British Academy Flagship Skills Project

Call for evidence: analysis

(November 2017)

Introduction

The British Academy received 34 responses to its call for evidence from individual researchers, research councils, higher education institutions, learned societies, employer bodies, career services, head teachers, Fellows of the Academy and government agencies.

Responses were received from researchers across the arts, humanities and social sciences (AHSS), but many of the responses from individual researchers tended to be from those working in the arts and humanities.

The Call for views¹ was divided into six sets of questions targeted at different audiences. Some responses from both individuals and organisations addressed questions across different sections according to the areas they were engaged in within the field of skills and higher education.

This document provides an analysis of the responses received. The overarching objective is to draw out themes and key messages as highlighted by the respondents.

The analysis is presented under the following headings:

- AHSS skills and the contribution they make to society and the economy
- Employability of AHSS graduates
- Skills of the future

Following the three sections of analysis, a fourth section is dedicated to suggestions made by the respondents about the scope of the project.

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¹ https://www.britac.ac.uk/callforevidence

Section 1: AHSS Skills and the contribution they make to society and the economy

Defining skills

A few respondents suggested a relevant definition of skills for the project to adopt. The definition below is one of the most compelling examples found in the responses:

"Skills correspond to the development and mastery of a set of abilities over a period of time. To be one who is skilled is to be able to complete tasks professionally, to time, and to a consistently high standard."

In the response containing this definition, the respondent emphasised the importance of the relationship between cognitive and non-cognitive skills (values, attributes, etc.), as they consider that "an individual's values can frame the way skills are mobilized and enacted."

They stress that it is imperative that in addition to AHSS skills, attributes such as confidence, resilience, integrity, are considered as part of the wider discussion. The demonstration or development of those attributes can help students to increase their suitability for different roles as well as their capacity to engage in lifelong learning activities.

The Royal Society of Edinburgh signalled that in a collaborative process involving input from staff, students and employers, some higher education institutions in Scotland have developed a list of "graduate attributes" which reflect the institution's mission and strategic priorities. Those graduate attributes have mainly been developed on an institution-by-institution basis, but common features across universities can be identified as follows:

- Lifelong learning
- Research
- Scholarship and enquiry
- Employability and careers development
- Global citizenship
- Communication and information literacy
- Ethical, social and professional understanding
- Personal and intellectual autonomy
- Collaboration
- Teamwork and leadership

Most of the respondents to the call for evidence highlighted the need for the project to distinguish between the skills gained at undergraduate, postgraduate taught and postgraduate research levels of study:

"Undergraduate studies, being as a rule broader in scope, subject matter and learning techniques, are perhaps more significant in providing the underpinning skills and to shaping attitudes."

Another aspect that the project should also consider is the distinction between "core disciplinary and broad generic employability skills" that are a feature of skills development within AHSS disciplines (written communication, critical thinking, research skills and team

work for example), and particular kinds of "high-level capabilities that are critical to success in different sectors of the world of work."

The definition of 'skills' should, according to the respondents, encompass those which are specialised, transferable, and difficult to articulate. These skills constitute "an increasingly important set of competencies within a labour market that is as precarious as it is heterogeneous." Depending on the sector of employment those higher skills listed below will be increasingly required to access competitive roles:

- Social networking capability
- Enterprise and career self-management
- Advocacy and the ability to present a case
- Analysis and evaluation of evidence, weighing up arguments and understanding multiple perspectives
- Awareness of the possibilities and limitations of data
- Methodological rigour
- Ability to notice and describe, and to contextualise, pointing out and unravelling complexity
- Imaginative objectivity, persuasion, diplomacy, negotiation, listening, empathy
- Leadership, independence, initiative, problem solving
- Creative enthusiasm, emotional intelligence, self-awareness, self-management
- Resilience, cultural awareness, adaptability, flexibility and the ability to navigate change

Another point to consider in defining skills is the "difference in the meaning of skills between what AHSS subjects can teach students and in the Arts, the creativity and risk-taking which involve freeing students from received wisdom. This liberation from mimetic forms of learning allow students to develop a can-do attitude desired by employers."

Respondents also stressed that the definition of skills for this project "should go beyond the traditional government tendency to equate necessary skills (particularly when referencing the 'skills gap') solely with 'professional' or 'employability' skills." They affirmed that it was "vital that this work looks further than what employers require; it should also look at how AHSS subjects can produce graduates who are successful citizens and consider what skills are necessary for society and communities to function successfully with respect to citizenship, social justice and leadership."

Supply and demand for skills

One respondent to the call for evidence made an interesting argument regarding the scope of the project in terms of the relationship between the demand and supply of skills. They suggested that a policy project like this one should "be concerned not just with the supply of skills, but also underlying levels of demand for skills, and how well skills are subsequently deployed within the productive process."

They note that the call for evidence synthesis made the assumption that the demand for higher skills "is high and rising steadily and that the main issue is how best and in what ways

to help HE providers to meet that demand – how can supply adjust and improve to meet rising demand."

The problem with that assumption, they argue, it that "it is now increasingly being recognised that we have weak and patchy demand for skills in many sectors, and that a significant number of organisations are unable to absorb and use all of their workers' skills to maximum effect." They quote publications from the Government Office for Science (Campbell 2016),² the UK Commission for Employment and Skills (2010),³ the Scottish Government's Skills Strategy (2007),⁴ and the OECD's 2012 Skills Strategy.⁵

They suggest that in many instances, the consequence is that "jobs that were filled by school leavers with good GCSEs or A levels two decades ago are now being filled by graduates, but the requirements of the job and the levels of discretion and creativity that it affords to the post holder have not been upgraded to reflect the enhanced capabilities of the new workforce."

In their response, this respondent asks a key question to which they attempt to provide an answer, both of which may be outside the scope of this project:⁶

"How employers can be supported to reconfigure work in order to be able to capitalise on the large individual and public investment in higher levels of skill being generated by mass HE? Through a new skills strategy that moves beyond issues solely to do with boosting supply and understand as a starting point the fact that skills are derived from and driven by business need."

What are the skills that AHSS should develop?

One response to the set of questions relating to the development of skills mentioned the objectives that the respondent considered as being fundamental to study in, and developed through, AHSS:

- sympathetic and empathetic understanding
- critical thought; and open-ended and open-minded enquiry
- high standard of communication, both written and oral
- interpersonal, team-building and leadership skills

They affirmed that "studying AHSS should develop a range of cognitive skills and subject-specific abilities."

A respondent from the arts and humanities provided this non-exhaustive list which could represent the key skills that AHSS students would be expected to develop:

² Campbell, M. 2016. 'The UK's Skill Mix: Current Trends and Future Needs', Future of Skills and Lifelong Learning Evidence Review, Foresight, London: Government Office for Science

³ UK Commission for Employment and Skills. 2010. Ambition 2020: the 2010 report, Wath-upon-Dearne: UKCES

⁴ Scottish Government. 2007. Skills for Scotland: A Lifelong Learning Strategy, Edinburgh: Scottish Government.

⁵ Organisation for Economic Cooperation and Development (OECD). 2012. Better skills, better jobs, better lives: a strategic approach to skills policies, Paris: OECD.

⁶ For details of attempts in Scotland and in other developed countries to address the issue of poor skills utilisation, see: https://www.skope.ox.ac.uk/wp-content/uploads/2016/09/Keep.-Improving-Skills-Utilisation-in-the-UK-Some-Reflections-on-What-Who-and-How.pdf

- The capacity to analyse complex cultural processes engaging with a range of analytic tools
- The ability to receive information in one medium and transmit it by other means to broader audiences
- The ability to establish, negotiate, and interpret complex interpersonal and multi-social communications and situations
- Scepticism towards established ways of thinking and the status quo, including the importance of being able to make discordant contributions
- An understanding of the relationship between ethics and aesthetics
- An awareness of historical transformation and how societies and peoples manage technological, social and political movements through communication
- A can-do attitude which is essential for effective and engaged study of AHSS
- Skills in business and customer awareness
- A cross-cultural understanding of social divisions including gender, class, sexuality, disability, age and ethnicity
- A critical understanding of the sensitivities of knowledge
- The ability to evaluate different forms and standards of evidence
- The ability to critically evaluate different constructions of knowledge
- The ability to critically evaluate different perspectives
- An understanding of different ideological and political discourses
- The ability to apply theory to 'real world' scenarios

Respondents from academia with a specific focus on the media sector provided the following list of skills which adds a level of detail to the previous list:

- **Communication skills:** communication is embedded in the foundations of these disciplines and students are developing skills across multiple platforms. One of the biggest shifts in the media landscape has been the surge in new platforms and the fragmentation of audiences.
- Creativity and imagination: innovation holds considerable economic and social
 value and is a key resource in both academic study and in the professional
 workplace. Although innovation is often future-focused at its core is sound
 reflexivity. This is one of the reasons why media history is such an important
 grounding for scholars in our disciplines. Allied to innovation we might also
 consider the importance of curiosity and resourcefulness.
- Critical inquiry, analysis and value judgement in an era of complexity and
 'fake news': critical engagement with the media is a core skill for students in
 our disciplines, fostering the ability to interpret, question, and analyse media
 texts, theories and systems. Students are critical, inquisitive and outward
 looking.
- Media literacy (including data literacy) is an increasingly important skill for all citizens.

- **Representation and power:** as emerging media professionals, students need to be aware of their responsibilities and the power they exercise in representing the public and public institutions.
- Practical production skills: students today must be able to prepare content for a complex cross-media landscape including social media, news media, portfolios, blogs, editorial, features, press releases etc. This requires mental agility and increasingly sophisticated forms of literacy.
- Ability to commercialise skills and content: given the growth in freelancing and self-employment in many creative industries, it is essential that students are able to cultivate their own entrepreneurial skills (e.g. understanding copyright law, monetizing content, negotiating with buyers, promoting their work).
- **Team working skills:** increasingly work within the creative economy is structured around collaboration and working in partnership. Those skills make students prepared for working lives that will likely feature co-production in often quite complicated circumstances and communities.
- Cultural mediation: an understanding (and an ability to negotiate) the tensions
 and opportunities arising between the local and the global. At the micro level,
 these tensions affect industries and regulations, as well as specific business
 models. This poses challenges for the economy (both at the national and global
 levels), as well as for minority cultures and languages.

They affirmed that "those skills were **transferable** across different spheres of engagement, such as the media, politics, citizenship, and business."

What are the skills that AHSS graduate demonstrate?

When asked to enumerate the skills that AHSS graduates demonstrate, respondents to the call for evidence often provided lists which had similarities to those lists provided for the previous question on the skills that study of AHSS should develop. In most of the responses they did not signal a discrepancy between the set of skills that AHSS ought to develop at university level and those that individuals demonstrate after graduating.

However, in some cases, respondents felt that AHSS graduates demonstrated skills as a consequence of their degrees which were not listed in the responses to the previous questions on skills developed through study. Those skills which are directly applicable in work settings or life situations are often presented in the context of graduate employment environments.

The respondents who described the skills that postgraduate researchers and PhD students demonstrate drew up the following list:

- the ability to communicate research outcomes to others, including a nonexpert audience
- a methodical approach to managing research data and datasets
- an understanding of the national and international research sectors across a range of disciplines

- expert subject knowledge and deep understanding of their own discipline
- an understanding of how digital tools can support research and the ability to apply these tools
- the ability to interpret, analyse and summarise primary and secondary research sources
- a non-hierarchical and collegiate approach to research
- the desire to share and impart knowledge to others

Some respondents from the creative industries sector, spanning games design to architecture, affirmed that digital expertise was one of the skills their graduates demonstrate. They explained that in Scotland, arts graduates who demonstrate digital expertise often went on to work for the creative industries sector which contributes £3.7 billion to the economy. They also noted that the growth of AHSS graduates' digital expertise was further enhanced by the development of "centres and networks in 'Digital Humanities' that are concerned with using digital tools and resources for research in the humanities and social sciences."

Other respondents mentioned that politics and international relations graduates often demonstrate information literacy skills that can be deployed in a wide range of contexts, as an employee, entrepreneur or citizen. Those information literacy skills often proved to be of high value "in a period of 'information overload' where the ability to assess the quality of information is becoming increasingly important."

In addition, politics graduates often develop "a further range of skills that derive from the content and focus of the discipline," since the subject matter and approaches "are so much in contention and in flux." They develop skills relating to processing and analysis of data in uncertain and sometimes rapidly changing environments and often proved capable "of contextualising and assessing such information and communicating it to others."

What contribution do those skills make to society and the economy?

Economic impact

To measure the contribution that graduates who developed skills through AHSS degrees make to society and the economy, respondents suggested looking at the career paths of those graduates. A more detailed and focused analysis of AHSS graduates' actual employment outcomes is provided in section 2.

Some publications such as the University of Oxford report, *Hidden Impact of the Humanities* (2013)⁷ may shed some light on the best strategy to gauge the economic and societal contribution of AHSS graduates.

The report, which looked at career paths of mid- and end-career humanities graduates, highlights the absence of substantial data and evidence on the contribution of AHSS graduates to the economy and society.

⁷ University of Oxford. 2013. Humanities Graduates and the British Economy: The Hidden Impact http://www.ox.ac.uk/news/2013-07-11-study-reveals-humanities-graduates-influence-britains-economy

It also makes the important point that given the extent to which graduates change careers over the course of their working lives, reliance on data about graduates' first main employment is not a sound basis for evaluating the economic and societal impact of AHSS graduates. This is reinforced by comprehensive research from the Economic and Social Research Council (ESRC) and the Higher Education Careers Services Unit (HECSU)⁸ that shows that graduate career paths evolve slowly, and some graduates take 5 years or longer to settle into their careers. The call for evidence therefore suggests that the project should emphasise the need for a long-term perspective when trying to assess the impact of AHSS graduates to society and the economy. This might be done through more longitudinal research.

Other respondents also affirmed that there was a clear need for a study of longer-term employment and for a survey of more mature reflections from AHSS graduates on the value of the skills they acquired at university as their careers have developed over a number of years: "a research project could investigate these questions, looking at different age groups from a variety of universities, and using HE Alumni and Development Offices as first points of contact."

One respondent pointed out the Arts and Humanities Research Council (AHRC) report, *Leading the World*, ⁹ in which the AHRC sought to develop a model to demonstrate the economic impact of the arts and humanities. In so doing, the AHRC analysed evidence from over 30 essays by leading arts and humanities researchers representing a large cross-section of AHSS disciplines.

Respondents involved in the provision of courses in media studies noted that:

"in addition to the fundamental role that the media play in enabling and sustaining vibrant democratic societies, providing citizens with information and platforms for political participation, the creative sectors remain some of the fastest growing areas of the economy, with a GVA that rises year on year." ¹⁰

They also pointed out that AHSS graduates acquire skills which help them play a role in supporting and enriching local economies and community engagement. To support their argument, respondents referred to the Wigtown book festival (founded in 1999), one of the largest literary gatherings in Scotland which creates an economic impact each year of more than £2.5m in an economically challenged, remote, rural area. But they also suggested that the project could attempt to map out involvement with local businesses: "many students are contributing to local economies and cultural economies and this is not being mapped."

Contributors to the call for evidence also suggested that recent research has shown that the creative industries are increasingly important to the economy at the local level. They

⁸ Purcell, K. and Elias, P. 2004. Seven Years On: Graduate Careers in a Changing Labour Market, ESRC/HECSU https://www.hecsu.ac.uk/assets/assets/documents/seven_years_on.pdf

⁹ AHRC. 2009. Leading the World: The Economic Impact of UK Arts and Humanities Research http://www.ahrc.ac.uk/documents/publications/leading-the-world/

¹⁰ DCMS. 2016. Creative Industries: Economic Estimates https://www.gov.uk/government/statistics/creative-industries-economic-estimates-january-2016

mentioned a 2016 report by Nesta which identified 47 creative clusters across the UK.¹¹ In addition, "the value of the IP [intellectual property] produced by creatives has become a significant UK success story in economic terms."¹²

A few respondents also mentioned the report *Brighton Fuse*¹³ as containing useful evidence of the role of arts and humanities graduates in contributing to the success of the creative digital economy in Brighton.

The creative economy also serves a valuable research and development function. For example, in developing web and mobile applications, programming, modelling new intellectual property rights systems (for example Creative Commons), and exploring funding mechanisms such as crowdfunding.

Societal impact

Respondents felt that in many ways, the economic case for AHSS can be considered as complementary to the social and creative value of AHSS.

They stressed that "it is the AHSS that has enabled us to gain and extend our understanding of the human condition, including an examination of human means of communication (languages, literatures, creative and performing arts), human actions (history), human ideas (philosophy) and the human brain (psychology). This focus is extended into the social sciences, human beings in various groupings, for example, national, ethnic, political, economic, and social."

In addition, they underlined the fact that the skills developed by AHSS graduates will be crucial to considering the impact of change from a wide range of perspectives, including social, economic, ethical and legal. Respondents insisted that "AHSS has a fundamental role in helping prepare society for a changing world, including supporting society's adaptive capabilities and building people's resilience. This emphasises the importance that consideration be given to understanding processes of change, which the AHSS are well placed to support."

Those arguments were in accordance with the results of research from the British Council in 2014,¹⁴ which was referenced by respondents, and which has shown that the majority of global leaders have either a social sciences (44%) or humanities (11%) bachelor's degree. The research further showed a clear need for leaders who have critical analytical and interpretative skills, and leaders who "can make decisions based on understanding of cultural context and human insight."

Another respondent quoted studies that are seeking to fill the evidence gap of the relationship between engagement with cultural heritage and a range of health and well-

¹¹ Mateos-Garcia, J. and Bakhshi, H. 2016. The Geography of Creativity in the UK http://www.nesta.org.uk/sites/default/files/the-geography of creativity in the uk.pdf

¹² Sweney, M. 2017. 'Creative sector fills UK coffers as money pours into film and TV production' in The Guardian. 4th March 2017.

¹³ http://www.brightonfuse.com/wp-content/uploads/2013/10/The-Brighton-Fuse-Final-Report.pdf

¹⁴ British Council. 2014. Mobilising the Humanities: The Development Perspective https://www.britishcouncil.us/sites/default/files/humanities report.pdf

being outcomes. Some of those studies have demonstrated that "cultural attendance and participation enhances human health and well-being, to the extent that people live longer as a result."

They mentioned the example of "Glasgow museums which have responded to the challenge of addressing the high level of health inequality within the city by introducing one of the most active health and well-being programmes in the UK."

The creative arts also have value in health and well-being terms, recognised for example in music projects working with disenfranchised youth, museums co-producing exhibitions alongside people with dementia, and increased talk about 'cultural prescriptions'.

Respondents affirmed that it was also important not to disregard the contribution of AHSS graduates to society in ways that are often less visible: "as web designers for banks, social media managers for premier league football teams, graphic designers for rail companies, or as press officers in Downing Street." They pointed out that "many more organisations and companies large and small are in the business of media and content production and circulation than was the case even a decade ago. Knowledge of digital infrastructure is a critical underpinning of this activity."

Section 2: Employability of AHSS graduates

This section is divided into two sub-sections which look at the skills that employers are looking for and at AHSS graduates' employment outcomes respectively.

Skills needed by employers

In this set of questions, contributors to the call for evidence were asked to think of the best ways to evidence the gaps between the skills that AHSS students demonstrate and those that employers are seeking. In most of their responses to the questions on employers' demand for skills, respondents drew upon and cited publications which the project team had often already identified in its evidence synthesis document.

Respondents invited the project to consider the clear distinction between skills required at point of entry and those that are important for future performance (which may be learnt through development programmes).

In general, respondents suggested that employers were looking for "well-rounded graduates with the following skills: communication, leadership, critical thinking, problem solving and managerial ability." All of these attributes are core elements of AHSS degree programmes, according the findings of the call for evidence summarised in section 1. Respondents confirmed that the Association of Graduate Recruiters development survey provides a comprehensive summary of nine key employability skills which employers want:¹⁵

- Managing up
- Dealing with conflict
- Negotiating and influencing
- Commercial awareness
- Business appropriate communication
- Self-awareness
- Problem solving
- Interpersonal skills
- Teamwork

They suggested that one way to measure the extent to which these skills align with the skills of AHSS graduates was "to carry out a survey of graduates pre- and post- employment."

Some respondents explained that the difficulty of making a comprehensive list of skills desired by employers was further increased by the rising number of students who are opting for a freelance career: "For those who become freelancers, certain additional skills are needed such as business acumen and financial insight. In addition, one of the key skills demanded by employers/ clients of those freelancers today relates to social media and digital literacy. Many employers expect young people to be confident and skilled in communicating online, however, research suggests that these skills are not always present

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¹⁵ AGR. 2017. Development Survey

and that many young people are anxious about how they project themselves online and the personal/professional boundaries of online visibility." 16

Respondents also warned against prioritising skills wanted by employers as this "could be counterproductive for the project owing to the changeable nature of the graduate labour market: sector and size of an organisation, and occupational area will impact the type, level and relative priority of skills employers are looking for."

Respondents emphasised that taking account of the skills wanted by employers should not lead to a one size fits all exercise. They noted that "a greater number of students have become very much aware of the importance of the skills agenda" and that "students should not be seen not as a passive entity waiting to be developed but as an active and willing participant engaged in the creation and development of their own capabilities."

Some contributions also indicated that employers were proactively investing in skills training and believed that they needed to make more efforts to contribute to closing the skills gap: "For example, 72% of employers run employability workshops/seminars with universities, and 61% of employers believe that outreach with schools is needed to increase the supply of skills." Those respondents invited the project to think about the best strategies to engage with employers and explore how methods of skills training and outreach can be better coordinated and more effective.

Employment outcomes

To illustrate the employment outcomes of AHSS graduates, respondents to the call for evidence made a list of publications and other forms of literature which had already contributed to mapping out where AHSS graduates can be found in the world of work.

An increasing number of employers claim that they no longer pay attention to graduates' academic results and prefer focusing on their strengths demonstrated through recruitment processes.¹⁷ Respondents pointed out that demonstrating a large set of skills remained an essential condition for accessing work in the private and public sector.

A respondent from a government agency indicated that in the Civil Service, competencybased models define the expected skills and behaviours. Members of the profession are expected to provide unambiguous evidence of how they demonstrate those competencies in practice throughout their careers.

Respondents quoted the report published in 2016 by the Institute of Fiscal Studies¹⁸ which found that "median incomes of graduates from most disciplines, about a dozen years after graduation, were much the same, with the exception of highly remunerated economics and medicine graduates, and underpaid arts graduates," suggesting that the skills provided by AHSS are as marketable as those in STEM and computing subjects.

¹⁶ Noonan, C. & Ashton, D. eds. (2013) Cultural Work and Higher Education. Basingstoke: Palgrave Macmillan.

¹⁷ AGR. 2017. Development Survey, p.10.

¹⁸ IFS Working Paper (W16/06) https://www.ifs.org.uk/publications/8233

They also highlighted the short documentary *Historians on Teaching* (2015)¹⁹ which consists of short clips by HE teachers from Europe, North America and Australia describing "outcomes for students," amounting to 31 distinct employability skills which the discipline can instil.

The following publications by David Nicholls were also suggested:

- The employability of History students (HEA Subject Centre for History, Classics and Archaeology, 2005). This study looks at the development of employability from A level to employment, based on a sizeable sample (540) and concludes that history graduates generally possess "key employability skills"; they excelled at "learning how to learn", although numeracy, leadership and IT skills were less well-developed.
- The Employment of History Graduates (HEA Subject Centre for History, Classics and Archaeology, 2005; updated 2011).²¹ This study concluded that a "truly remarkable number of history graduates have gone on to become the moversand-shakers of modern-day Britain." Both editions of the report include a section on famous history graduates, among them leaders in media, law, politics, civil service, trade unions and a considerable number of Vice-Chancellors.

The report by the University of Oxford previously quoted shows that education, management, finance, law and media are key sectors of employment for AHSS graduates.

Another documentary produced in 2016 by the Media, Communication and Cultural Studies Association focusing on *Studying media, communication and cultural studies at University* demonstrates the variety of roles graduates have secured. ²²

Respondents from higher education institutions and involved in media studies also listed the variety of roles and sectors in which their graduates had secured jobs:

- journalists and media professionals in local, regional, national, and international news organisations
- communications and PR professionals
- film and TV professionals (both creative, production, and managerial)
- publishers
- social media managers
- civil servants
- event managers
- primary, secondary, and HE educators
- researchers (in universities, public organisations, and think tanks)

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¹⁹ http://www.historiansonteaching.tv/category/being-teacher/outcomes

²⁰http://www2.warwick.ac.uk/fac/cross fac/heahistory/resources/br nicholls employability 200502xx 03.pd

²¹http://www2.warwick.ac.uk/fac/cross fac/heahistory/resources/br nicholls employmentupdate 20110320. pdf

²² https://youtu.be/vv9dcNky89I

- photographers and digital storytellers
- entrepreneurs
- lawyers

Section 3: Skills for the future

In sections 1 and 2, we reported respondents' suggestions that AHSS graduates will contribute to harnessing the impact of change from a wide range of perspectives, including social, economic, ethical and legal. Those graduates, who might become future global leaders, will have an important role to play in addressing global challenges.

Interdisciplinarity

Respondents suggested that the project may wish to consider research that demonstrates interdisciplinary and collaborative working among AHSS researchers in response to global transformations and challenges. They indicated that in 2009, UCL established its "Grand Challenges" which consist of cross-disciplinary research initiatives which aim to address some of the most pressing issues facing the world, including human well-being, justice and equity, transformative technology, global health, sustainable cities, and cultural understanding.

The project would, according to respondents, gain impact and relevance by considering the role of AHSS disciplines in underpinning increasingly important interdisciplinary work, particularly in relation to addressing global challenges.

The Campaign for Social Science for example, reinforces the point that social sciences are "the science of science" in that they provide understanding of how science and innovation work.

One of the big challenges for future generations will be to succeed in the effective and ethical use of big data. This success will be reliant on collaboration across the disciplines, where understanding attitudes and behaviour is as challenging as the computation.

Respondents from the UK research councils reiterated that while interdisciplinary developments need to be founded on strong disciplinary knowledge, those organisations encourage the development of researchers with the skills to work across disciplinary divides, researchers who have an interdisciplinary outlook and willingness to look and interact beyond their own discipline.

Respondents from higher education institutions and those involved in the provision of media studies highlighted the fact that "one of the key characteristics of a journalism, communications and/or creative industries degree today is precisely its engagement with other subjects and disciplines, for example politics, business or technology." The arts and humanities intersect with other core skillsets in ways that are complementary and critical to their success. For example, "the economic and societal value of the latest iPhone is only realised through the cultural meanings that are created to circulate around it in through elements such as the branding, packaging and design of the product."

Finally on interdisciplinarity a respondent suggested that the project look at the extent to which school education is preparing young people for a world in which interdisciplinary and collaborative work is far more common. They quoted the example of Scotland where

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²³ https://www.ucl.ac.uk/grand-challenges

interdisciplinary learning (IDL) is one of the four contexts for learning within the Curriculum for Excellence. In addition some organisations like the Royal Society of Edinburgh have been coordinating a national programme and action plan to support the provision of IDL in schools through better articulation and exemplification.

Further skills for the future

Respondents insisted that the project should recognise that the current skills requirements and demands of employers are likely to be different from what will be required in the future. This reaffirms the point made earlier in this section that AHSS disciplines will be very important in providing graduates who are able to adapt to changing circumstances.

The World Economic Forum report, Future of Jobs $(2016)^{24}$ lists the top 10 skills that will be required for 2020:

- Complex problem solving
- Critical thinking
- Creativity
- People management
- Coordinating with others
- Emotional intelligence
- Judgement and decision making
- Service orientation
- Negotiation
- Cognitive flexibility

To complete the set of skills listed above, universities are focussing on civic engagement opportunities for students, thus enabling students to develop skills to be a responsible citizen, engaging with political systems while having the opportunity to analyse and critique contemporary agendas.

Entrepreneurial skills

According to respondents to the call for evidence, another dimension, additional to the need for AHSS graduates to be able to work across and beyond their subject disciplines to lead the process of adaptation to changing circumstances, will be their ability to develop entrepreneurial skills.

The Scottish Government has set out a strategy to fulfil their ambition to transform Scotland into a world-leading entrepreneurial and innovative nation. ²⁵ This is to be implemented through the development of skills and experiences "beyond employability skills that will support an entrepreneurial, dynamic and innovative mindset among Scotland's students." This strategy is being supported by organisations such as the Royal Society of Edinburgh which has reported that "in order to enhance the delivery of enterprise education across higher education, concerted efforts to support all academic staff in understanding its

²⁴ http://www3.weforum.org/docs/WEF Future of Jobs.pdf

²⁵ Scottish Government. 2013. Scotland CAN DO: Becoming a World-leading Entrepreneurial and Innovative Nation, http://www.gov.scot/Publications/2013/11/7675

relevance and importance, and to develop their capacity to introduce enterprise skills to the curriculum, should be made."

Respondents who pointed out that it would be important for future AHSS graduates to develop entrepreneurial skills quoted a report published in 2007 by the Higher Education Academy which found that "humanities-trained entrepreneurs acquired invaluable skills at university, although they had to learn much professional knowledge after graduation," and concluded that "humanities graduates have the potential to succeed as entrepreneurs." ²⁶

Digital and data skills

In most of the submissions, respondents warned about the major skills gap that the UK will be facing in the data and digital economy.

They called for investment in education and training to widen participation in data-driven industries, and to develop good practice across all data-literate professions. Some insisted that, before students reach degree level education or training, educators in school need to be able to address students' problems with numeracy, and link their learning of statistical and data skills to subject contexts.

Contributors explained that it was necessary to broaden young people's access to education and training in the mathematical sciences, statistics, data science and experimental science, and their awareness of technology and its applications: "Students in the social sciences need to have sufficient opportunity to practice statistical enquiry using real data that they have collected or sourced, and to access expertise."

Respondents suggested that one of the solutions to that increasing challenge is for employers, such as the Office for National Statistics, to work with universities and research councils to shape the content of programmes: "This is becoming increasingly important especially in technical qualifications such as MSc programmes in quantitative methods, and provide feedback on the skills that employers require of graduates. The involvement can include advising on skills that would be of direct relevance for careers in the Government Statistical Service. There is also some form of cooperation with learned societies (particularly the Royal Statistical Society) on skills requirements."

Respondents suggested that there was a lack of digital training available to undergraduate and postgraduate students in the humanities. Such training is needed to expose graduates to highly specialised digital methods and equip researchers to engage with cutting edge digital technologies through the development of skills which will become increasingly important for humanities research as well as for employment in the wider world. Those skills include "text and data mining and manipulation, basic programming, research data management and data modelling." Linked to this is the regrettable decline in numeracy and statistical understanding, with the relative eclipse of economic history in many universities.

Some submissions mentioned the UK government's new Digital Strategy which aims to grow the economic contribution of digital businesses from £118bn to £200bn by 2025. This,

²⁶ Croucher, K. et al. 2007. Here be dragons? Enterprising graduates in the humanities https://www.heacademy.ac.uk/system/files/enterprise 1.pdf

according to the respondents, demonstrates the importance of digital advances within higher education institutions: "where revised digital strategies are needed to provide a learning environment which not only helps students to understand the evolving world in which we live, but to also be able to confidently use a range of innovative ICT platforms. With the speed of digitalisation and impact on globalisation we need to equip our graduates to become adaptable and resilient to remain competitive, helping them to prepare for jobs which may not even exist yet."

Respondents also highlighted the profound changes currently taking place in the media landscape in relation to the production and consumption of its outputs. They stated that it will essential for the sector's future to nurture and develop graduates and negotiate change. Emerging media professionals will need to demonstrate multiple production abilities such as "skills to prepare responsible picture, video and written content within short deadlines."

Business skills will also be needed to complement those production skills.

As the labour market changes there would also be a greater demand for interpersonal skills. While many areas of media production are reliant on technology and automation, the human aspects cannot be replicated: "It is likely that creative occupations are more future-proof to computerisation than many others".

They suggested that the project consider Richard and Daniel Susskind's book, *The Future of the Professions: How technology will transform the work of human experts*. Building on 30 years of research and practical work this book describes how technology will transform the work of all professionals and presents a cogent case for the need to rethink the way that expertise is shared in society.

Section 4: Suggestions

Most of the submissions to the call for evidence suggested further areas for the project to explore. Most of those suggestions concern evidence-gathering activities and stakeholder engagement but they also shed some light on some aspect of the skills landscape that had not been included in the initial scoping.

Their first suggestions related to the project's international dimension. Respondents felt that there was little in the call for evidence synthesis which considered international comparisons on skills in AHSS: "are our graduates better or worse equipped than their contemporaries elsewhere in Europe or in the USA? This may constitute a survey in its own right, but a small-scale research project could tap into the experiences of Erasmus students (both domestic and foreign) to discover what they felt about the acquisition of skills while abroad compared to those they developed at home."

They suggested that the project should take account of evidence about the value of AHSS internationally. The American Academy of Arts and Sciences has reported on the importance of the humanities and social sciences to future prosperity. The Academy has also developed a set of "Humanities Indicators" to provide policy makers with rigorous data on the condition of the humanities, charting trends over time, and supporting improved public understanding of the humanities.

In addition, the British Council published in 2014 a report on the value of the humanities.²⁷ This report shows that increasingly employers value the intercultural skills provided by AHSS, those skills that enable individuals to communicate across cultural contexts and consider multiple contexts.

Another suggestion for the British Academy was to use this project as an opportunity to develop a new strategy to support for AHSS postgraduate researchers and doctoral students: "Appropriate support that recognises the distinctiveness of arts and humanities scholarship should be embedded within higher education. An example is careers support, which is currently geared towards vocational degree programmes and meeting the needs of the largest employers of graduates and employment sectors. Doctoral students in arts and humanities would benefit from bespoke careers guidance and support. This support would enable them to reflect on their skills and make compelling applications to as wide a range of employers as possible."

The project could also be used as a springboard to rethink the framework of support for graduates who might wish to undertake work outside of academia whilst studying: "Supporting students who seek work experience whilst studying make the case for the value of arts and humanities in non-HE contexts and creates an evidence base of the skills and attributes that employers look for. These placements also challenge the academic/non-academic paradigm. Skills gained in higher education are academic by nature even if they are subsequently used in a non-HE setting. Equally, moving out of academia after studying,

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²⁷ British Council. 2014. Mobilising the Humanities: The Development Perspective https://www.britishcouncil.us/sites/default/files/humanities report.pdf

especially at PhD level, should not be seen as a failure but as evidence of the growing influence and value of arts and humanities academia across a range of sectors and the value of academic skills beyond academia. Funding councils, universities and other HE stakeholders should, furthermore, consider offering continuing professional development to graduates, thereby recognising the value of these skills and the need to maintain them. Professional bodies like Creative Skillset provide kite marks for degree programmes – these bodies could and should be engaged in accrediting skills training relevant to subject areas being studied. They tend to advocate for the commercial sectors they fall within and so can facilitate communication between employers and universities about skill requirements, shortages, standards, etc."²⁸

A final suggestion that was made by some respondents concerned the analysis of universities statements of attributes: "This would be difficult to do in a comprehensive way, but a case study methodology might be a useful approach. Many universities, as noted, have in recent years developed statements of the attributes they seek to develop in their graduates. QMUL has a statement of graduate attributes²⁹ that inform skills development within the curriculum and beyond for students in all disciplines."

Respondents finally suggested some literature which explores the types of pedagogy and curriculum design that have been developed to support AHSS students to develop their employability:

- On placements: Steven Curtis (2009), 'Short Placements and Employability'
 Paper presented at the Political Studies Association Annual Conference,
 Manchester, 7th April 2009.³⁰
- On university employability practice: Donna Lee, Emma Foster and Holly Snaith (2013), Responding to the employability agenda: developments in the politics and international relations curriculum in English universities. Project report. Higher Education Academy, York.³¹
- On the development of research skills, with a focus on quantitative skills:
 Alistair Clark (2011), 'Embedding Transferable Skills and Enhancing Student
 Learning in a Political Science Research Methods Module: Evidence from the
 United Kingdom' PS: Political Science & Politics, 44:01.³²

³⁰https://www.researchgate.net/profile/Steven_Curtis/publication/228637522_Short_Politics_Placements_an_d_Employability/links/02e7e5223d897cea38000000.pdf

²⁸ https://www.creativeindustriesfederation.com/sites/default/files/2017-06/Education%20Report%20web.pdf cited for further evidence

²⁹ http://www.qmul.ac.uk/docs/gacep/38598.pdf

 $^{^{31}\,\}underline{\text{https://kar.kent.ac.uk/38114/1/Lee,\%20Foster,\%20Snaith\%20Employability\%20learning\%20-\%20FINAL.pdf}$

³² https://www.cambridge.org/core/services/aop-cambridge-core/content/view/S1049096510002039