When I grow up I want to be a data scientist / work in policy related research / make a difference. Can you help me?
Jackie Carter (@JackieCarter) University of Manchester

I want to be an astronaut
I don’t want to be a munchkin, I want to be Dorothy
Sylvia’s mother, Mrs Emmeline Pankhurst, being arrested as a Suffragette (images reproduced courtesy of Dr Richard Pankhurst, and the LSE Library)
UK Data Service: Comms and Impact

Q-Step co-director

Methods@Manchester

ex- Jorum director and co-chair of OER13

Open education
Open data
Open scholarship
Open practice

Data, education, statistical and data literacy & skills, employability, impact, visualisation, making sense of statistics, ........
A POSITION STATEMENT

SOCIETY COUNTS

Quantitative Skills in the Social Sciences and Humanities

1. The British Academy is deeply concerned that the UK is weak in quantitative skills, in particular but not exclusively in the social sciences and humanities. This deficit has serious implications for the future of the UK’s status as a world leader in research and higher education, for the employability of our graduates, and for the competitiveness of the UK’s economy.
It is also a problem for the graduates themselves. ... the ability to "interpret and respond to quantitative data" is a core skill for the workplace and two-thirds of its [the Confederation for British Industry] members are concerned about their employees' inability to spot basic data errors. As our graduates compete in an increasingly challenging and international labour market, they must have the skills to succeed.
Last week The Guardian reported the results of the new wave of British Social Attitudes survey. The number of respondents who admitted to be very or a little prejudiced had increased over the last 5 years.

Critics were keen to investigate the data which runs counter to other data on attitudes, reported crime etc.

The report conflated two categories ‘very’ and ‘a little’ into a single measure. Is this appropriate for a subject like self-reported racism?

A longer view makes clear that there is a long-term secular decline in self-reported racism in the UK.
Dilnot gets angry and shouts - "400% is five-fold not four-fold increase. An increase of 100% is a doubling. Staggeringly sloppy". #qstep
About us

The ESSTED project, based at the University of Manchester, has been working with lecturers in Sociology and Politics to include more quantitative data and methods within the undergraduate curriculum. A key innovation has been to embed quantitative data within topic based modules. This approach allows students to encounter, interpret and reflect on quantitative data within a subject-specific setting. In turn, these experiences can help students to engage with theory, learn about the research process and develop quantitative skills that are useful for more advanced methods courses and the workplace.

Our interdisciplinary team, involving colleagues in Social Statistics, Sociology, Politics and MIMAS, are developing subject specific teaching resources. We also organise workshops and write briefing papers on different aspects of using quantitative data in teaching.
Making Students part of the Dataset

View on cultural impact of immigration over last 10 years

Through this simple exercise the students become ‘part of the dataset’ and were able to see first-hand the research process move through the different stages from question design through data collection to data analysis. While the exercise has a strongly substantive focus related to attitudes on immigration and the mediating effect of education, it introduces a number of important statistical concepts and critical skills relating to survey measurement, representativeness and making comparisons, in a natural and non-threatening way. Early feedback from Lecturers, teaching assistants and the students themselves has been very positive on this and other modules we have worked with so far, though more formal evaluation is yet to be completed.
What do we share?

Case Studies and access to our materials

Briefing papers

Creative Commons so teachers can use and adapt
Teaching ideas
Teaching data
What we do at Manchester
Embed don’t bolt on
Sociology / Politics and IR / Criminology / Social Anthropology / Geography / Social Policy

How?
• Workshops
• Videos
• Briefing Papers
• Webinars?
Evaluation

Baseline
- Student survey
- Lecturer survey
- Workshop discussions (informal)

ESSTED Modules
- Student survey + focus groups
- Interviews with module convenors

Dissemination
- Briefing papers
- Workshops
- Academic papers

Inform Q-Step and wider initiatives
- Lectureships
- Internships
Case study - teaching

Upskilling PhD students and researchers in data and methods

Author: Sean Clouston, University of Victoria, Canada

Date: 31 August 2011

Type of case study: Teaching

Course title: Statistical Methods in Ageing

Course type: Quantitative research methods; Substantive; Statistics

Level: Postgraduate; Advanced researchers

Teaching use

Sean Clouston, of the University of Victoria in British Columbia, Canada, used the UK Data Service-hosted English Longitudinal Study of Aging (ELSA) as a part of a week-long course on comparative and longitudinal analysis for Ph.D. students and accomplished researchers from throughout Canada. The 'Statistical Methods in Aging' conference presented a variety of analytical techniques to participants interested in both the subject of aging and the broader subject of doing analysis on longitudinal and international data.

"Not a lot of people trained to do this analysis in Canada, so the idea of the conference was building capacity, building knowledge of the data and what you can do with it," says Clouston. He says the idea for the conference sprung from his experience with a variety of international datasets and the realisation that much of the research he was seeing produced was regionally based. "My feeling was most of these people had done statistical research and a few had done longitudinal research but most had not dealt with it in detail or in complex methods," he notes.
Q-Step

Q-Step is a £19.5 million programme designed to promote a step-change in quantitative social science training in the UK.

Funded by the Nuffield Foundation, ESRC and HEFCE, Q-Step was developed as a strategic response to the shortage of quantitatively skilled social science graduates.

Q-Step is funding fifteen universities across the UK to establish Q-Step Centres that will support the development and delivery of specialist undergraduate programmes, including new courses, work placements and pathways to postgraduate study.

The resulting expertise and resources will be shared across the higher education sector through an accompanying support programme which will also forge links with schools and employers.

Further information:

Q-Step is also funding:

Support programme

Q-Step expertise and resources will be shared across the higher education sector through an accompanying support programme.

Q-Step Centres | Employers and Q-Step | Support programme

Highlights

Watch and/or download the presentations from Counting them in, the inaugural Q-Step conference held on 17 March 2014 at the Royal Society.
Manchester Q-Step

The Q-Step programme will give our students data analysis skills highly valued by employers.

About Q-Step at Manchester

Our Manchester Centre will offer new courses and training to support your career development.

What you'll gain

Can you apply?
Q-Step summer projects

- 20 projects, 10 organisations; 17 students (so far)
- Sociology, politics, criminology, linguistics
- 6-12 weeks long; generous stipends
- Quantitative skills
- Real world data, real world research and applications
- Students will produce (at least) a poster to share their experiences
- Will eventually include international projects with World Bank, OECD and IMF
Why?

• Great experience to do research
• Will find out if I like research
• Consolidate skills from the classroom
• I’m really interested in ……
• Help put theories into practice
• To prepare me for a quantitative dissertation
• Give me skills (STATA, SPSS, R)
• Help me get a job

What’s to gain?

• I hope to gain the experience to one day lead my own research into less accessible groups and give them a powerful voice that is often denied to them.
• [data analysis skills] I would like to develop further and overwhelming interests in poverty levels which is where the interests of my new bosses also lie (Think-tank intern)
Quant skills?

• The ability to present findings to a lay audience and to inform sensible, effective policy so as win a disillusioned (sic) public back over to politics (Politics student)

• This internship is a perfect fit for me and I'm very grateful for such an amazing opportunity! (Sociology)

• As a student of linguistics and sociology, quantitative method is really frequently used in my study. It can make the statement more objective and more convincing.

3-words

• Practical
• Relevant
• Enthusiastic
• Happy
• World
• Perhaps
• Analytical
• Curious
• Interesting
• Rewarding
• Opportunities
Government economist

Here's where she meets prince charming but she won't discover that it's him 'til chapter 3
• ESSTED Team: Mark Brown, Wendy Olsen, Stephanie Thomson (former), Jo Wathan, and academics from Politics and Sociology at University of Manchester

www.socialsciences.manchester.ac.uk/research/research-centres-and-networks/essted/our-people

• University of Manchester Q-Step team

www.manchester.ac.uk/q-step/our-people/

• Funders: ESRC, British Academy, Hefce and Nuffield Foundation