



## Getting students excited about Geography's real-world applications

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**For teachers – no matter what their area of expertise – one question that can come up from students and parents alike is, “what career prospects are there in this subject?”**

Geography is interesting in this regard. There's a sense amongst some students that geography, whilst interesting, is not as integral to the 21<sup>st</sup> century world as it was in the past. After all, haven't we already mapped the planet's surface? What possible need could there be for geography moving forward?

### **Geography teachers know better, of course**

When recommending career paths for students that find that passion for geography burning within them, numerous job titles leap to mind. Are they interested in being cartographer? It's a rewarding and enjoyable job, though admittedly the need for cartographers is becoming rarer in the 21<sup>st</sup> century. Town planner? The geography of the built environment is key in our modern times. Environment monitoring and management? Climatologist? Meteorologist? There is a long list of careers that geography is an integral part of. However, there is one job that avid geography students may not think of immediately.

### **Surveying the Lay of the Land**

Surveyors define the boundaries that exist in our built and natural environment. Upon the arrive of the first fleet and subsequent European settlers, it was surveyors that mapped the complexities of the Australian landscape. Their findings and recommendations had enormous say in determining where towns and cities were built. In fact, to this day, cadastral and land surveyors are amongst the first on the ground in any construction or development project.

One might say that if the word geography means “earth writing”, then surveying is about writing down the Earth's boundaries in permanent ink.

The natural geographical environment certainly has an impact on the surveyor's workload. For example, natural

waterways have a tendency to change their course over time, which means that water can have great importance when determining boundaries. As a result, land surveying and geography are intrinsically linked.

Due to the central role it plays in all sorts of construction and built environment projects, surveying is not just a viable career path for a high school student interested in mapping and geography – it's also a competitive one. A current skills shortage affecting the profession means that there are a surplus of well-paid opportunities for tertiary graduates.

### **Roles in Surveying**

For students interested in geography, surveying offers a practical outlet to the theoretical work. Surveyors engage with a variety of measurement and mapping tools, from the simple (measuring tapes and levels) to the complex (theodolites and total stations) to the extremely complex (GPS programs, 3D-scanning technology and drones). Using the data collected by these tools, surveyors can determine land measurements, examine topographical concerns, provide geospatial data integral to the maintenance and upkeep of existing structures, and lay out the foundations that other building, construction or design professionals rely on.

There are a variety of surveying roles students can pursue. A survey assistant will record measurements manually and electronically, peg out geographical boundaries, maintain the survey equipment and assist with the surveyor's tasks.

A surveying technician, meanwhile, will take a more analytical approach. Utilising software, photogrammetry and data collection equipment, not to mention extensive time out in the field (surveying

is definitely a job path that offers a variety of indoor and outdoor offices), the surveying technician role is an exciting and modern way of applying a geography student's learning.

Another surveying-associated role is the GIS technician – this stands for Geographic Information Systems. They collect location-based information and then develop it into a new format, such as a map.

With specialised training, a surveyor can become a licensed or registered surveyor: in Australia, only they have the legal authority to apply the laws and regulations regarding land ownership, map out subdivisions and distribute land titles.

## Get Kids into Survey

One tool for demonstrating the connections between geography and surveying to school students is the range of Get Kids into Survey posters. The newest edition is set to feature Australia's Sydney harbour as the backdrop, making it an even more effective teaching aid.

Developed in the United Kingdom by Elaine Ball Ltd and now available in the United States and here in Australia, these posters are purposed for a primary

school and young high school audience, efficiently – and literally – illustrating the ins and outs of the surveying world.

Students will learn about what surveyors and spatial specialists do, how it their work relates to other fields, what sort of projects they could work on, and more. These posters will capture the attention of students that have an interest in geography, maths, design, IT, the outdoors, or all of the above.

In fact, the opportunities that are afforded by this poster are numerous. There is a chance to promote surveying to not just a school audience, but to a primary one. With each poster filled with characters, surveying equipment and geospatial activities, students will be engaging with conversations about how human beings interact with natural and the built geography.

Get Kids into Survey is just one way of connecting the theory of geography with the real world. Copies of the first Get Kids into Survey poster can be ordered for no more than the cost of shipping via <https://www.elaineball.co.uk/product-category/australia/>. For further information on surveying as it pertains to geography, you can visit [www.alifewithoutlimits.com.au](http://www.alifewithoutlimits.com.au) or email [trysurveying@alifewithoutlimits.com.au](mailto:trysurveying@alifewithoutlimits.com.au).

## The Sydney edition of the Get Kids into Survey poster.

