 per cent) and Creative Arts and Design PGRs the least likely (32 per cent). Note the small numbers, however.

Table 19: Whether qualification was a requirement for main job at 6 months, broad subject groupings (%)

Whether needed and which aspect	AHSS	STEM	Ed/ Combined	All subjects
Yes: the qualification was a formal requirement	47.0	60.0	29.0	55.3
Yes: while the qualification was not a formal requirement it did give me an advantage	27.8	24.7	28.8	25.7
No: the qualification was not required	23.8	14.3	41.0	17.8
Don't know	1.5	1.1	1.2	1.2
Total	100	100	100	100
Total, N	1,900	4,800	245	6,940
- The subject(s) studied	34.3	37.7	24.8	36.5
- The level of study	43.0	36.5	54.5	38.6
- Sandwich/work experience (gained as part of my course)	1.6	3.2	1.4	2.8
- No one thing was most important	18.1	20.2	14.9	19.5
- Don't know	3.0	2.4	4.3	2.6
Total	100	100	100	100
Total, N	1,400	4,000	140	5,535

Base: All PGRs of working age in employment (not studying)
Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.
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Table 20: Whether qualification was a requirement for main job at 6 months, AHSS subject areas (%)

	SS	Law	B&A	MCD	Lang	H&P	CAD
Yes: the qualification was a formal requirement	**57.2**	48.8	47.6	44.6	44.0	42.5	32.2
Yes: while the qualification was not a formal requirement it did give me an advantage	27.2	30.7	26.9	34.5	25.9	28.9	28.3
No: the qualification was not required	14.3	18.5	24.6	19.2	29.5	26.5	**36.5**
Don't know	1.3	2.0	0.9	1.8	0.5	2.1	2.9
Total	100	100	100	100	100	100	100
Total, N	550	105	235	55	375	375	210
- The subject(s) studied	33.5	36.5	26.6	15.2	39.0	38.0	35.9
- The level of study	46.4	40.9	57.3	40.6	39.5	31.9	43.3
- Sandwich/work experience (gained as part of my course)	1.4	0.0	2.3	4.5	1.2	2.1	1.6
- No one thing was most important	15.9	16.4	12.3	30.6	18.4	24.2	17.2
- Don't know	2.8	6.3	1.4	9.1	1.9	3.8	1.9
Total	100	100	100	100	100	100	100
Total, N	460	80	170	45	260	265	120

Base: AHSS PGRs of working age in employment (not studying)
Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.
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Analysis then focused upon how important various factors were in getting their main job at 3.5 years. Evidence of skills and competencies were important for both AHSS and STEM PGRs (49 and 50.5 per cent, respectively; 41 per cent for Education/Combined PGRs). On the other

hand, previous work experience was much more important for Education/Combined PGRs than for STEM PGRs.

Table 21: How important were the following in getting your main job? (broad subject groupings), 3.5 years after graduating (%)

Importance of…?		AHSS	STEM	Ed/ Combined	All subjects
- The subject you studied	Formal req, %	47.0	52.1	40.9	50.2
	Important, %	29.4	34.9	36.8	33.6
	Base, N	260	680	50	985
- The type of qualification you obtained	Formal req, %	52.3	55.7	36	53.8
	Important, %	25.0	27.8	40.6	27.7
	Base, N	260	680	50	985
- The class or grade of the qualification you obtained	Formal req, %	20.6	23.8	13.3	22.4
	Important, %	35	35.4	27.1	34.9
	Base, N	240	620	45	910
- Evidence of skills and competencies	Formal req, %	**48.9**	**50.5**	40.6	49.6
	Important, %	43.0	42.3	44.3	42.6
	Base, N	260	675	50	980
- Any work experience or work placement that was part of the qualification you obtained*	Formal req, %	18.1	27.8	**29.5**	25.5
	Important, %	45.6	37.9	39.4	39.9
	Base, N	160	460	25	650
- Any qualifications obtained after the one you got in 2010/2011*	Formal req, %	19.6	22.1	-	21.4
	Important, %	29.4	30.9	-	30.3
	Base, N	120	310	20	450
- Relevant work experience from previous employment*	Formal req, %	24.7	22.6	**40.7**	24.0
	Important, %	54.6	49.5	49.7	50.9
	Base, N	245	615	45	905

Base: Working age PGRs in employment (no study) *Base is only those for whom the question applies
Source(s): HESA DLHE Long Record 2010/11. Copyright Higher Education Statistics Agency Limited.
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Numbers were too small to make any meaningful comparisons by subject area.

5.7 How do AHSS PGRs perceive their own skills, including skills gaps?

5.7.1 Qualitative data on skills and skills gaps

As with the UG/PGTs, PGR participants in the focus groups did not report that they had been asked by an employer to upgrade skills (apart from typical health and safety or general IT skills) or turned down for a job because of a lack of skills. However, they had been turned down because of a lack of experience. For example, several participants agreed with this response:

- *'Normally when I've applied for a job and not been given it, I've been told I lack some experience or just not the right fit'.*

Another added:

- *'I previously applied for a museum job and didn't have the specialist subject knowledge'.*

A further question asked them to describe any skills they were missing in their current job and a teacher told us:

- *'I think that the absence of any formal teaching training, or should I say any formal teaching training of substance, means that it is difficult to assure employers that you have teaching skills. The result is having to demonstrate them in interview or in your work, which is fine, but I always felt there was room for a more Swedish approach which actually includes concrete teacher training as part of the PhD process'* (Philosophy).

Another participant working in academia highlighted a lack of applicability of doctorate-level skills to life outside of Education:

- *'I think I am lacking in practicalities, in academia, it is very much emphasis on theory, that I sometimes wonder whether all these theories are really useful should I be leaving academia one day'* (Fashion Marketing and Retail).

Participants were then asked what other things they had gained, in relation to their personal development (Table 22).

Table 22: What do you think you have gained from studying your degree/postgraduate degree course in terms of your personal development?

	PGRs number	PGRs %
Self-confidence	7	88%
Autonomy	4	50%
Independent thinking	**8**	**100%**
Well-being	1	13%
Seeing things from a broader perspective	3	38%
Meeting people and hearing views that you may not have come across otherwise	5	63%
Finding your way in the world	3	38%
Preparedness for the next steps	2	25%
Other	0	0
TOTAL	8	100%

Source: IER AHSS graduate focus groups (UG/PGT).

For PGR participants, the responses to the poll were similar to UG/PGTs in some ways but even more extreme (note the smaller number of PGR participants overall, however). Independent thinking was reported by all (100%), followed by self-confidence (88%). The least

popular responses were wellbeing (13%), preparedness for the next steps (25%), seeing things from a broader perspective and finding your way in the world (both 38%).

5.7.2 Qualitative data on missing skills

Participants were asked if there were any skills which their doctorate had not helped them prepare for. Those not working in academia focused more on practical and applied skills:

- *'In my job, I'm required to conduct research with an aim to producing policy reports with practical recommendations for Government and institutions and companies etc. It is a big change for me to focus on practical issues and problem solving rather than on big theoretical issues…; I'd also add that my PhD didn't prepare me for working with others or dealing with any tensions between people'* (English Literature);
- '*Leadership and budgeting… Problem solving in terms of dealing with difficult partner institutions or individuals'* (History of Art);
- *'Not really a skill, but I felt quite strange in a professional environment; having to present yourself not as a student but as a professional feels bizarre'* (English).

Those working in Education similarly discussed more practical skills related to teaching:

- *'I would say the ability to teach and explaining to others in a simple manner… I said this because I realised that when you are teaching, not everyone understands you so I have to be careful with my choice of words'* (Fashion Marketing and Retail);
- *'Dealing with difficult students (especially over grading issues); working with colleagues on projects, events, curriculum development'* (History of Art).

5.7.3 Qualitative data on skills needs in the future; modernisation of existing skills

When asked about the skills needed in the future, almost all participants focused upon the need for more IT skills in the future and a need for greater social media use, irrespective of discipline or job:

- *'For graduates starting out in my field, the cutting edge and the wider community of new generation scholars is on social media. For me, I can afford to be grumpy and middle-aged and let them get on with it but if I wanted to build a profile now, that's how I would do it. It helps if universities know who you are when you apply for jobs - that used to be mainly through giving conference papers but these days blogs, twitter, etc. give a much wider platform;'*
- *'Young museum curators are increasingly using blogs to raise interest in their work';*
- *'I think social media skills helps me to engage with my students. They like it when I put up YouTube videos to complement with my lectures or seminar classes. And Facebook group is a great tool should the students want to work as a group'.*

Other participants from all disciplines outlined some other interesting skills:

- '*I think research will be critical - unless we fully understand wider issues, we won't be able to take action on them. In light of that, it would be fair to say innovation (although not really a skill) will be crucial also;'*

- *'Strategic business planning, change management';*
- *'Adaptability and the ability to manage yourself. Sounds like a cliché, but the ability to organise yourself, to see your own role in the firm and to push your own objectives. You will be more likely to adapt to changing environment then'.*

On the other hand, some of the PGRs highlighted the importance of AHSS skills in the future:

'I think the most important skills to policy are critical thinking and synthesising and communicating information. These skills are typically developed in subjects like English, history, classics and it seems no accident that the Director and trustees all come from these subject backgrounds. These subjects may become more vulnerable under new league tables and through the TEF' (English Literature).

When asked if they had the skills required for the future, one PGR participant working as a teacher told us:

'With the most recent education reform, especially A-Level, it is becoming clearer that the emphasis on the role of the teacher is no longer to deliver content, but to help students develop the skills needed to learn. As a trained philosopher I feel like I have the plasticity of thought required to cope with educational reform and to meet their new demands head on' (Philosophy).

5.7.4 Qualitative data on the role of university in skills development

PGR participants were particularly vocal on this issue and generally felt that university should develop broader skills which can be applied within the workplace but that there was currently too much of an emphasis on employability and job-related skills which should be developed primarily within the workplace:

- *'Initially I struggled to see how I could turn my academic CV into a 'regular' CV - it took me a while to recognise what skills I had and how these could be applied in other areas. Also I had very little idea of what kind of jobs I could do with a PhD that were not academic'* (English);
- *'I still hold on to an old-fashioned idea that universities are there to create well-rounded people able to meet change head-on rather than supply individuals or the workplace with specific skills. That's a rather utilitarian and depressing way of looking at it. The best workers in my view are creative, critical thinkers able to adapt to new situations and crucially teach themselves the skills they need'* (English);
- *'I think greater focus needs to be given to the study of subjects as having value in and of itself. I.e. developing aptitude in English. There are skills in each discipline that can translate to workplaces. Too much emphasis is given to the vague concept of employability and this distracts from the value of study - communication, critical thinking, problem solving, etc. emerge through being advanced in a particular subject areas'* (English Literature);
- *'The university is primarily a research institute, not a preparation for employment. I think employers should trust in the skills that students gain and not ask for so much experience'* (History of Art).

However, one participant who had completed his PhD some time ago, added:

‘Despite everything I've said, it is important to rethink the PhD - it's gone from being a niche and elite qualification to being one that more and more students are doing. If universities are increasing PGR they need to take some responsibility for what happens next - there aren't enough academic jobs for all the PGR graduates out there so it needs to be a qualification that works for everyone. That said, I am glad I did mine when I did!’ (English).

6 Discussion and conclusion

This report provides a comprehensive review of existing literature, as well as an overview of mixed-methods research, incorporating 3 different quantitative data sources, focus groups with 22 graduates and postgraduates, and interviews with 6 employers.

The degree courses undertaken by AHSS graduates are diverse, as are the occupations into which graduates eventually move. Some AHSS graduates take longer than others to move into a graduate career and there are differences between the value attached to, and the development of, certain skills. AHSS graduates appear to earn less, on average, than other graduates, with some evidence of a gender pay gap.

The literature review and interviews with employers highlighted that jobs are likely to change in the future, and employers across all sectors will value flexible and adaptable employees who bring a range of skills, most particularly good communication and people management skills, along with good technical skills. Creativity and innovation appear to be important skills for future employees (what comprises and should be classified as a 'skill' is debatable and there are subtle distinctions between knowledge, skills and experience. However, this is not the focus of this report (for more on this debate, see Elias and Purcell, 2013).

Our analysis shows that the majority of AHSS graduates are confident of their communication, interpersonal and softer social skills, and using the SOC(HE)2010_EP classification, fit easily within the 'communicator' category (where interpersonal skills, creative skills or high-level technological knowledge, capacity to access and manipulate information and/or an understanding of how to communicate information effectively to achieve objectives, are required).

On the other hand, they are less confident than other graduates of their numerical skills. There are large variations between AHSS subjects, however. When assessing the skills of the future, IT and digital skills appear to be those most likely to be required and all graduates in the focus groups commented on the increasing use of social media in future jobs. On the other hand, the graduates of today are 'digital natives' and the majority did not feel that such skills should or could be taught at university. Employers interviewed as part of the research focused upon the need for better communication skills, given the importance of communication and the changing nature of communication more generally. Whether good communication skills can be 'taught' or are inherent to the individual is a moot point but it seems inevitable that those with such skills are more likely to succeed in the workplace. What also seems likely is that those with more creative approaches to work will be highly valued and, if AHSS graduates can combine their creativity with good technical skills, they will be highly sought after. Those with narrow skill sets are more likely to struggle in the labour market, except in niche areas where there may be a shortage of particular skills.

Further consideration may be given to the teaching of entrepreneurial skills in higher education, as a higher proportion of AHSS graduates move into self-employment or freelance work (especially those graduating in particular subjects and those with portfolio careers). These skills do not appear to be taught within the workplace, and just over a half of the focus group participants reported that they used entrepreneurial skills in their current job. Similar findings emerged from the literature, particularly for Creative and Crafts graduates who felt that entrepreneurial skills were under-developed (Ball et al., 2010; Hunt et al., 2010).

In terms of PGRs, a large majority go into teaching professions, mostly in higher education where a PhD is a requirement for progression in most academic jobs. On the other hand, the skills taught on an AHSS doctorate are also highly transferable, combining independent and critical thinking with problem-solving abilities and the ability to work independently. Again, AHSS PGRs were more likely than other PGRs to be 'communicators' and less likely to be 'experts,' using the SOC(HE)_EP classifications. The qualitative data highlighted some of the difficulties of using doctoral-level skills in a more practical, applied level in the workplace. However, it is likely that this would also be the case with many non-AHSS PGRs. Those who took part in the focus group highlighted a range of valuable skills for use in both an academic and non-academic setting.

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8. Appendices

I. Literature review methodology

The literature review included journal articles and grey literature in English language, published since 2002, i.e. covering the last 15 years. It focused on studies undertaken in the UK, including European studies covering the UK. An Initial literature search showed that studies focusing on AHSS graduates only (i.e. JACS (Joint Academic Coding System) codes L-W)7, would yield few relevant studies. Moreover, since most of these studies are unlikely to provide comparison data with all or STEM subject areas, it was decided to widen the scope of the literature review to include studies covering all subject areas with pertinent subject specific data included in the publication.

The literature review was guided by a set of research questions:

- What strengths/weaknesses in terms of AHSS graduate skills have been identified by relevant stakeholders (such as graduates, employers etc.)?
- What skills do AHSS graduates use at work and what skills are required?
- What, AHSS skills gaps, if any have been identified?
- What skills have been identified that may be required in future?
- What type of further qualifications did AHSS graduates undergo and what conclusions may be drawn from this about potential skills gaps?
- What are the labour market destinations of AHSS graduates, in terms of (graduate/non-graduate) occupations and main sectors?
- What are the benefits of an AHSS study to society and the economy?
- How do the skills/skills gaps/future skills of AHSS graduates compare to those of STEM graduates?

Journal articles were searched using the following databases: (1) Scopus (claimed to be the largest database); (2) EBSCO HOST database gateway (selecting: British Education Index, Education abstracts, Education Research Complete, Educational Administration Abstracts, Eric); and (3) the International Bibliography of the Social Sciences (IBSS). In addition, we checked out a few other databases, including Taylor & Francis Online and ProQuest. The search for grey literature included key stakeholders, such as the Higher Education Funding Council for England (HEFCE); Higher Education Careers Services Unit (HECSU); Higher Education Statistics Agency (HESA); the Higher Education Academy; Universities UK; Research Councils UK (RCUK); Association of Graduate Recruiters (AGR); Association of Graduate Careers Advisors (Agcas); the Department for Business, Innovation and Skills (BIS), now the Department for Business, Energy & Industrial Strategy (BEIS); the National Centre for Entrepreneurship in Education (NCEE); the Campaign for Social Science and the Organisation for Economic Co-operation and Development (OECD). In addition, search engines were also used, applying the key words below. Moreover, the researchers were aware of a number of national and European graduate surveys and searched for related publications. In some instances, references found in the included literature were also screened for inclusion, as well as references drawn from our own databases.

[7] This includes: Social Studies, Law, Business & Administrative Studies, Mass Communications & Documentation, Languages, Historical & Philosophical Studies, and Creative Arts and & Design.

Key words used Boolean operators, where possible, combining the following keywords (1) graduate (2), jobs or employment or careers, and (3) UK or United Kingdom or Britain or England or Wales or Scotland or Northern Ireland. Separate searches were also run for (1) graduate skills and (2) UK (or its constituent parts); portfolio careers; and degree benefits, social rates of returns and portfolio careers. Depending on the database, search terms were applied to abstract, title and/or keywords. This generated a large amount of references for some searches, particularly the graduate skills search in Scopus, requiring a lot of sifting.

While the study was primarily interested in early graduate careers, and most studies are focused upon these, the review included some studies which (also) cover later parts of graduates' careers. The Literature review table in Appendix II provides for each reference information on the time that had elapsed since graduation. Of those graduate studies which cover all disciplines and provide subject specific breakdowns, preference had been given to studies conducted since the early 2000s. Excluded were the following studies: (1) publications solely based on undergraduate students' assessments (e.g. those in their final year); (2) studies that do not cover or include the UK. It is worth noting here that much of the research on graduate skills has been conducted in Australia (see Osmani et al. 2015); (3) publications of studies with include graduates from a wide range of subject areas but do not provide subject-specific data in that particular publication. A few exceptions were made to this where it helped to contextualise information; (4) studies in a language other than English, (5) studies presenting (largely) a collection of individual case studies and (6) commentaries or editorials.

Studies were screened by abstract and, if this did not provide conclusive information for the purpose of this study, the full article was retrieved and screened. All potentially relevant articles were imported into Endnote and then moved into a separate folder after it was established that the inclusion/exclusion criteria applied.

II. Literature included in the review

Literature review table

Author(s) and year	Subject area(s) of graduates	Data presented for other disciplines/types of job holders	Research method	Time after graduation	Type of skills captured	Relevant key topics*
I. Graduate studies						
Creative arts and design						
Ball, Pollard and Stanley, 2010 (includes 16.7% other subjects, notably media production and photography)	Art, design, crafts and media subjects	7 subject disciplines: fine art, applied arts and crafts, 3-D design, graphic design, fashion design, media production and electronic design, other visual and interdisciplinary arts (detailed tables also in the Annex)	Survey (n=3,478; 14 per cent response rate)	4-6 years	18 items (generic skills)	2.2, 3.3, 3.3
Ball et al, 2010 (includes 16.7% other subjects, notably media production and photography)	Art, design, crafts and media subjects (1st degree and foundation degree)	See Ball et al, 2010 (a)	Follow up qualitative survey (with text-based responses) a year later (n=2000 plus); small number of telephone interviews	4 to 6 years	not pre-determined	2.2, 3.2, 3.3
Carey, 2015	Fine Arts	no	Qualitative study (n=13 interviews)	18 years	not pre-determined	2.2

Author(s) and year	Subject area(s) of graduates	Data presented for other disciplines/types of job holders	Research method	Time after graduation	Type of skills captured	Relevant key topics*
Comunian, Faggian and Jewell, 2015 (b)	Creative arts and design	Digital technology (non AHSS); creative arts and design (AHSS); others (all other JACS codes)	Secondary analysis (DLHE; 2006)	6 months	n/a	3.2
Comunian, Faggian and Jewell, 2015 (a)	Music	Non creative, other creative, music, and total	Mixed methods study: secondary analysis (DHLE (2004/05 cohort) and L-DHLE data; interviews with recent music graduates	6 months and 3.5 years	n/a	3.2, 3.3
Comunian, Faggian and Jewel, 2014	Arts and humanities	Within arts and humanities and non-arts and humanities	Secondary analysis of DHLE data	6 months		3.2, 3.3
Business and administrative studies						
Nabi, 2003	Business studies	no	Survey of business graduates in full-time post from one HEI (n= 203; response rate: 26%)	on average: 3.4 years (and in 2nd job)	Graduate employability skills (23 items), drawing on the QAA subject benchmark for B&M degrees	2.2

Author(s) and year	Subject area(s) of graduates	Data presented for other disciplines/types of job holders	Research method	Time after graduation	Type of skills captured	Relevant key topics*
Webb and Chaffer, 2016	CIMA (Chartered Institute of Management Accountants) trainees	Accounting degree vs non-accounting degree	Survey of CIMA trainees (n=1655, response rate: 29%). Data analysis is based on 884 UK graduates	Majority: 2–5 years (51%)	Generic skills (16 items), (QAA Framework and Accounting Benchmark Statement; skills taken from employer surveys)	2.2
Wilton, 2008	Business & management (B&M)	All principal subject areas, including non AHSS; also breakdowns by type of B&M degree (specialist B&M degree; general B&M degree; combined degree with B&M)	Mixed methods: secondary analysis of the Class of 99 graduate study (Purcell, Elias, et al. 2005) (n=9800, incl. 1060 B&M graduates) and qualitative interviews (35 with B&M)	4 years (survey)	Employability skills (10 items); managerial competences (management skills, leadership skills and entrepreneurial skills)	2.2, 3.4

Author(s) and year	Subject area(s) of graduates	Data presented for other disciplines/types of job holders	Research method	Time after graduation	Type of skills captured	Relevant key topics*
Wilton, 2011	Business and management (B&M)	Type of B&M degree (specialist B&M degree; general B&M degree; combined degree with B&M)	Secondary analysis of the *Class of 99* graduate study (for details see Wilton, 2008); n=1016 business and management graduates in work	4 years	Employability skills (12 items)	2.2, 3.2
Wilton, 2012	Business and management (B&M)	Type of B&M degree (specialist B&M degree; general B&M degree; combined degree with B&M)	Mixed methods study: see Wilton, 2008; here: focus on B&M graduates aged below 24 when they completed their undergraduate degree; interviews: n=25	4 years		3.4
Social studies						
Gedye, Fender and Chalkley, 2004	Geography	comparision of undergradaute and graduate data	Survey at one HEI (n=105, response rate: 50%); in addtion, a survey of 1st year undergraduate students was also carried out	4-10 years	Knowledge/Skill/Attribute (list of 20 items)	2.2, 3.2

Author(s) and year	Subject area(s) of graduates	Data presented for other disciplines/types of job holders	Research method	Time after graduation	Type of skills captured	Relevant key topics*
Campaign for Social Sciences, 2013	Social sciences	STEM and arts and humanities (sector data)	Mixed methods study: Secondary analysis of L-DHLE data and 5 case studies	3.5 months		3.2
Humanities						
Kreager, 2013	Humanities	subject areas within humanities (9 - and for more detailed data classics, english, history, modern languages, philosophy)	Mixed methods study: Statistical data from 11,000 graduates of one university via the university's Development and Alumni Relations System for the years 1960-1989 (out of a total of 34,000 graduates); qualitative study (n=50 - mainly "high-flyers")	20 to 50 years	not pre-determined	2.2, 3.2
Historical & philosophical studies						

Author(s) and year	Subject area(s) of graduates	Data presented for other disciplines/types of job holders	Research method	Time after graduation	Type of skills captured	Relevant key topics*
Nicholls, 2005 (a)	history	comparison with all graduates	Survey of graduates of 2000 in 6 HEIs (n=66, response rate:21%) and famous graduates (n=84, response rate: 42%) (also survey of pupils and 3rd year undergraduates; with all 4 strands covering 540 respondents, with an overall response rate of 39%)	3.5 years (graduates)	Employability skills (10 items)	2.2
Nicholls, 2005 (b)	history	no	Secondary analysis of DHLE data for the years 1989, 1995, 1998 and 2002 (limited data analysis); review of DfEE-IER- CSU-AGCAS (1999,) 3 years after graduation; data from famous graduates (author's own database)	mix: 6 months (DHLE), 3 years (DfEE-IER-CSU-AGCAS, 1999)	n/a	3.2
All graduates, with (some) subject breakdowns (includes some studies which aggregate STEM/AHSS*)						

Author(s) and year	Subject area(s) of graduates	Data presented for other disciplines/types of job holders	Research method	Time after graduation	Type of skills captured	Relevant key topics*
BIS, 2013	all subject areas	specialist-vocational (includes medicine, engineering, law and education); occupationally-oriented (includes biology, mathematics, social studies, business, creative arts and inter-disciplinary studies); discipline-based (includes: physical sciences, linguistics, classics, history and philosophy)	Secondary analysis of Futuretrack	18 - 30 months	n/a (self-confidence included in the regression analysis)	
Chevalier, 2011	all subject areas	by subject area	Secondary analysis: (1) L-DHLE (2003 cohort followed up in 2006; n=7735 , as data focus on 1st degree holders who are currently employed, provide valid earning information and are aged 18–25 on graduation); (2) LFS 1994–2010	3.5 years	n/a	3.3

Author(s) and year	Subject area(s) of graduates	Data presented for other disciplines/types of job holders	Research method	Time after graduation	Type of skills captured	Relevant key topics*
D'Aguiar and Harrison, 2016 *	Focus on STEM	STEM or non-STEM first degree	Secondary analysis of DLHE and L-DLHE data (all graduating in 2006-07) (target group consists of n=2325 'returners' and 19882 'leavers')	6 months and 3.5 years	n/a	2.4
De Vries, R. (2014)*	all graduates	subject area	Secondary analysis of the DHLE (cohort graduating in 2012/1) and LDHLE (cohort graduating in 2008/09)	6 months and 3.5 respectively		3.3
DfE (2016)	All graduates	subject areas	Quantitative study: Matching HESA graduate data with HMRC PAYE data and DWP data (using the 2008/09 cohort as one example)	1 year (1st tax year after graduation) and and 5)	UK	n/a
HESCU et al, 2016	all graduates	subject areas (same set of questions)	Secondary analysis of DHLE data (2014/15 graduates)	6 months	n/a	3.2

Author(s) and year	Subject area(s) of graduates	Data presented for other disciplines/types of job holders	Research method	Time after graduation	Type of skills captured	Relevant key topics*
Leman, 2015	All	yes, JACS 1 and JACS2 (data file)	National Survey (The Postgraduate Taught Experience Survey) : n=72,200 students from 100 institutions (includes Masters (around 80%), postgraduate certificates and diplomas; response rate of 29.4%	67 % up to three years (own calculations from dataset)	n/a	2.4
Pollard, Pearson Willison, 2004	All	subject discipline (for some variables)	Mixed methods study: longitudinal survey of the 1998 cohort, surveyed again in 2003 (n=1503; response rate: 49%); qualitative survey with 40 individuals who had left HE early on	Approx.. 1-2 years	n/a	2.4

Author(s) and year	Subject area(s) of graduates	Data presented for other disciplines/types of job holders	Research method	Time after graduation	Type of skills captured	Relevant key topics*
Purcell et al. 2005	all	Subject discipline (for some variables)	Mixed methods study: survey of the Class of '99 (n=8571 1st degrees; response rate: 24%); Comparisons with Moving on survey (n=9600; response rate: 30%); plus follow up interviews with repondents in both studies (n=100 for Class of '99)	3-4 years (Class of '99); 7 years (Moving on survey)	Subject-specific skills; graduate skills, (employability skills)	2.2, 3.2, 3.3
Purcell et al, 2013	all	subject areas (for a range of variables on skills and destinations - for details see relevant key topics)	Mixed methods: Survey (longitudinal study), known as the Futuretrack study (n=17,075, including 2,163 new entrants to the study); qualitative study	18 or 30 months after completion of a 3-4 year course	Employability skills	2.2, 3,2, 3.3

Author(s) and year	Subject area(s) of graduates	Data presented for other disciplines/types of job holders	Research method	Time after graduation	Type of skills captured	Relevant key topics*
Shury et al. 2017	all	Subject-specific information for some variables	Mixed methods: Planning for Success Survey, covering those aged 21 or under who were UK domiciled at the start of the course (n=7,499; response rate: 22%); interviews with 30 graduates participating in the survey; secondary analysis of DLHE data	2.5 years	n/a	(2.4), (3.3), (3.4)
Smith and White, 2016*	STEM	AHSS and non AHSS subject areas; for some questions, reporting on selected AHSS graduates (e.g. languages, social sciences and history)	Secondary analysis of DHLE data (1994/95-2010/11)	6 months	n/a	3.2
UUK, 2016	all graduates	subject areas (e.g. skills)	Secondary analysis of DHLE data (2010–11) and L-DHLE data (2014)	6 months and 3.5 years	Transferable skills/employ ability skills	2.2, 3.2, 3.3

Author(s) and year	Subject area(s) of graduates	Data presented for other disciplines/types of job holders	Research method	Time after graduation	Type of skills captured	Relevant key topics*
Walker, I. & Zhu, Y. (2011)	all graduates	STEM; combined studies (COMB); Law; Economics and Management (LEM); other Social Sciences and Humanities (OSSAH) subjects	Secondary analysis of the UK LFS and BHPS	all career stages		3.3
All graduates - with no subject breakdowns in the report						
Brooks and Everett, 2009	no information provided	no	Qualitative study (n=90 graduates) from 6 HEIs and 2 focus groups with a sub-sample at the end of the study	around 5 years	n/a	2.4
Bowman, 2005	Six subject areas representing vocational, semi-vocational and non-vocational courses (interpreting, applied sciences, graphic art, business, philosophy and classics)	no	Qualitative study: interviews with 24 Masters degree students from 2 universities	not specified		2.4

Author(s) and year	Subject area(s) of graduates	Data presented for other disciplines/types of job holders	Research method	Time after graduation	Type of skills captured	Relevant key topics*
II. Employers and other stakeholder studies						
Business and administrative studies						
Ahmed, 2003	Accounting	no	Survey (n=53; response rate: 48%)	Accounting academics	Specific IT skills	2.3
Azevedo, Apfelthaler and Hurst, 2012	Business studies	no	Survey of business graduates (n=596) and employers (n=304) across 4 countries (average survey response rate of 11%)	Employers and graduates ("recent graduates")	eight generic competences (based on literature review and qualitative interviews)	2.3
Jackson and Chapman, 2012	Business studies	no	Survey of business academics (UK : 135 academics /34 HEIS); AUS: 156/34)	Business academics	non-technical competencies (20 items)	2.3
Major and Evans, 2008	Travel services industry	no	Survey (n=181, response rate: 4%)	Employers	9 generic items plus specific knowledge	2.3

Author(s) and year	Subject area(s) of graduates	Data presented for other disciplines/types of job holders	Research method	Time after graduation	Type of skills captured	Relevant key topics*
Tholen et al , 2016	Graduates as residential sales agents ("graduatising occupation")	no	Mixed methods study: interviews with 24 estate agencies (n=72, including manager/owner, recent and experienced agent); interviews with key stakeholders (HE and industry representatives) (n=12); industry- wide survey of employers (n=220) and employees (n=239, including 22% with a degree) ("low" response rate)	not known (New/recently recruited and experienced agent)	operationalisation of skills not included in the article	2.3
Wellman, 2010	Graduate and early career marketers	no	Document analysis: analysis of 250 job advertisements suitable for an early career marketer (with sufficient details on e.g. qualification requirements, specified or implied generic work	Employers (focus on early career marketers)	Range of skills and attributes	2.3

Author(s) and year	Subject area(s) of graduates	Data presented for other disciplines/types of job holders	Research method	Time after graduation	Type of skills captured	Relevant key topics*
			skills and personal traits)			
Winterbotham et al. (2014)	All	no	Survey of UK employers (via telephone); Core survey (n=91,000 ; response rate: 44%)I; Investment in Training Survey" (n=13,000, response rate: 39%)	n/a		
Other subject areas						
Stephens and Hamblin, 2006	Library and information management (LIM)	perceived skills requirements by sub-sector	Qualitative study: interviews with experienced staff in four specialist employment agencies	Graduates entering the labour market	Employability skills	2.3
III. Other literature						

Author(s) and year	Subject area(s) of graduates	Data presented for other disciplines/types of job holders	Research method	Time after graduation	Type of skills captured	Relevant key topics*
World Economic Forum, 2016	All	yes	Survey of senior HR directors and other senior staff in 9 targeted industry sectors from 15 developed and emerging economies and regional economic areas (n=371)	Not specific	Work-related (abilities, basic and cross-functional skills)	2.5
Green and Mason, 2014	All	yes	Discussion paper, using Community Innovation Survey and LFS data to highlight issues	Not specific	Innovation-related skills and knowledge	2.5
OECD, 2013	All			Not specific	Managerial skills	2.5
DHA Communications, 2012	Music (not all graduates)	no	UK-wide survey using the musicians union membership (n= 1966 responses) and 34 interviews with musicians, stakeholders and industry rep	Not specific	Varied skills to manage a portfolio career	4

* Legend: 2.2 : Graduates assessment of their skills; 2.3 Employer and academics' assessment of graduates' skills, 2.4 : Further study and skills development; 3.2: Destinations; 3.3: Salaries; 3.4: Extra-curricular activities and employment outcomes; 4: Benefits of degree study to economy and society

III. Table Appendix for the secondary data analysis, UG/PGT analysis

Table A1: Personal characteristics of graduates, by subject area, all data sources

	DLHE (6 months)			Futuretrack (18-24 months)*		LDLHE (3.5 years)		
	AHSS	**STEM**	**Ed/combined**	**AHSS**	**STEM**	**AHSS**	**STEM**	**Ed/combined**
Gender								
Male	40.9	47.7	24.7	41.4	51.2	38.9	50.4	22.7
Female	59.1	52.3	75.3	58.6	48.8	61.1	49.6	77.3
Other	0.0	0.0	0.0	-	-	0.0	0.0	0.0
Age group (at graduation)								
Under 25	73.1	66.0	47.5	75.1	71.7	68.9	67.5	39.6
25-30	12.5	16.5	22.8	13.0	13.3	13.9	15.4	22.3
31 or older	14.4	17.4	29.7	11.9	15.0	17.1	17.1	38.1
Ethnicity (grouped)								
Asian	9.1	11.4	6.8	7.9	9.2	8.0	9.5	5.5
Black	6.1	5.7	3.2	3.5	3.7	5.0	4.2	3.0
Other (including mixed)	4.7	4.3	2.9	5.0	3.9	3.1	2.8	2.3
White	80.1	78.6	87.1	83.6	83.2	83.9	83.5	89.2
Socio-economic group								
Managerial/Professional(1-2)	55.6	54.2	44.9	59.1	59.5	54.5	55.1	45.7
Intermediate(3-4)	20.4	20.2	23.2	19	18.5	21.7	21.7	22.7
Routine/Manual(5-8)	24.0	25.6	31.9	21.9	21.9	23.8	23.2	31.6
All graduates, N	162,375	145,060	43,850	181,670	177,365	36,975	24,680	9,990

Base: All graduates of working age on graduation. *All graduates

Source(s): *Futuretrack wave 4 survey;

HESA DLHE Record 2014/15;HESA DLHE Long Record 2010/11

Table A2: Study characteristics of graduates, by subject area, all data sources

	DLHE (6 months)			Futuretrack (18-24 months)*		LDLHE (3.5 years)		
	AHSS	**STEM**	**Ed/combined**	**AHSS**	**STEM**	**AHSS**	**STEM**	**Ed/combined**
Region of domicile								
North East	3.0	3.5	4.2	-	-	3.3	3.8	4.1
North West	9.4	10.5	12.2	-	-	9.1	10.0	12.7
Yorkshire and The Humber	6.3	6.9	8.4	-	-	6.3	6.8	7.9
East Midlands	5.9	6.1	7.4	-	-	5.5	5.7	7.3
West Midlands	7.5	7.8	10.1	-	-	7.0	7.9	8.2

	DLHE (6 months)			Futuretrack (18-24 months)*		LDLHE (3.5 years)		
	AHSS	**STEM**	**Ed/combined**	**AHSS**	**STEM**	**AHSS**	**STEM**	**Ed/combined**
East of England	8.7	8.0	7.2	-	-	8.9	7.9	7.6
London	16.1	14.7	12.1	-	-	15.0	12.4	12.8
South East	13.8	12.8	12.3	-	-	13.9	12.7	11.8
South West	6.9	7.0	8.0	-	-	7.0	7.5	7.2
England region unknown	0.2	0.2	0.2	-	-	0.5	0.4	0.4
Northern Ireland	3.0	3.7	3.2	-	-	3.7	3.8	5.5
Scotland	6.2	7.7	7.1	-	-	6.2	8.8	6.3
Wales	4.0	4.6	5.6	-	-	4.9	5.5	5.9
UK region unknown	0.0	0.0	0.0	-	-	0.1	0.1	0.0
Guernsey, Jersey and the Isle of Man	0.3	0.3	0.2	-	-	0.3	0.2	0.1
Other EU	8.7	6.3	1.8	-	-	8.3	6.5	2.2
Level of qualification obtained								
First degree or equivalent	77.5	70.4	37.1	98.3	95	75.0	72.0	36.7
Other UG	0.0	0.0	0.0	1.8	4.8	0.0	0.0	0.0
PGCE/PGDE/PG CertE	0.0	0.0	46.6	0	0	0.0	0.0	49.3
Masters	18.0	24.0	6.7	0	0	20.8	23.9	6.4
Other PG	4.5	5.7	9.6	0	0	4.2	4.1	7.6
Doctorate	0.0	0.0	0.0	0	0	0.0	0.0	0.0
Classification of first degree								
First	22.4	25.6	18.5	21.0	25.5	16.9	19.8	12.8
Upper second	55.4	41.9	48.8	53.3	41.8	54.5	42.9	42.4
2:2/Third/pass/ unclassified	22.2	32.5	32.7	22.6	30.2	28.6	37.3	44.8
Mission group								
1994 Group	7.1	5.1	5.1	-	-	7.8	5.3	6.3
Million Plus	5.6	2.8	9.4	-	-	10.0	8.7	16.7
Russell Group	10.5	10.0	16.0	-	-	27.1	32.3	13.8
University Alliance	29.5	29.6	29.8	-	-	21.2	21.6	29.3
Guild HE	24.9	30.6	15.3	-	-	5.3	3.0	9.1
Other	22.3	21.9	24.4	-	-	28.6	29.1	24.8
All graduates, N	162,375	145,055	43,850	181,355	177,295	28,595	32,275	8,190

Base: All graduates of working age on graduation. *All graduates

Source(s): *Futuretrack wave 4 survey;

HESA DLHE Record 2014/15;HESA DLHE Long Record 2010/11

Table A3: Type of institution attended (Futuretrack)

	AHSS	STEM
Highest tariff university	25.1	33.9
High tariff university	23.2	25.3
Medium tariff university	28.2	27.2
Lower tariff university	11.8	8.7
General HE college	1.9	0.5
Specialist HE college	6.8	1.2
Overseas	2.9	3.2
Total	100	100
Count	181,355	177,295

Base: All graduates
Source(s): *Futuretrack wave 4 survey;

Table A4: Activity at 6 months after graduation, broad subject groups

	AHSS	STEM	Ed/combined	All subjects
Full-time work	55.8	62.8	75.1	61.1
Part-time work	14.5	10.2	11.0	12.3
Primarily in work and also studying	2.7	2.6	3.1	2.7
Primarily studying and also in work	2.7	2.1	1.0	2.2
Full-time study	11.6	12.5	4.5	11.1
Part-time study	1.0	0.8	0.7	0.9
Due to start work	1.1	0.9	0.2	0.9
Unemployed	5.2	4.4	1.4	4.4
Other	5.3	3.8	2.9	4.4
Total	100	100	100	100
Total, N	162,375	145,055	43,850	351,280

Base: All graduates of working age on graduation.
Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.
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Table A5: Activity at 6 months after graduation, AHSS subjects

	SS	Law	B&A	MCD	Lang	H&P	CAD
Full-time work	56.6	48.9	68.5	60.1	47.0	43.4	51.2
Part-time work	12.4	8.2	9.0	19.1	14.8	15.0	25.2
Primarily in work and also studying	3.0	3.8	3.8	1.0	2.3	2.7	1.4
Primarily studying and also in work	2.6	5.6	1.4	1.3	3.9	4.0	2.4
Full-time study	12.7	22.1	5.8	5.3	18.3	20.3	7.0
Part-time study	1.1	2.0	0.7	0.5	1.2	1.5	0.8
Due to start work	1.3	0.9	1.1	1.1	1.3	1.2	1.0
Unemployed	5.0	4.0	5.2	6.5	4.9	5.1	6.0
Other	5.5	4.3	4.6	5.1	6.3	6.8	5.1
Total	100	100	100	100	100	100	100
Total, N	33,390	14,115	41,690	8,870	18,915	14,570	30,825

Base: AHSS graduates of working age on graduation.
Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.
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Table A6: Type of contract at 6 months after graduation, broad subject groups

	AHSS	STEM	Ed/combined	All subjects
Self-employed/freelance	7.5	3.2	1.7	4.9
Starting up own business	0.9	0.5	0.2	0.6
On a permanent or open-ended contract	58.7	65.3	61.9	61.9
On a fixed-term contract lasting 12 months or longer	11.4	16.4	20	14.7
On a fixed-term contract lasting less than 12 months	8.8	6.4	8.5	7.8
Voluntary work	1.4	1	0.4	1.1
On an internship/placement	3.7	1.7	0.3	2.4
Developing a professional portfolio/creative practice	0.5	0.2	0.1	0.3
Temping (including supply teaching)	2.5	1.7	4.8	2.5
Other	1.9	1.6	1.2	1.7
On a zero hours contract	2.8	2	1	2.2
Total	100	100	100	100
Total, N	113,620	105,255	37,330	256,205

Base: Working age graduates in work without study.

Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.

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Table A7: Type of contract at 6 months after graduation, AHSS subjects

	SS	Law	B&A	MCD	Lang	H&P	CAD
Self-employed/freelance	2.7	3.7	3.2	11.2	6.0	4.7	20.0
Starting up own business	0.5	0.6	1.1	1.1	0.4	0.6	1.4
On a permanent or open-ended contract	62.4	60.1	69.7	54.6	51.0	52.4	46.6
On a fixed-term contract lasting 12 months or longer	12.8	15.2	11.6	9.3	12.8	13.1	7.6
On a fixed-term contract lasting less than 12 months	9.1	9.3	6.5	9.9	13.1	11.1	8.3
Voluntary work	1.8	1.5	0.6	1.4	1.8	2.8	1.2
On an internship/placement	3.5	3.1	2.3	5.0	5.5	5.1	4.3
Developing a professional portfolio/creative practice	0.1	0.2	0.1	0.6	0.3	0.2	1.7
Temping (including supply teaching)	2.8	2.1	1.9	2.3	3.2	3.6	2.7
Other	1.8	2.1	1.6	1.8	2.2	2.2	2.2
On a zero hours contract	2.5	1.9	1.6	2.9	3.6	4.2	4.1
Total	100	100	100	100	100	100	100
Total, N	22,935	8,020	32,175	7,000	11,625	8,465	23,400

Base: Working age graduates in work without study.

Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.

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Table A8: Activity at 3.5 years after graduation, broad subject groups

	AHSS	STEM	Ed/combined	All subjects
Full-time paid work	74.2	73.0	76.5	74.1
Part-time paid work	7.0	6.2	11.6	7.4
Voluntary/unpaid work only (inc.internships)	0.8	0.4	0.3	0.6
Work and further study	5.2	5.2	3.8	5.0
Further study only	5.8	10.2	1.9	6.8
Assumed to be unemployed	3.0	2.5	1.6	2.6
Not available for employment	1.9	1.2	2.3	1.7
Employed mode unknown	0.7	0.5	1.4	0.7
Other	0.2	0.2	0.3	0.2
Creating a portfolio	1.4	0.7	0.4	1.0
Total	100	100	100	100
Total, N	36,975	24,675	9,990	71,640

Base: All graduates of working age on graduation.

Table A9: Activity at 3.5 years after graduation, AHSS subject groups

	SS	Law	B&A	MCD	Lang	H&P	CAD
Full-time paid work	74.9	79.4	81.4	76.4	68.2	65.6	69.0
Part-time paid work	6.5	4.4	4.9	8.7	8.1	6.7	10.7
Voluntary/unpaid work only (including internships)	0.9	0.8	0.4	0.6	1.0	0.9	1.0
Work and further study	5.8	5.6	4.7	3.4	6.1	7.3	3.6
Further study only	6.7	4.6	2.5	3.3	9.7	12.0	4.7
Assumed to be unemployed	2.4	2.6	3.1	3.5	2.9	2.6	3.8
Not available for employment	1.5	1.0	1.3	2.3	2.4	3.3	2.2
Employed mode unknown	0.6	0.8	0.7	0.6	0.5	0.5	0.8
Other	0.2	0.0	0.1	0.1	0.2	0.3	0.4
Creating a portfolio	0.5	0.8	0.9	1.1	1.0	0.7	4.0
Total	100	100	100	100	100	100	100
Total, N	7,495	3,215	9,140	2,305	4,270	3,830	6,720

Base: AHSS graduates of working age on graduation.

Table A10: Type of contract at 3.5 years after graduation, broad subject groups

	AHSS	STEM	Ed/combined	All subjects
On a permanent or open-ended contract	75.9	78.8	80.4	77.5
On a fixed-term contract lasting 12 months or longer	9.3	10.0	8.5	9.4
On a fixed-term contract lasting less than 12 months	4.2	3.6	3.2	3.9
Self-employed/freelance	5.9	3.7	2.5	4.6
Temporarily, through an agency	1.4	1.2	2.5	1.5
Temporarily, other than through an agency	0.8	0.4	1.0	0.7
Employed on another basis	1.3	1.1	1.1	1.2
Setting up own managing your own business	1.3	1.2	0.8	1.2
Total	100	100	100	100
Total, N	30,255	19,630	8,825	58,710

Base: Working age graduates in work without study.

Table A11: Type of contract at 3.5 years after graduation, AHSS subjects

	SS	Law	B&A	MCD	Lang	H&P	CAD
On a permanent or open-ended contract	77.1	72.7	84.4	75.8	73.4	74.3	66.1
On a fixed-term contract lasting 12 months or longer	11.5	16.0	6.2	7.5	10.7	11.1	6.6
On a fixed-term contract lasting less than 12 months	3.8	4.0	2.8	5.7	5.8	6.0	4.6
Self-employed/freelance	3.0	3.5	2.5	7.0	5.3	3.9	16.2
Temporarily, through an agency	1.9	1.2	1.0	1.3	1.8	1.6	1.2
Temporarily, other than through an agency	0.7	0.2	0.7	1.0	1.1	0.8	1.0
Employed on another basis	1.0	1.9	0.8	0.8	1.3	1.8	1.7
Setting up own managing your own business	0.8	0.5	1.7	1.0	0.7	0.5	2.5
Total	100	100	100	100	100	100	100
Total, N	6,160	2,715	7,920	1,970	3,295	2,800	5,390

Base: Working age graduates in work without study.

Table A12: Industry sections of main job at 6 months, broad subject groupings (%)

	AHSS	STEM	Ed/combined	Total
Section A: AGRICULTURE, FORESTRY AND FISHING	0.1	0.4	0.0	0.2
Section B: MINING AND QUARRYING	0.3	0.7	0.0	0.4
Section C: MANUFACTURING	4.3	6.4	0.5	4.6
Section D: ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY	0.4	0.5	0.1	0.4
Section E: WATER SUPPLY; SEWERAGE, WASTE MANAGEMENT AND REMEDIATION ACTIVITIES	0.2	0.4	0.0	0.3
Section F: CONSTRUCTION	1.1	2.9	0.1	1.7
Section G: WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND MOTORCYCLES	14.2	8.5	1.5	10.0
Section H: TRANSPORTATION AND STORAGE	1.8	1.2	0.2	1.3
Section I: ACCOMMODATION AND FOOD SERVICE ACTIVITIES	6.5	2.9	0.6	4.2
Section J: INFORMATION AND COMMUNICATION	8.3	6.3	0.6	6.3

	AHSS	STEM	Ed/combined	Total
Section K: FINANCIAL AND INSURANCE ACTIVITIES	6.4	2.8	0.5	4.1
Section L: REAL ESTATE ACTIVITIES	1.5	0.9	0.2	1.1
Section M: PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES	14.9	11.7	0.6	11.5
Section N: ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES	5.7	2.7	2.8	4.0
Section O: PUBLIC ADMINISTRATION AND DEFENCE; COMPULSORY SOCIAL SECURITY	7.4	3.1	2.9	5.0
Section P: EDUCATION	10.4	7.1	83.3	19.7
Section Q: HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	8.3	38.0	4.7	20.0
Section R: ARTS, ENTERTAINMENT AND RECREATION	6.2	2.7	0.8	3.9
Section S: OTHER SERVICE ACTIVITIES	1.7	0.7	0.3	1.1
Section T: ACTIVITIES OF HOUSEHOLDS AS EMPLOYERS; UNDIFFERENTIATED GOODS- AND SERVICES-PRODUCING ACTIVITIES OF HOUSEHO	0.1	0.1	0.2	0.1
Section U: ACTIVITIES OF EXTRATERRITORIAL ORGANISATIONS AND BODIES	0.3	0.0	0.0	0.1
Total	100	100	100	100
Total, N	113,745	105,655	37,755	257,160

Base: All graduates of working age in employment (not studying)
Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.
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Table A13: Industry sections of main job at 6 months, AHSS subject areas (%)

	SS	Law	B&A	MCD	Lang	H&P	CAD
Section A: AGRICULTURE, FORESTRY AND FISHING	0.1	0.0	0.1	0.1	0.1	0.1	0.1
Section B: MINING AND QUARRYING	0.1	0.4	0.7	0.1	0.0	0.1	0.0
Section C: MANUFACTURING	1.9	1.7	7.6	2.2	2.4	2.5	5.3
Section D: ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY	0.4	0.4	0.7	0.4	0.4	0.3	0.2
Section E: WATER SUPPLY; SEWERAGE, WASTE MANAGEMENT AND REMEDIATION ACTIVITIES	0.2	0.1	0.4	0.2	0.1	0.2	0.1
Section F: CONSTRUCTION	0.7	1.4	1.7	0.7	0.7	0.8	0.8
Section G: WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND MOTORCYCLES	8.7	8.3	14.4	15.7	13.1	14.2	21.6
Section H: TRANSPORTATION AND STORAGE	1.4	1.5	3.0	1.0	1.4	1.5	0.9
Section I: ACCOMMODATION AND FOOD SERVICE ACTIVITIES	4.2	3.6	6.4	7.0	7.1	7.3	8.9
Section J: INFORMATION AND COMMUNICATION	4.0	3.3	7.1	28.0	10.3	6.2	9.5
Section K: FINANCIAL AND INSURANCE ACTIVITIES	7.8	6.6	10.3	2.9	4.8	6.2	1.5
Section L: REAL ESTATE ACTIVITIES	1.7	1.6	2.3	1.0	1.3	1.2	0.7
Section M: PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES	9.8	43.4	14.8	12.3	12.5	11.0	13.8
Section N: ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES	5.1	4.4	7.6	5.0	6.4	6.7	3.5

	SS	Law	B&A	MCD	Lang	H&P	CAD
Section O: PUBLIC ADMINISTRATION AND DEFENCE; COMPULSORY SOCIAL SECURITY	21.7	8.3	4.4	2.0	3.3	6.2	1.1
Section P: EDUCATION	10.6	4.9	5.7	8.3	22.8	16.1	11.1
Section Q: HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	16.7	6.6	8.7	3.7	5.9	6.6	3.3
Section R: ARTS, ENTERTAINMENT AND RECREATION	2.0	1.6	2.8	7.8	4.8	7.7	16.0
Section S: OTHER SERVICE ACTIVITIES	1.9	1.2	1.1	1.5	1.9	4.7	1.5
Section T: ACTIVITIES OF HOUSEHOLDS AS EMPLOYERS; UNDIFFERENTIATED GOODS- AND SERVICES-PRODUCING ACTIVITIES OF HOUSEHO	0.1	0.1	0.0	0.1	0.2	0.2	0.2
Section U: ACTIVITIES OF EXTRATERRITORIAL ORGANISATIONS AND BODIES	0.7	0.6	0.1	0.2	0.3	0.1	0.0
Total	100	100	100	100	100	100	100
Total, N	22,960	8,035	32,205	7,010	11,650	8,475	23,405

Base: AHSS graduates of working age in employment (not studying)

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Table A14: Industry sections of main job at 3.5 years, broad subject groupings (%)

	AHSS	STEM	Ed/combined	Total
Section A: AGRICULTURE, FORESTRY AND FISHING	0.1	0.4	0.0	0.2
Section B: MINING AND QUARRYING	0.4	1.1	0.2	0.6
Section C: MANUFACTURING	5.2	8.0	0.7	5.4
Section D: ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY	0.5	0.6	0.0	0.4
Section E: WATER SUPPLY; SEWERAGE, WASTE MANAGEMENT AND REMEDIATION ACTIVITIES	0.3	0.7	0.1	0.4
Section F: CONSTRUCTION	0.9	3.4	0.2	1.7
Section G: WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND MOTORCYCLES	8.4	5.7	1.2	6.4
Section H: TRANSPORTATION AND STORAGE	1.5	1.4	0.2	1.3
Section I: ACCOMMODATION AND FOOD SERVICE ACTIVITIES	2.1	1.0	0.4	1.4
Section J: INFORMATION AND COMMUNICATION	8.4	7.7	1.0	7.1
Section K: FINANCIAL AND INSURANCE ACTIVITIES	7.0	4.1	0.7	5.1
Section L: REAL ESTATE ACTIVITIES	1.4	1.4	0.4	1.3
Section M: PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES	18.6	17.4	1.5	15.6
Section N: ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES	3.9	2.1	1.5	2.9
Section O: PUBLIC ADMINISTRATION AND DEFENCE; COMPULSORY SOCIAL SECURITY	7.7	5.5	2.5	6.2
Section P: EDUCATION	16.0	11.8	81.9	24.5
Section Q: HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	11.1	24.6	6.4	14.9
Section R: ARTS, ENTERTAINMENT AND RECREATION	4.6	2.3	0.8	3.3
Section S: OTHER SERVICE ACTIVITIES	1.7	0.7	0.2	1.1
Section T: ACTIVITIES OF HOUSEHOLDS AS EMPLOYERS; UNDIFFERENTIATED GOODS- AND SERVICES-PRODUCING ACTIVITIES OF HOUSEHO	0.1	0.0	0.1	0.1

	AHSS	STEM	Ed/combined	Total
Section U: ACTIVITIES OF EXTRATERRITORIAL ORGANISATIONS AND BODIES	0.2	0.0	0.0	0.1
Total	100	100	100	100
Total, N	30,185	19,605	8,820	58,610

Base: All graduates of working age in employment (not studying)

Table A15: Industry sections of main job at 3.5 years, AHSS subject areas (%)

	SS	Law	B&A	MCD	Lang	H&P	CAD
Section A: AGRICULTURE, FORESTRY AND FISHING	0.1	0.1	0.2	0.0	0.0	0.1	0.1
Section B: MINING AND QUARRYING	0.3	0.5	0.9	0.1	0.2	0.0	0.1
Section C: MANUFACTURING	2.1	2.2	9.8	4.0	2.8	2.7	6.6
Section D: ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY	0.6	0.2	0.8	0.4	0.2	0.5	0.1
Section E: WATER SUPPLY; SEWERAGE, WASTE MANAGEMENT AND REMEDIATION ACTIVITIES	0.2	0.1	0.5	0.3	0.1	0.2	0.2
Section F: CONSTRUCTION	0.6	0.6	1.7	0.6	0.7	0.8	0.7
Section G: WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND MOTORCYCLES	4.6	4.1	10.4	9.6	6.8	7.3	13.2
Section H: TRANSPORTATION AND STORAGE	1.2	1.0	2.9	0.7	1.2	1.4	0.8
Section I: ACCOMMODATION AND FOOD SERVICE ACTIVITIES	0.6	0.6	2.7	2.2	2.4	2.3	3.0
Section J: INFORMATION AND COMMUNICATION	4.1	3.1	6.7	27.2	10.2	6.3	11.7
Section K: FINANCIAL AND INSURANCE ACTIVITIES	8.8	7.0	11.0	3.8	5.4	6.1	1.7
Section L: REAL ESTATE ACTIVITIES	1.9	1.6	1.8	1.2	1.0	1.2	0.7
Section M: PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES	13.5	50.0	17.8	12.7	15.1	15.7	15.3
Section N: ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES	2.5	2.3	5.7	4.4	4.1	3.7	3.4
Section O: PUBLIC ADMINISTRATION AND DEFENCE; COMPULSORY SOCIAL SECURITY	12.5	12.0	8.3	4.7	4.6	8.7	1.9
Section P: EDUCATION	14.8	6.0	8.8	12.5	31.3	23.6	20.7
Section Q: HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	27.8	6.7	6.4	7.9	7.1	8.4	5.9
Section R: ARTS, ENTERTAINMENT AND RECREATION	1.1	0.2	2.5	6.2	4.6	6.8	12.3
Section S: OTHER SERVICE ACTIVITIES	2.1	1.0	1.0	1.3	1.9	3.9	1.4
Section T: ACTIVITIES OF HOUSEHOLDS AS EMPLOYERS; UNDIFFERENTIATED GOODS- AND SERVICES-PRODUCING ACTIVITIES OF HOUSEHO	0.2	0.1	0.1	0.0	0.1	0.1	0.2
Section U: ACTIVITIES OF EXTRATERRITORIAL ORGANISATIONS AND BODIES	0.5	0.4	0.1	0.1	0.5	0.2	0.0
Total	100	100	100	100	100	100	100
Total, N	6,150	2,710	7,885	1,970	3,290	2,790	5,380

Base: AHSS graduates of working age in employment (not studying)

Table A16: Top ten industry divisions of main job at 6 months, broad subject groupings (%)

AHSS		STEM		Ed&Other	
SIC	**%**	**SIC**	**%**	**SIC**	**%**
(47) Retail trade, except of motor vehicles and motorcycles	12.6	(86) Human health activities	34.8	(85) Education	83.3
(85) Education	10.4	(47) Retail trade, except of motor vehicles and motorcycles	7.6	(84) Public administration and defence; compulsory social security	2.9
(84) Public administration and defence; compulsory social security	7.4	(85) Education	7.1	(78) Employment activities	2.4
(69) Legal and accounting activities	6.1	(71) Architectural and engineering activities; technical testing and analysis	6.1	(88) Social work activities without accommodation	2.4
(56) Food and beverage service activities	4.8	(62) Computer programming, consultancy and related activities	4.4	(86) Human health activities	2.1
(64) Financial service activities, except insurance and pension funding	4.4	(84) Public administration and defence; compulsory social security	3.1	(47) Retail trade, except of motor vehicles and motorcycles	1.4
(86) Human health activities	4	(56) Food and beverage service activities	2.3	(56) Food and beverage service activities	0.5
(88) Social work activities without accommodation	3.6	(88) Social work activities without accommodation	2.2	(93) Sports activities and amusement and recreation activities	0.4
(90) Creative, arts and entertainment activities	3.6	(64) Financial service activities, except insurance and pension funding	1.9	(87) Residential care activities	0.3
(73) Advertising and market research	2.9	(93) Sports activities and amusement and recreation activities	1.8	(64) Financial service activities, except insurance and pension funding	0.3
All sectors, N	113,745	All sectors, N	105,655	All sectors, N	37,755

Base: AHSS, STEM and Education/combined graduates of working age in employment (not studying)

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Table A17: Top ten industry divisions of main job at 6 months, AHSS subject areas (%)

SocStud		Law		B&A		MCD		Lang		H&Ph		CAD	
SIC	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**
(84) Public administration and defence; compulsory social security	21.7	(69) Legal and accounting activities	40.1	(47) Retail trade, except of motor vehicles and motorcycles	11.5	(47) Retail trade, except of motor vehicles and motorcycles	14.4	(85) Education	22.8	(85) Education	16.1	(47) Retail trade, except of motor vehicles and motorcycles	20.1
(85) Education	10.6	(84) Public administration and defence; compulsory social security	8.3	(64) Financial service activities, except insurance and pension funding	7.5	(59) Motion picture, video and television programme production, sound recording and music publishing	9.7	(47) Retail trade, except of motor vehicles and motorcycles	11.8	(47) Retail trade, except of motor vehicles and motorcycles	13.1	(90) Creative, arts and entertainment activities	13.3
(88) Social work activities without accommodation	9.2	(47) Retail trade, except of motor vehicles and motorcycles	7.5	(86) Human health activities	6.7	(58) Publishing activities	8.4	(56) Food and beverage service activities	5.4	(84) Public administration and defence; compulsory social security	6.2	(85) Education	11.1
(47) Retail trade, except of motor vehicles and motorcycles	7.8	(85) Education	4.9	(69) Legal and accounting activities	6.4	(85) Education	8.3	(58) Publishing activities	4.7	(56) Food and beverage service activities	5.9	(74) Other professional, scientific and technical activities	8.8

SocStud		Law		B&A		MCD		Lang		H&Ph		CAD	
SIC	%	**SIC**	%	**SIC**	%	**SIC**	%	**SIC**	%	**SIC**	%	**SIC**	%
(86) Human health activities	5.8	(64) Financial service activities, except insurance and pension funding	4.3	(85) Education	5.7	(56) Food and beverage service activities	5.8	(74) Other professional, scientific and technical activities	3.5	(94) Activities of membership organisations	4.2	(56) Food and beverage service activities	7.6
(64) Financial service activities, except insurance and pension funding	5.6	(88) Social work activities without accommodation	3.5	(84) Public administration and defence; compulsory social security	4.4	(60) Programming and broadcasting activities	5.7	(73) Advertising and market research	3.5	(64) Financial service activities, except insurance and pension funding	3.9	(59) Motion picture, video and television programme production, sound recording and music publishing	5.0
(69) Legal and accounting activities	3.9	(56) Food and beverage service activities	2.8	(62) Computer programming, consultancy and related activities	3.9	(73) Advertising and market research	5.3	(88) Social work activities without accommodation	3.3	(78) Employment activities	3.8	(73) Advertising and market research	2.8
(56) Food and beverage service activities	3.3	(86) Human health activities	2.7	(73) Advertising and market research	3.8	(70) Activities of head offices; management consultancy activities	3.3	(84) Public administration and defence; compulsory social security	3.3	(91) Libraries, archives, museums and other cultural activities	3.8	(62) Computer programming, consultancy and related activities	1.9

SocStud		Law		B&A		MCD		Lang		H&Ph		CAD	
SIC	%	**SIC**	%	**SIC**	%	**SIC**	%	**SIC**	%	**SIC**	%	**SIC**	%
(70) Activities of head offices; management consultancy activities	2.1	(68) Real estate activities	1.6	(78) Employment activities	2.9	(93) Sports activities and amusement and recreation activities	2.4	(64) Financial service activities, except insurance and pension funding	2.9	(69) Legal and accounting activities	3.3	(93) Sports activities and amusement and recreation activities	1.5
(78) Employment activities	2.7	(78) Employment activities	2.2	(56) Food and beverage service activities	3.7	(90) Creative, arts and entertainment activities	2.9	(78) Employment activities	3.2	(88) Social work activities without accommodation	3.7	(88) Social work activities without accommodation	1.7
Total	22,960	Total	8,035	Total	32,205	Total	7,010	Total	11,650	Total	8,475	Total	23,405

Base: AHSS graduates of working age in employment (not studying)

Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.

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Table A18: Top ten industry divisions of main job at 3.5 years, broad subject groupings (%)

AHSS		STEM		Ed&Other	
SIC	**%**	**SIC**	**%**	**SIC**	**%**
(85) Education	16.0	(86) Human health activities	20.7	(85) Education	81.9
(69) Legal and accounting activities	8.2	(85) Education	11.8	(88) Social work activities without accommodation	4.0
(88) Social work activities without accommodation	8.1	(71) Architectural and engineering activities; technical testing and analysis	8.1	(84) Public administration and defence; compulsory social security	2.5
(84) Public administration and defence; compulsory social security	7.7	(62) Computer programming, consultancy and related activities	5.6	(86) Human health activities	2.1
(47) Retail trade, except of motor vehicles and motorcycles	7.0	(84) Public administration and defence; compulsory social security	5.5	(78) Employment activities	1.1
(64) Financial service activities, except insurance and pension funding	4.0	(47) Retail trade, except of motor vehicles and motorcycles	4.8	(47) Retail trade, except of motor vehicles and motorcycles	1.0
(70) Activities of head offices; management consultancy activities	3.3	(88) Social work activities without accommodation	3.1	(62) Computer programming, consultancy and related activities	0.5
(73) Advertising and market research	3.1	(64) Financial service activities, except insurance and pension funding	2.1	(69) Legal and accounting activities	0.5
(62) Computer programming, consultancy and related activities	2.5	(74) Other professional, scientific and technical activities	2.1	(64) Financial service activities, except insurance and pension funding	0.4
(86) Human health activities	2.4	(72) Scientific research and development	1.9	(68) Real estate activities	0.4
Base, N	30,185	Base, N	19,605	Base, N	8,820

Base: AHSS, STEM and Education/combined graduates of working age in employment (not studying)

Source(s): HESA DLHE Long Record 2010/11. Copyright Higher Education Statistics Agency Limited.

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Table A19: Top ten industry divisions of main job at 3.5 years, AHSS subject areas (%)

SocStud		Law		B&A		MCD		Lang		H&Ph		CAD	
SIC	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**
(88) Social work activities without accommodation	23.1	(69) Legal and accounting activities	45.6	(85) Education	8.8	(85) Education	12.5	(85) Education	31.3	(85) Education	23.6	(85) Education	20.7
(85) Education	14.8	(84) Public administration and defence; compulsory social security	12.0	(84) Public administration and defence; compulsory social security	8.3	(47) Retail trade, except of motor vehicles and motorcycles	8.9	(47) Retail trade, except of motor vehicles and motorcycles	5.8	(84) Public administration and defence; compulsory social security	8.7	(47) Retail trade, except of motor vehicles and motorcycles	11.8
(84) Public administration and defence; compulsory social security	12.5	(85) Education	6.0	(47) Retail trade, except of motor vehicles and motorcycles	7.8	(58) Publishing activities	8.5	(58) Publishing activities	5.6	(88) Social work activities without accommodation	6.7	(90) Creative, arts and entertainment activities	9.8
(64) Financial service activities, except insurance and pension funding	5.2	(88) Social work activities without accommodation	4.7	(69) Legal and accounting activities	7.4	(59) Motion picture, video and television programme production, sound recording and music publishing	7.9	(84) Public administration and defence; compulsory social security	4.6	(47) Retail trade, except of motor vehicles and motorcycles	6.4	(74) Other professional, scientific and technical activities	7.5

SocStud		Law		B&A		MCD		Lang		H&Ph		CAD	
SIC	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**
(69) Legal and accounting activities	4.7	(64) Financial service activities, except insurance and pension funding	3.5	(64) Financial service activities, except insurance and pension funding	6.7	(73) Advertising and market research	5.8	(88) Social work activities without accommodation	4.6	(69) Legal and accounting activities	5.1	(59) Motion picture, video and television programme production, sound recording and music publishing	4.9
(70) Activities of head offices; management consultancy activities	4.1	(47) Retail trade, except of motor vehicles and motorcycles	3.3	(70) Activities of head offices; management consultancy activities	4.3	(88) Social work activities without accommodation	5.3	(69) Legal and accounting activities	4.3	(91) Libraries, archives, museums and other cultural activities	4.8	(73) Advertising and market research	4.1
(47) Retail trade, except of motor vehicles and motorcycles	3.8	(65) Insurance, reinsurance and pension funding, except compulsory social security	2.1	(62) Computer programming, consultancy and related activities	3.8	(60) Programming and broadcasting activities	5.1	(73) Advertising and market research	3.8	(70) Activities of head offices; management consultancy activities	3.6	(88) Social work activities without accommodation	3.9
(86) Human health activities	3.6	(70) Activities of head offices; management consultancy activities	2.0	(88) Social work activities without accommodation	3.2	(84) Public administration and defence; compulsory social security	4.7	(70) Activities of head offices; management consultancy activities	3.1	(94) Activities of membership organisations	3.6	(62) Computer programming, consultancy and related activities	2.8

SocStud		Law		B&A		MCD		Lang		H&Ph		CAD	
SIC	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**
(66) Activities auxiliary to financial services and insurance activities	2.2	(86) Human health activities	1.7	(73) Advertising and market research	2.9	(91) Libraries, archives, museums and other cultural activities	4.4	(74) Other professional, scientific and technical activities	2.9	(73) Advertising and market research	3.4	(58) Publishing activities	2.1
(73) Advertising and market research	2.1	(68) Real estate activities	1.6	(86) Human health activities	2.9	(62) Computer programming, consultancy and related activities	3.9	(90) Creative, arts and entertainment activities	2.5	(64) Financial service activities, except insurance and pension funding	3.3	(56) Food and beverage service activities	2.0
	6,150		2,710		7,885		1,970		3,290		2,790		5,380

Base: AHSS graduates of working age in employment (not studying)

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Table A20: Professional and Graduate jobs (SOC(HE)_EP) at 6 months, broad subject groupings (%)

	AHSS	STEM	Ed/ combined	All subjects
Professional/associate professional or managerial (1-3)	68.7	83.2	88.9	77.6
Non-professional job (4-9)	31.3	16.8	11.1	22.4
Total	100	100	100	100
Total, N	113,980	105,770	37,755	257,505
Expert	31.1	64.8	40.4	46.3
Strategist	8.1	3.7	1.1	5.3
Communicator	19.9	4.4	44.2	17.1
Non-graduate	40.9	27.0	14.3	31.3
Total	100	100	100	100
Total, N	113,980	105,770	37,755	257,505

Base: All graduates of working age in employment (not studying)

Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.

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Table A21: Professional and Graduate jobs (SOC(HE)_EP) at 6 months, AHSS subjects (%)

	SS	Law	B&A	MCD	Lang	H&P	CAD
Professional/associate professional or managerial (1-3)	71.9	75.0	75.2	66.9	62.2	58.2	62.2
Non-professional job (4-9)	28.1	25.0	24.8	33.1	37.8	41.8	37.8
Total	100	100	100	100	100	100	100
Total, N	22,995	8,055	32,265	7,020	11,670	8,480	23,495
Expert	43.8	37.0	29.2	15.8	24.1	24.9	29.6
Strategist	8.3	5.5	15.8	2.7	4.8	6.4	2.3
Communicator	9.0	4.9	20.1	43.6	27.4	19.0	24.8
Non-graduate	38.8	52.7	34.9	37.9	43.7	49.7	43.4
Total	100	100	100	100	100	100	100
Total, N	22,995	8,055	32,265	7,020	11,670	8,480	23,495

Base: AHSS graduates of working age in employment (not studying)

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Table A22: Professional and Graduate jobs (SOC(HE)_EP) at 3.5 years, broad subject groupings (%)

	AHSS	STEM	Ed/combined	All subjects
Professional/associate professional or managerial (1-3)	76.8	86.8	89.9	82.1
Non-professional job (4-9)	23.2	13.2	10.1	17.9
Total	100	100	100	100
Total, N	30,190	19,610	8,820	58,620
Expert	33.4	59.7	48.6	44.4
Strategist	10.5	6.5	2.1	7.9
Communicator	22.0	7.4	32.3	18.7
Non-graduate	34.1	26.5	17.0	29.0
Total	100	100	100	100
Total, N	30,190	19,610	8,820	58,620

Base: All graduates of working age in employment (not studying)

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Table A23: Professional and Graduate jobs (SOC(HE)_EP) at 3.5 years, AHSS subjects (%)

	SS	Law	B&A	MCD	Lang	H&P	CAD
Professional/associate professional or managerial (1-3)	81.5	82.0	79.4	73.3	74.8	73.0	69.2
Non-professional job (4-9)	18.5	18.0	20.6	26.7	25.2	27.0	30.8
Total	100	100	100	100	100	100	100
Total, N	6,140	2,710	7,885	1,975	3,295	2,785	5,400
Expert	45.2	47.3	27.4	19.1	28.1	33.6	29.9
Strategist	11.2	7.9	18.8	5.7	6.5	8.3	4.2
Communicator	13.2	7.4	20.4	43.9	33.5	21.9	26.9
Non-graduate	30.4	37.3	33.4	31.3	32.0	36.2	39.0
Total	100	100	100	100	100	100	100
Total, N	6,140	2,710	7,885	1,975	3,295	2,785	5,400

Base: AHSS graduates of working age in employment (not studying)

Source(s): HESA DLHE Long Record 2010/11. Copyright Higher Education Statistics Agency Limited.

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Table A24: Occupational major group of employment in main job and 'professional' marker at 6 months, broad subject groupings (%)

SOC 2010 – Major groups	AHSS	STEM	Ed/combined	All subjects
1: MANAGERS, DIRECTORS AND SENIOR OFFICIALS	6.6	3.0	1.3	4.4
2: PROFESSIONAL OCCUPATIONS	22.9	61.9	82.9	47.7
3: ASSOCIATE PROFESSIONAL AND TECHNICAL OCCUPATIONS	39.2	18.3	4.7	25.5
4: ADMINISTRATIVE AND SECRETARIAL OCCUPATIONS	9.1	3.3	1.5	5.6
5: SKILLED TRADES OCCUPATIONS	1.2	1.0	0.2	1.0
6: CARING, LEISURE AND OTHER SERVICE OCCUPATIONS	4.7	3.9	7.4	4.8
7: SALES AND CUSTOMER SERVICE OCCUPATIONS	10.6	5.1	1.4	7.0
8: PROCESS, PLANT AND MACHINE OPERATIVES	0.4	0.5	0.1	0.4
9: ELEMENTARY OCCUPATIONS	5.4	3.0	0.6	3.7
Total	100	100	100	100
Total, N	113,980	105,770	37,755	257,505

Base: All graduates of working age in employment (not studying)

Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.

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Table A25: Occupational major group of employment in main job and 'professional' marker at 6 months, AHSS subject areas (%)

SOC 2010 – Major groups	SS	Law	B&A	MCD	Lang	H&P	CAD
1: MANAGERS, DIRECTORS AND SENIOR OFFICIALS	5.3	4.3	13.0	3.3	3.6	4.6	3.2
2: PROFESSIONAL OCCUPATIONS	34.7	30.3	20.3	24.7	25.0	23.6	10.6
3: ASSOCIATE PROFESSIONAL AND TECHNICAL OCCUPATIONS	31.8	40.4	41.9	38.9	33.6	29.9	48.3
4: ADMINISTRATIVE AND SECRETARIAL OCCUPATIONS	7.7	10.2	10.2	8.3	11.7	13.0	6.0
5: SKILLED TRADES OCCUPATIONS	0.7	0.6	0.9	1.0	0.9	1.4	2.3
6: CARING, LEISURE AND OTHER SERVICE OCCUPATIONS	7.3	2.2	1.9	2.7	7.5	7.8	4.7
7: SALES AND CUSTOMER SERVICE OCCUPATIONS	8.1	8.2	8.4	13.3	11.1	11.9	15.1
8: PROCESS, PLANT AND MACHINE OPERATIVES	0.4	0.3	0.4	0.4	0.3	0.6	0.6
9: ELEMENTARY OCCUPATIONS	4.0	3.5	3.0	7.3	6.3	7.1	9.1
Total	100	100	100	100	100	100	100
Total, N	22,995	8,055	32,265	7,020	11,670	8,480	23,495

Base: AHSS graduates of working age in employment (not studying)

Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.

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Table A26: Occupational major group of employment in main job and 'professional' marker at 3.5 years, broad subject groupings (%)

SOC 2010 – Major groups	AHSS	STEM	Ed/combined	All subjects
1: MANAGERS, DIRECTORS AND SENIOR OFFICIALS	8.7	5.5	4.3	7.0
2: PROFESSIONAL OCCUPATIONS	31.8	59.0	78.4	47.9
3: ASSOCIATE PROFESSIONAL AND TECHNICAL OCCUPATIONS	36.3	22.3	7.3	27.3
4: ADMINISTRATIVE AND SECRETARIAL OCCUPATIONS	12.2	4.4	2.3	8.1
5: SKILLED TRADES OCCUPATIONS	1.0	1.8	0.2	1.2
6: CARING, LEISURE AND OTHER SERVICE OCCUPATIONS	3.5	3.1	6.4	3.8
7: SALES AND CUSTOMER SERVICE OCCUPATIONS	4.7	2.4	0.6	3.3
8: PROCESS, PLANT AND MACHINE OPERATIVES	0.4	0.4	0.2	0.4
9: ELEMENTARY OCCUPATIONS	1.4	1.1	0.4	1.1
Total	100	100	100	100
Total, N	30,190	19,610	8,820	58,620

Base: All graduates of working age in employment (not studying)

Table A27: Occupational major group of employment in main job and 'professional' marker at 3.5 years, AHSS subject areas (%)

SOC 2010 – Major groups	SS	Law	B&A	MCD	Lang	H&P	CAD
1: MANAGERS, DIRECTORS AND SENIOR OFFICIALS	7.5	5.4	16.4	5.4	4.5	6.8	5.1
2: PROFESSIONAL OCCUPATIONS	42.4	44.7	21.1	28.7	38.0	39.2	22.4
3: ASSOCIATE PROFESSIONAL AND TECHNICAL OCCUPATIONS	31.7	32.0	41.9	39.2	32.4	27.0	41.8
4: ADMINISTRATIVE AND SECRETARIAL OCCUPATIONS	9.8	11.5	12.7	14.8	15.2	16.3	9.6
5: SKILLED TRADES OCCUPATIONS	0.3	0.2	0.5	0.6	0.8	0.8	3.5
6: CARING, LEISURE AND OTHER SERVICE OCCUPATIONS	4.8	1.7	1.7	1.9	3.6	4.3	5.8
7: SALES AND CUSTOMER SERVICE OCCUPATIONS	2.9	4.0	4.1	6.4	4.1	4.0	8.1
8: PROCESS, PLANT AND MACHINE OPERATIVES	0.2	0.1	0.6	0.2	0.3	0.3	0.8
9: ELEMENTARY OCCUPATIONS	0.5	0.5	1.0	2.7	1.2	1.2	3.1
Total	100	100	100	100	100	100	100
Total, N	6,140	2,710	7,885	1,975	3,295	2,785	5,400

Base: AHSS graduates of working age in employment (not studying)

Table A28: Ten most common occupations (minor or sub-minor group) at 6 months, by subject area

SocStud		Law		B&A		MCD		Lang		H&Ph		CAD	
SOC	**%**	**SOC**	**%**	**SOC**	**%**	**SOC**	**%**	**SOC**	**%**	**SOC**	**%**	**SOC**	**%**
(2442) SOCIAL WORKERS	9.1	(3520) LEGAL ASSOCIATE PROFESSIONALS	21.6	(2421) CHARTERED AND CERTIFIED ACCOUNTANTS	17.8	(3543) MARKETING ASSOCIATE PROFESSIONALS	10.5	(7111) SALES AND RETAIL ASSISTANTS	11.7	(7111) SALES AND RETAIL ASSISTANTS	11.1	(3415) MUSICIANS	13.2
(7111) SALES AND RETAIL ASSISTANTS	5.7	(7111) SALES AND RETAIL ASSISTANTS	10.6	(3534) FINANCE AND INVESTMENT ANALYSTS AND ADVISERS	7.5	(7111) SALES AND RETAIL ASSISTANTS	10.7	(2314) SECONDARY EDUCATION TEACHING PROFESSIONALS	8.3	(2314) SECONDARY EDUCATION TEACHING PROFESSIONALS	6.1	(7111) SALES AND RETAIL ASSISTANTS	10.0
(2421) CHARTERED AND CERTIFIED ACCOUNTANTS	5.5	(2419) LEGAL PROFESSIONALS N.E.C.	5.5	(3537) FINANCIAL AND ACCOUNTING TECHNICIANS	4.2	(9274) BAR STAFF	4.4	(2319) TEACHING AND OTHER EDUCATIONAL PROFESSIONALS N.E.C.	7.0	(9274) BAR STAFF	4.4	(2319) TEACHING AND OTHER EDUCATIONAL PROFESSIONALS N.E.C.	5.1
(3534) FINANCE AND INVESTMENT ANALYSTS AND ADVISERS	4.4	(2413) SOLICITORS	5.2	(7111) SALES AND RETAIL ASSISTANTS	4.1	(2471) JOURNALISTS, NEWSPAPER AND PERIODICAL EDITORS	3.7	(9273) WAITERS AND WAITRESSES	4.5	(2319) TEACHING AND OTHER EDUCATIONAL PROFESSIONALS N.E.C.	3.8	(9274) BAR STAFF	4.1

SocStud		Law		B&A		MCD		Lang		H&Ph		CAD	
SOC	**%**	**SOC**	**%**	**SOC**	**%**	**SOC**	**%**	**SOC**	**%**	**SOC**	**%**	**SOC**	**%**
(3239) WELFARE AND HOUSING ASSOCIATE PROFESSIONALS N.E.C.	3.7	(9273) WAITERS AND WAITRESSES	3.4	(3562) HUMAN RESOURCES AND INDUSTRIAL RELATIONS OFFICERS	4.1	(2472) PUBLIC RELATIONS PROFESSIONALS	4.1	(3412) AUTHORS, WRITERS AND TRANSLATORS	4.0	(4159) OTHER ADMINISTRATIVE OCCUPATIONS N.E.C.	3.5	(9273) WAITERS AND WAITRESSES	3.8
(2314) SECONDARY EDUCATION TEACHING PROFESSIONALS	2.7	(4159) OTHER ADMINISTRATIVE OCCUPATIONS N.E.C.	2.7	(3543) MARKETING ASSOCIATE PROFESSIONALS	3.8	(3416) ARTS OFFICERS, PRODUCERS AND DIRECTORS	3.4	(9274) BAR STAFF	3.7	(9273) WAITERS AND WAITRESSES	3.1	(9272) KITCHEN AND CATERING ASSISTANTS	3.2
(3539) BUSINESS AND RELATED ASSOCIATE PROFESSIONALS N.E.C.	2.7	(9274) BAR STAFF	2.3	(3539) BUSINESS AND RELATED ASSOCIATE PROFESSIONALS N.E.C.	3.2	(7219) CUSTOMER SERVICE OCCUPATIONS N.E.C.	3.3	(3543) MARKETING ASSOCIATE PROFESSIONALS	2.7	(3543) MARKETING ASSOCIATE PROFESSIONALS	2.6	(3416) ARTS OFFICERS, PRODUCERS AND DIRECTORS	2.8
(2319) TEACHING AND OTHER EDUCATIONAL PROFESSIONALS N.E.C.	2.6	(7219) CUSTOMER SERVICE OCCUPATIONS N.E.C.	2.2	(4122) BOOK-KEEPERS, PAYROLL MANAGERS AND WAGES CLERKS	2.5	(9272) KITCHEN AND CATERING ASSISTANTS	3.2	(4159) OTHER ADMINISTRATIVE OCCUPATIONS N.E.C.	2.7	(7219) CUSTOMER SERVICE OCCUPATIONS N.E.C.	2.3	(2314) SECONDARY EDUCATION TEACHING PROFESSIONALS	2.7
(9273) WAITERS AND WAITRESSES	2.5	(4212) LEGAL SECRETARIES	2.0	(2423) MANAGEMENT CONSULTANTS AND BUSINESS ANALYSTS	2.5	(3417) PHOTOGRAPHERS, AUDIO-VISUAL AND BROADCASTING EQUIPMENT OPERATORS	2.7	(2315) PRIMARY AND NURSERY EDUCATION TEACHING PROFESSIONALS	2.6	(9272) KITCHEN AND CATERING ASSISTANTS	2.2	(3421) GRAPHIC DESIGNERS	2.4

SocStud		Law		B&A		MCD		Lang		H&Ph		CAD	
SOC	**%**	**SOC**	**%**	**SOC**	**%**	**SOC**	**%**	**SOC**	**%**	**SOC**	**%**	**SOC**	**%**
(6145) CARE WORKERS AND HOME CARERS	2.5	(2311) HIGHER EDUCATION TEACHING PROFESSIONALS	1.9	(4159) OTHER ADMINISTRATIVE OCCUPATIONS N.E.C.	2.0	(9273) WAITERS AND WAITRESSES	2.9	(9272) KITCHEN AND CATERING ASSISTANTS	2.5	(3239) WELFARE AND HOUSING ASSOCIATE PROFESSIONALS N.E.C.	2.0	(3422) PRODUCT, CLOTHING AND RELATED DESIGNERS	2.3
Base, N	1,850	Base, N	1,325	Base, N	2,150	Base, N	205	Base, N	1,155	Base, N	970	Base, N	1,150

Base: AHSS graduates of working age in employment (not studying)

Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.

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Table A29: Ten most common occupations (minor or sub-minor group) at 3.5 years, by AHSS subject area

SocStud		Law		B&A		MCD		Lang		H&Ph		CAD	
SOC	**%**	**SOC**	**%**	**SOC**	**%**	**SOC**	**%**	**SOC**	**%**	**SOC**	**%**	**SOC**	**%**
(2442) SOCIAL WORKERS	12.7	(2413) SOLICITORS	22.2	(3545) SALES ACCOUNTS AND BUSINESS DEVELOPMENT MANAGERS	8.2	(3543) MARKETING ASSOCIATE PROFESSIONALS	9.8	(2314) SECONDARY EDUCATION TEACHING PROFESSIONALS	8.0	(2314) SECONDARY EDUCATION TEACHING PROFESSIONALS	6.1	(3421) GRAPHIC DESIGNERS	6.4
(3534) FINANCE AND INVESTMENT ANALYSTS AND ADVISERS	3.8	(3520) LEGAL ASSOCIATE PROFESSIONALS	13.4	(3562) HUMAN RESOURCES AND INDUSTRIAL RELATIONS OFFICERS	5.0	(2471) JOURNALISTS, NEWSPAPER AND PERIODICAL EDITORS	8.8	(2315) PRIMARY AND NURSERY EDUCATION TEACHING PROFESSIONALS	6.6	(2315) PRIMARY AND NURSERY EDUCATION TEACHING PROFESSIONALS	4.5	(3422) PRODUCT, CLOTHING AND RELATED DESIGNERS	5.0
(3545) SALES ACCOUNTS AND BUSINESS DEVELOPMENT MANAGERS	3.5	(2419) LEGAL PROFESSIONALS N.E.C.	7.9	(3543) MARKETING ASSOCIATE PROFESSIONALS	4.7	(3416) ARTS OFFICERS, PRODUCERS AND DIRECTORS	7.2	(3545) SALES ACCOUNTS AND BUSINESS DEVELOPMENT MANAGERS	4.7	(4159) OTHER ADMINISTRATIVE OCCUPATIONS N.E.C.	3.2	(3416) ARTS OFFICERS, PRODUCERS AND DIRECTORS	4.3

SocStud		Law		B&A		MCD		Lang		H&Ph		CAD	
SOC	**%**	**SOC**	**%**	**SOC**	**%**	**SOC**	**%**	**SOC**	**%**	**SOC**	**%**	**SOC**	**%**
(2423) MANAGEMENT CONSULTANTS AND BUSINESS ANALYSTS	3.2	(2412) BARRISTERS AND JUDGES	2.9	(3534) FINANCE AND INVESTMENT ANALYSTS AND ADVISERS	4.5	(3545) SALES ACCOUNTS AND BUSINESS DEVELOPMENT MANAGERS	4.9	(3543) MARKETING ASSOCIATE PROFESSIONALS	4.2	(3543) MARKETING ASSOCIATE PROFESSIONALS	3.1	(2314) SECONDARY EDUCATION TEACHING PROFESSIONALS	3.6
(2315) PRIMARY AND NURSERY EDUCATION TEACHING PROFESSIONALS	2.8	(3545) SALES ACCOUNTS AND BUSINESS DEVELOPMENT MANAGERS	2.2	(2423) MANAGEMENT CONSULTANTS AND BUSINESS ANALYSTS	3.7	(2472) PUBLIC RELATIONS PROFESSIONALS	3.6	(2471) JOURNALISTS, NEWSPAPER AND PERIODICAL EDITORS	4.0	(3545) SALES ACCOUNTS AND BUSINESS DEVELOPMENT MANAGERS	2.7	(2319) TEACHING AND OTHER EDUCATIONAL PROFESSIONALS N.E.C.	3.2
(3239) WELFARE AND HOUSING ASSOCIATE PROFESSIONALS N.E.C.	2.7	(4112) NATIONAL GOVERNMENT ADMINISTRATIVE OCCUPATIONS	1.7	(2421) CHARTERED AND CERTIFIED ACCOUNTANTS	3.2	(3417) PHOTOGRAPHERS, AUDIO-VISUAL AND BROADCASTING EQUIPMENT OPERATORS	3.3	(3412) AUTHORS, WRITERS AND TRANSLATORS	4.0	(2444) CLERGY	2.2	(7111) SALES AND RETAIL ASSISTANTS	3.0
(2426) BUSINESS AND RELATED RESEARCH PROFESSIONALS	2.6	(4132) PENSIONS AND INSURANCE CLERKS AND ASSISTANTS	1.7	(3542) BUSINESS SALES EXECUTIVES	2.6	(7111) SALES AND RETAIL ASSISTANTS	2.7	(2319) TEACHING AND OTHER EDUCATIONAL PROFESSIONALS N.E.C.	3.7	(2423) MANAGEMENT CONSULTANTS AND BUSINESS ANALYSTS	2.1	(3545) SALES ACCOUNTS AND BUSINESS DEVELOPMENT MANAGERS	2.8

SocStud		Law		B&A		MCD		Lang		H&Ph		CAD	
SOC	**%**	**SOC**	**%**	**SOC**	**%**	**SOC**	**%**	**SOC**	**%**	**SOC**	**%**	**SOC**	**%**
(2429) BUSINESS, RESEARCH AND ADMINISTRATIVE PROFESSIONALS N.E.C	2.3	(4159) OTHER ADMINISTRATIVE OCCUPATIONS N.E.C.	1.5	(4122) BOOK-KEEPERS, PAYROLL MANAGERS AND WAGES CLERKS	2.4	(4159) OTHER ADMINISTRATIVE OCCUPATIONS N.E.C.	2.6	(4159) OTHER ADMINISTRATIVE OCCUPATIONS N.E.C.	3.0	(3542) BUSINESS SALES EXECUTIVES	2.0	(3417) PHOTOGRAPHERS, AUDIO-VISUAL AND BROADCASTING EQUIPMENT OPERATORS	2.8
(3231) YOUTH AND COMMUNITY WORKERS	2.2	(3543) MARKETING ASSOCIATE PROFESSIONALS	1.3	(3537) FINANCIAL AND ACCOUNTING TECHNICIANS	2.4	(2451) LIBRARIANS	2.5	(2472) PUBLIC RELATIONS PROFESSIONALS	2.4	(3562) HUMAN RESOURCES AND INDUSTRIAL RELATIONS OFFICERS	2.0	(3411) ARTISTS	2.5
(2314) SECONDARY EDUCATION TEACHING PROFESSIONALS	1.9	(7219) CUSTOMER SERVICE OCCUPATIONS N.E.C.	1.2	(1135) HUMAN RESOURCE MANAGERS AND DIRECTORS	2.1	(2137) WEB DESIGN AND DEVELOPMENT PROFESSIONALS	2.0	(3562) HUMAN RESOURCES AND INDUSTRIAL RELATIONS OFFICERS	2.3	(2471) JOURNALISTS, NEWSPAPER AND PERIODICAL EDITORS	1.9	(2315) PRIMARY AND NURSERY EDUCATION TEACHING PROFESSIONALS	2.5
	6,140		2,710		7,885		1,975		3,295		2,785		5,400

Base: AHSS graduates of working age in employment (not studying)

Source(s): HESA DLHE Long Record 2010/11. Copyright Higher Education Statistics Agency Limited.

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Table A30: Use of skills and capabilities in current job (% using 'a lot') at 1-2 years, AHSS subject areas, Futuretrack

		SocStud	Law	B&A	MCD	Lang	H&Ph	CAD
Written communication	Some	22.7	21.9	27.5	32.2	25.2	28.6	40.2
	A lot	71.8	69.0	67.2	58.8	66.2	59.6	47.5
Spoken communication	Some	11.5	13.2	14.1	22.3	16.0	16.0	17.3
	A lot	87.2	84.0	85.3	74.8	81.9	82.7	80.9
Numerical analysis skills	Some	47.6	53.0	43.4	52.3	53.7	52.8	51.1
	A lot	27.3	25.2	45.6	22.8	19.6	22.4	23.5
Critical evaluation	Some	30.8	30.5	40.6	45.2	42.0	40.4	39.9
	A lot	51.6	46.7	45.1	27.8	33.6	38.6	37.5
Research skills	Some	39.4	34.5	47.1	38.2	40.5	43.4	38.2
	A lot	32.7	36.7	28.5	32.1	31.0	26.8	28.5
Presentation skills	Some	42.7	41.4	43.4	40.7	33.4	37.4	34.0
	A lot	32.0	25.1	30.3	26.0	37.3	33.3	36.9
Innovative thinking	Some	37.6	46.3	43.1	35.0	36.9	39.3	33.5
	A lot	47.9	33.5	41.3	50.6	44.7	40.8	51.1
Entrepreneurial skills	Some	29.1	32.0	36.7	38.5	34.7	32.5	29.5
	A lot	12.8	9.4	18.0	10.7	11.5	11.2	20.1
Ability to work in teams	Some	25.3	28.9	26.5	24.2	32.9	28.4	29.7
	A lot	71.3	66.5	71.1	70.1	62.4	63.5	63.9
Ability to work individually	Some	17.7	16.7	19.1	19.4	18.8	21.1	19.2
	A lot	81.6	81.7	79.5	79.5	80.3	76.3	78.9
Ability to manage my time effectively	Some	13.2	14.6	12.9	13.4	16.3	17.1	17.7
	A lot	84.2	82.8	84.9	80.0	81.9	79.0	79.3
Total, N(unw)		823	398	808	196	690	516	988

Base: AHSS graduates in employment (HESA definition)
Source: Futuretrack wave 4 survey

Table A31: Use of skills and capabilities in current job, broad subject groupings (% using 'a lot') at 1-2 years, broad subject groupings, Futuretrack

		AHSS	STEM	ED/oth	All subjects
Written communication	Some	29.6	30.5	30.7	30.1
	A lot	61.8	62.9	63.0	62.4
Spoken communication	Some	15.2	15.2	12.8	14.8
	A lot	83.2	83.8	85.7	83.9
Numerical analysis skills	Some	49.6	46.1	51.0	48.4
	A lot	28.2	37.0	29.5	32.0
Critical evaluation	Some	38.2	36.0	37.0	37.1
	A lot	41.5	49.5	42.5	45.0
Research skills	Some	40.8	46.8	44.6	43.9
	A lot	30.2	26.4	25.8	27.9
Presentation skills	Some	38.7	46.6	35.6	41.4
	A lot	32.9	26.0	38.5	31.1
Innovative thinking	Some	38.3	42.5	36.8	39.7
	A lot	45.3	45.2	48.7	45.9
Entrepreneurial skills	Some	32.5	30.7	36.4	32.4
	A lot	15.1	10.6	11.2	12.6
Ability to work in teams	Some	28.2	22.7	25.6	25.5
	A lot	67.0	74.0	70.2	70.4
Ability to work individually	Some	18.9	17.5	18.3	18.2

		AHSS	STEM	ED/oth	All subjects
	A lot	79.7	81.1	80.3	80.3
Ability to manage my time effectively	Some	15.2	12.7	13.2	13.8
	A lot	82.0	85.2	84.2	83.6
Total, N(unw)	4,419	4,302	1,840	10,561	4,419

Base: In employment (HESA definition)
Source: Futuretrack wave 4 survey

Table A32a: Extent current job is appropriate for skill level (scale of 1-7, mean score) at 1-2 years, AHSS subject areas and broad groupings, Futuretrack

	Mean	s.d.	SE	Base, N (weighted)
Social Studies	4.54	2.00	0.01	24,549
Law	4.19	2.12	0.02	10,012
Business & Admin studies	4.67	1.88	0.01	26,479
Mass communication and Documentation	4.41	2.02	0.03	6,304
Languages and related	4.34	1.96	0.02	16,217
Hist & Philosophical studies	4.19	2.07	0.02	13,045
Creative Arts & Design	4.25	2.06	0.01	33,877
AHSS	***4.40***	***2.01***	***0.01***	***130,483***
STEM	***5.06***	***1.95***	***0.01***	***126,346***
Ed/combined	***4.61***	***2.01***	***0.01***	***52,006***
All subjects	**4.70**	**2.01**	**0.00**	**308,835**

Base: In employment (HESA definition)
Source: Futuretrack wave 4 survey

Table A32b: Extent current job is appropriate for skill level (scale of 1-7, %) at 1-2 years, AHSS subject areas and broad groupings, Futuretrack

	1 - Very inapp.	2	3	4	5	6	7 - Ideal	Total, N(unw)
- SS	11.1	10.3	10.9	9.6	15.9	24.1	18.2	847
- Law	16.1	11.8	12.8	9.7	12.2	19.6	17.9	413
- B&A	8.8	7.8	10.4	12.0	18.2	24.8	17.9	853
- MCD	13.5	10.7	6.8	14.3	17.1	20.3	17.4	200
- Lang	10.6	13.2	11.7	11.8	15.4	23.3	13.9	698
- H&P	16.5	10.4	11.5	11.6	13.5	22.4	14.1	519
- CAD	14.8	12.1	9.8	12.2	14.7	20.4	15.9	994
AHSS	**12.6**	**10.8**	**10.6**	**11.5**	**15.5**	**22.5**	**16.5**	**4,524**
STEM	**8.6**	**6.9**	**7.3**	**8.0**	**13.5**	**26.7**	**29.0**	**4,403**

Base: AHSS and STEM graduates in employment
Source: Futuretrack wave 4 survey

Table A33: Engagement in further study, by AHSS subject area and broad subject groupings (%), at 6 months and 3.5 years

Subject area	Further study at 6 months, %	Total, N	Further study at 3.5 years, %	Total, N	Further study since graduation, %	Total, N
- Social Studies	19.4	33,390	12.5	7,495	41.1	6,220
- Law	33.5	14,115	10.2	3,210	57.3	2,745
- Business and Administration	11.7	41,690	7.2	9,140	34.1	7,990

Subject area	Further study at 6 months, %	Total, N	Further study at 3.5 years, %	Total, N	Further study since graduation, %	Total, N
- Mass Communications and Documentation	8.1	8,870	6.7	2,305	25.8	1,990
- Languages and related	25.7	18,915	15.8	4,270	51.4	3,320
- Historical and Philosophical Studies	28.5	14,570	19.3	3,825	49.5	2,820
- Creative Arts and Design	11.6	30,825	8.3	6,720	29.5	5,465
AHSS	**18.0**	**162,375**	**11.0**	**36,975**	**39.5**	**30,555**
STEM	**18.0**	**145,055**	**15.4**	**24,675**	**38.6**	**19,775**
Education/other	**9.3**	**43,850**	**5.7**	**9,990**	**27.0**	**8,970**
All subjects	**16.9**	**351,280**	**11.8**	**71,640**	**37.3**	**59,300**

Base: All graduates of working age on graduation.
Source(s): HESA DLHE Record 2014/15;HESA DLHE Long Record 2010/11

Table A34: Subject of further study at 6 months (%), AHSS subject area

	SS	Law	B&A	MCD	Lang	H&P	CAD	AHSS
(1) Medicine & dentistry	0.3	0.2	0.4	0.3	0.3	0.4	0.1	0.3
(2) Subjects allied to medicine	2.5	0.3	1.5	1.3	1.4	0.7	1.2	1.3
(3) Biological sciences	3.8	0.4	1.8	1.7	1.0	0.9	1.1	1.7
(4) Veterinary science, agriculture & related subjects	0.5	0.0	0.4	0.3	0.2	0.3	0.2	0.3
(6) Physical sciences	1.5	0.1	0.2	0.3	0.4	1.1	0.2	0.6
(7) Mathematical sciences	0.7	0.1	0.6	0.1	0.2	0.3	0.5	0.4
(8) Computer science	0.8	0.1	2.0	2.2	0.8	0.7	2.4	1.1
(9) Engineering & technology	0.8	0.1	1.6	0.9	0.3	0.3	1.7	0.8
(A) Architecture, building & planning	1.7	0.3	1.1	0.4	0.3	0.9	0.7	0.9
(B) Social studies	44.1	3.4	4.3	6.0	5.4	8.6	1.4	13.4
(C) Law	6.9	86.7	2.5	1.8	7.1	9.9	0.6	18.7
(D) Business & administrative studies	16.5	5.0	74.9	15.1	5.5	5.5	4.8	19.5
(E) Mass communications & documentation	1.8	0.3	0.8	42.0	5.7	4.0	4.5	3.6
(F) Languages	2.1	0.4	1.3	4.2	34.9	5.1	2.7	7.6
(G) Historical & philosophical studies	2.1	0.4	0.5	1.9	5.4	42.7	1.2	7.8
(H) Creative arts & design	0.5	0.1	0.7	10.0	5.9	2.6	55.6	8.6
(I) Education	13.3	2.0	5.6	11.8	25.3	16.2	21.2	13.5
Total	100	100	100	100	100	100	100	100
Total, N	6,400	4,730	4,830	715	4,810	4,145	3,535	29,160

Base: AHSS graduates of working age engaged in further study.
Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.

Table A35: Subject of further study at 3.5 years (%), AHSS subject area

	SS	Law	B&A	MCD	Lang	H&P	CAD	AHSS
(1) Medicine & dentistry	2.8	1.0	0.4	0.3	2.2	1.6	0.9	1.6
(2) Subjects allied to medicine	6.1	2.9	4.8	6.1	5.7	3.5	9.2	5.5
(3) Biological sciences	5.0	0.9	1.3	1.0	1.4	2.1	3.4	2.6
(4) Veterinary science	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
(5) Agriculture & related subjects	0.5	0.3	0.5	0.2	0.1	1.0	0.7	0.5
(6) Physical sciences	1.3	0.1	0.4	1.0	0.3	1.1	0.7	0.8
(7) Mathematical sciences	1.0	1.7	0.7	0.8	0.1	0.2	1.9	0.8
(8) Computer science	0.4	0.0	2.0	4.4	0.1	1.1	1.3	1.0
(9) Engineering & technology	0.6	2.2	1.5	0.0	0.3	0.4	3.2	1.1
(A) Architecture, building & planning	1.4	0.0	0.3	1.0	0.3	0.7	1.6	0.8
(B) Social studies	43.8	6.0	7.3	9.7	5.8	7.0	3.4	14.9
(C) Law	4.3	66.0	1.4	2.4	5.1	5.5	0.8	8.5
(D) Business & administrative studies	13.0	9.7	64.0	15.8	8.9	8.9	5.3	18.6
(E) Mass communications & documentation	1.4	0.4	1.7	16.2	4.0	1.7	5.5	3.0
(F) Languages	2.8	0.0	0.7	6.3	37.1	3.3	3.4	8.3
(G) Historical & philosophical studies	3.0	1.7	1.6	5.6	5.9	48.2	4.1	11.7
(H) Creative arts & design	1.1	0.2	0.7	8.3	6.1	2.3	32.1	6.6
(I) Education	10.2	6.9	10.3	20.9	16.4	11.4	22.4	13.3
(J) Combined	1.3	0.0	0.2	0.1	0.2	0.0	0.0	0.4
Total	100	100	100	100	100	100	100	100
Total, N	920	315	640	155	665	735	545	3,975

Base: AHSS graduates of working age engaged in further study.

Table A36: Subject of further study at any time between graduation and 3.5 years (%), AHSS subject area

	SS	Law	B&A	MCD	Lang	H&P	CAD	AHSS
(1) Medicine & dentistry	0.5	0.0	0.1	0.0	0.4	0.0	0.2	0.2
(2) Subjects allied to medicine	3.7	0.5	1.2	2.0	2.3	1.2	2.5	2.0
(3) Biological sciences	2.6	0.5	1.7	1.5	0.8	1.2	2.1	1.6
(4) Veterinary science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(5) Agriculture & related subjects	1.4	0.3	1.7	1.0	1.2	2.8	2.4	1.6
(6) Physical sciences	0.9	0.2	0.5	0.3	0.2	1.6	0.2	0.6
(7) Mathematical sciences	1.7	0.2	1.8	2.3	0.5	0.8	2.3	1.4
(8) Computer science	1.6	0.6	2.7	4.2	1.1	1.1	2.4	1.8
(9) Engineering & technology	1.1	0.4	1.8	0.6	0.4	1.1	2.7	1.3
(A) Architecture, building & planning	1.5	0.2	0.6	0.5	0.0	0.3	0.3	0.6
(B) Social studies	29.4	3.5	3.0	3.8	4.7	6.8	4.0	9.5
(C) Law	6.0	75.6	1.7	1.4	5.4	8.7	1.7	13.6
(D) Business & administrative studies	28.4	12.2	73.0	29.9	16.6	18.0	17.0	32.0
(E) Mass communications & documentation	1.2	0.2	0.6	21.6	7.9	3.8	3.1	3.3
(F) Languages	1.9	1.3	0.9	2.8	20.5	3.6	2.0	4.5
(G) Historical & philosophical studies	1.0	0.0	0.3	2.3	2.4	20.7	0.6	3.2
(H) Creative arts & design	0.6	0.0	1.0	7.2	3.5	2.3	27.9	5.2
(I) Education	16.0	4.2	6.9	17.8	31.9	25.7	27.8	17.5
(J) Combined	0.6	0.1	0.3	0.8	0.3	0.3	0.9	0.4
Total	100	100	100	100	100	100	100	100
Total, N	2,530	1,570	2,700	515	1,705	1,395	1,605	12,010

Base: AHSS graduates of working age engaged in further study.
Source(s): HESA DLHE Long Record 2010/11. Copyright Higher Education Statistics Agency Limited.
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Table A37: Whether qualification was a requirement for main job at 6 months, broad subject grouping (%)

Whether needed and which aspect	AHSS	STEM	Ed/combined	All subjects
Yes: the qualification was a formal requirement	28.2	54.3	68.3	44.7
Yes: while the qualification was not a formal requirement it did give me an advantage	30.7	19.4	12.7	23.5
No: the qualification was not required	38.6	24.7	18.0	29.9
Don't know	2.5	1.6	1.0	1.9
Total	100	100	100	100
Total, N	96,770	89,490	30,985	217,250
- The subject(s) studied	37.2	50.3	41.0	43.7
- The level of study	31.1	20.6	24.5	25.3
- Sandwich/work experience (gained as part of my course)	9.9	7.6	10.5	9.0
- No one thing was most important	17.0	17.6	19.7	17.7
- Don't know	4.9	3.9	4.3	4.3
Total	100	100	100	100
Total, N	56,155	64,605	24,380	145,140

Base: All graduates of working age in employment (not studying)
Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.
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Table A38: Whether qualification was a requirement for main job at 6 months, AHSS subjects (%)

	SS	Law	B&A	MCD	Lang	H&P	CAD
Yes: the qualification was a formal requirement	35.4	34.9	30.4	21.9	26.7	21.5	20.8
Yes: while the qualification was not a formal requirement it did give me an advantage	26.6	27.8	32.4	36.4	30.8	26.4	33.5
No: the qualification was not required	36.0	35.3	34.9	38.6	40.2	49.8	42.4
Don't know	2.0	2.0	2.3	3.1	2.3	2.3	3.3
Total	100	100	100	100	100	100	100
Total, N	20,090	6,800	27,035	5,690	10,130	7,440	19,590
- The subject(s) studied	36.8	44.5	35.0	41.1	28.7	19.1	48.1
- The level of study	33.5	30.0	29.4	23.4	42.0	53.3	20.3
- Sandwich/work experience (gained as part of my course)	7.5	4.4	13.3	13.6	7.3	5.7	11.0
- No one thing was most important	17.7	16.6	17.6	16.7	17.1	16.8	15.3
- Don't know	4.5	4.4	4.8	5.3	4.8	5.2	5.4
Total	100	100	100	100	100	100	100
Total, N	12,290	4,190	16,695	3,265	5,770	3,520	10,420

Base: AHSS graduates of working age in employment (not studying)
Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.
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Table A39: How important were the following in getting your main job? (broad subject areas), 3.5 years after graduating, broad subject groupings (%)

		AHSS	STEM	Ed/combined	All subjects
Importance of... The subject you studied	Formal req, %	17.6	39.0	55.1	30.4
	Important, %	28.9	28.5	24.9	28.2
	Base, N	30,145	19,575	8,785	58,505
Importance of...The type of qualification you obtained	Formal req, %	23.4	38.6	58.6	33.8
	Important, %	30.5	30.2	22.3	29.2
	Base, N	30,080	19,545	8,775	58,400
Importance of...The class or grade of the qualification you obtained	Formal req, %	10.4	12.9	18.1	12.4
	Important, %	28.3	32.4	35.9	30.8
	Base, N	29,825	19,355	8,560	57,740
Importance of...Evidence of skills and competencies	Formal req, %	32.7	35.7	43.4	35.3
	Important, %	48.5	47.9	45.1	47.8
	Base, N	30,085	19,525	8,770	58,380
Importance of...Any work experience or work placement that was part of the qualification you obtained in 2010/11*	Formal req, %	12.5	22.8	46.7	22.5
	Important, %	34.7	34.4	30.0	33.7
	Base, N	19,095	13,835	7,770	40,700
Importance of...Any qualifications obtained after the one you got in 2010/2011*	Formal req, %	24.2	26.2	27.9	25.4
	Important, %	29.1	30.1	27.6	29.2
	Base, N	18,545	12,455	5,530	36,530
Importance of...Relevant work experience from previous employment*	Formal req, %	23.5	22.2	23.5	23.1
	Important, %	50.9	46.7	48.6	49.2
	Base, N	28,230	17,890	8,320	54,440

Base: Working age graduates in employment (no study) *Base is only those for whom the question applies

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Table A40: How important were the following in getting your main job? (AHSS subject areas), 3.5 years after graduating (%)

		SS	Law	B&A	MCD	Lang	H&P	CAD
Importance of... The subject you studied	Formal req, %	22.6	30.9	13.3	12.4	15.9	12.4	17.4
	Important, %	25.1	26.3	38.2	33.7	22.3	15.7	29.9
	Base, N	6,155	2,715	7,850	1,970	3,280	2,790	5,380
Importance of...The type of qualification you obtained (e.g. BA, MSc, PhD, etc)	Formal req, %	30.0	34.8	19.7	14.1	27.2	23.3	16.5
	Important, %	29.3	27.5	36.1	33.0	28.0	25.2	28.5
	Base, N	6,145	2,715	7,850	1,965	3,270	2,780	5,360

		SS	Law	B&A	MCD	Lang	H&P	CAD
Importance of...The class or grade of the qualification you obtained	Formal req, %	13.3	16.1	10.4	4.0	11.2	12.4	4.9
	Important, %	28.3	36.4	30.4	25.0	30.2	26.8	21.7
	Base, N	6,070	2,700	7,805	1,940	3,220	2,765	5,330
Importance of...Evidence of skills and competencies	Formal req, %	37.2	29.0	31.0	34.7	34.3	30.5	31.3
	Important, %	47.4	53.6	50.2	46.5	48.9	48.8	45.3
	Base, N	6,140	2,710	7,865	1,955	3,275	2,785	5,360
Importance of...Any work experience or work placement that was part of the qualification you obtained in 2010/11*	Formal req, %	20.6	9.8	11.6	10.7	10.7	8.7	9.2
	Important, %	36.3	38.0	38.8	31.9	30.5	27.3	31.9
	Base, N	3,915	1,720	5,065	1,470	1,815	1,405	3,705
Importance of...Any qualifications obtained after the one you got in 2010/2011*	Formal req, %	25.2	39.0	17.7	11.4	34.7	28.7	18.1
	Important, %	33.2	23.8	35.1	26.0	23.5	24.2	25.9
	Base, N	3,820	1,965	4,710	1,055	2,105	1,790	3,100
Importance of...Relevant work experience from previous employment*	Formal req, %	24.5	15.5	27.0	25.8	26.6	23.7	18.5
	Important, %	52.6	55.3	49.1	50.7	49.3	49.4	51.1
	Base, N	5,825	2,545	7,315	1,865	3,040	2,615	5,025

Base: Working age graduates in employment (no study) *Base is only those for whom the question applies
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Table A41: Whether qualification, subject and skills have been an advantage in job search, broad subject groupings, 1-2 years after graduating, Futuretrack (%)

Agree/agree strongly, %	AHSS	STEM	Ed/oth	All subjects
The subject I studied has been an advantage	37.8	60.5	44.1	48.1
The university I studied at has been an advantage	30.5	38.3	31.4	33.8
The skills I developed made me more employable	47.5	62.6	50.1	54.1
I have the skills employers are likely to be looking for when recruiting for the kind of jobs I want	55.0	63.7	57.8	59.0
Total, N(unw)	4,763	4,594	1,960	11,317

Base: In employment (HESA definition)
Source: Futuretrack wave 4 survey

Table A42: Whether qualification, subject and skills have been an advantage in job search, AHSS subject areas, 1-2 years after graduating, Futuretrack (%)

Agree/agree strongly, %	SocStud	Law	B&A	MCD	Lang	H&Ph	CAD	All AHSS
The subject I studied has been an advantage	42.4	51.6	47.4	31.5	33.9	24.4	31.4	42.4
The university I studied at has been an advantage	34.3	32.6	29.5	22.1	38.7	38.4	21.8	34.3

Agree/agree strongly, %	SocStud	Law	B&A	MCD	Lang	H&Ph	CAD	All AHSS
The skills I developed made me more employable	51.5	47.7	47.6	47.9	50.5	48.6	42.3	51.5
I have the skills employers are looking for	56.1	61.6	59.6	49.5	53.9	51.3	51.5	56.1
Total, N(unw)	891	449	834	204	782	570	1,033	891

Base: AHSS graduates in employment (HESA definition)
Source: Futuretrack wave 4 survey

Table A43: How well did your course prepare you for …? (AHSS subject areas), 6 months after graduating (%)

		AHSS	STEM	Ed/combined	All subjects
How well did your HE experience prepare you for business?					
Not at all	%	20.9	29.1	37.0	26.2
Not very well	%	25.2	27.3	23.1	25.8
Well	%	36.0	29.2	24.7	31.9
Very well	%	17.8	14.4	15.2	16.1
Total	%	100.0	100.0	100.0	100.0
Total, N		75,665	64,900	18,970	159,530
How well did your HE experience prepare you for study?					
Not at all	%	4.0	2.8	3.2	3.4
Not very well	%	8.7	7.0	8.2	7.9
Well	%	47.3	48.4	49.3	48.0
Very well	%	40.0	41.8	39.2	40.7
Total	%	100.0	100.0	100.0	100.0
Total, N		83,885	78,445	26,570	188,905
How well did your HE experience prepare you for work?					
Not at all	%	8.7	7.1	6.3	7.7
Not very well	%	16.2	12.0	7.7	13.2
Well	%	48.4	46.9	44.4	47.2
Very well	%	26.8	34.0	41.6	31.8
Total	%	100.0	100.0	100.0	100.0
Total, N		87,595	81,500	27,545	196,640

Base: AHSS graduates of working age in employment (not studying)
Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.
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Table A44: How well did your course prepare you for …? (broad subject groupings), 6 months after graduating (%)

		SS	Law	B&A	MCD	Lang	H&P	CAD
How well did your HE experience prepare you for business?								
Not at all	%	31.7	27.6	14.5	18.0	27.7	30.8	12.5
Not very well	%	28.0	25.1	21.9	25.9	29.2	29.6	23.6
Well	%	28.3	32.0	41.8	38.1	30.5	28.8	40.8
Very well	%	12.0	15.3	21.8	18.0	12.6	10.8	23.1
Total	%	100	100	100	100	100	100	100
Total, N		14,620	5,000	21,255	4,730	7,645	5,395	17,020
How well did your HE experience prepare you for study?								
Not at all	%	3.1	3.6	3.9	6.6	2.6	2.6	6.0
Not very well	%	7.3	7.6	8.8	13.2	5.7	5.2	12.0

		SS	Law	B&A	MCD	Lang	H&P	CAD
Well	%	46.8	45.7	50.4	48.6	43.7	40.7	48.1
Very well	%	42.8	43.1	36.9	31.7	48.0	51.4	33.9
Total	%	100	100	100	100	100	100	100
Total, N		17,735	5,980	23,125	4,815	8,855	6,690	16,690
How well did your HE experience prepare you for work?								
Not at all	%	9.6	8.8	6.1	8.6	10.9	12.4	9.2
Not very well	%	16.4	15.4	11.9	16.3	18.9	18.4	19.8
Well	%	47.5	48.3	50.6	48.0	48.7	49.2	45.8
Very well	%	26.5	27.5	31.5	27.0	21.5	20.0	25.2
Total	%	100	100	100	100	100	100	100
Total, N		18,055	6,125	24,835	5,310	8,945	6,475	17,855

Base: AHSS graduates of working age in employment (not studying)

Table A45: To what extent did your HE experience enable you to… at work? (broad subject groupings), 3.5 years after graduating (%)

Extent higher education experience prepared you for/enabled you to…		AHSS	STEM	Ed/combined	All subjects
progress your career aspirations?	Very well	24.2	32.1	43.0	29.7
	Quite well	49.2	49.0	44.2	48.4
		30,170	19,600	8,905	58,675
Be innovative in the workplace	A great extent	22.3	24.9	32.9	24.8
	Some extent	60.9	61.8	58.2	60.8
		29,545	19,270	8,800	57,620
Solve problems in your work	A great extent	27.0	35.5	28.0	30.0
	Some extent	58.5	55.2	60.2	57.6
		29,860	19,510	8,795	58,165
Communicate effectively in your work	A great extent	41.1	40.1	38.4	40.4
	Some extent	49.2	49.1	53.0	49.7
		30,100	19,510	8,845	58,460
Make good decisions in your workplace?	A great extent	27.1	33.2	33.8	30.1
	Some extent	58.4	56.6	56.7	57.5
		29,720	19,395	8,800	57,920
Work effectively with others	A great extent	38.3	42.2	41.0	40.0
	Some extent	48.9	47.9	49.1	48.6
		29,875	19,485	8,805	58,165
Take initiative and personal responsibility in your work	A great extent	42.5	43.3	42.1	42.7
	Some extent	46.3	47.3	48.5	47.0
		30,025	19,490	8,835	58,350

Extent higher education experience prepared you for/enabled you to…		AHSS	STEM	Ed/combined	All subjects
Make effective use of information and communication technology in your work	A great extent	32.3	40.9	31.4	35.1
	Some extent	48.5	47.4	53.3	48.9
		29,450	19,355	8,735	57,535
Work effectively with numbers	A great extent	17.5	35.2	21.7	24.2
	Some extent	35.4	45.0	47.5	40.5
		27,765	18,905	8,410	55,080
Use the skills you gained during your higher education experience?	A great extent	30.5	41.3	58.9	38.5
	Some extent	54.0	48.4	34.8	49.1
		27,890	18,615	8,480	54,980

Base: Working age graduates in employment (no study)

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Table A46: To what extent did your HE experience enable you to… at work? (AHSS subjects), 3.5 years after graduating (%)

Extent higher education experience prepared you for/enabled you to…		SS	Law	B&A	MCD	Lang	H&P	CAD	SS
Progress your career aspirations?	Very well, %	26.0	26.1	26.5	21.1	21.7	20.4	22.6	26.0
	Quite well, %	50.3	49.2	53.3	47.6	48.8	47.7	43.3	50.3
	Base, N	6,150	2,715	7,905	1,965	3,260	2,775	5,400	6,150
Be innovative in the workplace	Very well, %	20.7	18.2	20.7	21.7	20.9	18.5	31.4	20.7
	Quite well, %	61.5	60.0	62.5	62.2	61.8	65.0	55.4	61.5
	Base, N	5,995	2,665	7,765	1,940	3,160	2,680	5,345	5,995
Solve problems in your work	Very well, %	27.6	30.4	26.8	20.4	23.7	26.1	29.4	27.6
	Quite well, %	58.8	56.4	61.3	59.8	59.4	58.9	53.8	58.8
	Base, N	6,085	2,700	7,860	1,940	3,200	2,720	5,355	6,085
Communicate effectively in your work	Very well, %	40.6	40.8	36.3	37.7	53.1	46.1	40.4	40.6
	Quite well, %	49.9	49.5	53.5	51.0	41.1	45.1	48.3	49.9
	Base, N	6,120	2,715	7,890	1,965	3,265	2,770	5,380	6,120
Make good decisions in your workplace?	Very well, %	28.9	28.4	27.3	21.2	23.7	26.0	28.7	28.9
	Quite well, %	58.2	57.4	60.4	62.5	58.6	59.5	53.9	58.2
	Base, N	6,050	2,690	7,815	1,935	3,170	2,730	5,335	6,050
Work effectively with others	Very well, %	36.1	33.2	39.7	40.2	35.9	32.7	45.2	36.1

Extent higher education experience prepared you for/enabled you to…		SS	Law	B&A	MCD	Lang	H&P	CAD	SS
	Quite well, %	51.1	50.4	50.4	49.4	48.8	50.0	42.7	51.1
	Base, N	6,075	2,685	7,850	1,945	3,215	2,740	5,365	6,075
Take initiative and personal responsibility in your work	Very well, %	42.7	40.5	38.4	38.9	46.2	45.8	47.0	42.7
	Quite well, %	45.6	47.0	49.9	49.5	43.4	44.2	42.9	45.6
	Base, N	6,105	2,700	7,870	1,950	3,250	2,760	5,390	6,105
Make effective use of information and communication technology in your work	Very well, %	32.2	31.9	32.2	37.0	30.2	31.1	33.0	32.2
	Quite well, %	49.2	48.6	51.2	48.6	45.7	46.9	46.0	49.2
	Base, N	6,015	2,645	7,805	1,950	3,140	2,690	5,210	6,015
Work effectively with numbers	Very well, %	21.6	11.4	28.0	10.3	6.8	9.7	11.8	21.6
	Quite well, %	37.3	32.2	46.5	31.8	23.4	27.9	28.9	37.3
	Base, N	5,740	2,500	7,725	1,735	2,840	2,485	4,740	5,740
use the skills you gained during your higher education experience?	Very well, %	33.0	35.6	29.9	28.2	29.4	24.1	30.6	33.0
	Quite well, %	53.4	50.5	57.6	53.4	55.4	58.4	47.3	53.4
	Base, N	5,875	2,600	7,565	1,785	3,065	2,660	4,335	5,875

Base: Working age graduates in employment (no study)

Source(s): HESA DLHE Long Record 2010/11. Copyright Higher Education Statistics Agency Limited.

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Table A47: How do you rate your skills in the following areas? (% Excellent or very good – broad subject groupings), 1-2 years after graduating, Futuretrack (%)

Excellent/Very good	AHSS	STEM	Ed/oth	All subjects
Written communication	82.4	75.9	81.6	79.6
Spoken communication	73.8	69.0	75.3	72.1
Numeracy skills	38.2	58.6	43.2	47.3
Computer literacy	71.8	76.7	70.2	73.5
Self-confidence	55.3	53.0	53.6	54.1
Self-discipline	61.0	59.6	60.0	60.3
Ability to work in a team	82.9	83.3	83.5	83.2
Leadership skills	55.0	52.0	56.8	54.1
Creativity	63.9	49.2	57.2	56.8
Total, N(unw)	4,795	4,606	1,973	11,374

Base: All in employment

Source: Futuretrack wave 4 survey

Table A48: How do you rate your skills in the following areas? (% Excellent or very good – AHSS subject areas), 1-2 years after graduating, Futuretrack (%)

Excellent/Very good	SS	Law	B&A	MCD	Lang	H&P	CAD
Written communication	82.6	87.7	77.6	84.9	94.4	91.3	74.0
Spoken communication	75.8	79.2	73.2	71.1	81.9	74.5	67.1
Numeracy skills	39.0	36.0	55.6	28.7	27.4	32.5	34.6
Computer literacy	70.1	66.5	81.1	81.2	60.7	61.8	75.8
Self-confidence	54.6	58.0	60.9	54.4	52.1	48.0	55.5
Self-discipline	59.6	62.7	64.2	58.0	61.0	59.1	60.5
Ability to work in a team	84.1	84.3	85.7	85.4	80.6	79.5	81.6
Leadership skills	54.1	59.4	60.7	44.4	50.9	51.7	55.4
Creativity	49.5	48.0	54.2	71.1	64.0	54.7	89.3
Total, N(unw)	891	450	838	206	786	574	1,050

Base: AHSS graduates in employment
Source: Futuretrack wave 4 survey

IV. Table Appendix for the secondary data analysis, PGR analysis

Table B1: Personal characteristics of graduates at 6 months and 3.5 years, by broad subject grouping (%)

	DLHE (6 months)			LDLHE (3.5 years)		
	AHSS	STEM	Ed/combined	AHSS	STEM	Ed/combined
Gender						
Male	48.4	53.7	35.2	49.2	49.3	31.3
Female	51.6	46.3	64.4	50.8	50.7	68.7
Other	0.0	0.0	0.3	0.0	0.0	0.0
Age group (at graduation)						
Under 25	0.1	0.2	0.0	0.0	0.1	0.0
25-30	37.9	62.2	10.2	38.6	64.7	10.9
31 or older	62.0	37.6	89.8	61.4	35.1	89.1
Ethnicity (grouped)						
Asian	3.8	8.5	3.1	2.4	6.7	2.8
Black	2.8	2.0	5.5	2.3	0.9	1.4
Other (including mixed)	4.3	4.4	1.5	3.6	3.6	0.7
White	89.1	85.1	89.9	91.6	88.8	95.1
Socio-economic group						
Managerial/Professional(1-2)	65.3	63.9	66.7	51.9	62.1	71.8
Intermediate(3-4)	23.7	18.9	20.8	30.1	15.6	28.2
Routine/Manual(5-8)	10.9	17.2	12.5	18.1	22.3	0.0
All graduates, N	2,530	6,350	315	295	740	55

Base: All PGRs of working age.
Source(s): HESA DLHE Record 2014/15;HESA DLHE Long Record 2010/11

Table B2: Study characteristics of graduates at 6 months and 3.5 years, by broad subject area (%)

	DLHE (6 months)			LDLHE (3.5 years)		
	AHSS	**STEM**	**Ed/combined**	**AHSS**	**STEM**	**Ed/combined**
Region of domicile						
North East	3.3	3.0	3.8	2.8	4.0	3.6
North West	5.7	8.1	8.9	5.2	10.4	12.0
Yorkshire and The Humber	5.2	5.7	5.4	5.0	5.0	4.1
East Midlands	5.2	6.1	5.9	4.8	4.9	4.5
West Midlands	4.1	6.1	8.6	5.9	5.7	6.3
East of England	6.9	6.3	7.5	7.0	7.4	5.7
London	14.7	12.5	8.7	12.6	12.2	9.1
South East	10.9	12.1	13.5	12.8	13.7	16.4
South West	6.5	8.0	11.3	6.7	6.4	14.0
England region unknown	2.3	1.4	2.2	2.8	1.9	0.5
Northern Ireland	2.8	1.8	1.3	1.6	2.2	0.0
Scotland	7.2	8.3	6.8	6.0	7.2	7.6
Wales	3.7	3.8	2.2	3.4	3.2	3.2
UK region unknown	0.3	0.0	0.0	0.7	0.5	0.6
Guernsey, Jersey and the Isle of Man	0.1	0.2	0.5	0.5	0.0	0.0
Other EU	21.1	16.7	13.5	22.4	15.4	12.3
Level of qualification obtained						
First degree or equivalent	-	-	-	-	-	-
Other UG	-	-	-	-	-	-
PGCE/PGDE/PGCertE	-	-	-	-	-	-
Masters	-	-	-	-	-	-
Other PG	-	-	-	-	-	-
Doctorate	100	100	100	100	100	100
Mission group						
1994 Group	11.3	7.0	12.9	13.6	6.4	15.6
Million Plus	0.8	0.1	2.9	1.5	2.9	8.0
Russell Group	3.1	2.7	8.3	52.5	65.8	48.0
University Alliance	22.7	20.5	15.9	11.5	7.0	13.3
Guild HE	54.2	63.9	43.6	0.7	0.2	0.0
Other	7.9	5.7	16.5	20.2	17.8	15.0
All PGRs, N	2,530	6,350	315	295	740	55

Base: All PGRs of working age.

Source(s): HESA DLHE Record 2014/15;HESA DLHE Long Record 2010/11

Table B3: Activity at 6 months after graduation, broad subject groupings (%)

	AHSS	**STEM**	**Ed/combined**	**All subjects**
Full-time work	64.5	81.0	76.4	76.3
Part-time work	20.5	5.8	14.3	10.2
Primarily in work and also studying	2.7	2.2	3.8	2.4
Primarily studying and also in work	0.9	0.5	0.6	0.6
Full-time study	1.6	2.7	0.6	2.3
Part-time study	0.6	0.4	0.0	0.4

	AHSS	STEM	Ed/combined	All subjects
Due to start work	0.7	0.9	0.0	0.8
Unemployed	4.4	3.1	1.3	3.4
Other	4.1	3.3	3.0	3.5
Total	100	100	100	100
Total, N	2,530	6,350	315	9,195

Base: All PGRs of working age 6 months after graduation.

Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.

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Table B4: Activity at 6 months after graduation, AHSS subject areas (%)

	SS	Law	B&A	MCD	Lang	H&P	CAD
Full-time work	71.4	81.0	77.7	62.6	55.5	57.7	55.3
Part-time work	15.6	8.7	10.8	25.2	27.9	22.6	30.1
Primarily in work and also studying	2.8	2.4	2.7	3.1	2.6	2.0	4.2
Primarily studying and also in work	0.1	0.0	1.0	0.0	1.4	1.1	1.8
Full-time study	1.3	1.6	1.3	2.7	2.2	1.5	1.4
Part-time study	0.5	0.0	1.1	0.4	0.6	0.9	0.0
Due to start work	0.6	0.8	0.3	0.7	0.4	1.3	0.4
Unemployed	3.6	2.4	2.6	4.0	4.5	7.0	4.0
Other	4.0	3.2	2.6	1.3	4.9	5.9	2.8
Total	100	100	100	100	100	100	100
Total, N	700	125	310	75	510	535	275

Base: AHSS PGRs of working age 6 months after graduation.

Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.

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Table B5: Type of contract at 6 months after graduation, broad subject groupings (%)

	AHSS	STEM	Ed/combined	All subjects
Self-employed/freelance	8.5	2.5	5.3	4.2
Starting up own business	0.8	0.6	0.4	0.6
On a permanent or open-ended contract	43.5	47.8	69.6	47.4
On a fixed-term contract lasting 12 months or longer	28.3	37.3	16.3	34.1
On a fixed-term contract lasting less than 12 months	12.6	9	4.8	9.8
Voluntary work	0.5	0.3	0.4	0.3
On an internship/placement	0.2	0.2	0	0.2
Developing a professional portfolio/creative practice	0.5	0.1	0.7	0.2
Temping (including supply teaching)	2.0	0.5	0.8	0.9
Other	1.9	1.3	0.7	1.4
On a zero hours contract	1.4	0.4	1.1	0.7
Total	100	100	100	100
Total, N	2,135	5,435	285	7,850

Base: Working age PGRs in work without study.

Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.

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Table B6: Type of contract at 6 months after graduation, AHSS subject area (%)

	SS	Law	B&A	MCD	Lang	H&P	CAD
Self-employed/freelance	4.1	7.0	8.5	4.9	7.4	8.5	23.5
Starting up own business	0.4	0.9	2.6	1.5	0.2	0.7	0.4
On a permanent or open-ended contract	41.7	52.4	66.5	55.8	34.4	34.8	45.3
On a fixed-term contract lasting 12 months or longer	37.0	22.0	15.1	21.4	30.1	33.1	14.3
On a fixed-term contract lasting less than 12 months	12.9	11.5	4.0	12.1	17.2	14.3	11.1
Voluntary work	0.3	0.9	0.0	0.0	0.2	1.3	0.2
On an internship/placement	0.0	1.8	0.0	0.0	0.0	0.5	0.0
Developing a professional portfolio/creative practice	0.3	0.0	0.7	0.0	0.9	0.2	0.9
Temping (including supply teaching)	1.1	1.8	1.1	2.6	4.0	2.1	1.8
Other	1.3	1.8	1.5	1.5	2.8	2.4	1.3
On a zero hours contract	0.9	0.0	0.0	0.0	2.7	2.2	1.3
Total	100	100	100	100	100	100	100
Total, N	600	115	275	65	425	425	235

Base: Working age PGRs in work without study.

Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.

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Table B7: Activity at 3.5 years after graduation, broad subject groupings (%)

	AHSS	STEM	Ed/combined	All subjects
Full-time paid work	76.5	84.2	64.2	81.1
Part-time paid work	11.6	7.6	21.6	9.4
Voluntary/unpaid work only (inc.internships)	0.7	0.2	1.7	0.4
Work and further study	2.5	1.3	2.7	1.7
Further study only	0.3	1.2	0.0	0.9
Assumed to be unemployed	2.2	2.1	2.7	2.2
Not available for employment	3.7	1.5	6.5	2.3
Employed mode unknown	1.1	1.5	0.0	1.3
Other	0.3	0.1	0.6	0.2
Creating a portfolio	1.1	0.5	0.0	0.7
Total	100	100	100	100
Total, N	295	740	55	1,090

Base: All PGRs of working age 3.5 years after graduation.

Source(s): HESA DLHE Long Record 2010/11. Copyright Higher Education Statistics Agency Limited.

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Table B8: Activity at 3.5 years after graduation, AHSS subject area (%)

	SS	Law	B&A	MCD	Lang	H&P	CAD
Full-time paid work	80.1	-	85.3	-	71.2	75.4	62.4
Part-time paid work	11.5	-	5.7	-	13.1	11.0	20.0
Voluntary/unpaid work only (inc.internships)	0.0	-	0.0	-	0.0	1.7	2.6
Work and further study	2.1	-	1.9	-	3.6	1.5	6.4
Further study only	0.0	-	0.0	-	0.0	1.1	0.0
Assumed to be unemployed	1.2	-	0.0	-	4.6	1.6	6.0
Not available for employment	4.1	-	3.9	-	6.2	3.0	0.0
Employed mode unknown	0.7	-	2.2	-	0.3	1.6	0.0
Other	0.0	-	0.0	-	0.5	1.0	0.0
Creating a portfolio	0.4	-	1.0	-	0.6	2.2	2.7
Total	100	100	100	100	100	100	100
Total, N	80	10	40	5	60	70	25

Base: All PGRs of working age 3.5 years after graduation.

Table B9: Type of contract at 3.5 years, broad subject groupings (%)

	AHSS	STEM	Ed/combined	All subjects
On a permanent or open-ended contract	59.4	62.0	75.5	62.0
On a fixed-term contract lasting 12 months or longer	25.3	29.8	13.9	27.8
On a fixed-term contract lasting less than 12 months	4.3	3.9	1.7	3.9
Self-employed/freelance	7.8	2.3	5.4	3.9
Temporarily, through an agency	0.3	0.2	0.0	0.2
Temporarily, other than through an agency	0.5	0.2	1.4	0.3
Employed on another basis	1.3	0.3	1.5	0.7
Setting up own managing your own business	1.0	1.2	0.6	1.1
Total	100	100	100	100
Total, N	260	680	50	990

Base: Working age PGRs in employment (no study)

Table B10: Type of contract at 3.5 years, AHSS subject area (%)

	SS	Law	B&A	MCD	Lang	H&P	CAD
On a permanent or open-ended contract	61.4	-	78.1	-	53.7	45.1	63.8
On a fixed-term contract lasting 12 months or longer	29.8	-	11.4	-	30.2	29.0	20.3
On a fixed-term contract lasting less than 12 months	3.9	-	0.9	-	4.4	8.6	1.8
Self-employed/freelance	3.5	-	5.8	-	9.7	11.2	12.8
Temporarily, through an agency	0.0	-	0.0	-	0.0	1.3	0.0
Temporarily, other than through an agency	0.5	-	0.0	-	0.5	1.2	0.0
Employed on another basis	0.5	-	0.0	-	1.5	2.9	0.0
Setting up own managing your own business	0.5	-	3.9	-	0.0	0.8	1.3
Total	100	100	100	100	100	100	100
Total, N	75	10	35	5	50	65	25

Base: Working age AHSS PGRs in employment (no study)

Table B11: Industry sections of main job at 6 months, broad subject groupings (%)

	AHSS	STEM	Ed/ combined	All subjects
Section A: AGRICULTURE, FORESTRY AND FISHING	0.0	0.2	0.4	0.2
Section B: MINING AND QUARRYING	0.0	0.7	0.0	0.5
Section C: MANUFACTURING	0.4	8.3	0.0	5.9
Section D: ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY	0.0	0.3	0.0	0.2
Section E: WATER SUPPLY; SEWERAGE, WASTE MANAGEMENT AND REMEDIATION ACTIVITIES	0.0	0.3	0.0	0.2
Section F: CONSTRUCTION	0.3	0.3	0.0	0.3
Section G: WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND MOTORCYCLES	1.0	1.0	0.0	1.0
Section H: TRANSPORTATION AND STORAGE	0.6	0.4	0.0	0.5
Section I: ACCOMMODATION AND FOOD SERVICE ACTIVITIES	0.2	0.2	0.0	0.2
Section J: INFORMATION AND COMMUNICATION	3.2	5.5	0.7	4.7
Section K: FINANCIAL AND INSURANCE ACTIVITIES	1.7	1.3	0.4	1.3
Section L: REAL ESTATE ACTIVITIES	0.2	0.1	0.7	0.1
Section M: PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES	7.9	15.3	4.2	12.9
Section N: ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES	1.3	0.5	0.4	0.7
Section O: PUBLIC ADMINISTRATION AND DEFENCE; COMPULSORY SOCIAL SECURITY	3.2	3.5	6.2	3.5
Section P: EDUCATION	68.6	44.9	80.9	52.6
Section Q: HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	3.1	15.9	3.2	12.0
Section R: ARTS, ENTERTAINMENT AND RECREATION	5.5	0.8	1.4	2.1
Section S: OTHER SERVICE ACTIVITIES	2.0	0.5	1.8	0.9
Section T: ACTIVITIES OF HOUSEHOLDS AS EMPLOYERS; UNDIFFERENTIATED GOODS- AND SERVICES-PRODUCING ACTIVITIES OF HOUSEHO	0.0	0.0	0.0	0.0
Section U: ACTIVITIES OF EXTRATERRITORIAL ORGANISATIONS AND BODIES	0.7	0.2	0.0	0.3
Total	100	100	100	100
Total, N	2,150	5,505	285	7,940

Base: All PGRs of working age in employment (not studying)

Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.

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Table B12: Industry sections of main job at 6 months, AHSS subject areas (%)

	SS	Law	B&A	MCD	Lang	H&P	CAD
Section A: AGRICULTURE, FORESTRY AND FISHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Section B: MINING AND QUARRYING	0.0	0.0	0.4	0.0	0.0	0.0	0.0
Section C: MANUFACTURING	0.2	0.0	0.9	0.0	0.2	0.2	1.3
Section D: ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Section E: WATER SUPPLY; SEWERAGE, WASTE MANAGEMENT AND REMEDIATION ACTIVITIES	0.0	0.0	0.0	0.0	0.0	0.2	0.0
Section F: CONSTRUCTION	0.2	0.9	0.7	0.0	0.0	0.2	0.4
Section G: WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND MOTORCYCLES	0.4	0.9	0.4	0.0	1.4	2.2	0.4
Section H: TRANSPORTATION AND STORAGE	0.5	0.9	1.1	0.0	1.2	0.0	0.4
Section I: ACCOMMODATION AND FOOD SERVICE ACTIVITIES	0.2	0.0	0.5	0.5	0.0	0.2	0.0
Section J: INFORMATION AND COMMUNICATION	1.2	1.8	1.8	8.4	6.6	2.6	3.8
Section K: FINANCIAL AND INSURANCE ACTIVITIES	2.4	0.9	4.7	1.5	1.3	0.2	0.4
Section L: REAL ESTATE ACTIVITIES	0.3	0.0	0.4	0.0	0.2	0.0	0.0
Section M: PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES	8.3	17.2	11.5	1.5	4.7	6.9	7.4
Section N: ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES	0.7	0.0	2.2	0.0	0.9	2.3	1.3
Section O: PUBLIC ADMINISTRATION AND DEFENCE; COMPULSORY SOCIAL SECURITY	4.8	4.4	2.2	2.6	2.3	3.3	1.8
Section P: EDUCATION	71.3	67.0	68.5	76.7	73.3	61.3	64.6
Section Q: HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	5.1	0.9	1.8	1.5	2.8	3.3	1.3
Section R: ARTS, ENTERTAINMENT AND RECREATION	1.8	0.0	1.6	5.8	3.8	10.4	16.5
Section S: OTHER SERVICE ACTIVITIES	1.0	1.8	0.7	1.5	0.9	6.5	0.4
Section T: ACTIVITIES OF HOUSEHOLDS AS EMPLOYERS; UNDIFFERENTIATED GOODS- AND SERVICES-PRODUCING ACTIVITIES OF HOUSEHO	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Section U: ACTIVITIES OF EXTRATERRITORIAL ORGANISATIONS AND BODIES	1.5	3.5	0.7	0.0	0.2	0.0	0.0
Total	100	100	100	100	100	100	100
Total, N	605	115	275	65	425	430	235

Base: AHSS PGRs of working age in employment (not studying)

Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.

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Table B13: Industry sections of main job at 3.5 years, broad subject groupings (%)

	AHSS	STEM	Ed/combined	All subjects
Section A: AGRICULTURE, FORESTRY AND FISHING	0.0	0.2	0.0	0.1
Section B: MINING AND QUARRYING	0.0	0.6	0.0	0.4
Section C: MANUFACTURING	1.5	6.5	0.0	4.8
Section D: ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY	0.1	0.4	0.0	0.3
Section E: WATER SUPPLY; SEWERAGE, WASTE MANAGEMENT AND REMEDIATION ACTIVITIES	0.0	0.3	0.0	0.2
Section F: CONSTRUCTION	0.3	0.4	0.0	0.4
Section G: WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND MOTORCYCLES	0.4	0.4	0.0	0.4
Section H: TRANSPORTATION AND STORAGE	0.1	0.3	0.0	0.3
Section I: ACCOMMODATION AND FOOD SERVICE ACTIVITIES	0.1	0.1	0.0	0.1
Section J: INFORMATION AND COMMUNICATION	1.9	4.5	1.2	3.7
Section K: FINANCIAL AND INSURANCE ACTIVITIES	2.2	1.6	1.0	1.7
Section L: REAL ESTATE ACTIVITIES	0.3	0.1	0.0	0.1
Section M: PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES	7.5	18.2	1.3	14.5
Section N: ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES	0.5	0.5	0.0	0.5
Section O: PUBLIC ADMINISTRATION AND DEFENCE; COMPULSORY SOCIAL SECURITY	4.1	3.0	5.7	3.4
Section P: EDUCATION	69.6	42.9	79.0	51.7
Section Q: HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	3.3	18.4	8.6	13.9
Section R: ARTS, ENTERTAINMENT AND RECREATION	4.1	0.6	2.1	1.6
Section S: OTHER SERVICE ACTIVITIES	2.8	0.9	1.3	1.4
Section T: ACTIVITIES OF HOUSEHOLDS AS EMPLOYERS; UNDIFFERENTIATED GOODS- AND SERVICES-PRODUCING ACTIVITIES OF HOUSEHO	0.0	0.0	0.0	0.0
Section U: ACTIVITIES OF EXTRATERRITORIAL ORGANISATIONS AND BODIES	1.0	0.2	0.0	0.4
Total	100	100	100	100
Total, N	260	680	50	985

Base: All PGRs of working age in employment (not studying)

Source(s): HESA DLHE Long Record 2010/11. Copyright Higher Education Statistics Agency Limited. Neither the Higher Education Statistics Agency Limited nor HESA Services Limited can accept responsibility for any inferences or conclusions derived by third parties from data or other information supplied by HESA Services.

Table B14: Industry sections of main job at 3.5 years, AHSS subject areas (%)

	SS	Law	B&A	MCD	Lang	H&P	CAD
Section A: AGRICULTURE, FORESTRY AND FISHING	0.0	-	0.0	-	0.0	0.0	0.0
Section B: MINING AND QUARRYING	0.0	-	0.0	-	0.0	0.0	0.0
Section C: MANUFACTURING	1.0	-	4.9	-	0.8	1.1	1.6
Section D: ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY	0.0	-	0.0	-	0.0	0.6	0.0
Section E: WATER SUPPLY; SEWERAGE, WASTE MANAGEMENT AND REMEDIATION ACTIVITIES	0.0	-	0.0	-	0.0	0.0	0.0
Section F: CONSTRUCTION	0.0	-	0.0	-	0.8	0.5	0.0
Section G: WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND MOTORCYCLES	0.4	-	0.0	-	0.0	1.3	0.0
Section H: TRANSPORTATION AND STORAGE	0.5	-	0.0	-	0.0	0.0	0.0
Section I: ACCOMMODATION AND FOOD SERVICE ACTIVITIES	0.0	-	0.0	-	0.0	0.6	0.0
Section J: INFORMATION AND COMMUNICATION	0.4	-	0.0	-	3.3	1.8	5.4
Section K: FINANCIAL AND INSURANCE ACTIVITIES	1.8	-	5.3	-	2.3	1.2	0.0
Section L: REAL ESTATE ACTIVITIES	0.5	-	0.0	-	0.0	0.5	0.0
Section M: PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES	6.4	-	15.1	-	4.9	6.6	6.9
Section N: ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES	0.7	-	0.4	-	0.0	1.1	0.0
Section O: PUBLIC ADMINISTRATION AND DEFENCE; COMPULSORY SOCIAL SECURITY	6.8	-	4.8	-	1.9	3.7	0.0
Section P: EDUCATION	69.6	-	67.4	-	78.2	60.1	75.0
Section Q: HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	5.2	-	1.0	-	2.0	3.9	4.7
Section R: ARTS, ENTERTAINMENT AND RECREATION	0.9	-	0.0	-	4.0	10.7	5.1
Section S: OTHER SERVICE ACTIVITIES	2.6	-	1.1	-	1.4	6.3	1.2
Section T: ACTIVITIES OF HOUSEHOLDS AS EMPLOYERS; UNDIFFERENTIATED GOODS- AND SERVICES-PRODUCING ACTIVITIES OF HOUSEHO	0.0	-	0.0	-	0.0	0.0	0.0
Section U: ACTIVITIES OF EXTRATERRITORIAL ORGANISATIONS AND BODIES	3.3	-	0.0	-	0.6	0.0	0.0
Total	100	100	100	100	100	100	100
Total, N	70	10	35	5	50	65	25

Base: AHSS PGRs of working age in employment (not studying)

Table B15: Top ten industry divisions of main job at 6 months, broad subject groupings (%)

AHSS		STEM		Ed&Other	
SIC	**%**	**SIC**	**%**	**SIC**	**%**
(85) Education	68.6	(85) Education	44.9	(85) Education	80.9
(84) Public administration and defence; compulsory social security	3.2	(86) Human health activities	14.7	(84) Public administration and defence; compulsory social security	6.2
(90) Creative, arts and entertainment activities	3.1	(72) Scientific research and development	8.4	(72) Scientific research and development	2.5
(72) Scientific research and development	2.5	(62) Computer programming, consultancy and related activities	3.8	(86) Human health activities	1.8
(91) Libraries, archives, museums and other cultural activities	2.3	(84) Public administration and defence; compulsory social security	3.5	(88) Social work activities without accommodation	1.4
(94) Activities of membership organisations	2	(71) Architectural and engineering activities; technical testing and analysis	2.4	(94) Activities of membership organisations	1.4
(88) Social work activities without accommodation	1.8	(21) Manufacture of basic pharmaceutical products and pharmaceutical preparations	2.1	(90) Creative, arts and entertainment activities	1.1
(70) Activities of head offices; management consultancy activities	1.4	(74) Other professional, scientific and technical activities	1.6	(68) Real estate activities	0.7
(74) Other professional, scientific and technical activities	1.4	(26) Manufacture of computer, electronic and optical products	1.3	(70) Activities of head offices; management consultancy activities	0.7
(69) Legal and accounting activities	1.4	(70) Activities of head offices; management consultancy activities	1.2	(74) Other professional, scientific and technical activities	0.7
Total	2,150	Total	5,505	Total	285

Base: AHSS, STEM and Education/combined PGRs of working age in employment (not studying)

Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.

Table B16: Top ten industry divisions of main job at 6 months, AHSS subject areas (%)

SocStud		Law		B&A		MCD		Lang		H&Ph		CAD	
SIC	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**
(85) Education	71.3	(85) Education	67.0	(85) Education	68.5	(85) Education	76.7	(85) Education	73.3	(85) Education	61.3	(85) Education	64.6
(84) Public administration and defence; compulsory social security	4.8	(69) Legal and accounting activities	11.9	(70) Activities of head offices; management consultancy activities	6.2	(59) Motion picture, video and television programme production, sound recording and music publishing	3.8	(58) Publishing activities	4.5	(91) Libraries, archives, museums and other cultural activities	7.1	(90) Creative, arts and entertainment activities	15.5
(72) Scientific research and development	4.1	(84) Public administration and defence; compulsory social security	4.4	(64) Financial service activities, except insurance and pension funding	3.6	(62) Computer programming, consultancy and related activities	4.6	(84) Public administration and defence; compulsory social security	2.3	(94) Activities of membership organisations	6.5	(62) Computer programming, consultancy and related activities	2.1
(88) Social work activities without accommodation	2.6	(72) Scientific research and development	3.5	(72) Scientific research and development	2	(90) Creative, arts and entertainment activities	3.8	(91) Libraries, archives, museums and other cultural activities	1.9	(84) Public administration and defence; compulsory social security	3.3	(74) Other professional, scientific and technical activities	2.3

SocStud		Law		B&A		MCD		Lang		H&Ph		CAD	
SIC	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**
(86) Human health activities	2.5	(99) Activities of extraterritorial organisations and bodies	3.5	(84) Public administration and defence; compulsory social security	2.2	(84) Public administration and defence; compulsory social security	2.6	(88) Social work activities without accommodation	1.6	(90) Creative, arts and entertainment activities	3.3	(59) Motion picture, video and television programme production, sound recording and music publishing	1.7
(64) Financial service activities, except insurance and pension funding	2	(94) Activities of membership organisations	1.8	(74) Other professional, scientific and technical activities	1.4	(66) Activities auxiliary to financial services and insurance activities	1.5	(90) Creative, arts and entertainment activities	1.6	(72) Scientific research and development	2.3	(71) Architectural and engineering activities; technical testing and analysis	1.6
(70) Activities of head offices; management consultancy activities	1.7	(41) Construction of buildings	0.9	(78) Employment activities	1.4	(73) Advertising and market research	1.5	(47) Retail trade, except of motor vehicles and motorcycles	1.4	(88) Social work activities without accommodation	2.3	(72) Scientific research and development	1.8
(99) Activities of extraterritorial organisations and bodies	1.5	(47) Retail trade, except of motor vehicles and motorcycles	0.9	(29) Manufacture of motor vehicles, trailers and semi-trailers	0.9	(86) Human health activities	1.5	(74) Other professional, scientific and technical activities	1.4	(47) Retail trade, except of motor vehicles and motorcycles	1.7	(84) Public administration and defence; compulsory social security	1.8

SocStud		Law		B&A		MCD		Lang		H&Ph		CAD	
SIC	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**
(74) Other professional, scientific and technical activities	1.2	(49) Land transport and transport via pipelines	0.9	(62) Computer programming, consultancy and related activities	1.1	(91) Libraries, archives, museums and other cultural activities	1.5	(72) Scientific research and development	1.2	(74) Other professional, scientific and technical activities	1.7	(91) Libraries, archives, museums and other cultural activities	1.1
(91) Libraries, archives, museums and other cultural activities	1.1	(61) Telecommunications	0.9	(86) Human health activities	1.1	(94) Activities of membership organisations	1.5	(64) Financial service activities, except insurance and pension funding	0.9	(58) Publishing activities	1.2	(73) Advertising and market research	0.8
Total	605	Total	115	Total	275	Total	65	Total	424	Total	430	Total	235

Base: AHSS PGRs of working age in employment (not studying)

Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.

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Table B17: Top ten industry divisions of main job at 3.5 years, broad subject groupings (%)

AHSS		STEM		Ed/Combined	
SIC	**%**	**SIC**	**%**	**SIC**	**%**
(85) Education	69.6	(85) Education	42.9	(85) Education	79.0
(84) Public administration and defence; compulsory social security	4.1	(86) Human health activities	15.8	(84) Public administration and defence; compulsory social security	5.7
(70) Activities of head offices; management consultancy activities	3.1	(72) Scientific research and development	9.5	(86) Human health activities	4.5
(88) Social work activities without accommodation	2.5	(62) Computer programming, consultancy and related activities	3.3	(88) Social work activities without accommodation	4.1
(91) Libraries, archives, museums and other cultural activities	2.6	(71) Architectural and engineering activities; technical testing and analysis	3.2	(90) Creative, arts and entertainment activities	1.4
(94) Activities of membership organisations	2.8	(84) Public administration and defence; compulsory social security	3	(94) Activities of membership organisations	1.3
(69) Legal and accounting activities	1.4	(88) Social work activities without accommodation	2.5	(58) Publishing activities	0.6
(72) Scientific research and development	1.5	(70) Activities of head offices; management consultancy activities	2.0	(63) Information service activities	0.6
(90) Creative, arts and entertainment activities	1.5	(26) Manufacture of computer, electronic and optical products	1.5	(65) Insurance, reinsurance and pension funding, except compulsory social security	1.0
(64) Financial service activities, except insurance and pension funding	1.2	(74) Other professional, scientific and technical activities	1.5	(70) Activities of head offices; management consultancy activities	0.6
Base, N	260	Base, N	680	Base, N	50

Base: AHSS, STEM and Education/combined PGRs of working age in employment (not studying)

Source(s): HESA DLHE Long Record 2010/11. Copyright Higher Education Statistics Agency Limited.

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Table B18: Top ten industry divisions of main job at 3.5 years, AHSS subject areas (%)

SocStud		Law		B&A		MCD		Lang		H&Ph		CAD	
SIC	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**
(85) Education	69.6	-	-	(85) Education	67.4	-	-	(85) Education	78.2	(85) Education	60.1	(85) Education	75.0
(84) Public administration and defence; compulsory social security	6.8	-	-	(70) Activities of head offices; management consultancy activities	9.8	-	-	(91) Libraries, archives, museums and other cultural activities	3.0	(91) Libraries, archives, museums and other cultural activities	6.9	(63) Information service activities	2.4
(70) Activities of head offices; management consultancy activities	4.4	-	-	(84) Public administration and defence; compulsory social security	4.8	-	-	(58) Publishing activities	1.6	(94) Activities of membership organisations	6.3	(88) Social work activities without accommodation	2.9
(88) Social work activities without accommodation	3.3	-	-	(17) Manufacture of paper and paper products	2.4	-	-	(62) Computer programming, consultancy and related activities	1.7	(69) Legal and accounting activities	2.4	(90) Creative, arts and entertainment activities	3.3

SocStud		Law		B&A		MCD		Lang		H&Ph		CAD	
SIC	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**	**SIC**	**%**
(94) Activities of membership organisations	2.6	-	-	(28) Manufacture of machinery and equipment (not elsewhere classified)	1.5	-	-	(64) Financial service activities, except insurance and pension funding	1.5	(84) Public administration and defence; compulsory social security	3.7	(28) Manufacture of machinery and equipment (not elsewhere classified)	1.6
(99) Activities of extraterritorial organisations and bodies	3.3	-	-	(64) Financial service activities, except insurance and pension funding	1.6	-	-	(72) Scientific research and development	2.4	(88) Social work activities without accommodation	3.9	(59) Motion picture, video and television programme production, sound recording and music publishing	1.7
(64) Financial service activities, except insurance and pension funding	0.9	-	-	(66) Activities auxiliary to financial services and insurance activities	2.6	-	-	(74) Other professional, scientific and technical activities	2.4	(90) Creative, arts and entertainment activities	3.8	(62) Computer programming, consultancy and related activities	1.4
(72) Scientific research and development	1.5	-	-	(69) Legal and accounting activities	3.1	-	-	(84) Public administration and defence; compulsory social security	1.9	(47) Retail trade, except of motor vehicles and motorcycles	1.3	(70) Activities of head offices; management consultancy activities	1.2
(86) Human health activities	1.9	-	-	(26) Manufacture of computer, electronic and optical products	1.0	-	-	(88) Social work activities without accommodation	2.0	(62) Computer programming, consultancy and related activities	1.0	(72) Scientific research and development	1.8
(21) Manufacture of basic pharmaceutical products and pharmaceutical preparations	0.5	-	-	(65) Insurance, reinsurance and pension funding, except compulsory social security	1.0	-	-	(94) Activities of membership organisations	1.4	(70) Activities of head offices; management consultancy activities	1.0	(73) Advertising and market research	1.8
	70		10		35		5		50		65		25

Base: AHSS PGRs of working age in employment (not studying)

Source(s): HESA DLHE Long Record 2010/11. Copyright Higher Education Statistics Agency Limited.

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Table B19: Professional and Graduate jobs (SOC(HE)_EP) at 6 months, broad subject groupings (%)

	AHSS	STEM	Ed/combined	All subjects
Professional/associate professional or managerial (1-3)	95.4	98.8	98.9	97.9
Non-professional job (4-9)	4.6	1.2	1.1	2.1
Total	100	100	100	100
Total, N	2,150	5,510	285	7,945
Expert	79.4	89.6	87.0	86.7
Strategist	5.4	4.0	5.6	4.5
Communicator	7.3	2.7	4.6	4.1
Non-graduate	7.9	3.6	2.8	4.8
Total	100	100	100	100
Total, N	2,150	5,510	285	7,945

Base: All PGRs of working age in employment (not studying)

Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.

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Table B20: Professional and Graduate jobs (SOC(HE)_EP) at 6 months, AHSS subject area (%)

	SS	Law	B&A	MCD	Lang	H&P	CAD
Professional/associate professional or managerial (1-3)	97.8	99.1	98.9	95.4	92.4	91.2	96.2
Non-professional job (4-9)	2.2	0.9	1.1	4.6	7.6	8.8	3.8
Total	100	100	100	100	100	100	100
Total, N	605	115	275	65	425	430	235
Expert	87.5	81.9	75.0	80.0	75.3	71.3	84.0
Strategist	5.2	5.3	15.3	8.4	2.6	3.5	2.0
Communicator	2.6	0.9	1.8	3.0	12.3	14.4	8.5
Non-graduate	4.6	11.9	7.9	8.6	9.8	10.8	5.5
Total	100	100	100	100	100	100	100
Total, N	605	115	275	65	425	430	235

Base: AHSS PGRs of working age in employment (not studying)

Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.

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Table B21: Professional and Graduate jobs (SOC(HE)_EP) at 3.5 years, broad subject groupings (%)

	AHSS	STEM	Ed/combined	All subjects
Professional/associate professional or managerial (1-3)	95.7	98.0	97.9	97.4
Non-professional job (4-9)	4.3	2.0	2.1	2.6
Total	100	100	100	100
Total, N	260	680	50	990
Expert	79.7	84.8	86.3	83.5
Strategist	5.9	5.6	4.1	5.6
Communicator	6.0	3.0	4.9	3.9
Non-graduate	8.3	6.6	4.7	7.0
Total	100	100	100	100
Total, N	260	680	50	990

Base: All PGRs of working age in employment (not studying)

Source(s): HESA DLHE Long Record 2010/11. Copyright Higher Education Statistics Agency Limited.

Table B22: Professional and Graduate jobs (SOC(HE)_EP) at 3.5 years, AHSS subject area (%)

	SS	Law	B&A	MCD	Lang	H&P	CAD
Professional/associate professional or managerial (1-3)	96.2	-	98.5	-	93.1	93.7	98.2
Non-professional job (4-9)	3.8	-	1.5	-	6.9	6.3	1.8
Total	100	100	100	100	100	100	100
Total, N	75	10	35	5	50	65	25
Expert	87.7	-	73.1	-	74.4	74.0	85.5
Strategist	5.7	-	21.7	-	3.7	1.7	2.5
Communicator	1.4	-	0.0	-	11.8	10.3	7.0
Non-graduate	5.3	-	5.2	-	10.2	14.0	4.9
Total	100	100	100	100	100	100	100
Total, N	75	10	35	5	50	65	25

Base: AHSS PGRs of working age in employment (not studying)
Source(s): HESA DLHE Long Record 2010/11. Copyright Higher Education Statistics Agency Limited.

Table B23: Occupational major group of employment in main job and 'professional' marker at 6 months, broad subject groupings (%)

SOC 2010 – Major groups	AHSS	STEM	Ed/combined	All subjects
1: MANAGERS, DIRECTORS AND SENIOR OFFICIALS	4.5	2.1	4.9	2.8
2: PROFESSIONAL OCCUPATIONS	79.7	90.1	89.8	87.3
3: ASSOCIATE PROFESSIONAL AND TECHNICAL OCCUPATIONS	11.2	6.7	4.2	7.8
4: ADMINISTRATIVE AND SECRETARIAL OCCUPATIONS	2.9	0.4	0.7	1.1
5: SKILLED TRADES OCCUPATIONS	0.1	0.1	0.0	0.1
6: CARING, LEISURE AND OTHER SERVICE OCCUPATIONS	0.8	0.2	0.4	0.4
7: SALES AND CUSTOMER SERVICE OCCUPATIONS	0.7	0.2	0.0	0.3
8: PROCESS, PLANT AND MACHINE OPERATIVES	0.0	0.1	0.0	0.1
9: ELEMENTARY OCCUPATIONS	0.2	0.2	0.0	0.2
Total	100	100	100	100
Total, N	2,150	5,510	285	7,945

Base: All PGRs of working age in employment (not studying)
Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.

Table B24: Occupational major group of employment in main job and 'professional' marker at 6 months, AHSS subject areas (%)

SOC 2010 – Major groups	SS	Law	B&A	MCD	Lang	H&P	CAD
1: MANAGERS, DIRECTORS AND SENIOR OFFICIALS	4.0	4.4	12.4	11.9	2.8	2.8	1.1
2: PROFESSIONAL OCCUPATIONS	86.7	85.5	77.3	78.2	76.5	78.2	70.2
3: ASSOCIATE PROFESSIONAL AND TECHNICAL OCCUPATIONS	7.1	9.3	9.2	5.4	13.1	10.1	24.9

SOC 2010 – Major groups	SS	Law	B&A	MCD	Lang	H&P	CAD
4: ADMINISTRATIVE AND SECRETARIAL OCCUPATIONS	1.4	0.9	1.1	3.0	4.9	5.5	1.3
5: SKILLED TRADES OCCUPATIONS	0.2	0.0	0.0	0.0	0.0	0.2	0.4
6: CARING, LEISURE AND OTHER SERVICE OCCUPATIONS	0.3	0.0	0.0	0.0	1.2	1.6	1.3
7: SALES AND CUSTOMER SERVICE OCCUPATIONS	0.2	0.0	0.0	1.5	1.1	1.3	0.8
8: PROCESS, PLANT AND MACHINE OPERATIVES	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9: ELEMENTARY OCCUPATIONS	0.2	0.0	0.0	0.0	0.5	0.2	0.0
Total	100	100	100	100	100	100	100
Total, N	605	115	275	65	425	430	235

Base: AHSS PGRs of working age in employment (not studying)

Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.

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Table B25: Occupational major group of employment in main job and 'professional' marker at 3.5 years, broad subject groupings (%)

SOC 2010 – Major groups	AHSS	STEM	Ed/combined	All subjects
1: MANAGERS, DIRECTORS AND SENIOR OFFICIALS	5.3	3.3	3.5	3.8
2: PROFESSIONAL OCCUPATIONS	82.7	86.4	87.7	85.5
3: ASSOCIATE PROFESSIONAL AND TECHNICAL OCCUPATIONS	7.7	8.3	6.7	8.0
4: ADMINISTRATIVE AND SECRETARIAL OCCUPATIONS	3.0	0.6	1.4	1.3
5: SKILLED TRADES OCCUPATIONS	0.1	0.6	0.0	0.4
6: CARING, LEISURE AND OTHER SERVICE OCCUPATIONS	1.0	0.2	0.7	0.4
7: SALES AND CUSTOMER SERVICE OCCUPATIONS	0.1	0.4	0.0	0.3
8: PROCESS, PLANT AND MACHINE OPERATIVES	0.0	0.2	0.0	0.1
9: ELEMENTARY OCCUPATIONS	0.1	0.1	0.0	0.1
Total	100	100	100	100
Total, N	260	680	50	990

Base: All PGRs of working age in employment (not studying)

Source(s): HESA DLHE Long Record 2010/11. Copyright Higher Education Statistics Agency Limited.

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Table B26: Occupational major group of employment in main job and 'professional' marker at 3.5 years, AHSS subject areas (%)

SOC 2010 – Major groups	SS	Law	B&A	MCD	Lang	H&P	CAD
1: MANAGERS, DIRECTORS AND SENIOR OFFICIALS	3.4	-	14.5	-	2.9	4.8	5.7
2: PROFESSIONAL OCCUPATIONS	88.7	-	81.4	-	76.8	79.4	82.1
3: ASSOCIATE PROFESSIONAL AND TECHNICAL OCCUPATIONS	4.1	-	2.6	-	13.3	9.6	10.5
4: ADMINISTRATIVE AND SECRETARIAL OCCUPATIONS	3.4	-	1.5	-	3.8	4.4	0.0
5: SKILLED TRADES OCCUPATIONS	0.0	-	0.0	-	0.0	0.6	0.0
6: CARING, LEISURE AND OTHER SERVICE OCCUPATIONS	0.0	-	0.0	-	3.2	0.8	1.8
7: SALES AND CUSTOMER SERVICE OCCUPATIONS	0.4	-	0.0	-	0.0	0.0	0.0
8: PROCESS, PLANT AND MACHINE OPERATIVES	0.0	-	0.0	-	0.0	0.0	0.0
9: ELEMENTARY OCCUPATIONS	0.0	-	0.0	-	0.0	0.6	0.0
Total	100	100	100	100	100	100	100
Total, N	75	10	35	5	50	65	25

Base: AHSS PGRs of working age in employment (not studying)
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Table B27: The top 10 AHSS occupations for PGRs at 6 months:

AHSS	%
(2311) HIGHER EDUCATION TEACHING PROFESSIONALS	35.0
(2119) NATURAL AND SOCIAL SCIENCE PROFESSIONALS N.E.C.	13.3
(2114) SOCIAL AND HUMANITIES SCIENTISTS	4.9
(2426) BUSINESS AND RELATED RESEARCH PROFESSIONALS	4.0
(2312) FURTHER EDUCATION TEACHING PROFESSIONALS	3.7
(2319) TEACHING AND OTHER EDUCATIONAL PROFESSIONALS N.E.C.	2.7
(3412) AUTHORS, WRITERS AND TRANSLATORS	2.1
(2314) SECONDARY EDUCATION TEACHING PROFESSIONALS	2.0
(3415) MUSICIANS	1.5
(2423) MANAGEMENT CONSULTANTS AND BUSINESS ANALYSTS	1.4
Base, N	2,150

Base: AHSS PGRs of working age in employment (not studying)
Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.
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Table B28: The top 10 AHSS occupations for PGRs at 3.5 years:

AHSS	%
(2311) HIGHER EDUCATION TEACHING PROFESSIONALS	40.9
(2114) SOCIAL AND HUMANITIES SCIENTISTS	8.0
(2119) NATURAL AND SOCIAL SCIENCE PROFESSIONALS N.E.C.	7.0
(2317) SENIOR PROFESSIONALS OF EDUCATIONAL ESTABLISHMENTS	4.6
(2425) ACTUARIES, ECONOMISTS AND STATISTICIANS	2.2
(2426) BUSINESS AND RELATED RESEARCH PROFESSIONALS	2.3
(2429) BUSINESS, RESEARCH AND ADMINISTRATIVE PROFESSIONALS N.E.C	2.2
(2319) TEACHING AND OTHER EDUCATIONAL PROFESSIONALS N.E.C.	1.8
(2452) ARCHIVISTS AND CURATORS	2.0
(1139) FUNCTIONAL MANAGERS AND DIRECTORS N.E.C.	1.5
Base, N	260

Base: AHSS PGRs of working age in employment (not studying)
Source(s): HESA DLHE Long Record 2010/11. Copyright Higher Education Statistics Agency Limited.
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Table B29: Ten most common AHSS occupations at 3.5 years (minor or sub-minor group), by subject area

SocStud		Law		B&A		MCD		Lang		H&Ph		CAD	
SOC	**%**	**SOC**	**%**	**SOC**	**%**	**SOC**	**%**	**SOC**	**%**	**SOC**	**%**	**SOC**	**%**
(2311) HIGHER EDUCATION TEACHING PROFESSIONALS	37.1	-	-	(2311) HIGHER EDUCATION TEACHING PROFESSIONALS	55.5	-	-	(2311) HIGHER EDUCATION TEACHING PROFESSIONALS	45.6	(2311) HIGHER EDUCATION TEACHING PROFESSIONALS	26.2	(2311) HIGHER EDUCATION TEACHING PROFESSIONALS	45.4
(2119) NATURAL AND SOCIAL SCIENCE PROFESSIONALS N.E.C.	11.9	-	-	(2317) SENIOR PROFESSIONALS OF EDUCATIONAL ESTABLISHMENTS	9.8	-	-	(2114) SOCIAL AND HUMANITIES SCIENTISTS	10.3	(2114) SOCIAL AND HUMANITIES SCIENTISTS	11.4	(2114) SOCIAL AND HUMANITIES SCIENTISTS	9.9
(2114) SOCIAL AND HUMANITIES SCIENTISTS	7.4	-	-	(2423) MANAGEMENT CONSULTANTS AND BUSINESS ANALYSTS	7.1	-	-	(2119) NATURAL AND SOCIAL SCIENCE PROFESSIONALS N.E.C.	3.3	(2119) NATURAL AND SOCIAL SCIENCE PROFESSIONALS N.E.C.	9.8	(2317) SENIOR PROFESSIONALS OF EDUCATIONAL ESTABLISHMENTS	7.9
(2425) ACTUARIES, ECONOMISTS AND STATISTICIANS	6.1	-	-	(1139) FUNCTIONAL MANAGERS AND DIRECTORS N.E.C.	6.0	-	-	(2317) SENIOR PROFESSIONALS OF EDUCATIONAL ESTABLISHMENTS	3.0	(2444) CLERGY	5.7	(2119) NATURAL AND SOCIAL SCIENCE PROFESSIONALS N.E.C.	2.7
(2317) SENIOR PROFESSIONALS OF EDUCATIONAL ESTABLISHMENTS	3.6	-	-	(1132) MARKETING AND SALES DIRECTORS	2.4	-	-	(1115) CHIEF EXECUTIVES AND SENIOR OFFICIALS	1.2	(2452) ARCHIVISTS AND CURATORS	6.9	(2312) FURTHER EDUCATION TEACHING PROFESSIONALS	3.1
(2426) BUSINESS AND RELATED RESEARCH PROFESSIONALS	3.7	-	-	(2119) NATURAL AND SOCIAL SCIENCE PROFESSIONALS N.E.C.	1.9	-	-	(2134) IT PROJECT AND PROGRAMME MANAGERS	1.6	(2317) SENIOR PROFESSIONALS OF EDUCATIONAL ESTABLISHMENTS	3.5	(2319) TEACHING AND OTHER EDUCATIONAL PROFESSIONALS N.E.C.	6.3

SocStud		Law		B&A		MCD		Lang		H&Ph		CAD	
SOC	**%**	**SOC**	**%**	**SOC**	**%**	**SOC**	**%**	**SOC**	**%**	**SOC**	**%**	**SOC**	**%**
(2429) BUSINESS, RESEARCH AND ADMINISTRATIVE PROFESSIONALS N.E.C	4.6	-	-	(2425) ACTUARIES, ECONOMISTS AND STATISTICIANS	1.6	-	-	(2314) SECONDARY EDUCATION TEACHING PROFESSIONALS	1.3	(2319) TEACHING AND OTHER EDUCATIONAL PROFESSIONALS N.E.C.	2.8	(2426) BUSINESS AND RELATED RESEARCH PROFESSIONALS	5.0
(2150) RESEARCH AND DEVELOPMENT MANAGERS	3.4	-	-	(2429) BUSINESS, RESEARCH AND ADMINISTRATIVE PROFESSIONALS N.E.C	1.5	-	-	(2315) PRIMARY AND NURSERY EDUCATION TEACHING PROFESSIONALS	2.8	(3412) AUTHORS, WRITERS AND TRANSLATORS	2.9	(2412) BARRISTERS AND JUDGES	2.4
(1139) FUNCTIONAL MANAGERS AND DIRECTORS N.E.C.	1.3	-	-	(3538) FINANCIAL ACCOUNTS MANAGERS	1.5	-	-	(2319) TEACHING AND OTHER EDUCATIONAL PROFESSIONALS N.E.C.	1.6	(1254) SHOPKEEPERS AND PROPRIETORS, WHOLESALE AND RETAIL	1.3	(3415) MUSICIANS	3.5
(2112) BIOLOGICAL SCIENTISTS AND BIOCHEMISTS	2.1	-	-	(1115) CHIEF EXECUTIVES AND SENIOR OFFICIALS	0.9	-	-	(2426) BUSINESS AND RELATED RESEARCH PROFESSIONALS	1.4	(1259) MANAGERS AND PROPRIETORS IN OTHER SERVICES NEC	1.3	(1134) ADVERTISING AND PUBLIC RELATIONS DIRECTORS	1.2
Base, N	75		10	Base, N	35		5	Base, N	50	Base, N	65	Base, N	25

Base: AHSS PGRs of working age in employment (not studying)

Source(s): HESA DLHE Long Record 2010/11. Copyright Higher Education Statistics Agency Limited.

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Table B30: In the job you were doing on… how often did you…? (broad subject groupings), 6 months after graduating (%)

In the job you were doing on… How often did you…?		AHSS	STEM	Ed/combined	All subjects
- conduct research	Most of the time, %	37.7	47.0	21.0	43.3
	Some of the time, %	34.2	19.8	38.1	24.6
	Base, N	260	630	40	930
- Interpret or critically evaluate research findings	Most of the time, %	39.7	48.0	38.9	45.3
	Some of the time, %	36.5	28.2	32.5	30.7
	Base, N	260	630	40	930
- Draw on the detailed knowledge on which your research degree was based	Most of the time, %	41.7	40.7	38.4	40.9
	Some of the time, %	26.7	28.3	35.3	28.2
	Base, N	260	630	40	930
- Use your general disciplinary knowledge	Most of the time, %	60.8	66.1	66.8	64.7
	Some of the time, %	22.5	24.3	24.5	23.8
	Base, N	260	630	40	930
- Use the research skills you developed as a research student	Most of the time, %	55.2	55.8	42.5	55.0
	Some of the time, %	27.9	28.3	40.0	28.7
	Base, N	260	630	40	930
- Use the generic skills you developed as a research student	Most of the time, %	58.2	63.6	52.9	61.6
	Some of the time, %	30.8	28.3	35.0	29.3
	Base, N	260	630	40	930
- Work autonomously	Most of the time, %	70.4	68.0	64.7	68.5
	Some of the time, %	25.8	28.4	32.2	27.9
	Base, N	260	630	40	930
- Work as part of a team	Most of the time, %	34.1	48.2	42.6	44.0
	Some of the time, %	49.6	43.2	42.5	44.9
	Base, N	260	630	40	930
- Work under close supervision	Most of the time, %	4.1	5.2	2.4	4.8
	Some of the time, %	16.8	23.0	17.2	21.0
	Base, N	260	630	40	930
- have responsibility for supervising the work of others	Most of the time, %	23.8	29.1	32.3	27.8
	Some of the time, %	36.9	40.2	34.0	39.0
	Base, N	260	630	40	925

Base: Working age PGRs in employment (no further study)
Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.
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Table B31: Any further study in 3.5 years since graduation, how many and type of qualification, broad subject groupings (%)

	AHSS	STEM	Ed/combined	All subjects
Further study since graduation	21.0	19.4	19.6	19.8
No further study	79.0	80.6	80.4	80.2
Total	100	100	100	100
Total, N	265	690	50	1,005
- One	85.5	75.2	75.3	78.1
- Two	11.3	18.0	17.7	16.1
- Three	3.3	3.4	3.6	3.4
- More than three	0.0	3.4	3.4	2.5
Total	100	100	100	100
Total, N	55	135	10	200
- Higher degree mainly by research (PhD, DPhil, MPhil)	4.1	9.0	6.8	7.5
- Higher degree, mainly by taught course (MA, MSc)	6.7	8.5	17.7	8.5
- Postgraduate diploma or certificate (incl. PGCE)	40.1	27.9	34.7	31.6
- First degree (BA, BSc, MEng)	1.8	2.8	3.2	2.5
- Professional qualification (e.g. Chartered Accountancy, Chartered Institute of Marketing)	24.1	28.9	2.9	26.3
- Other diploma or certificate	19.4	19.6	31.4	20.1
- Vocational Qualifications	2.4	2.0	3.3	2.2
- GCSE/A level	0.0	0.0	0.0	0.0
- Other	0.7	0.5	0.0	0.6
- Not aiming for a qualification	0.7	0.8	0.0	0.7
Total	100	100	100	100
Total, N	55	135	10	200

Base: Working age PGRs in employment (not in further study)
Source(s): HESA DLHE Long Record 2010/11. Copyright Higher Education Statistics Agency Limited.
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Table B32: Subject of further study in 3.5 years since graduation, broad subject groupings (%)

	AHSS	STEM	Ed/combined	All subjects
(1) Medicine & dentistry	0.0	4.6	0.0	3.1
(2) Subjects allied to medicine	2.3	8.0	3.8	6.2
(3) Biological sciences	2.4	19.5	13.6	14.5
(4) Veterinary science	0.0	0.3	0.0	0.2
(5) Agriculture & related subjects	1.4	2.1	0.0	1.8
(6) Physical sciences	0.0	4.3	3.6	3.0
(7) Mathematical sciences	0.6	2.0	0.0	1.5
(8) Computer science	1.8	2.7	0.0	2.3
(9) Engineering & technology	0.0	4.6	3.5	3.3
(A) Architecture, building & planning	0.0	0.8	0.0	0.5
(B) Social studies	5.2	2.6	12.7	3.8
(C) Law	3.6	5.4	0.0	4.7
(D) Business & administrative studies	12.3	11.8	11.8	12.0

	AHSS	STEM	Ed/combined	All subjects
(E) Mass communications & documentation	0.7	0.9	0.0	0.8
(F) Languages	4.3	0.7	0.0	1.7
(G) Historical & philosophical studies	5.2	0.6	0.0	1.8
(H) Creative arts & design	1.6	0.8	3.7	1.2
(I) Education	58.6	27.9	47.3	37.4
(J) Combined	0.0	0.4	0.0	0.2
Total	100	100	100	100
	55	135	10	200

Base: Working age PGRs in employment (not in further study) with some study since graduation
Source(s): HESA DLHE Long Record 2010/11. Copyright Higher Education Statistics Agency Limited.
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Table B33: Whether qualification was a requirement for main job at 6 months, broad subject groupings (%)

Whether needed and which aspect	AHSS	STEM	Ed/combined	All subjects
Yes: the qualification was a formal requirement	47.0	60.0	29.0	55.3
Yes: while the qualification was not a formal requirement it did give me an advantage	27.8	24.7	28.8	25.7
No: the qualification was not required	23.8	14.3	41.0	17.8
Don't know	1.5	1.1	1.2	1.2
Total	100	100	100	100
Total, N	1,900	4,800	245	6,940
- The subject(s) studied	34.3	37.7	24.8	36.5
- The level of study	43.0	36.5	54.5	38.6
- Sandwich/work experience (gained as part of my course)	1.6	3.2	1.4	2.8
- No one thing was most important	18.1	20.2	14.9	19.5
- Don't know	3.0	2.4	4.3	2.6
Total	100	100	100	100
Total, N	1,400	4,000	140	5,535

Base: All PGRs of working age in employment (not studying)
Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.
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Table B34: Whether qualification was a requirement for main job at 6 months, AHSS subject areas (%)

	SS	Law	B&A	MCD	Lang	H&P	CAD
Yes: the qualification was a formal requirement	57.2	48.8	47.6	44.6	44.0	42.5	32.2
Yes: while the qualification was not a formal requirement it did give me an advantage	27.2	30.7	26.9	34.5	25.9	28.9	28.3
No: the qualification was not required	14.3	18.5	24.6	19.2	29.5	26.5	36.5
Don't know	1.3	2.0	0.9	1.8	0.5	2.1	2.9
Total	100	100	100	100	100	100	100
Total, N	550	105	235	55	375	375	205
- The subject(s) studied	33.5	36.5	26.6	15.2	39.0	38.0	35.9
- The level of study	46.4	40.9	57.3	40.6	39.5	31.9	43.3
- Sandwich/work experience (gained as part of my course)	1.4	0.0	2.3	4.5	1.2	2.1	1.6
- No one thing was most important	15.9	16.4	12.3	30.6	18.4	24.2	17.2
- Don't know	2.8	6.3	1.4	9.1	1.9	3.8	1.9

	SS	Law	B&A	MCD	Lang	H&P	CAD
Total	100	100	100	100	100	100	100
Total, N	460	80	170	45	260	265	120

Base: AHSS PGRs of working age in employment (not studying)
Source(s): HESA DLHE Record 2014/15. Copyright Higher Education Statistics Agency Limited.
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Table B35: How important were the following in getting your main job? (broad subject areas), 3.5 years after graduating (%)

Importance of…?		AHSS	STEM	Ed/ combined	All subjects
- The subject you studied	Formal req, %	47.0	52.1	40.9	50.2
	Important, %	29.4	34.9	36.8	33.6
	Base, N	260	680	50	985
- The type of qualification you obtained	Formal req, %	52.3	55.7	36	53.8
	Important, %	25	27.8	40.6	27.7
	Base, N	260	680	50	985
- The class or grade of the qualification you obtained	Formal req, %	20.6	23.8	13.3	22.4
	Important, %	35	35.4	27.1	34.9
	Base, N	240	620	45	910
- Evidence of skills and competencies	Formal req, %	48.9	50.5	40.6	49.6
	Important, %	43.0	42.3	44.3	42.6
	Base, N	260	675	50	980
- Any work experience or work placement that was part of the qualification you obtained*	Formal req, %	18.1	27.8	29.5	25.5
	Important, %	45.6	37.9	39.4	39.9
	Base, N	160	460	25	650
- Any qualifications obtained after the one you got in 2010/2011*	Formal req, %	19.6	22.1	-	21.4
	Important, %	29.4	30.9	-	30.3
	Base, N	120	310	20	450
- Relevant work experience from previous employment*	Formal req, %	24.7	22.6	40.7	24.0
	Important, %	54.6	49.5	49.7	50.9
	Base, N	245	615	45	905

Base: Working age PGRs in employment (no study) *Base is only those for whom the question applies
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Table B36: How important were the following in getting your main job? (AHSS subject areas), 3.5 years after graduating (%)

Importance of…?		SS	Law	B&A	MCD	Lang	H&P	CAD
- The subject you studied	Formal req, %	41.2	-	48.7	-	49.0	45.3	-
	Important, %	37.5	-	33.7	-	24.2	23.8	-
	Base, N	70	10	35	5	50	65	20
- The type of qualification you obtained	Formal req, %	57.1	-	54.4	-	55.2	46.0	-
	Important, %	24.1	-	28.0	-	22.8	20.9	-
	Base, N	70	10	35	5	50	65	20

Importance of…?		SS	Law	B&A	MCD	Lang	H&P	CAD
- The class or grade of the qualification you obtained	Formal req, %	26.2	-	16.7	-	23.4	18.5	-
	Important, %	33.7	-	33.2	-	35.1	29.2	-
	Base, N	65	10	35	5	50	55	20
- Evidence of skills and competencies	Formal req, %	51.5	-	49.0	-	46.8	46.6	-
	Important, %	42.2	-	42.9	-	47.5	41.3	-
	Base, N	70	10	35	5	50	60	20
- Any work experience or work placement that was part of the qualification you obtained*	Formal req, %	18.6	-	15.0	-	13.2	20.7	-
	Important, %	46.6	-	46.5	-	52.8	33.1	-
	Base, N	45	5	25	5	35	35	15
- Any qualifications obtained after the one you got in 2010/2011*	Formal req, %	22.1	-	28.3	-	13.1	19.6	-
	Important, %	28.3	-	23.2	-	37.8	24.4	-
	Base, N	25	5	25	0	25	30	10
- Relevant work experience from previous employment*	Formal req, %	23.9	-	21.4	-	22.9	26.7	-
	Important, %	51.2	-	64.2	-	53.2	53.9	-
	Base, N	65	10	35	5	50	55	20

Base: Working age PGRs in employment (no study) *Base is only those for whom the question applies
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Table B37: How well did your course prepare you for …? % (AHSS subject areas), 6 months after graduating (%)

		AHSS	STEM	Ed/combined	All subjects
How well did your HE experience prepare you for business?					
Not at all	%	28.7	25.4	30.2	26.5
Not very well	%	22.5	29.2	25.2	27.2
Well	%	31.0	28.2	26.3	28.9
Very well	%	17.8	17.2	18.3	17.4
Total	%	100	100	100	100
Total, N		1,420	3,665	180	5,265
How well did your HE experience prepare you for study?					
Not at all	%	4.4	3.3	4.7	3.6
Not very well	%	3.3	3.7	3.0	3.6
Well	%	35.3	40.1	29.4	38.4
Very well	%	57.0	52.9	62.9	54.4
Total	%	100	100	100	100
Total, N		1,490	3,965	215	5,670
How well did your HE experience prepare you for work?					
Not at all	%	9.7	6.6	10.6	7.6
Not very well	%	13.2	8.5	9.6	9.8
Well	%	39.8	42.4	35.8	41.5
Very well	%	37.3	42.5	44.0	41.1
Total	%	100	100	100	100
Total, N		1,675	4,455	210	6,340

Base: Working age PGRs in employment (no study)
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Table B38: How well did your course prepare you for …? (AHSS subject areas), 6 months after graduating (%)

		SS	Law	B&A	MCD	Lang	H&P	CAD
How well did your HE experience prepare you for business?								
Not at all	%	33.3	34.0	25.2	24.8	28.0	28.1	22.1
Not very well	%	24.1	14.8	18.5	19.6	22.7	27.1	18.7
Well	%	29.5	29.1	27.5	35.1	33.6	28.3	37.8
Very well	%	13.0	22.1	28.8	20.6	15.7	16.5	21.3
Total	%	100	100	100	100	100	100	100
Total, N		395	75	175	35	295	285	165
How well did your HE experience prepare you for study?								
Not at all	%	3.6	5.1	6.2	2.5	4.1	4.0	5.3
Not very well	%	4.6	6.4	1.1	5.0	2.9	3.3	1.8
Well	%	35.6	30.6	32.6	28.1	34.3	34.1	45.0
Very well	%	56.3	58.0	60.1	64.4	58.7	58.5	47.9
Total	%	100	100	100	100	100	100	100
Total, N		415	80	185	40	305	300	170
How well did your HE experience prepare you for work?								
Not at all	%	6.7	11.8	10.6	7.8	12.6	8.5	13.5
Not very well	%	12.1	5.9	8.0	15.6	15.9	17.3	12.9
Well	%	41.5	37.8	31.0	41.4	37.3	43.8	43.6
Very well	%	39.7	44.6	50.4	35.2	34.1	30.4	30.0
Total	%	100	100	100	100	100	100	100
Total, N		490	95	215	45	325	330	175

Base: Working age PGRs in employment (no study)

Table B39: Impact of research degree work (broad subject groupings), 3.5 years after graduating (%)

To what extent has your research degree enabled you to…?		AHSS	STEM	Ed/ combined	All subjects
- Be innovative in the workplace	A great extent, %	39.4	44.9	32.1	42.8
	Some extent, %	52.4	49.6	61.4	50.8
	Base, N	255	635	40	925
- Make a difference in the workplace	A great extent, %	34.1	38.4	35	37.1
	Some extent, %	52.9	54.3	56.2	54
	Base, N	250	630	40	920
- Change organisational culture and/or working practices	A great extent, %	13.8	14.5	16.9	14.4
	Some extent, %	45.2	47.6	54.2	47.2
	Base, N	250	620	40	910
- Influence the work of others in the workplace	A great extent, %	17.8	17.8	20.2	17.9
	Some extent, %	61.4	67.6	67.9	65.9
	Base, N	250	625	40	920
- Access immediate or short-term job opportunities in your chosen career	A great extent, %	28.8	28.1	22.1	28
	Some extent, %	42.5	46.7	45.2	45.5
	Base, N	245	600	40	880
- Enhance your credibility or standing in the workplace	A great extent, %	54.9	51.6	54.7	52.7

To what extent has your research degree enabled you to…?		AHSS	STEM	Ed/ combined	All subjects
	Some extent, %	39.5	43.8	40.2	42.4
	Base, N	260	635	40	930
- Progress towards your long term career aspirations	A great extent, %	54.3	53.1	40.3	52.8
	Some extent, %	36.8	40	44.7	39.3
	Base, N	255	630	40	920
- Enhance your social and intellectual capabilities beyond employment	A great extent, %	49.5	35.7	43.4	39.9
	Some extent, %	43.7	54	48.4	50.8
	Base, N	260	625	40	925
- Enhance the quality of your life generally	A great extent, %	44.2	31	34.3	34.8
	Some extent, %	45.3	55.6	52.9	52.6
	Base, N	255	630	340	920
- Other	A great extent, %	15.6	11	14.6	12.5
	Some extent, %	36.9	41.1	41.4	40
	Base, N	175	435	30	640

Base: Working age PGRs in employment (no further study)

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Table B40: Impact of research degree work (AHSS subject areas), 3.5 years after graduating (%)

To what extent has your research degree enabled you to…?		SS	Law	B&A	MCD	Lang	H&P	CAD
- Be innovative in the workplace	A great extent, %	38.1	-	43.7	-	38	37.5	40.9
	Some extent, %	53	-	54.3	-	53.3	52.6	47.8
	Base, N	70	10	35	5	50	60	25
- Make a difference in the workplace	A great extent, %	30	-	47.5	-	28.7	36.4	29.5
	Some extent, %	56.7	-	47.9	-	55.7	47.9	58.2
	Base, N	70	10	35	5	50	60	25
- Change organisational culture and/or working practices	A great extent, %	13.3	-	19.5	-	8.7	12.8	-
	Some extent, %	38.9	-	55.8	-	43.1	44.8	-
	Base, N	70	10	35	5	50	60	20
- Influence the work of others in the workplace	A great extent, %	20.4	-	28.3	-	12.2	11.2	-
	Some extent, %	60	-	58.5	-	63.6	64.5	-
	Base, N	70	10	35	5	50	60	20
- Access immediate or short-term job opportunities in your chosen career	A great extent, %	29.2	-	33	-	33.6	19.6	-
	Some extent, %	45.5	-	41	-	40	41.4	-
	Base, N	65	10	30	5	50	60	20
- Enhance your credibility or standing in the workplace	A great extent, %	53.3	-	67.8	-	52.1	50.6	58.2
	Some extent, %	43	-	26.9	-	39	43	37.2
	Base, N	70	10	35	5	50	65	25
- Progress towards your long term career aspirations	A great extent, %	57.2	-	60.7	-	57.9	44.4	-
	Some extent, %	35.3	-	32.3	-	33.6	41.9	-

To what extent has your research degree enabled you to…?		SS	Law	B&A	MCD	Lang	H&P	CAD
	Base, N	70	10	35	5	50	60	20
- Enhance your social and intellectual capabilities beyond employment	A great extent, %	45.4	-	46.7	-	52.7	54.4	53.7
	Some extent, %	45.7	-	50.3	-	41.5	37.6	42
	Base, N	70	10	35	5	50	65	25
- Enhance the quality of your life generally	A great extent, %	41.1	-	44.6	-	47.7	46.4	-
	Some extent, %	47.3	-	50.3	-	40.6	40.8	-
	Base, N	70	10	35	5	50	60	20
- Other	A great extent, %	10.7	-	23.9	-	15.2	14.1	-
	Some extent, %	43	-	42.6	-	34	28.8	-
	Base, N	45	5	30	5	35	45	15

Base: Working age PGRs in employment (no further study)

Table B41: Impact of HE experience on work (broad subject groupings), 3.5 years after graduating (%)

Extent your HE experience prepare you for/to…?		AHSS	STEM	Ed/ combined	All subjects
- help you progress your career aspirations?	Very well, %	41.3	48.9	45.5	46.7
	Quite well, %	45.0	41.1	37.9	41.9
	Base, N	260	685	50	995
- Be innovative in the workplace	A great extent, %	-	39.9	-	37.2
	Some extent, %	-	55.2	-	58.8
	Base, N	0	50	10	60
- Solve problems in your work	A great extent, %	-	47.2	-	45.0
	Some extent, %	-	49.7	-	47.1
	Base, N	0	50	10	60
- Communicate effectively in your work	A great extent, %	-	64.9	-	59.7
	Some extent, %	-	33.7	-	32.2
	Base, N	0	50	10	60
- Make good decisions in your workplace?	A great extent, %	-	58.0	-	53.9
	Some extent, %	-	42.0	-	40.6
	Base, N	0	50	10	60
- Work effectively with others	A great extent, %	-	61.4	-	55.4
	Some extent, %	-	37.2	-	36.3
	Base, N	0	50	10	60
- Take initiative and personal responsibility in your work	A great extent, %	-	58.6	-	55.9
	Some extent, %	-	40.0	-	35.9
	Base, N	0	50	10	60
- Make effective use of information and communication technology in your work	A great extent, %	-	31.6	-	33.4
	Some extent, %	-	52.6	-	43.7

Extent your HE experience prepare you for/to…?		AHSS	STEM	Ed/ combined	All subjects
	Base, N	0	50	10	60
- Work effectively with numbers	A great extent, %	-	26.6	-	24.7
	Some extent, %	-	52.6	-	46.6
	Base, N	0	45	10	55

Base: Working age AHSS PGRs in employment (no further study)
Source(s): HESA DLHE Long Record 2010/11. Copyright Higher Education Statistics Agency Limited.
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Table B42: Impact of HE experience on work (AHSS subject areas), 3.5 years after graduating (%)

Extent your HE experience prepare you for/to…?		SS	Law	B&A	MCD	Lang	H&P	CAD
- help you progress your career aspirations?	Very well, %	43.5	-	51.9	-	38.9	31.8	-
	Quite well, %	45.7	-	44.3	-	42.1	47.8	-
	Base, N	75	10	35	5	50	65	20
- Be innovative in the workplace	A great extent, %	-	-	-	-	-	-	-
	Some extent, %	-	-	-	-	-	-	-
	Base, N	-	-	-	-	-	-	-
- Solve problems in your work	A great extent, %	-	-	-	-	-	-	-
	Some extent, %	-	-	-	-	-	-	-
	Base, N	-	-	-	-	-	-	-
- Communicate effectively in your work	A great extent, %	-	-	-	-	-	-	-
	Some extent, %	-	-	-	-	-	-	-
	Base, N	-	-	-	-	-	-	-
- Make good decisions in your workplace?	A great extent, %	-	-	-	-	-	-	-
	Some extent, %	-	-	-	-	-	-	-
	Base, N	-	-	-	-	-	-	-
- Work effectively with others	A great extent, %	-	-	-	-	-	-	-
	Some extent, %	-	-	-	-	-	-	-
	Base, N	-	-	-	-	-	-	-
- Take initiative and personal responsibility in your work	A great extent, %	-	-	-	-	-	-	-
	Some extent, %	-	-	-	-	-	-	-
	Base, N	-	-	-	-	-	-	-
- Make effective use of information and communication technology in your work	A great extent, %	-	-	-	-	-	-	-
	Some extent, %	-	-	-	-	-	-	-

Extent your HE experience prepare you for/to…?		SS	Law	B&A	MCD	Lang	H&P	CAD
	Base, N	-	-	-	-	-	-	-
- Work effectively with numbers	A great extent, %	-	-	-	-	-	-	-
	Some extent, %	-	-	-	-	-	-	-
	Base, N	-	-	-	-	-	-	-

Base: Working age AHSS PGRs in employment (no further study)

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