ACADEMY of SOCIAL SCIENCES

ESRC PhD Consultation: Academy of Social Sciences response

Which institution do you work for?

The Academy of Social Sciences and its Campaign for Social Science. The Academy of Social Sciences (AcSS) is the national academy of academics, learned societies and practitioners in the social sciences. Its mission is to promote social science in the United Kingdom for public benefit. The Academy is composed of nearly 1400 individual Fellows, 46 Learned Societies and a number of affiliates. Fellows are distinguished scholars and practitioners from academia and the public and private sectors. Most UK Learned Societies in the social sciences are represented within the Academy. The Campaign for Social Science (CfSS) is the outward-facing, advocacy voice of the Academy of Social Sciences.

Over the past few years, AcSS and CfSS have produced various reports relevant to this consultation. See especially ***Positive Prospects***, ***World of Talent***, and ***Vital Business***. Findings from these reports informs our response in various ways.

This AcSS submission is **neither** a substitute for, nor a summary of, representations made by either member Learned Societies, who will have deeper subject-specific knowledge and views, or by universities, who will have more hands-on experience as providers of PhD training and supervision. Instead, this submission some general reflections about trends in need for skills related to social science PhD training.

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1. **In your view, how well do UK social science doctoral programmes equip students with the skills needed for their future careers? How competitive are they internationally?**
    a. In responding to this question, please consider how well UK social science doctoral programmes equip students with core research skills as well as the generic transferable skills needed for careers within and outside academia. What do current doctoral programmes do well and what is missing?
    b. To what extent is global competitiveness a concern in relation to UK social science doctoral graduates? Please tell us about your experiences of how well UK doctoral graduates compare with those from other countries. For example, is your institution recruiting doctoral graduates from the UK or overseas? How well do UK doctoral programmes prepare social science graduates to compete with overseas graduates?
    c. We are particularly interested in the skills and experiences that, in your view, are not adequately covered by doctoral programmes at present, and why you perceive this to be a gap. How important are digital and data skills for social science students and how effectively are these being developed at present?

AcSS recognises the significant upskilling in PhD structure and provision the ESRC has encouraged since 2010. That it has done so while retaining flexibility in different models under an overarching framework is a signal achievement. Professional doctorates are also important in some disciplines.

We are also aware of recent IFS findings about labour market returns to postgraduate degrees. Returns in the form of higher salaries are not only thing that matters, but these data serve as a reminder that the PhD is not just a path to academic work, and that the social science disciplines of Law, Economics and Management (LEM subjects) have particularly high returns.

Discipline-specific flexibility is important, but some key overarching priorities for AcSS are:

- The relative shortness of the UK PhD compared to some international comparators (nearly 6 years is the median length in the USA, and over 4 years in Germany).

- Continuing to strengthen robust and deep training in the structured taught element, possibly extending over more than one year.

- AcSS has long been concerned about the growing need for number and data skills in social science training, as in ***Positive Prospects. Vital Business*** shows the importance of these skills within social science disciplines in the private sector. Increased training in these, not just at a general level met by one module in a year-long methods course, but by providing longer, deeper training, and more advanced training for some, including opportunities for hands-on use of these skills, seems to us a priority. The steps taken to increase number and data skills in doctoral training in 2010 and 2015 were

welcome but, given academic developments and employability requirements, it is time for further steps.

- There are a variety of ways to address this. One may be to provide further structured training in hands-on data use, using discipline-specific secondary data or teaching datasets to provide deeper skills in data analysis and critical evaluation. Funding for specific summer courses could be made more widely available (and this could include funding for development of further special summer courses such as the four-week residential APTS course for EPSRC PhD students). Greater funding for part-time research posts to provide more diverse hands-on experience could also be made available.

- Even where students' own PhD research is likely to be based on qualitative methods, we believe students should have deeper engagement with data analysis and evaluation, a growing imperative for both academic and non-academic work. Building this into the early stages of dissertations (with relevant training) in the form of 'state of the field' summaries may be a way forward.

- This will be of special importance in facing the 'grand challenges' which require cross-disciplinary research, and where the social sciences are important: the environment; business, productivity and industrial growth; risk evaluation and scenario planning; etc.

- We recognise that ESRC-funded students account for only around 10% of all social science PhD placements. While ESRC accreditation sets standards for many departments, it is not clear that all non-ESRC funded students follow the same pathway as their ESRC-funded counterparts. This is unlike systems in other countries, where institutions have same general requirements for training, irrespective of source of funding.

- Nearly two-thirds of social science PhD candidates at Russell Group universities are international students. One reason cited for this is that these students have stronger number and data skills, as they have had more broadly-based secondary and/or undergraduate education. This serves as a reminder that further steps are needed to address this issue *before* students start PhDs. We have already noted that at PhD level, lengthening and deepening some of the formal training is important, as is ensuring more of a bridge between the taught and dissertation elements of the PhD, with clearer expectations about the data analysis and critique relevant to the dissertation topic. Improving these skills is also likely to require signalling at *undergraduate* level too. We return to this in Q.6.

2. **How can UK doctoral programmes best prepare graduates for non-academic career pathways?**
    a. Roughly half of all UK doctoral graduates do not pursue academic careers. When answering this question please draw on learning from your institution and where relevant more widely. We are particularly interested to hear about the role of internships / placements and the impact of involving of non-academic partners in doctoral programmes.
    b. To what extent does careers information, advice and guidance prepare doctoral candidates for non-academic careers?
    c. How can higher education institutions and doctoral students be incentivised to develop the skills and attributes needed for non-academic careers?
    d. What are the barriers to more effective support?

There have been questions about expansion of the existing partner-sponsored PhDs, where evaluation has shown these are often bureaucratically unwieldy, and that timescales and expectations between sponsoring organisations and academic partners do not always match. Short-term research placements, especially if incentivised at HEI level could be a helpful alternative, especially over the summer period, and if working to a clear plan for skill and knowledge development. So could more funding – and clearer expectations – about the usefulness of the variety of summer courses available.

We also believe there is a need for better, and better-informed careers guidance for social science students, not just during the PhD but before applications are made. Our own experience (for instance, with ***Positive Prospects***) has been that it is difficult to get substantive engagement from careers offices about the prospects for social science students, much less particular disciplines. We suspect partnership between specialist knowledgeable careers offices and academic leaders would be needed to provide a real step-change in the quality and precision of appropriately-tailored careers guidance. Some learned societies have developed materials to help with this, and others are well-placed to do so with appropriate funding support.

Current uni-dimensional 'league table' approaches do not help different institutions, in different labour markets and different disciplines, to provide a clear picture of the employment prospects and pathways of recent graduates. Nor do they provide early signalling about the skills that would give those who completed PhDs an advantage in both academic and non-academic employment. Incentivising HEIs to provide this sort of evidence to *prospective* applicants would help give students clearer expectations, and inform them what they can do while on the PhD to improve employment prospects. Generic training in CV writing skills is not a substitute for encouraging deeper, more evidence-based and more discipline-specific information about the range of career pathways available.

Again, we would cite ***Vital Business;*** while it is based on a small number of case studies, we think encouraging students with careers information *early* on in the PhD could help them think about the likely growth in demand for a range of number and data skills (including statistics, data-harvesting techniques and so on). Research carried out some time ago by the National Centre for Research Methods showed that all too often students only became aware of these issues at the end of their PhDs, rather than early enough to allow them to take action.

3. **How can social science doctoral programmes best prepare graduates to work collaboratively?**
    a. When answering this question please consider all types of collaboration, including interdisciplinary, international, cross-organisation and cross-sector.
    b. What skills are needed to work on collaborative projects, such as grand challenges?
    c. Please tell us about any practices that you believe to be innovative and/or particularly effective in supporting social science doctoral graduates to develop these skills and work collaboratively.

AcSS notes that the kinds and nature of collaborations will vary tremendously by discipline and dissertation topic. And we recognise the tension between the need for the PhD to provide both a component of taught skills and knowledge and to demonstrate the ability to carry out an independent project.

We would however encourage consideration of whether early-stage PhD training could provide more of a bridge between the two, in the form of short-term RA responsibilities which promote appropriate collaborative working (in a team within a discipline, cross-disciplinary or otherwise), and which would also yield joint citations. This is likely to become possible only if the funding period were lengthened, or research teams in universities had more funding and capacity for summer placements. We suspect that, rather than making this a universal requirement, attention should be paid to how to incentivise this– whether through funded internships or external placements, and/or placements on larger projects within HEIs. The aim should be to promote this a component element of PhD training that many, though not necessarily all, students would wish to have on their CVs, and to ensure that incentives were strong for HEIs to set these up and promote them to their students. This is, of course, relatively common in some disciplines (e.g., economics) but we believe that it could more common in other disciplines than it is now.

These could include research placements at university research centres, many of whom span more than one discipline and which often involve larger project-teams, teaching collaboration skills by doing, rather than in the abstract.

There are also possibly synergies with other UKRI initiatives. For instance, where do PhDs fit within the Roadmap commitment to increase UK investment in R&D to 2.4% - could this include a commitment to increase numbers of social science PhDs in appropriate ways? Could the Challenge areas under the Industrial Strategy Challenge Fund have studentships attached, including the possibility that PhDs could focus on translational and mission-oriented research? Another example would be to focus on priority areas such as social care, the levelling up agenda and steer PhDs in these areas to support the evidence base, and raise the status and employability of graduates in these areas.

4. **How can doctoral student health and wellbeing be safeguarded?**

   Other respondents are better placed to answer this, though we believe a more structured timetable of training and a longer period of funding could help student health and well-being, as it would be more realistic and would result in better bridges between structured learning and the dissertation.

5. **How can we ensure a diverse and inclusive population of social science doctoral students?**

   Increasing diversity and inclusion in the doctoral students is another reason – beyond those mentioned in Q.6 – for ESRC consideration of pathways *into* the PhD. It is too late to address diversity issues if steps are not taken prior to enrolment in a doctorate. This is doubly true if boosting long-term employment prospects is a priority vis à vis inclusivity.

   HESA data show that women undergraduates predominate in social science undergraduate degrees across all disciplines, but they are very unevenly spread between different disciplines. They are far less common in disciplines like economics that require higher-level number and data skills (and the gap actually starts at secondary level), and a large majority in social science disciplines (like education) that typically do not require or teach higher level number and data skills. We believe the data also support this analysis for BAME enrolments. (It may be worth noting that within STEM subjects, biology faces many of the same challenges.) Having gender-specific materials to encourage girls and young women to acquire number and data skills for the social sciences (as STEM does for the natural and physical sciences) would be a long-term project, but would help redress the situation.

   The current National Data Strategy consultation provides an opportunity to link efforts to lift number and data skills with inclusivity. STEM subjects are not the only ones that need these skills, and many students choose the social sciences to make a social difference. Ensuring links between substantive subjects and research questions with increased exposure to number and data skills, and considering the pipeline into the PhD, would, we believe, pay dividends in inclusivity and diversity.

6. **What aspects of current UK social science doctoral programmes could be developed to ensure they remain world leading?**
   a. How could UK doctoral programmes be organised, structured and funded to more effectively support a diverse and globally competitive population of social science graduates? Please consider alternative funding models, the length of the full time programme and any other changes that would be required to improve future provision.
   b. What can the social sciences learn from other disciplines and organisations?

   We have suggested various steps could be taken within existing PhD programmes to ensure global competitiveness, though we believe that they would be better

supported by a period of funding for 4 years. A key priority is increasing number and data skills (in understanding and ability to use statistics, and in data-harvesting and other data-handling techniques). This may require a longer-period of structured training as part of the PhD, but we note that in the US, having 2 or more years of structured training (within an overall length of 5-6 years) is common.

Of course, qualitative research skills are important and valuable, but UK pipelines and training are already world-leading in these. That is one reason why our submission focusses on an area of relative UK weakness – number and data skills. Another important issue – for the health of the social science disciplines, and for provision outside ESRC-funded students – is understanding how requirements are set and pathways chosen for PhD students not funded by the ESRC, and whether they are required to follow the same training pathways. The distinction between ESRC-funding for individual students and ESRC-accreditation of PhD training programmes is essential.

In addition to our reply to Q.1, AcSS notes that tackling the issue of number and data skills requires thinking about education *below* post-graduate level, as it affects the pipeline for UK-origin students. We respect and support institutional autonomy for universities, but think steps can be taken at HEI level to incentivise greater provision of, and support for, appropriate number and data skills within UK undergraduate disciplines – and indeed at secondary school level. Without real attention to the pathways from which students come into doing a PhD, it is unlikely that real progress will be achieved.

Learned Societies are indispensable partners in this. We note the work that, for instance, the Royal Geographic Society has done to promote number and data skills specific to their discipline, both as a whole and for different parts of it. This was however funded by a grant from the Nuffield Foundation. We believe that other social science Learned Societies would be eager to develop material for both secondary and undergraduate level that deepened number and data skills relevant to their disciplines, but very few have the resources available to do so. If the ESRC provided a funding stream for Learned Societies to develop curricular content, teaching materials and help set expectations about the data and digital skills of both secondary and undergraduate education, it could promote clearer expectations about what it means to be a social scientist, and provide a stronger platform for further developments in, and intake into, the PhD.