Geography Comes of Age

The editor talks to Dr Rita Gardner CBE, Director of the Royal Geographical Society (with IBG) and the Society's head of education and outdoor learning, Steve Brace.

Forget those Oxford PPEs if you want to rise to the top: focus on geography. This is the message from the Royal Geographical Society (with IBG). And if you're looking for evidence in these times of fake news, what better example is there than the UK's current Prime Minister, Theresa May, a graduate in geography from St Hugh's College, Oxford.

For those with less lofty ambitions and aiming to become a GIS professional, there's no better beginning than a geography degree; it's the starting point to understanding geographical information science. It's also a popular undergraduate choice, with interest doubling in recent years and over 7,000 graduates last year alone. Why is this? Well Dr Rita Gardner argues there are two reasons.

Firstly, she says it's their wide range of skills. 'They have IT skills and spatial awareness, they have knowledge of social and environmental issues and they are employable'. She also adds that they have social skills, are team players and are trained in research, all underpinned by the specialist knowledge of the RGS-IBG. 'They have the capacity to see the big picture', she concludes.

The second reason is the 'inter-disciplinary nature of geography', says Gardner, 'they have the capacity to speak with specialists and to pull together ideas because of their grounding in the language of natural and social sciences.' Steve Brace thoughtfully adds that 'events, processes and changes happen in places, which is how geographers organise and understand the world'. Supporting the development of all these skills is the RGS-IBG, which has, at the request of higher education, introduced a programme to accredit university courses against the Geography benchmark.

Quantitative Literacy

So how true all is this? In 2013, the RGS- IBG and two research councils produced the report, *International Benchmarking Review of UK Human Geography*. The review found a very healthy and lively discipline, well regarded internationally and way ahead of most other countries. But there was one worrying aspect: geographical information science was under-represented compared to the US and perhaps due to what it cited as a weakness in "quantitative literacy" – those analytical and maths skills, so essential to high-level GIS application. Yet surely by now GIS is an essential tool of geographers? Gardner agrees and emphasises that those skills are taught in courses equally with the ability to understand and interpret what the technology delivers, whereas in the US geography is more tightly focused around GIS technology.

We turned to mapping skills, always an implied essential to a geography course. It was good to learn that Professor Danny Dorling's cartograms, an imaginative and engaging way of looking at maps and data, are now a regular feature in classrooms across Britain (www.worldmapper.org/). Gardner confirms that students must have good geospatial skills if they are going to understand and interpret data. She believes that geography can be a vehicle for improving those quantitative literacy skills at secondary education level.

Since 2011 RGS-IBG has been closely involved with the Department for Education in developing a new national curriculum for 11-18-year-olds as part of the English Baccalaureate initiative; the new curriculum was introduced from September last year. In recent years the number of secondary school students studying GCSE geography has risen by 35%, with over 37,000 studying geography to A-level.

For 11-14-year-olds, the curriculum calls for the ability to interpret a range of sources of geographical information, including maps, diagrams, globes, aerial photographs as well as GIS. For A-level students (16-18-year-olds) the scope is more advanced focusing on fieldwork skills, quantitative and qualitative analysis, collecting and using geospatial data and understanding the meaning of concepts like place and the application of GIS. And there's additional help for teachers too. A recent two-year initiative, Data Skills in Geography, backed by the Nuffield Foundation has enabled RGS to upskill secondary school teachers with online resources as well as face-to-face development. Universities too are demanding better GCSE grades in maths, with some looking for A-levels in maths (currently around 20% of students studying geography degree programmes have maths A Level – doubled in the last ten years).

For those seeking more information for young people about the opportunities studying geography can bring, the RGS's Going places with Geography is a good starting point (www.rgs.org/OurWork/Study+Geography/Going+places+with+geography.ht).

For post-grad students, the prospects are looking better than they have for some time. Several universities offer MSc's in GIS

(see our article on the University of Aberdeen). The UK Government's budget recently announced additional funds for 1000 new PhD's and fellowship positions in STEM subjects (science, technology, engineering and mathematics). The money will be allocated through institutions and the various research councils and some will hopefully trickle down to "part STEM" geography. Gardner argues that because geographers are employable (amongst the top three or four subjects that quickly find jobs for grads) some of this should trickle down to geography.

Chartered Geographers on the Rise

One of the flagship programmes of the RGS-IBG has been the introduction of the chartered geographer qualification, which has attracted many from the GI community. Launched in 2004, there is now a cohort of around 700 who have achieved the standard – usually a post-grad six-year period of practice to reach this status and ongoing CPD requirements of 30 hours a year.

Growing acceptance of the accreditation across the public sector and industry recognises the value that CGs bring through working in sectors like education, government (local and central), retail and the City where geospatial analytical skills are in demand, for instance, in risk modelling and analysis for the insurance sector. 'The image of the geographer is rising' explains Gardner, and it's not just chartered geographers. 'We have a new strategy around the professional geographer community working in a myriad of workplaces'. She also says that CG's can get paid more with many mentioning an "esteem factor" as well as putting them on par with colleagues from other professional disciplines. The qualification is also beginning to be mentioned in recruitment adverts.

Prospects for geography in the UK have never looked better, 'it is now in its rightful place,' says Gardner, 'it is a professional discipline bringing serious training and professional skills to bear'. For university courses it's no longer seen as a "soft option" and the chartered geographer qualification has added genuine value to CVs for those seeking new opportunities as well as promotion.

Strategic Alliance Begins Work

Earlier this year the RGS-IBG announced a strategic alliance with the Association for Geographical Information (AGI). Although it's early days Gardner is enthusiastic about the possibilities this may bring. With joint funding from both organisations, a new senior public affairs manager will be in place shortly with a work programme agreed by both bodies. The aim is to help promote better understanding of GIS and to work with both organisations' professionals and early careers networks.

AGI members and readers may recall the 2014 GeoCom conference when the government's chief scientific advisor Sir Mark Walport gave a presentation that spectacularly underlined how geospatial data now underpins everything government does. Sir Mark has now backed the appointment of a Head of Geography within the government science and engineering profession. The interest in place is again moving up the national agenda.

This article was published in GIS Professional April 2017

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