

Confronting the Geomatics Professional's Identity Crisis

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While I was presenting an educationally themed paper at GeoBusiness2014 in London last May, attendees were polled in real time on which title/role most accurately represents our industry's graduates (from a choice of: Geospatial Scientist, Spatial Information Surveyor, Geosurveyor, Geomatics Professional, or Other). 'Geospatial Scientist' and 'Geomatics Professional' were chosen. However, worldwide it is generally accepted by our industry that a lack of clarity persists regarding what title a geomatics professional should use. Primarily this confusion reflects a lack of recognition by the general public of what the geomatics/spatial information sector encompasses. There is also evidence that academics continue to toil with defining a consistent set of competencies/skills for geomatics graduates. The decision to add new skills and knowledge to rapidly evolving 'geo' programmes appears easier than knowing which 'legacy' or traditional skills should be omitted, and when. This ambiguity is further reinforced when geoprofessional roles are unregulated within some jurisdictions, i.e. when the title of 'Land Surveyor' or 'Geomatics Surveyor' is not protected by legislation (as is currently the case in Ireland). This absence of a recognised and industry-consistent professional (and, in many cases, statutory) title is a real difficulty for educators, with many arguing that this issue alone is significantly affecting the sustainability of the

profession.

Cognisant of these issues generally, and of the vulnerability of its geomatics programme specifically, academic staff within the Spatial Information Sciences Group (SIG) at the Dublin Institute of Technology (DIT) – where Ireland's only bachelor-level geomatics programme is delivered – are responding to emerging industry developments, clarifying what the current core geomatics graduate attributes are and ensuring that these are reflected within its programmes. Further to this, the Group has introduced options such as problem and project-based interdisciplinary learning, outreach activities such as work placement/internships (where learning during the normal working week is supported by workplace mentors and SIG academic supervision) together with student 'learning with communities' projects. Work placement/internship providers are asked annually to give formal feedback on the technical and professional skills of students placed within their organisation/department. As a result of this informed feedback from industry, it was decided to develop two further programmes: an MSc in Geographic Information Systems and an MSc in Geospatial Engineering (in addition to an existing MSc in Spatial Information Management). Additionally, the SIG alumni are surveyed (twice in the past five years) on their career paths, skills needs, etc., while masterclasses, workshops and seminars are hosted in collaboration with relevant professional bodies (mostly free of charge) for professionals across the AEC (architecture, engineering and construction) sectors.

Back in 2007, DIT recommended that '*all programmes will provide students with a range of opportunities to develop, practice and be assessed on an agreed range of key employability skills or graduate attributes*'. By early 2013, overarching attributes were defined which anticipated that DIT graduates would be '*Engaged, Enterprising, Enquiry based, Effective, Expert in chosen subject discipline*'. From recent successes the Group is assured that through integration of these attributes with specialised discipline-specific competencies it continues to attract high-quality applicants and to secure the survival of its programmes.

It is important to state that much of what is described here is not unique. Programme teams on 'geo' courses worldwide are adopting comparable initiatives. However, SIG is acutely aware that only with such changes to existing paradigms of education will its programmes be reactive to, and reflective of, our evolving profession. Educators everywhere must exact a similar partnership-based approach with industry in order to showcase that the breadth of 'geo' skills is broader than that of the traditional 'land surveying' profession and, in so doing, begin to address the identity challenges confronting geomatics graduates and established professionals worldwide. Perhaps an industry-led discussion on discipline-specific geomatics/spatial information graduate attributes might get the ball rolling?

For more information on DIT graduate attributes, see: <http://www.dit.ie/litc/aboutthelitc/litcspotlight/ditgraduateattributes/>

Biography

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A chartered geomatics/land surveyor and lecturer in spatial data management, e-government service provision, land management, spatial data applications and geodetic/land surveying, she has served as chair and vice chair of the SCSi Geomatics Professional Group (PG) and as a member of the RICS Global Geomatics Professional Group (2011-2012). She is currently a member of the RICS UK and Ireland Regulatory Board, and a member of the RICS FIG delegation. Helen was appointed to the board of the Property Registration Authority of Ireland in early 2014.

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