

## An island of saints, scholars and statisticians!

## Reasoning from evidence

James Nicholson, Jim Ridgway and Sean McCusker from the University of Durham in the UK will give a talk today at the special topic session on "Statistical Literacy, Critical Numeracy and Social Statistics" (STS008, 3.00pm@Auditorium Wing They will be Right). project called "Reasoning from Evidence", funded by the Nuffield Foundation, which is developing some data visualisation tools to support the teaching of Sociology in courses for 16 18 year olds, but the tools have much wider application across many subjects and wider age ranges.

Sociologists theorise about issues such as inequalities in health, educational achievement, criminal distribution of wealth. The starting point for theory should be a clear understanding of phenomena.

Teaching social sciences in pre-college courses is a challenge, in part, because any social phenomenon involves a number of with the evidence.



presenting their work on a factors. Up to now the complexity of social data has been a substantial obstacle, so the use of data has largely been restricted to headline statistics based on aggregated data, and explorations of the effects of single factors considered separately.

The use of technology offers the opportunity to let even young students get to grips with disaggregated data (literally). Using drag and drop variable placeholders they can behaviour or the manipulate the data to explore which factors are associated with the biggest effects, and to describe patterns in the data. Students can have the confidence to talk about the stories that the data tell. and can then judge the extent to which rival accounts are consistent