

# Postgraduate Medical Journal

The Journal of Continuing Medical Education

---

## Editorial

---

### Learning to teach

“See one, do one, teach one” is a phrase commonly used to describe the way in which doctors learn their craft. Although clearly a caricature, like many, there is an element of truth in it. In the traditional apprenticeship style of learning, students and junior doctors picked up knowledge, skills, and attitudes opportunistically on whatever patients presented. This was a largely informal process of observation and gradual assumption of tasks, often described as “learning by osmosis”. As junior doctors became more experienced and climbed the hierarchy, they started to teach students or doctors more junior than themselves.

Despite the fact that educating patients and colleagues is a routine and fundamental part of doctors’ work, little if any education or training was provided to develop this skill. A similar situation was prevalent across higher education in the UK, where expertise in one’s subject was considered the only prerequisite for teaching it. Ironically, this was not the case in earlier stages of education, where a degree or postgraduate certificate in education was required to teach in state schools. Prospective school teachers were expected to develop an understanding of how children learn and of psychological and sociological factors affecting learning, as well as developing the practical “craft” skills of teaching. A few universities (mostly former polytechnics) and nursing colleges also recognised the need to develop teaching, and required lecturers to gain teaching certificates. In medicine, general practice was unusual in requiring postgraduate trainers to undertake a programme of education before teaching/supervising trainees, and in recognising the importance of the trainer as a role model.<sup>1</sup>

Does the general lack of training and education for teaching matter? A range of studies have shown that teachers themselves are often critical of the quality of undergraduates’ learning.<sup>2</sup> Although most teachers aim to impart intellectual skills, a spirit of inquiry, understanding, and concepts which can be applied in new situations, many students simply learn to accumulate facts. In medicine, students face particular problems trying to apply theoretical knowledge to clinical situations.<sup>3</sup>

There is now good evidence about what leads to effective learning,<sup>4</sup> yet the design of many medical curricula serve to prevent this by, for example, factual overload or assessments which promote rote learning rather than understanding. Balla suggests that much medical teaching takes insufficient account of the evidence about how students learn, with many teachers having little or no understanding

of education theory and being unable to diagnose the level at which to teach students.<sup>5</sup> Similar concerns have been expressed about the skills of hospital doctors responsible for supervising trainees.<sup>6</sup>

Part of the problem which Balla and others identify is the priority given to research within teaching hospitals. There has also been a widespread belief among university teachers that there is a positive correlation between good teaching and research activity. In fact, numerous studies have failed to establish the nature of the relationship, or whether there is one at all.<sup>7</sup>

Another common belief is that teachers are “born not made”, with individuals often citing charismatic lecturers from their student days. Ramsden summarises the numerous studies that have shown that the characteristics of a good teacher are rather more straightforward: good organisation, understandable explanations, empathy with students’ needs, stimulation of interest, provision of feedback on work, clear goals, and encouragement of independent thought.<sup>8</sup> While individuals may start at different levels of ability, it is clear that the characteristics cited can be learnt or developed.

Recently there has been an increased emphasis on providing opportunities for doctors to learn about teaching. Why has this come about, and what do such opportunities offer?

Increased accountability in higher education in the UK has been a major precipitating factor. The Quality Assurance Assessment was introduced to provide peer review of university subjects, and grade them on “fitness for purpose”. Each medical school receives a rating which is made public with the aim of assisting prospective students to make choices. One of the criteria on which schools are graded is quality assurance, which includes assessment of the opportunities for staff training and development.

Pressures to improve medical teaching have also come from within the profession. Two major reports: the Calman report on postgraduate education, and the General Medical Council’s report *Tomorrow’s Doctors* set out clear guidelines which medical schools and postgraduate training schemes had to meet.<sup>9 10</sup>

The main impact of these reports has been to increase the degree of planning, organisation, and monitoring of programmes. At both undergraduate and postgraduate level, there are now detailed aims and objectives which

define the competencies which students/postgraduates are expected to acquire.

The reports also promote the use of more effective teaching, learning and supervision methods, based on the growing body of educational research. New methods such as problem based learning, the use of computer assisted learning and project work have been introduced to facilitate a greater degree of self directed learning. Students are expected to take more responsibility for defining what they need to know and finding out for themselves. This is seen as necessary to prepare them to deal with the huge and fast changing body of knowledge which will be impossible for them to learn, but which they will need to access as doctors. Related to this is a greater emphasis on learning skills, including practical procedures, information technology and communication skills, and intellectual skills such as analysis and problem solving. There have also been developments in educational assessment, such as new formats for written papers, and the introduction of clinical assessments, appraisal, and portfolio assessment.

Such developments require a change in the teachers' role from one of didactic giver of knowledge to one of guide and facilitator of student learning. This change of emphasis requires teachers to reconceptualise their role, and develop new skills themselves. The demands of such major changes have led many medical schools and colleges to appoint educationalists to advise on the process and to provide appropriate learning opportunities for staff.

Most if not all medical schools and/or their associated universities now offer short training courses in teaching methodologies which help doctors to learn and develop specific skills such as formulating objectives or facilitating a small group. A growing number also offer higher level courses, such as postgraduate certificates, diplomas, and masters' courses in education.<sup>11</sup> These allow a greater range and depth of study which develops teachers' understanding and judgment of educational issues, and encourages them to critically review their own teaching approaches. Masters courses include a research element, in which staff undertake research and evaluation projects, usually within their own teaching context.

In 1999, the Institute for Learning and Teaching was established with a remit to promote and accredit good teaching practice across the tertiary education sector.<sup>12</sup> It is now in the process of accrediting individuals and institutional training programmes in teaching such as those described above.

Other initiatives to improve teaching include the introduction of peer review or educationalist review of teaching, in which teachers can discuss specific teaching sessions with observers. These and some of the courses work on a "reflective practitioner" model, which encourages individuals to reflect on the process and effects of their own teaching, and thus develop and improve their understanding and practice.<sup>13</sup>

Another important source of learning for teachers is through feedback from or dialogue with students. Probably

the most frequently used, but not always the most effective method, is student rating scales or questionnaires. A range of other methods are available including nominal group technique, focus groups, and open ended comment sheets which can yield varying levels and types of data to inform future developments in the teaching.<sup>14</sup>

A range of publications is available to support teaching including books specifically tailored for those in higher education and in medical education (see for example Gibbs are Habershaw<sup>15</sup> and Newble and Cannon<sup>16</sup>). The number of journals devoted to medical education is also increasing as the amount of work in this area expands, and there is a drive towards "evidence based teaching".<sup>17</sup>

These trends indicate a growing professionalism within medical teaching, which raises a number of questions. Should everyone be expected to teach, or should it be reserved for those with particular interest and expertise? Should everyone who teaches be expected to undertake relevant training and education? And, as teaching becomes more professional and less reliant on enthusiastic amateurs, will there be greater recognition and reward for teaching? Doctors have a vital educational role, and it is to be hoped that the current opportunities will allow and motivate more doctors to develop their expertise in an area which has, until recently, been largely taken for granted.

M SEABROOK

Department of Medical & Dental Education,  
Guy's, King's & St Thomas' School of Medicine,  
3rd Floor, Weston Education Centre,  
Cutcombe Road, London SE5 9PJ, UK

- 1 Keighley B, Murray S. *Guide to postgraduate medical education*. London: BMJ Publishing Group, 1996: 49-50.
- 2 Ramsden P. *Learning to teach in higher education*. London: Routledge, 1992: 17-37.
- 3 Balla JI. Insights into some aspects of clinical education - I. Clinical practice. *Postgrad Med J* 1990;66:212-17.
- 4 Marton F, Hounsell D, Entwistle N. *The experience of learning*. 2nd Ed. Edinburgh: Scottish Academic Press, 1997.
- 5 Balla JI. Insights into some aspects of clinical education - II. A theory for clinical education. *Postgrad Med J* 1990;66:297-301.
- 6 Standing Committee on Postgraduate Medical and Dental Education (SCOPME). *Teacher development in hospital medicine and dentistry*. London: SCOPME, 1999.
- 7 Brew A, Boud D. Research and learning in higher education. In: Smith B, Brown S, eds. *Research, teaching and learning in higher education*. London: Kogan Page, 1995.
- 8 Ramsden P. *Learning to teach in higher education*. London: Routledge, 1992: 90.
- 9 Calman report. *Hospital doctors: training for the future. The report of the working group on specialist medical training*. Lancashire: Health Publications Unit, April 1993.
- 10 General Medical Council. *Tomorrow's doctors. Recommendations on undergraduate medical education*. London: GMC, 1993.
- 11 Burton J. Get a masters degree in education. *BMJ Classified* 8 January 2000: 2-3.
- 12 www.ilt.ac.uk
- 13 Schön D. *The reflective practitioner: how professionals think in action*. London: Temple Smith, 1983.
- 14 Gibbs G, Habershaw S, Habershaw T. *53 interesting ways to appraise your teaching*. Bristol: Technical & Educational Services, 1989.
- 15 Gibbs G, Habershaw T. *Preparing to teach*. Bristol: Technical & Educational Services Ltd, 1989.
- 16 Newble D, Cannon R. *A handbook for medical teachers*. 2nd Ed. Lancaster: MTP Press Ltd, 1987.
- 17 Hart IR, Harden RM. Best evidence medical education (BEME): a plan for action. *Medical Teacher* 2000;22:131-5.