COMMENTARY

Interdependence is one of many factors that influences collaborative health care practice

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Sebok-Syer et al1 describe that while clinical care is delivered collaboratively in a team, assessment of performance in that team is individual. This creates a conceptual paradox as we tend to think of competencies as residing in individuals yet the performance of a student or trainee is influenced by the team in which they work and by the clinical supervision they receive. This relationship has been termed interdependence and is defined as ‘patterns of interaction between individuals, working collaboratively, that can afford or constrain one’s performance and potentially shape the practice of a broader healthcare team’ (page 2).1

In their review paper, Sebok-Syer et al sought assessment approaches that included interdependent measures (ie those that consider both the individual and the team, with effort to capture both team and individual contributions). The concepts identified were diverse and only loosely related to health care assessment as it is typically operationalised: dyadic measurement (relevant to separating trainee from supervisor input), social network mapping (linking staff to certain clinical activities) and data mining and machine learning (eg linking Electronic Health Records to staff clicks). In doing so, the authors highlighted the importance of qualitative approaches to capture the complexities of health care and advised on the need for clarity of purpose for any future measure.

In considering these possibilities, we were struck by how our recent review of tools used to evaluate the impact of interprofessional education training programmes,2 identified items that seem to capture the nature of interdependence without using that specific term.3-5 Nonetheless, the items and descriptors of these tools align very closely with the concept of interdependence in the context of collaborative learning as described by Laal6 where “interdependence may be positive (cooperation), negative (competition) or none (individualistic efforts).”7 For example, in the Operating Room Teamwork Assessment Scale (ORTAS), we identified ‘interactions among team members demonstrated consideration of each others’ contributions and views regarding patient care and/or team performance’5 and in the Interprofessional Leadership Tool (IPL), and we identified ‘Reflect on individual and team performance for individual, as well as team, performance improvement’.3 It is notable that these items and other similar items in other tools, linked to interdependence, are embedded within tools used to assess a range of factors associated with and influencing collaborative learning and team working. This demonstrates the more holistic consideration of performance rather than focussing on just one influencing factor, with an appreciation of the complexity involved in collaborative practice.

The purpose of collaborative learning is to enable effective teamwork, with members making a unique contribution towards a common goal, such as patient care. Sebok-Syer et al are focussed more on coupling, ‘to capture the interdependence of trainee performance with both supervisors as well as with other trainees and health care professionals’.8 Attempting to separate out collaborative practice and identify independent practice seems antithetical to the model of health care delivery. However, one can see that this could provide a better idea of the student’s entrustability to undertake/engage in that clinical activity being assessed. This then could inform the level of supervision that the trainee is perceived to require in that clinical activity.

We, therefore, appreciate and support the endeavour presented by Sebok-Syer et al to measure interdependence in the pursuit of understanding an individual’s level of competence within the context of collaborative practice. We are less certain, however, that assessment for interdependence could ever explicate the ‘true’ individual...
student performance from the complexity of collaborative clinical practice. Collaborative working in the workplace is a complex dynamic system where individuals are navigating and orientating themselves within non-linear relationships, systems and processes and with situated learning. As such, an adequate assessment that measures student/trainee performance in such a complex system will likely need to acknowledge, characterise and record the variability in and influence of these factors in this context.

As a result, we agree with the authors’ efforts to highlight the importance of qualitative approaches. If well documented, such approaches could provide more insight to enable supervisors and trainees to judge the level of supervision required for trainees to undertake/engage in a particular clinical activity.

As before, this alignment comes after considering the work of Sebok-Syer et al while reflecting on the evaluation of interprofessional education programmes. Some of the tools we uncovered, whether aimed at individual or team performance or both contained textual feedback. For example, the Interprofessional Professionalism Assessment Tool examines individual performance related to interprofessionalism while encouraging the capture of qualitative comments. This enables the assessor to add details to their judgement that relate to the context and complexity and to provide personal and focussed feedback. Without this, a more limited perspective of the performance is presented.

In conclusion, to achieve a better understanding of individual performance, within collaborative working, measuring one factor such as interdependence provides only a slice of insight. There are multiple variables within any given context that need to be considered and captured to gain a deeper understanding. The power of personalised, subjective but contextualised assessment and feedback cannot be ignored. This allows the assessor to capture and articulate complexity.

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INTRODUCTION

Balmer, Rosenblatt and Boyer call for those training medical educators to ‘recast belonging to multiple communities of practice as knowledgeability, not as tension or identity crisis’. Reinterpreting the experience of multi-membership as a strength is welcome. In this commentary, I suggest that graduate programmes may go further and aim to equip students to capitalize on this knowledgeability by calving out legitimate zones in the peripheries, by becoming brokers at boundaries, and by handling the conflicts that often emerge from claims to multiple competencies.

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In earlier phases of Etienne Wenger-Trayner’s work, he described how learners move from legitimate peripheral participation to core membership. He situated this process within a community of practice, characterised by shared domain, shared practices, and community relationships. The landscapes of practice model—which Balmer, Rosenblatt and Boyer employ—emerges from the third phase of Wenger-Trayner’s work and was comprehensively described in Learning In Landscapes of Practice: Boundaries, Identity, and Knowledgeability in Practice-based Learning. This model describes how learners can move across many communities of practice, sometimes travelling toward the centre of a community of practice, sometimes sharing knowledge over boundaries, and sometimes crossing boundaries themselves. In the context of medical education, this landscape may involve research communities, clinical communities, pedagogical communities and management communities at the same time and medical teachers must be able to exchange skills and knowledge between the communities they encounter.

Balmer, Rosenblatt and Boyer used the landscapes of practice model to interpret their longitudinal study of students who undertook a medical education programme. The data they report illustrate the tensions encountered by newly trained medical educators (see in particular, the experiences of Thomas, Mark and Julie). Their suggestion that medical educators may benefit from reinterpreting their multi-membership not as a tension but as knowledgeability is surely a useful starting point, but there are further steps which can be taken to support medical educators to comfortably inhabit their complex professional identities.