



***Teaching quantitative methods in disciplinary context: integrating quantitative method and evidence into the Social Science undergraduate curriculum.***

A project funded by the ESRC Curriculum Innovation initiative. See [www.esrc.ac.uk](http://www.esrc.ac.uk).

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The specific objectives of the CI proposal are as follows:

- To ensure students are better informed about the contribution of quantitative work to research in their discipline, and to the social sciences generally.
- To enable students to practise and develop their quantitative skills over the course of the degree from level 1 to level 3, and build confidence working with numeric data as part of the process of learning substantive topics in the Social Sciences (i.e. not just in a methods course).
- To make students more aware of the links between the quantitative skills they are acquiring in their methods courses (and the datasets used) and their ability to understand and answer research questions in areas of substantive learning that interest them.

We believe these objectives are crucial to stimulating student interest in quantitative approaches, which in turn will open the way for much greater use of the UK's uniquely rich supply of social datasets in undergraduate dissertations, and increased numbers proceeding to more advanced quantitative training at postgraduate level.

This proposal, together with a linked bid to the RDI scheme, addresses the multi-faceted nature of the quantitative methods problem, with curriculum innovations involving both method and substantive teaching (the focus of the CI bid), supported by a raft of 'train the trainer' type activities aimed to promote a culture in which staff are encouraged and supported in the greater use of quantitative approaches in their own teaching (the focus of the RDI bid). Our aim throughout is to achieve enduring change in the undergraduate curriculum.

We aim to achieve these objectives through two linked initiatives.

- 1. To work with named subject specialists in Sociology and Politics at Manchester to develop a range of teaching materials that help embed quantitative data and method into the teaching of substantive (non-methods) courses**

### **1.1 Teaching Partners**

The partner lecturers and the nominated modules are shown below:



Lecturer	Nominated Module	Level and degree programme	No of students
Prof Sue Heath	The Sociology of Personal Life	Level 1: (BsocSc Sociology; BA(Econ)	400
Dr James Rhodes	Racism and Ethnicity	Level 2:(BsocSc Sociology; BA(Econ)	60
Dr. Tej Purewal	Comparative Perspectives on Gender	Level 2:(BsocSc Sociology; BA(Econ)	80
Dr Gemma Edwards	Power and Protest	Level 3:(BsocSc Sociology; BA(Econ):	40
Dr. Nick Turnbull & Dr Rob Ford	Introduction to Comparative Politics	Level 1	500
Dr. Francesca Gains	The Politics of Policy Making	Level 2	40
Dr. Andrew Russell	Elections and Voters	Level 2	40
	British Politics Since 1940	Level 3	60
Dr. Jane Green & Dr Kingsley Purdam	Dissertation in Politics	Level 3: BsocSc Politics; BA(Econ)	40

## 1.2 Design of Teaching Materials

The format and content of the Quantitative Methods Curriculum Innovation materials will be specifically tailored for use in the partner lecturers' own teaching. This process will be informed by one to one consultation between the project team and the partner lecturers over the first year of the project. It is envisaged that this will result in a non-standard model for the format of teaching materials, incorporating multiple options for delivery and student assessment. While development of our materials will be guided by the user in order to achieve relevance and usability, wherever possible use will be made of existing Teaching and Learning resources (as well as the teaching datasets ESDS host a growing collection of excellent on-line tutorials e.g. <http://www.esds.ac.uk/international/resources/learning.asp> ).

With our team, we are able to make best use of Manchester School of Social Sciences' enviable strengths across a number of areas.

### Piloting of materials

All materials developed in year 1 of the project will be piloted by partner lecturers in their teaching of the nominated modules in year 2. As part of the project, lecturers will be able to draw on skilled assistance in all stages of this initial piloting exercise, including delivery and evaluation. However, this support will be provided within a framework of (staff) peer-assisted learning to ensure our partners are given the skills and confidence to deliver and adapt all piloted materials in subsequent years of teaching without assistance. Moreover, facilitated by a series of initiatives in the linked RDI bid (including an 'Undergraduate Quantitative Methods' network which includes provision of short course training), we will strongly encourage the sharing and dissemination of these innovations to teaching colleagues across the School of Social Sciences and beyond.

In the second stage, after extensive in-house evaluation (see 'Evaluation Strategy' below), the materials will be revised to make them suitable for on-line dissemination as a teaching resource for the wider HE community. A secondary consideration is the amount of time and expertise required of potential users before the materials can be used in teaching. Again, the partnership model used here to develop materials will help minimise prerequisites.

### Initiatives in methods teaching

This second plank of the proposal deals with aspects of the timetabling, content and delivery of quantitative methods training within the undergraduate curriculum at Manchester. It should be stressed that while we see

these as integral to the CI proposals, much of the resourcing of these developments will come from the University.

A guiding philosophy of this proposal is that quantitative methods should be embedded throughout the curriculum, not marginalised within methods courses. Innovations include:

- i) **‘Engaging in Social Research’:** In 2012 the School of Social Sciences at Manchester will launch a major new inter-disciplinary degree programme –the BA (Social Sciences). All BASS students will undertake the first year module ‘Engaging in Social Research’. In the first of our proposed innovations we will lead in the re-design and delivery of the quantitative method component of this module.
- ii) **‘Statistics in Society’:** As part of a commitment to a broad based education, from 2012 all undergraduate programmes in Manchester may include the option to take up to 30 credits from a new ‘University College’.
- iii) **A new course in Secondary Analysis of Social Surveys**

### Evaluation Strategy

A key strength of the proposal design is that all materials developed in part 1 will be piloted by the partner lecturers in their own teaching. This will enable a thorough process of evaluation by the project team working alongside the lecturer. This will include staff and student evaluation using questionnaires and some selected focus groups.

As part of our overall evaluation strategy for the curriculum innovation project, we will monitor attitudes of Sociology and Politics undergraduates using a short questionnaire during the period to track any differences between students who are exposed to different combinations of the innovations. To obtain a deeper understanding we also propose to sample two small groups of students from the new BASS intake in 2012 and interview them about their attitudes towards and experience using quantitative methods at regular intervals over the life time of the project, and specifically in relation to project innovations. To specifically help evaluate the impact of innovations used in Engaging Social Research, we have gained the support of the course convenor for an alternative first year methods course ‘Researching Culture and Society’ (serving the BSocSci (Sociology) programme), to carry out a comparative evaluation, interviewing students before, during and after completion of the two modules.

Within the period of the project we will be able to follow our sampled students through to their final year.

<b>Timetable of work</b>		
Year 1 (Jan 2012 – Dec 2012)	Year 2 (Jan 2013 – Dec 2013)	Year 3 (Jan 2014 – Dec 2014)
<ul style="list-style-type: none"> <li>• Consultation and development of course materials for 8 substantive modules</li> <li>• New course development and delivery of Engaging Social Research, Statistics in Society and Secondary Analysis of Social Surveys</li> <li>• Student evaluation (recruitment of 1<sup>st</sup> year BASS students for project evaluation)</li> <li>• Comparative evaluation of ‘Engaging Social Research’ and ‘Researching Culture and Society’</li> </ul>	<ul style="list-style-type: none"> <li>• Piloting and evaluation of course materials for 8 substantive modules</li> <li>• Development of materials as on line resources</li> <li>• Student evaluation (2<sup>nd</sup> year BASS students)</li> </ul>	<ul style="list-style-type: none"> <li>• Piloting and evaluation of selected materials in other HE institutions</li> <li>• Dissemination of materials as on-line learning resource</li> <li>• Student evaluation (3<sup>rd</sup> year BASS students)</li> </ul>

