Occupational medicine training into the 21st century

The Colleges and Faculties of Occupational and Environmental Medicine largely developed to meet the need of postgraduate training in the discipline, and this function remains central to their role in 2010. To this end, a number of these organizations have examined the training curriculum and pathways in their countries and within the last few years have developed new curricula. The Australian Faculty of Occupational and Environmental Medicine in the Royal Australasian College of Physicians Australia (RACP) has recently undertaken this process and are about to introduce a new curriculum for the training of occupational and environmental physicians in Australia and New Zealand. The new curriculum will take effect from 2011 [1].

There have been a number of drivers to the development of the new curriculum, both internal and external to the Faculty. Fundamentally, these pressures reflected the needs of trainees for an updated syllabus. Over most of the preceding decade, the failure rates for the exit examination within the Faculty were high and the assessment committee was concerned about this trend. Additionally, the Australian Medical Council reviewed the Faculty processes and criticized the relatively high failure rate attributing this in part to the lack of an updated and modern curriculum. The trainees themselves also had concerns about the training program and content. Further impetus came from the wish to align the educational strategies within the Faculty with modern educational philosophy and with work going on within the college in other medical disciplines. External pressures came from other craft groups and an ongoing desire for the Faculty to redefine the role and definition of occupational medicine practice to keep it contemporary. Finally, the increasing trend to link specialist registration with continuing education for Fellows favoured curriculum development. These forces drove the Faculty to re-examine its core competencies and training processes. Almost simultaneously, the Faculty of Occupational Medicine in Britain [2] and also the College of Occupational and Environmental Medicine in the USA [3] produced similar documents.

How was this document written?

In the early 1990s, shortly after the then Australasian College of Occupational Medicine came into existence, the original training syllabus was developed. This modest document, quite novel at the time, contained a basic outline of the requirements for training in occupational medicine together with a brief list of fundamental competencies. This syllabus remained largely intact until the latest development.

A focus group of occupational physicians met in 2007 to re-examine the content of the original syllabus. The Faculty appointed a project officer to conduct a process to extend the content and develop a curriculum. Feedback from the Faculty membership conveyed several areas of concern, particularly relating to the ways of entering training and the need for consultant level experience near the end of training. As a result, the Faculty decided to adopt and incorporate most of the RACP basic training document [4] into the new occupational and environmental medicine curriculum. The basic training document was integrated into the next draft of the Faculty curriculum by taking the relevant parts of basic physicians’ training as the model requirements for a Faculty trainee. In addition, the Professional Qualities Curriculum [5]—developed for all physicians in the RACP—was made part of the Faculty curriculum. All trainees within the RACP must cover the Professional Qualities Curriculum but its actual inclusion within the Faculty curriculum stressed the critical place of communication, patient safety, cultural competency, ethics, leadership and advocacy in the practice of occupational and environmental medicine.

Expert feedback was then sought and received to tighten all sections of the document. Input from external bodies was requested from union and employer groups as well as from occupational hygienists and ergonomists. A ‘scope of learning’ section was added to every learning objective to define the boundaries of learning, something particularly sought by trainees. The document was finally accepted in December 2009 by the College Education Committee for implementation in 2011. Interestingly, although the document was written without close reference to the recently developed curriculum in the UK or the American College of Occupational Environmental Medicine competencies, the similarities are quite striking. Those curricula emphasize both the responsibilities of the trainee in the education process and the need for a lifelong learning. Identical to the British curriculum is the concept of a spiral curriculum where trainees revisit core competencies that evolve through the period of training, and the themes of professionalism are similar. Minor differences include the emphasis in the British document of clinical governance and core competencies related to
business, although elements of this competency do appear in the Australian and New Zealand curriculum.

**What are the strengths of this approach?**

Certainly, the development of a detailed curriculum is popular with the trainees. It lends certainty to their learning process and a basis for analysis of learning needs. It helps define assessment processes and assures trainees when they submit for assessment. Built into the document is a process of formative assessment strategies, so that trainees will gain a step-by-step understanding of their learning performance to date. This way, it is expected that trainees attempting their summative assessment will seldom fail through lack of preparation and self-assessment. Defining (and redefining) the specialty through the development of a curriculum is also another positive and potentially the use of the document.

The weaknesses in some ways are a mirror reflection of the strengths. Defining curriculum and training has potential to limit both the scope and definition of practice. In particular, if the curriculum is allowed to become dated, redundant content will weight the required body of knowledge and skills toward deference to the past and clutter out or delay incorporation of important new trends. Curiously, it may limit the development of the clinical reasoning among some trainees. Time lent to gaining facts must be shared with time lent to applying those facts to clinical problems. If trainees use the curriculum as a ‘cookbook’ for their prime approach to learning, then they may in part deny themselves sufficient time or opportunity to extend their minds to the typically messy problems of everyday practice. Form overwhelms reality. Finally, in the courtroom, a barrister could display a copy of the curriculum and challenge the credentials of an expert witness who proffered any comment beyond the confines of the document.

**What of the future?**

Having developed the curriculum, the Faculty is eager for it to be used. It is a statement of hope. Its strength can be realized only if trainees and Fellows want to use it and become competent in its use, most particularly those Fellows who are trainee supervisors. If acceptance is and remains lukewarm, application of the curriculum will likely become patchy and its intentions will languish. To address this potential problem, regular reinforcement and educational opportunities will be needed to afford trainees and Fellows of the Faculty skills to use the curriculum and understand its content. In addition, an update and development cycle will be mandated into the document because changing community needs require the gradual reshaping of any medical specialty. The near future will bring new assessment processes, new information technologies and new tools to assist in the delivery of curriculum. Online enhancements are particularly important for trainees in remote areas, an important issue in Australia and New Zealand. Trends in society mores and new legislation may ring changes to be reflected in the curriculum. New diseases and new processes of work will bear the need for curriculum change. Finally, some of our earlier expectations of trainees (and ourselves) will need to be rejected as no longer relevant to the training of new occupational physicians. This culling of redundant material in such a document can be the most difficult task of all. Yet, it must be done lest the clutter of redundant material buries or obscures what is needed for the fluent learning of current practice.

A curriculum develops around the knowledge, skills and attitudes of the practitioners of a specialty. These bases for learning are the cultural capital of professionals and they need to be accepted and relevant. A good curriculum directs people, in particular trainees, on the path to the development of their cultural capital. This brings advantages to both trainees and Fellows. It defines their specialty and affords focus to continuing medical education.

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