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When I say....capability

Hilary Neve and Sally Hanks

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Neither of us are chefs, but we can both confidently prepare and cook a tasty spaghetti Bolognese and our families regularly judge us as competent at the task. Imagine, however, cooking the same dish on a team task for television's competitive 'Masterchef©' programme. The judges scrutinise us as we get to grips with the equipment and ingredients which bear little resemblance to those we use at home. We are cooking, not for 2 or 4, but for a factory workforce of 50. To make matters worse, our team members have their own ideas and we argue about adding extra ingredients and whether the spaghetti is cooked. The pressure mounts and our stress levels increase. The recipe and approach which works so successfully in our own kitchens, now seems entirely redundant. When the meal is served, the sauce is unpleasant, the spaghetti soggy and neither the factory staff nor the judges are impressed.

Medical and dental education, in preparing students for their future careers, tend to teach clinical abilities in terms of competence and use a variety of assessment strategies, such as the OSCE, to assess these¹. Yet the competencies which serve students well in familiar, routine and predictable situations², often do not adequately prepare new clinicians for the real world of healthcare. Foundation doctors, for example, quickly "get out of their depth" when working in complex settings^{3,4}. Ticking the competency box does not seem to be enough. They also need to know "*when to take no action and how*

*to move forward when guidelines and protocols do not cover the situation*⁵. This can occur, where patients are angry or confused, where there is uncertainty, clinical or team disagreement or where doctors are dealing with their own emotional response⁴.

“Capability” is increasingly recognised in higher education, as an essential element of professional expertise. Being capable is often used synonymously with being competent. but when we say ‘capability’ we are referring to an all-round human quality, *“an integration of knowledge, skills, personal qualities and understanding used appropriately and effectively”*⁶. Competency is, of course, an important attribute of capability, but while we may assume competencies are generalisable, there appears to be little evidence for this³.

Capable clinicians need to be able to integrate and apply multiple competencies, not just in familiar and focused settings, but in novel, complex and changing circumstances^{2,6,7}. In addition, capability requires individuals to be creative and to be able to think outside the box; to address challenging and atypical problems; to have high levels of self-efficacy but also to be able to work effectively with and lead others; to know how to learn; and to be able to learn from experiences.

So how do we educate for capability, as well as competency? Regular feedback, the challenge of novel contexts and “what if?” scenarios which require the generation and application of underlying principles the use of nonlinear methods including small group discussion and PBL⁷, as well as longitudinal placements and apprenticeships can all facilitate this. The notion of

capability challenges us not only to re-think the linear learning outcome model, but also our assessment methods. We will need to find ways of assessing students' performance, including their ability to problem solve in complex clinical situations, where the interaction of several competencies may be much more important than a series of separate assessments of task specific competencies². This will require meaningful assessment tools and standards that reflect the real world and students' ability to integrate and transfer their learning to new settings. Perhaps we should also assess students' resilience and their ability to adapt and innovate?

For cooks, their capability may only be fully tested in high demand and unpredictable situations such as 'Masterchef©'. Doctors and dentists are likely to face 'Masterchef© moments' every day at work. Our education strategies need to prepare them with the capability to cope with these.

² Gardner A, Hase S, Gardner G, Dunn SV, Carryer J. From competence to capability: a study of nurse practitioners in clinical practice. *Journal of Clinical Nursing* 2008;**17**(2):250–8.

³ Illing JC, Morrow GM, Rothwell nee Kergon CR, Burford BC, Baldauf BK, Davies CL, Peile EB, Spencer JA, Johnson N, Allen M, Morrison J. Perceptions of UK medical graduates' preparedness for practice: a multi-centre qualitative study reflecting the importance of learning on the job. *BMC Medical Education* 2013;**13**(1);34.

⁴ Monrouxe L, Bullock A, Cole J, Gormley G, Kaufhold K, Kelly N, Mattick K, Rees C, Scheffler G. *How Prepared are UK Medical Graduates for Practice?* Final report from a programme of research commissioned by the General Medical Council, 2014. <http://www.gmc-uk.org/about/research/25531.asp> (accessed 14 July 2015).

⁵ General Medical Council and Academy of Medical Royal Colleges. *Developing a framework for generic professional capabilities: a public consultation*, 2015. <http://www.gmc-uk.org/education/27193.asp> (accessed 14 July 2015).

⁶ Stephenson J. The Concept of Capability and its Importance in Higher Education Education. In: Stephenson J, Yorke M, editors. *Capability and Quality in Higher Education* London: Kogan Page;1998.

⁷ Fraser S W, Greenhalgh T. Coping with complexity: educating for capability. *BMJ* 2001;**323**:799–803.