Proto-professionalism: how professionalisation occurs across the continuum of medical education

Sean R Hilton[1] & Henry B Slotnick[2]

INTRODUCTION Professionalism and its assessment across the medical education continuum have become prominent topics in recent years. We consider the nature of professionalism and how it emerges and relates to the work carried out by doctors and doctors-in-training.

THESIS AND DISCUSSION We suggest 6 domains in which evidence of professionalism can be expected: ethical practice; reflection/self-awareness; responsibility for actions; respect for patients; teamwork, and social responsibility. Furthermore, we propose that a defining characteristic is encapsulated by the Greek term *phronesis*, or practical wisdom. Phronesis is acquired only after a prolonged period of experience (and reflection on experience) occurring in concert with the professional's evolving knowledge and skills base. The prior period we have termed as one of 'proto-professionalism'. Influences on proto-professionalism are considered in terms of moral and psychosocial development and reflective judgement.

CONCLUSION Curricula that develop meta-skills will foster the acquisition and maintenance of professionalism. Adverse environmental conditions in the hidden curriculum may have powerful attritional effects.

KEYWORDS education, medical, undergraduate/*standards; professional competence/*standards; faculty; students, medical; curriculum/standards; ethics, medical; attitude of health personnel.

*Medical Education 2005; **39**: 58–65*
doi:10.1111/j.1365-2929.2004.02033.x

[1]Department of Community Health Sciences, St. George's Hospital Medical School, London, UK
[2]Office of Continuing Medical Education, University of Wisconsin Medical School, Madison, Wisconsin, USA

Correspondence: Professor Sean R Hilton, Department of Community Health Sciences, St. George's Hospital Medical School, Cranmer Terrace, London SW17 0RE, UK. Tel: 00 44 20 8725 5422; Fax: 00 44 20 8767 7697; E-mail: shilton@sghms.ac.uk

INTRODUCTION

Although the professions fulfil vital roles by addressing complex and technical problems for society, they have for some time been under close scrutiny. Medicine, in particular, has become a target in the backlash against the autonomy and self-regulation of the professions, with the result that the state, government or private corporations have gained increasing control of the operation of health systems and, more recently, the regulation of the profession itself.

In the UK, problems include lapsed professional behaviours that have led, amongst other measures, to the General Medical Council (GMC) requirement that all medical schools establish 'fitness to practise' committees to identify medical students unsuited to the profession of medicine regardless of their academic standing. In the USA, society's problems with medicine include perceived conflicts of interest resulting in the ascendancy of managed care and the loss of doctor autonomy. The problems and the reactions have, in turn, prompted initiatives strengthening medical professionalism in undergraduate and postgraduate training.

For practising doctors in the UK and North America relicensure (recertification/revalidation) is now a reality, with increasing attention being paid to explicit outcomes that relate to professionalism. Despite this, the uncertainties that remain about the attributes defining medical professionalism prompted Armstrong *et al.* to comment recently that the obstacles to effective continuing professional development 'seem almost insurmountable'.[1] These uncertainties need to be resolved before medical educators, accrediting organisations and licensing bodies can confidently assess professionalism.[2] In this paper we offer 2 perspectives:

Overview

What is already known on this subject

Evaluation of professional attitudes and behaviours now forms a central but incompletely defined component of assessment across the medical education continuum.

What this paper adds

A concise definition of medical professionalism is offered that incorporates attributes within 6 domains identified from across the literature on the subject.

We propose the term 'proto-professionalism' to define the state in which the participant spends the lengthy period of medical education and training when professionalism is acquired. It is a product of both attainment and attrition that results from the educational and work environments.

There are cognitive, psychosocial and epistemological aspects of proto-professionalism.

Suggestions for further research

Future research could evaluate approaches that foster acquisition and development of meta-skills in stage-appropriate ways.

1 what professionalism comprises and how it relates to the work carried out by doctors-in-training and practising doctors, and
2 how professionalism emerges in the lives of doctors-in-training (i.e. medical students and junior doctors) and is maintained in practising doctors.

ACQUIRING PROFESSIONALISM

Professionalism does not represent simply another diploma or qualification that is acquired by the doctor-in-training in order to practise independently. We believe it to be an acquired state, rather than a trait (Cosgrove; personal communication), and one that takes a number of years to attain and which must be maintained throughout a professional lifetime.

We suggest the term 'proto-professionalism' to describe the concept of a lengthy state in which the learner develops the skills and knowledge, and gains the experience needed to acquire professionalism. Skills, knowledge and experience are necessary for professionalism, but sophisticated reflection on the doctor's part is also required to produce insights enabling the individual to better address the needs of patients specifically, and society generally.

DEFINING PROFESSIONALISM

'Professional' and associated words and terms have a wide range of uses and interpretations in contemporary language. Some have argued that the term 'professionalism' in medicine has been devalued by the tendency to equate it solely with autonomy, or self-regulation.[3] As a prerequisite for discussing proto-professionalism, we consider some perspectives on professionalism and offer a concise, practical definition of medical professionalism.

Generic professionalism

The 3 original professions of law, medicine and the clergy arose in mediaeval European universities. These and subsequent professions have addressed a class of problems for society, and in return have been granted (a) monopoly status (laws prohibit non-members of the profession from practising); (b) authority to decide both who enters the required training and how that training is organised, conducted and evaluated, and (c) participation with governmental agencies in monitoring practice. Together, these and related arrangements comprise the *implied social contract*.[4]

Society grants monopoly status despite the risks that professionals might misuse their proprietary knowledge and skills for their own advantage, or that a monopoly might stifle competition that improves service and reduces costs. Protections against such risks traditionally come from the professionals putting clients' interests above their own. This establishes a *fiduciary* relationship – a trust that patients can place in their doctors and, by extension, that society can place in the medical profession. In reward for the altruism underlying the fiduciary relationship, society conceded autonomy and self-regulation to the professions. However, as far back as the 1930s, Talcott Parsons identified an ostensible conflict between the professions' altruism and self-interests. By the 1970s many in the sociological literature were critical of the professions, particularly as they wielded their power

in ways that addressed their self-interests. In 1972, for example, Johnson defined *profession* as a way 'an occupation … exercises control over its work'.[5] More recently, Freidson[6] suggested a way in which the threats facing professions can be resolved. He argued that because professions remain both necessary and desirable for society, a case can be made for a reborn professionalism 'expressed purely as dedication to a complex craft that is of value to others. To liberate it from material self-interest is the most radical way by which professionalism can be reborn'.[6] Notwithstanding Freidson's words, many in society regard professionals as tight-knit, self-interested groups, rather than altruistic and socially aware. Opinions vary on the appropriate balance between self-interest and altruism.

Medical professionalism

Medicine has responded to the challenge to its professional values. In the UK, the GMC's publication *Good Medical Practice*[7] is a statement of the responsibilities of the doctor as a professional in the areas of good clinical care, working with colleagues, and probity in medical practice.

A combined North American and European declaration on medical professionalism lists commitments in the areas of patient welfare, patient autonomy and social justice[8] and a project of the Royal College of Physicians and Surgeons of Canada delineates a competency framework for successful completion of specialist training and continuing accreditation, specifying 'professional' as 1 of 7 roles expected of the competent specialist.

Other organisations and numerous individuals have discussed the components of medical professionalism, and proposed definitions.[3,4,9–14] They argue that medicine as a profession has held an implicit social contract with society, and that in recent years, as professional self-interest has been seen to predominate over altruism, society has sought to re-define and make more explicit the contract. The results, seen by doctors as loss of autonomy and respect, have led to widespread loss of morale and a need for doctors to reassert their professionalism in a renewed social contract with society. The importance of the social contract to this discussion is that it allows a definition of professionalism in medicine. Kuczewski has proposed a parsimonious and attractive definition, which states that it is: 'the norms of the relationships in which physicians engage in the care of patients'.[15] This recognises the centrality(although not exclusivity) of the relationship between doctor and patient, while also being consistent with the idea that societal norms change. However, in reviewing the formulations offered by other individuals and organisations, we have identified 6 domains of professionalism that feature consistently and are also aspects of the social contract (Fig. 1).

Personal (intrinsic) attributes of professionals:

1. ethical practice
2. reflection and self-awareness
3. responsibility/accountability for actions (commitment to excellence/lifelong learning/ critical reasoning)

Co-operative attributes of professionals:

4. respect for patients
5. working with others (teamwork)
6. social responsibility

Figure 1 Six domains of medical professionalism.

Personal (intrinsic) attributes of doctors

While these attributes could be said to apply to all occupations, we suggest they should be more highly developed in the professions.

Ethical practice

This is the foundation on which agreement exists between clients' expectations and what professionals expect to provide. High (principled) levels of ethical functioning are required because the problems addressed for society are typically complex and rife with conflicting viewpoints. They are not amenable to approaches based on simpler understandings of human interaction.

Reflection and self-awareness

Although most people may function at modest cognitive levels to satisfy their survival and psychosocial needs, the knowledge and skills used by doctors to deal with complex problems demand higher levels of both thinking and understanding.[16]

Responsibility/accountability for actions (commitment to excellence/lifelong learning/critical thinking)

Here, expectations of professionals are high, and sophisticated appreciation of ethical considerations is required, together with reflection on factors influencing given situations and impacts of possible actions.

Attributes of doctors as they relate to other parties to the social contract (co-operation)

In contrast to intrinsic domains, this is where more profession-specific attributes of the social contract are to be found, in terms of what is expected of doctors and what they do to satisfy those expectations.

Respect for patients

This demands an understanding of patients' needs, but also appreciation of the ways in which doctors' actions are understood by patients.

Working with others (teamwork)

Some skills are generic (e.g. understanding how groups mature and function) and some are specific to the professions doctors encounter (e.g. nursing, pharmacy).

Social responsibility

Through the social contract, doctors have responsibilities to the societies they serve. They must represent medicine's esoteric knowledge and perspectives such as public and population health insights, but also must encompass awareness of and sensitivity to the range of views on health issues.

These 6 domains incorporate the entirety of professionalism in medicine, and also allow a utilitarian and normative definition of the mature medical professional: 'a doctor who is reflective and who acts ethically'. This definition may appear tautological, but in fact the emphasis on reflection and ethics derives from the nature of the complex problems doctors address for society, rather than the inclusion of reflection and ethics among the domains of professionalism. All 6 domains may be subsumed within this brief statement.

Effective description of professionalism requires discussion of 1 further concept – that of practical wisdom (or prudence). Aristotle (in Nichomachean Ethics) referred to practical wisdom – arguably a *sine qua non* of the mature professional in action – as *phronesis*. He considered the mature expert to show the proper blend of:

- *episteme*: the knowledge required for practice;
- *techne*: the skills or craftsmanship required for practice, and
- *phronesis*: 'prudence' or 'practical wisdom', such that professionals know which rules to break and how far to break them to accommodate the reality at hand.

In today's terminology, knowledge, skills and attitudes are familiar concepts, but while *episteme* may be equated to knowledge base, and *techne* to skills, *phronesis* refers to much more than attitudes. It implies insights and judgements based on the experiences arising from dealing with conflicts and uncertainty.

The concept of phronesis is central to the intellectual activity underlying actions taken. It is partly art, and contributes to professional judgement as acknowledged by other writers including Schon (knowledge in action),[17] Polanyi (tacit knowledge),[18] Coles and Fish (deliberative judgement),[19] Epstein (mindfulness),[20] Eraut (personal knowledge, know-how)[21] and Fraser and Greenhalgh (capability).[22]

We believe that phronesis arises from 2 components – experience and reflection on experience – interacting with the professional's evolving knowledge and skills base. Professionalism is thus a state reached only after a prolonged period of learning, instruction and reflective experience. We propose the period leading up to this as one of proto-professionalism.

This should not imply that proto-professionals are unprofessional, rather that they have yet to acquire full professional maturity. Good professional behaviours from proto-professionals may be sought and identified in context and interpreted as proposed by Ginsburg *et al.*,[13,23] according to where they are located along the continuum of medical education.

We now consider how professionalism matures, in anticipation of describing what medical educators need to do to facilitate its development.

HOW PROFESSIONALISATION AND LEARNING OCCURS ACROSS THE CONTINUUM OF MEDICAL EDUCATION

Theoretical considerations

Medical students, house officers and practising doctors all have recurring biological and psychosocial needs that they address daily (Maslow's hierarchy). They differ in the ways they satisfy these needs, and

these may be considered under the headings of psychosocial development, moral development and reflective judgement.

Psychosocial development

The Eriksonian stage, called *intimacy versus isolation,* bears directly on proto-professionalism because it corresponds well with medical school and house officer training. This stage finds the young adult addressing issues of establishing and maintaining intimate relationships with others (e.g. spouses, children) while simultaneously learning other skills and knowledge and gaining the experiences necessary to be successful during subsequent stages. The most important characteristic of this stage in terms of proto-professionalism is that the doctor-in-training's orientations are toward learning what is required of him of her, in contrast to professionalism's more external orientation.

Doctors become independent practitioners after entering Erikson's *generativity versus stagnation* stage. This is the time when adults contribute to current and subsequent generations in ways ranging from raising families through to (in the case of doctors) addressing professional responsibilities. Prior to this, they gain sufficient experience (and reflect on it) to acquire professionalism. Evidence of movement to generativity versus stagnation is seen in increased self-awareness of a role in which one is a contributor to the health and well being of others.

Moral development

Relatively simplistic approaches to questions of morality often entertained by students when they enter medical school are insufficient to deal with problems that doctors encounter. What is required is *principled* morality (e.g. morality based on principles such as those underlying the social contract) to clarify issues involved and identify possible solutions.[24] It is unlikely that doctors will develop such ethical approaches on their own, and more likely that formal instruction in medical ethics will help proto-professionals develop them. As noted earlier, however, it is only after training has been completed that doctors will have sufficient experience and reflection to become comfortable and skilled at principled decision making.

Reflective judgement

King and Kitchener describe theoretical and empirical work to define stages of development towards high level reflective judgement.[16] Of particular interest to proto-professional development are *ill-structured problems.* These are complex and ambiguous, described with incomplete information only, require consideration of multiple perspectives, and result in multiple solutions all demanding to be evaluated. The issue here is the role played by experience and reflection on that experience; proto-professionals become more epistemologically sophisticated as they progress through their training and so better able to understand that varieties of evidence are differentially effective in supporting solutions to ill-structured problems.

In summary, elucidating professionalism in medicine requires consideration of cognitive, psychosocial and epistemological issues because all bear on the doctor-in-training's needs, and their ability to understand the needs presented to them by those with whom they interact.

How are these qualities established during the transition from new medical student to mature practitioner?

Thus far we have discussed what professionalism is, its domains and the fact that much learning takes place before mature professionalism can be realised. From the perspective of the learner we believe that proto-professionalism is about developing *identity* (i.e. what a person does and the ways in which that person relates to others). This is, in turn, a function of knowledge and skills gained from learning and experience and the phronesis arising from reflection on that experience. We suggest that the professional's development of identity is a product of 2 simultaneous processes: attainment and attrition (Fig. 2).

Attainment

This is about positive influences, ranging from curriculum design to clinical environment. Lave and Wenger refer to learning occupations having learners starting at the periphery and working toward the centre.[25] Application of their concept *legitimate peripheral participation* to medicine indicates that junior students begin at the periphery by mimicking what practising clinicians do (e.g. take histories, perform physical examinations) but without their activities being the basis for treating patients. As they mature to house officers, however, their efforts become more central as they practise under supervision – with their supervisors available when they encounter problems or make errors. Not until they have completed

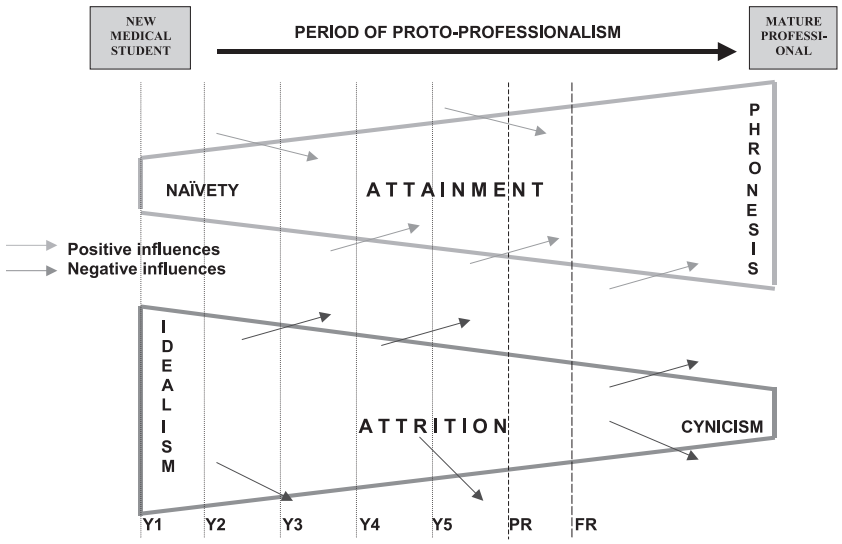

Figure 2 Proto-professionalism: a model to describe influences on the development of professionalism that transforms a medical student to a mature professional.

training are they in the centre, practising independently.

This movement from periphery to centrality carries with it different 'identities'. What students do and how they relate to others (patients, nurses, doctors) is different from what house officers do, which is different from what an independent doctor does. At each stage, learners' actions and interactions provide experiences and offer opportunities to reflect. These things do not constitute professionalism, but address learners' immediate psychosocial needs, and they are necessary for professionalism in the future.

Attrition

Attrition results from adverse effects of the environment, such as unhelpful pedagogical approaches in medical school or harshness in the complex adaptive health care systems in which medical students and doctors work.[22] Arguably the multiple pressures created in these environments have the most influence on the character of professionalism exhibited by the mature practitioner. It is likely that at times self-interest (or even self-preservation) takes precedence over altruism. Important influences of the hidden curriculum may convert the naïve idealist entering the system to a cynic.[26] These influences include negative role models, unsupportive work conditions and pressures of overwork. There is also a degree of natural decay in 'attained' qualities (i.e. people forget what they don't use regularly), although this need not detract from proto-professional development.

IMPLICATIONS FOR MEDICAL EDUCATION AND TRAINING

The preceding discussion leads to 3 implications for facilitating medical professionalism among doctors-in-training and newly independent doctors. As medical educators we need to:

- recognise that professionalism arises from a longterm combination of experience and reflection on experience;
- provide stage-appropriate experiences for proto-professionals, and
- maximise opportunities for attainment and minimise inappropriate attrition.

What does this mean in practice? At all levels it means a shift of emphasis to create a more balanced picture of the profession of medicine for proto-professionals to observe and emulate. This includes providing proper role models to demonstrate how to reflect on ill-structured problems and their associated ethical problems. In some cases, this may simply mean a senior saying, 'I really don't know what is going on here, and that makes me feel uncomfortable', so that learners will come to recognise their limits as indicating that they are human and not failures as doctors. In other cases, it means asking proto-professionals to think out loud in working through the problems they encounter.

Encouragement and support is essential for proto-professionals working in situations characterised by uncertainty. This will frequently be as simple as the supervisor asking, 'Well, what do you think is going

Underemphasised	*Emphasised*
Art	Science
Professionalism	Expertise[31]
Reflective practitioner	Technical rationality[17]
Mindfulness	Mindlessness[20]
Humanism	Bioscience
Subjective	Objective
Empathy	Detachment
Relationship-centred	Evidence-based
Generalism	Specialism
Collegiality	Hierarchy
Inter-professionalism	Intra-professionalism

Figure 3 Requirements for proto-professionals currently underemphasised and emphasised in undergraduate and postgraduate training programmes.

on here?' before offering suggestions on how to proceed, but will demand more on other occasions.

Legitimate peripheral participation carries implications for how proto-professionalism is assessed and evaluated, particularly for medical students. It says that:

- looking for evidence of mature professionalism is premature at best;
- the most important task is simply asking learners what they perceive their responsibilities to be, and
- evidence of proto-professionalism should be sought not only in what students do and how they interact with others, but also in their own observations on their learning activities.

We believe approaches to learning are acquired early in training and – as discussed above – shape the learner's identity[27] and that proto-professionals need explicit rather than implicit attention given to our 6 suggested domains of professionalism throughout training. While it is beyond our scope to discuss details of content and the assessments that should underpin it across the medical education continuum, we support the increasing attention given to the development of meta-skills such as reflection.[28–30] We suggest reconsidering provision in currently underemphasised areas in primary medical degrees (Fig. 3). We do not denigrate science, objectivity, specialism and so forth: all are essential to good medical professionalism. However, we propose a more evident balance, and we believe taking these actions will foster professionalisation from the earliest opportunities. Once acquired, medical professionalism must be maintained – it is a state, not a trait. Approaches to licensure and relicensure are recognising this increasingly.

CONCLUSIONS

This paper argues for a broad view of medical professionalism incorporating 6 domains. These may be classified as those areas focusing on the doctor alone (ethical practice, reflection and responsibility), and those requiring collaboration (respect for patients, teamwork and social responsibility).

We assert that attainment of professionalism occurs over a prolonged period of learning, experience and maturation, and suggest using the term 'proto-professionalism' to describe this period. The mature professional exhibits practical wisdom (phronesis) in addition to specialised knowledge and technical skills.

The educational and work environments shape acquisition and maintenance in positive (attainment) and negative (attrition) ways. The challenge for those involved across the continuum of medical education is to optimise the conditions for the acquisition and maintenance of professionalism in medicine.

Contributors: both authors are jointly responsible for the final paper. SRH conducted the review, conceived the domains and the structural representation of professionalism, and wrote the initial drafts. HBS revised the document and contributed the theoretical sections.
Acknowledgements: we thank Dr Marianna Shershneva (University of Wisconsin) and David Prideaux (University of Flinders, Adelaide, South Australia) for commenting helpfully on early drafts. Particular thanks are due to Drs David Leach and Patricia Surdyk (ACGME) and Dr Ellen Cosgrove (University of New Mexico) for their kind advice and inspiration.
Funding: SRH was funded by a Leverhulme Trust Study Abroad Fellowship for part of this work.
Conflicts of interest: none.
Ethical approval: not applicable.

REFERENCES

1 Armstrong EG, Doyle J, Bennett NL. Transformative professional development of physicians as edu-

cators: assessment of a model. *Acad Med* 2003;**78** (7):702–7.
2 Arnold L. Assessing professional behaviour: yesterday, today and tomorrow. *Acad Med* 2002;**77** (6):58–70.
3 Swick H. Towards a normative definition of medical professionalism. *Acad Med* 2000;**75** (6):77–81.
4 Cruess R, Cruess S, Johnston SE. Renewing professionalism: an opportunity for medicine. *Acad Med* 1999;**74** (8):878–84.
5 Johnson T. *Professions and Power*. London: Macmillan 1972.
6 Freidson E. *Professionalism Reborn: Theory, Prophesy and Policy*. Chicago: University of Chicago Press 1994.
7 General Medical Council. *Good Medical Practice*. London: GMC 2001.
8 Sox H, ed. Medical professionalism in the new millennium: a physician charter. Ann Intern Med 2002; **136** (3):243–6.
9 Pellegrino ED, Veatch RM, Langan JP, eds. *Ethics, Trust and the Professions. Philosophical and Cultural Aspects*. Georgetown, Washington DC: Georgetown University Press 1991.
10 Irvine D. The performance of doctors: the new professionalism. *Lancet* 1999;**353**:1174–7.
11 Rothman DJ. Medical professionalism: focusing on the real issues. *N Engl J Med* 2000;**342** (17):1284–6.
12 Calman K. The profession of medicine. *BMJ* 1994;**309**:1140–4.
13 Ginsburg S, Regehr G, Hatala R *et al*. Context, conflict and resolution: a new conceptual framework for evaluating professionalism. *Acad Med* 2000;**75** (10 Suppl):82–7.
14 Wear D, Castellani B. The development of professionalism: curriculum matters. *Acad Med* 2000;**75** (6):602–11.
15 Kuczewski M. Developing competency in professionalism: the potential and the pitfalls. ACGME Bulletin 2001;3–6.
16 King PM, Kitchener KS. *Developing Reflective Judgement*. San Francisco: Jossey-Bass 1994.
17 Schon DA. *Educating the Reflective Practitioner*. San Francisco: Jossey-Bass 1987.
18 Polanyi M. *Personal Knowledge: Towards a Post-critical Philosophy*. Chicago: University of Chicago Press 1962.
19 Coles C, Fish D. *Developing Professional Judgement in Health Care: Learning through the Critical Appreciation of Practice*. Oxford: Butterworth Heinemann 1998.
20 Epstein RM. Mindful practice. *JAMA* 1999;**282** (9):833–9.
21 Eraut M. *Developing Professional Knowledge and Competence*. London: Falmer Press 1994.
22 Fraser SW, Greenhalgh T. Coping with complexity: educating for capability. *BMJ* 2001;**323**:799–803.
23 Ginsburg S, Regehr G, Lingard L. To be and not to be: the paradox of the emerging professional stance. *Med Educ* 2003;**37** (4):350–8.
24 Self DJ, Baldwin DC. Moral reasoning in medicine. In: Rest JR, Narvaez D, eds. *Moral Development in the Professions*. Hillsdale, New Jersey: Lawrence Erlbaum Associates 1994;163–72.
25 Lave J, Wenger E. *Situated Learning: Legitimate Peripheral Participation*. Cambridge: Cambridge University Press 1991.
26 Hafferty FW. Beyond curriculum reform: confronting medicine's hidden curriculum. *Acad Med* 2001;**76** (10):403–7.
27 Slotnick HB. How doctors learn: education and learning across the medical school to practice trajectory. *Acad Med* 2001;**76** (10):1013–26.
28 Driessen EW, van Tartwijk J, van der Vleuten CPM *et al*. Use of portfolios in early undergraduate training. *Med Teacher* 2003;**25** (1):18–23.
29 Gordon J. Fostering students' personal and professional development in medicine: a new framework for PPD. *Med Educ* 2003;**37** (4):341–9.
30 Epstein RM, Hundert EM. Defining and assessing professional competence. *JAMA* 2002;**287** (2):226–35.
31 Cohen JJ. Measuring professionalism: listening to our students. *Acad Med* 1999;**74** (9):1010.

Received 4 January 2004; editorial comments to authors 23 February 2004, 22 April 2004; accepted for publication 6 May 2004