Introduction

Our intentions for this book

This book is for both teachers and learners in surgical practice. Much of it would also be of interest to all who work in Post Graduate Medical and Dental Education (PGMDE). It is about the *practice* of education as it relates to doctors who work, learn and teach in clinical settings. That is, it is focused on the practice of teaching, learning and assessment, the principles and values that underlie that practice, and their development and refinement. In this sense, it seeks to suggest the sort of standards implicit in the term 'sound educational practice', and to provoke readers either to give grounds for refuting their importance, or to work actively to support and develop them.

It should be remembered, however, that learning 'the practice of education' is itself a lifelong enterprise, and that there is neither a quick fix approach to it, nor a set of recipes that will begin to do it justice. Like all 'practices', it is learnt gradually, by engaging in it mindfully. Learning the practice of education neither springs fully-fledged in the hearts and minds of teachers, nor do they have to have developed all these capabilities perfectly *before* working with learners. The teaching process is professional development for both learner and teacher. A practice is learnt by engaging in it thoughtfully and critically and is illuminated by the ideas of others who are part of the same tradition.

For those who aspire to prepare surgeons of the future in a serious and rigorous way, and those who seek to learn to be well-cultivated, thinking surgeons, we offer this book as a companion along what will be a physically and intellectually challenging and rewarding journey. Our ultimate motivation here is our conviction that improving education is the very best way of improving patient care.

We seek in this publication, then, to provide challenging new perspectives that seriously question much that the current climate of PGMDE promotes. We believe that the time is ripe for crystallizing better ways forward in surgical and medical education. We perceive that currently there is no informed debate about the best ways in which to develop doctors and surgeons during their postgraduate years. Indeed, it seems to us that the voice of education has been submerged in a rush to create speedy solutions to problems that have not been fully analyzed. In contributing some ideas about the practice of education, and seating these in examples of good teaching and learning for surgeons, then, we are attempting to illustrate other ways forward. Our aim is to encourage wise deliberation and consequently sound and logical decisions about matters which will have far reaching effects on health care in the 21st Century.

This book, then, offers the voice of education rather than training. It provides an example of the detailed arguments, ideas, processes and language in which to think and talk about education logically and rationally in order to determine the best basis for carrying it out. We are saddened by the current trend to train rather than educate postgraduate doctors - the more so because this approach is being pressed upon medicine and medical education to the point where it is virtually a *fait accompli*, without considering other approaches, and without any evidence that it is the best way forward. Indeed, it seems to us to arise from misguided notions that trade long-term benefits for short-term quick fixes, and that are unaware of, or ignore, potentially better and more economic approaches.

As authors, we draw upon considerable combined experience in surgery, surgical teaching and educational *practice*. We do not offer undigested educational theory. Rather, we seek to develop in readers an understanding and ultimately a refinement of the educational *practices* in which they engage. We also hope to establish a recognition that for the long-term success of surgical education and ultimately of surgical practice, these educational activities need to be underpinned and unified by sound educational principles and a knowledge of how to choose and defend the kind of education that best suits the successful development of surgeons and the practice of surgery.

We take as our foundation the arguments, values and principles that clarify the nature of education and of educational practice. We have been concerned to shape our educational intentions around the notion of enabling doctors to *become* surgeons and *conduct* themselves as professionals (rather than training them in surgical behaviour). We seek to illuminate the importance of a partnership in learning between the surgeon educator and the learning surgeon, and we treat this and its implications seriously. We take a holistic view of surgical practice, rather than seeing it as something to be atomized into fragments and taught and assessed in bits. That is, we believe that the professional's knowing and doing are all part of one holistic process of thoughtful or intelligent practice (see Ryle, 1949). Here, we subscribe to Gardner's 'Multiple Intelligences' (see Gardner, 1993), and the notion that physicians or surgeons bring to their practice the whole of themselves as human beings, not merely parts of their minds or bodies. Intelligent practice itself, we suggest, is the coming together of 'being, thinking, knowing, doing and extending practice'. And these are underpinned by values, beliefs, assumptions, feelings, and personal theories which for all of us, whether we acknowledge it or not, arise from our entire autobiography and have been shaped by experiences, some of which we may barely remember.

In relation to the evolution of this book, we have adopted the role of practitioner researchers and taken a broadly 'action research' and cyclical approach, which we believe will be evident to the discerning reader. We began by seeking first to explore *in the practice setting* the real everyday complex work of our surgical colleagues (their thinking, knowing and doing). We brought up to that our educational philosophy, modifying our practical ideas and suggestions in the light of their starting points, and adapting these further in response to their reactions to them in the practice setting (how useful they have found them and in what ways). In that sense we

model what we are advocating indirectly throughout Part two of this book and directly in its final chapter, namely a practitioner researcher approach to practice (both surgical and educational).

Being a surgeon, then, involves being a professional with all that that means in terms of relating to patients and colleagues and knowing oneself. Engaging in doing which itself is intelligent (thoughtful and knowledgeable) means being aware of the knowledge and clinical thinking that are the bases of one's practice. Developing means engaging in professional development both educationally and surgically. We have attempted to attend to all these and to how they come together in the activity we have characterized as cultivating a surgeon.

We offer these ideas in two parts (as indicated in the contents page), the first of which seeks to establish the *educational foundations* for cultivating a surgeon, the second of which looks in considerable detail at the *practice of education* (including assessment) in surgical settings. All chapters start with a summary of their main contents, in order to help readers to locate ideas and processes that they may wish to consider or re-read.

Through the two parts of the book there are six main themes, which we hope emerge clearly, as follows.

Theme I: Being/Becoming

This is about the surgeon being and becoming a growing professional.

For example, the new doctor becoming a surgeon or the registrar becoming a consultant is essentially about 'coming to be' rather than simply 'learning to do'. This involves learning to be a member of a profession, being clear about one's own personal and professional values, and gradually taking on a wider view of, and role in, the Trust as an entity and the surgical profession as a whole. We believe that the foundations of all these matters need to be set in motion from the beginning of surgical education (see Chapters 1 and 2).

Theme 2: The practice of education (learning, teaching and assessment)

This is about the thinking, knowing and doing that the teacher and learner need to understand, be committed to and be able to enact, if the enterprise is to count as education.

For example, this includes understanding what makes teaching an educational practice (and in what ways it might fail to be truly educational); what sort of educational values and principles underpin that practice; how to provide a nurturing environment for learners; how to free learners to think for themselves; how to make explicit the tacit knowledge and experience that learners need to access; how to assess that learning so that it educates the learner; and how to engage in reflecting on experience so that the invisible elements of practice are made visible (see Chapters 3 to 6).

Theme 3: Clinical thinking

This is about all the cognitive processes of reasoning, decision-making, deliberating and exercising professional judgement that lie behind the practitioner's 'doing'.

For example, this focuses upon all those cognitive processes which result in a medical action, a clinical decision, or a professional judgement, and the assessment of surgeons' abilities in these (see Chapters 7 and 8).

Theme 4: Knowing

This is about all the different kinds of knowing that surgeons call upon in the course of 'doing', together with their associated and varied ways of seeing the world and of understanding it.

For example, this includes: factual medical knowledge; knowledge about how to do things (formal procedural knowledge and know-how); sensory knowledge; intuitive knowledge; knowledge gained through theorizing practice; knowledge gained through improvisation; tacit knowledge; personal knowledge; and self-knowledge (see Chapter 9).

Theme 5: Doing

This is about nurturing learning surgeons and assessing their success in the operative and technical procedures and the clinical processes that are carried out as activities by the surgeon in the entire clinical setting.

For example, this includes not only surgical processes but pre-operative, operative and post-operative procedures (those in the clinic, theatre and ward), as well as the activities that support these within the Trust as a whole (presentations at meetings, teaching and learning, setting up new systems, finding out about new ideas). (See Chapter 10.)

Theme 6: Developing

This is about all the professional developments needed and activities engaged in, in order to develop the being, doing, knowing and thinking.

For example, this encompasses all those processes of investigation and research through which the teacher seeks to evaluate the education that has been offered, and the learning practitioner seeks to gain further education. This would include: learning more about career pathways and how to develop within the profession as a whole; learning new techniques and procedures; gaining new knowledge including self-knowledge; working out into the wider

professional community; reading research *critically*; writing up and publishing research. We have focused particularly here upon coming to understand practice better through reflection as educational enquiry, which we see as an overarching activity in all the above (see Chapter 11).

We hope that by all these means we have provided readers with a variety of ways of looking at the arguments we offer, and of finding their way to sections they may need to re-read and or use.

We have addressed both the teacher and the learner in this text, since cultivating a thinking surgeon involves both cultivating thinking surgical teachers, and developing pro-active learners. We believe that this book can offer fertile ground for engaging in a learning partnership in the practice setting. We believe that our contribution will be relevant and will provide important perspectives that may otherwise be overlooked, whatever the fate of the various curricula now in development for teaching in the clinical setting.

We would remind readers that education books are not to be read like novels, or treated like a 'work-book', which has to be worked through in page order, but used to pursue and deepen ideas and understanding. We hope this book can be used at the relevant point in practice, when teacher and learner are looking for a challenge to their thinking and activities to take their educational practice further.

This book is no more than a beginning, a contribution to a debate that we hope will ultimately enhance the way that surgeons are prepared for practice. But this will only be so if readers engage critically with what we offer, and reshape or develop it further. In the end, it is not our own ideas that matter, but whether and how the surgical profession can move forward with real progress. Education of a profession, for a profession and by a profession, is an enterprise that is central to its continued health. The survival and development of surgical practice depends upon sound education. We all need it to be successful. We all have a part to play.

Note: Throughout the book we have deliberately used, with reference to surgeons who are receiving postgraduate education as part of their post, both the terms 'trainees' and 'learning surgeons', but with a greater emphasis on the latter. In doing so we believe that we are reflecting the stage that the surgical profession has currently reached in moving gradually away from seeing the enterprise of postgraduate medicine as training and towards seeing it as education.

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February 2005