

## **Skills, competencies and accreditation – where are we now?**

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Let's begin by being clear about the meaning of the title's words. A skill is not simply an ability to carry out an activity, it is to do so well. Skills are often acquired after much practice. Those who can observe the meticulous attention to detail and repetition with which Johnny Wilkinson refined his art, will have savoured the drop kick in the final seconds of the 2003 Rugby World Cup. Competency takes us squarely into the realm of work: someone who has competency may be expected to have a skill that is central to their work. It has a flavour of (high) quality in the sense that someone who is competent is able to do something well. Someone's credentials are independently verified evidence of who they are or what they are or are able to do. The key is the concept of independence: you don't have to trust me if you trust the accrediting authority.

There is another word I want to introduce: capability. "Capabilities are high level descriptions of key behaviours, skills and knowledge that underpin effective performance. These define what effective performers actually understand, apply or demonstrate in common situations, most of the time, to achieve the best results" (SILC Skills Development Framework, 2010, p. 2).

The field of land contamination investigation, assessment, remediation and regulation, let alone the broader field of brownfield regeneration, is nothing if it is not *multi*-disciplinary. That is to say it encompasses multiple disciplines. It is not inter-disciplinary or cross-disciplinary. The disciplines that speak into this field include industrial archaeology; environmental and analytical chemistry; toxicology and epidemiology; engineering, hydro and environmental geology; civil, electrical and environmental engineering; environmental, planning property and commercial law; property surveying – the list goes on.

It is so far from possible that one individual could be competent in all or indeed more than perhaps a brace of the above that it should not need to be said, and yet... Land contamination has suffered in recent years from a desire to make everything too simple. For example the once (admittedly only in a limited way) probabilistic CLEA model has been reduced to a deterministic mode, while its owner, the Environment Agency, still proclaims the benefits of probabilistic approaches in detailed quantitative human health risk assessment and even in generic quantitative groundwater risk assessment: a case of too little statistics perhaps. On the other hand, the replacement of the all too telegraphic statistical tests in CLR 7 with the more substantial guidance from CL:AIRE/CIEH suffers from an excess of statistics to the point where the centrality of uncertainties in the conceptual model as the driver for further site investigation was being diluted.

The sector has several skills development frameworks. The Environment Agency Technical Development Framework has been operational for a few years and has had a tangible impact on investment in staff training. During 2009 and 2010 The SILC Professional and Technical Panel and the CIEH have published consultation drafts of skills development frameworks for practitioners and specifically for regulators respectively. Some professional bodies, notably the Geological Society, have training guides for pre-chartered professionals. Many private organisations have internal staff development programmes.

The current economic climate has reduced the size of the construction and redevelopment sector. Levels of astoundingly high skills shortage predicted as late as 2008 were almost immediately followed by wide-scale redundancies and downsizing in the private sector and it seems the public sector may be about to join that process. Yet houses and other structures are still being built, investigations still carried out and remediation still goes on. Who will do that work? I would argue that those who remain in

the sector are likely to be the more committed and the more committed are likely to be the more capable. However the need for accreditation – some independent credentials of competence – will become ever more urgent. Currently clients rely on testimonials of previous clients. However such testimonials may become harder to obtain – the more so if the former client is no longer in post. So a source of accreditation that is likely to be durable is becoming increasingly necessary.

At present the only relevant cross-disciplinary accreditation scheme in the UK is the Specialist in Land Condition, on whose PTP I currently represent the Geological Society. SILC is acknowledged to be far from perfect leading many to question its value or at best to desist from engaging. My own position is that while being far from perfect it is still closer to providing the sector with the accreditation it and its clients deserve than any other possible model and therefore deserves the sector's, and its stakeholders, support. Should SILC wither away and the draft Soil Framework Directive (SFD) become law, it is likely some form of competency scheme will then have to be developed *ab initio* to meet the SFD requirements.

The more pressing need now is to be, and be able to demonstrate one is, competent in the line of work one is offering to carry out. SILC offers one line of evidence of such competence.

*The views expressed in this essay are the author's own and were prepared for the time, event and likely audience at which they were aired. Feedback, positive or critical, is welcome.*

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LQM are known for their work in training regulators and consultants and in peer reviewing countless reports for local authorities and developers. They pioneered the use of bioaccessibility in UK human health risk assessment and worked with CIEH to publish generic assessment criteria some 82 common contaminants to complement the screening values for 10 substances published on behalf of the UK government. This has revolutionised and speeded up the consideration of contaminated land issues through the land use planning system.

He runs a unique vocational masters programme at The University of Nottingham. Over the past decade has helped many consultants and regulators hone their skills in risk based contaminated land management. That program is now entirely delivered by distance learning using a combination of recorded lectures, webinars and online tutorials.