



INSPIRING THE NEXT GENERATION

AMID GROWING VACANCIES AND RISING DEMAND FOR GEOSPATIAL SKILLS ACROSS THE UK, ALEX MCKEE INTRODUCES A NEW INDUSTRY-LED INITIATIVE THAT AIMS TO INSPIRE THE NEXT GENERATION WITH A RANGE OF EDUCATIONAL RESOURCES AND CAREER GUIDANCE

The UK geospatial sector is currently valued annually at £11 billion¹ and is expected to increase further as our reliance on location data grows. The importance of the sector is such that, in 2018, the government established the Geospatial Commission to set the nation's geospatial strategy and promote the sector more widely. According to the Geospatial Commission², applicants with data science skills are in the highest demand, shortly followed by Earth Science skills and specialist surveyors.

Due to the demand, it's predicted there will be a significant shortfall of suitably qualified geospatial experts within 10 to 20 years³, leaving a substantial skills shortage in the wider sector and a high demand for potential employees. The potential impact of this across the industry, from construction services to data management and geospatial analysis, could have significant consequences, with roles left unfilled and business looking internationally to solve this problem.

So why are there so few geospatially-skilled employees, despite record-high levels of demand? Recent research from the

Chartered Institution of Civil Engineering Surveyors³ suggests that the reduced rate of recruitment is due to a lack of awareness of the geospatial sector at primary and secondary school level.

Awareness in education

Ed Parsons, Geospatial Technologist at Google, proposes that the 'ability to interrogate and integrate datasets to form a bigger picture comes from the experience of studying geography'⁴. Given that Geographic Information Systems or GIS is now a compulsory component of the national curriculum in England and Wales, combined with the extensive use of GIS in virtually every field, research suggests a strong link between the Geography curriculum at secondary school level and geospatial degree programmes through the use of GIS.

With the support of 10 industry partners, a new website, Geospatial UK, has been created to address the expected skills shortage across the geospatial sector. Using GIS resources to attract Geography teachers and students, the website aims to inspire the next generation to

choose a geospatial career by enhancing their practical skills and technical knowledge, as well as raising awareness of the varied roles in the geospatial sector, including job titles, brief description of the role and expected salary.

To satisfy the demand for specialist surveyors, once students have ventured into the world of GIS through the Geospatial UK website, they are guided to think about data capture. The majority of Geography curriculums require KS5 students to complete an independent investigation on their topic of choice. Geospatial UK has created several guidance documents to support students through their independent studies, some of which use specialist equipment such as laser scanners or Augmented Reality. For these practical studies, Geospatial UK encourages teachers to get in contact to arrange for training sessions by geospatial specialists, the latter also being able to discuss career paths and stimulate further interest.

The new Geospatial UK website was launched in June 2021 and has already received an overwhelmingly positive response from both industry and educators.



“One of the best things I have seen to promote the profession in years.” Barry Gleeson, Wood Plc

“The website is pitched at the right level and offers excellent insight into the career paths available.” Nicki Nichols, The Hydrographic Society Scotland

“I’ve been going through the activities over the last couple of days and I’m blown away.” Alex Carter, Geography Teacher at The John Roan School

How can you help?

Tackling this sector-wide problem requires sector-wide involvement. In a new wave of ethical employment, some organisations such as Skanska, offer paid volunteer days which adds social value for both the employees and the students, and boosts future recruitment levels.

Alternatively, evidence shows that a young person (under 18) who gains work placement is more likely to remain in that field as a result of the work experience⁵, highlighting an age-group which is often overlooked for career opportunities.

If you feel inspired and want to support the geospatial sector but aren’t sure where to start, search for www.geospatialuk.org to see how you could help.

References

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- ⁵Employment 4 Students (2016) *How Offering Work Experience To Young People Benefits Employers*. Available at: <https://recruiter.e4s.co.uk/2016/08/30/work-experience-young-people/> [Accessed: 10/02/22].

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³Chartered Institution of Civil Engineering Surveyors (2019) *State of Geospatial Survey Education*.

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⁵Employment 4 Students (2016) *How Offering Work Experience To Young People Benefits Employers*. Available at: <https://recruiter.e4s.co.uk/2016/08/30/work-experience-young-people/> [Accessed: 10/02/22].

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