Self-directed learning – the importance of concepts and contexts

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Much medical education, from undergraduate programmes to continuing professional development, is based on the premise that doctors are, or should be, self-directed learners. Part of its attraction seems to be that the idea of self-directed learning (SDL) accords with western ideals of democracy, individualism and egalitarianism. It is also seen as a prerequisite for life-long learning. Two papers in this issue remind us that we should challenge the assumptions underpinning SDL and explore its applicability to clinical medicine.[1,2]

Dornan *et al.* in Manchester explored the use of a web-based learning management system in supporting student learning in the clinical environment in a large teaching hospital.[1] They concluded that their 3rd year students were rarely fully autonomous, and valued support and direction (organisational, affective *and* pedagogic), with which they became more motivated and apparently better able to identify and pursue their own learning needs than if left to their own devices. Previous findings that problem-based learning (PBL) does not automatically transfer to the clinical environment were also confirmed.

Hoban and colleagues assessed the underlying factor structure of a commonly used instrument for measuring SDL, the Self-Directed Learning Readiness Scale (SDLRS), using principal axis factor analysis and a series of confirmatory factor analyses, with a large sample of first year medical students in Virginia.[2] They found no support for an overarching construct of self-directedness, and observed that many of the characteristics comprising the instrument (for example, positive attitudes towards learning as tool for life) were not necessarily predictive of SDL behaviour. Their main conclusion is that the SDLRS falls short of measuring characteristics that are claimed to be associated with SDL.

Both papers highlight that it is crucial that educators understand concepts underpinning educational approaches and initiatives, in order to evaluate whether they are likely to be effective. Candy suggested there are several conceptually distinct ways of viewing SDL, based on varying educational philosophies, from the ideological to the instrumental, which may have different implications for practice in different settings.[3] For example, Miflin *et al.* reported the difficulties in implementing a graduate medical course based on the idea of SDL when there were many different interpretations of the concept amongst the teachers and students involved.[4]

Medical educators are exhorted to adopt SDL with the principal aim of producing learners who can manage their own learning throughout their careers. It is argued that learners should be given more control over their learning processes and be encouraged to be educationally self-managing because this will enable them to continue life-long learning outside educational institutions. Yet Coffield caustically claimed that 'for too long life-long learning has remained an evidence-free zone, under-researched, under-theorised, unencumbered by doubt and unmoved by criticism'.[5] The same could probably be said of SDL. Both Candy[3] and Schmidt[6] questioned whether encouraging SDL processes in one context would enable self-management or learner control to be transferred to other learning contexts. Furthermore, Norman draws attention to the fact that self-directed learners need to be effective at self-assessment, yet research evidence suggests that many health professionals (pre- or post-qualification) have difficulties with this.[7] Eva claimed that external guidance would always be required for unfamiliar areas of practice, 'thus reducing the validity of the rhetoric around nurturing learners to be self-directed'.[8] Schmidt put forward similar arguments for his claim that the importance of SDL skills in professional practice had been overemphasised.[6]

Dornan *et al.* in this issue, draw attention to the different emphasis given to SDL when viewed from a cognitive perspective compared to those who base their educational approach on social learning theories.[1] Cognitivists stress the private and individual nature of learning. However, Candy claims: 'The term

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self-direction has misled many into elevating the individual above the collective – but the nature of knowledge and learning inherently puts learners in relationship with others'.[3] The place of self-direction must be carefully considered, and Dornan's research adds weight to the view that learning in clinical medicine is as much the product of an interaction between the learner and the environment as a private, individual process.

The context of learning must also be considered. Self-directedness has been seen by some as a relatively stable trait or measurable personal attribute, the underlying assumption behind the development of tools such as the SDRLS. However, many authors[3,9] argue that the ability and motivation to be self-directed varies with the context of learning. The subject matter; the social, cultural and educational setting; past experiences; self-concept; and relevant study skills all influence the extent to which self directedness is possible or likely. Dornan and Hoban's papers lend support to these views.

So, what of future research on SDL? As Candy, and Merriam & Caffarella[3,9] have argued, it must take much more account of contextual factors, so that educators can consider how the findings may apply to their own situations. The researchers' conceptualisation of the term must also be clearly communicated, with careful consideration and discussion of how the researchers' assumptions and educational theories may have influenced the study design or its interpretation. These key steps would make medical education research at the same time more rigorous and more useful to educators.

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