

*Research Note*  
*Cardiff University Q-Step Centre for Excellence*  
*in Quantitative Methods (post 16 focus)*  
*Creation of new 'A' level in Social Analytics*  
*for Wales*

RHYS JONES  
*Cardiff University*

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, Economic and Social Research Council (ESRC) and Higher Education Funding Council England (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. Stronger links between Higher Education Institutes and FE colleges/secondary schools will enable pre-university students to realise the value in applying for these new and exciting undergraduate programmes. 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 (Nuffield Foundation 2014).

The Q-Step Centre for Excellence in Quantitative Methods is based in the Cardiff School of Social Sciences (SOCSI). In the past four years, the School has made significant investments to develop the quality of undergraduate skills in quantitative methods. This centre will consolidate and significantly develop this work and enable Cardiff to be a leading centre of quantitative pedagogy.

A major strand of the Cardiff Q-Step Centre work will focus on the development of a new 'A' level in Social Analytics. This new advanced level course will encompass learning outcomes of statistical thinking and analysis to explain various sociological phenomena such as, for example, health inequalities, differential educational attainment and achievement, and the role of religion in society. This new 'A' level course is scheduled to be launched in September 2015.

The development of an 'A' level qualification in Social Analytics will be in partnership with schools and colleges in south Wales, the Welsh Joint Education Committee and Royal Statistical Society Education. Students who complete the new qualification will be encouraged to apply for the BSc Social Analytics in September 2016, although the new degree course will enrol its first cohort and launch in September 2015 at Cardiff University's School of Social Sciences. This new and innovative undergraduate programme will build upon and augment the content delivered throughout the 'A' level in Social Analytics. The entry criteria for the new degree programme will not, however, require students to have taken the 'A' level in Social Analytics. Students applying with 'A' levels in mathematics and the sciences will also be made favourable offers, reflecting the types of students we would like to attract for the new degree programme. In terms of widening participation, there is also considerable scope to create other level 3 qualifications, for which Agored Cymru and the International Baccalaureate have expressed a keen interest to participate in the near future.

On a national level, standards of numeracy in Wales are a cause for concern, with 51% of 16 to 19-year-olds having numeracy skills that are at or below entry level (WG 2011). These worrying levels place Wales at the bottom of countries within the UK, suggesting current initiatives are inadequate to address these poor levels of mathematical skills (Tanner and Jones 2013). The development of an 'A' level in Social Analytics will aid in addressing the numeracy deficit in Wales, fostering the development of statistical thinking to tackle sociological problems that exist within society. In addition, the new 'A' level will compliment students' educational development, taking a panel of scientifically orientated subjects such as biology, psychology and mathematics.

The rationale for creating these new qualifications rests on the findings of a number of studies that indicate a relatively small number of undergraduate entrants are likely to enter social science programmes with 'A' level mathematics (or other sciences) (Williams, Payne and Hodgkinson

2008), or the expectation of pursuing quantitative social science. Most enter programmes with sociology/humanities 'A' levels and this constituency may not be the best recruiting ground for quantitative social science. By recruiting in a different constituency ('A' level mathematics, sciences, social analytics or with appropriate pre-university quantitative skills), it should be possible to produce a cohort of highly competent quantitative social scientists upon completion of the proposed BSc in Social analytics.

The key objectives of the Q-Step Centre at Cardiff SOCSI are as follows:

- The development of an A' level qualification in Social Analytics, in partnership with schools and colleges in south Wales, the Welsh Government and the Welsh Joint Education Committee examination board.
- Summer school opportunities for year 10 and 11 students, from local schools and colleges in south Wales.
- Partnerships and collaborations with the University of Auckland, WJEC, Royal Statistical Society Education, Sage Publications, Office for National Statistics, Welsh Government and the National Centre for Research Methods (NATCEN).
- The development of a range of open source distance learning materials.
- The development of CPD courses to train teachers and lecturers to deliver these courses.
- An annual conference event to engage schools, external organisations and other Higher Education Institutes, related to the development and expansion of quantitative methods in social science.

A consultation meeting – prior to the bid for Q-Step funding – was held at Cardiff University in November 2012, and a number of schools and colleges from south Wales attended. There was strong support for this initiative, though initially we will work with a consortium of schools/colleges from the region.

More recently, a scoping exercise was undertaken involving senior representatives from a number of local colleges, WJEC and the International Baccalaureate. There has been, to date, an overwhelmingly positive response to the proposed qualification, with particular enthusiasm for the contextualised statistical content. It is envisaged that this will help support and give contemporary relevance to a panel of other 'A' level subjects that students might opt for (including, for example, the sciences, mathematics, psychology, geography, economics and business studies).

It is hoped these initiatives and stakeholder collaboration within the Cardiff University Q-Step Centre will help to address not only the deficit in quantitative social scientists within the UK, but will expand to tackle and ameliorate the poor numeracy standards identified within Wales.

### References

- Nuffield Foundation (2014) *Q-Step*. Available at: <http://www.nuffieldfoundation.org/q-step> (accessed 14 April 2014).
- Tanner, H. and Jones, S. (2013). 'Developing Mathematical Literacy in Welsh Secondary Schools'. *University of Wales Journal of Education*, 16, 21–6.
- Welsh Government (2011). *National Survey of Adult Skills*. Available at <http://wales.gov.uk/statistics-and-research/national-survey-adult-skills/?lang=en> (accessed 14 April 2014).
- Williams, M., Payne, G. and Hodgkinson, L. (2008). 'Does Sociology Count? Student attitudes to the teaching of quantitative methods'. *Sociology*, 42 (5), 1003–22.

### Contact

Expressions of interest from individuals or institutions are welcome to contact the FE lead in creating the 'A' level in Social Analytics:

Rhys Jones  
Email: [jonesrc10@cardiff.ac.uk](mailto:jonesrc10@cardiff.ac.uk)