Medical Education in the United Kingdom – A view from an educationalist working in medicine

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Introduction

I was approached to write this paper by a fellow medical educator in Japan, as a way of giving insights into how medical education is constructed in the UK. It is essentially a descriptive piece in which I have tried to cover the basic frameworks and to describe some of medical education's key interested parties. I also include a section that must be understood as a personal construction of what I believe medical education and its contexts to be, and finish with a description of faculty development work designed specifically to meet the needs of clinically-based medical teachers.

Stakeholders in medical education for the UK.

There are a great many stakeholders in medical education in the UK, at both under and post graduate levels, and the following listing, which although extensive, is by no means the entirety of all those involved. The central body is, arguably, the General Medical Council (GMC) (considered in greater detail later). There are also the 32 medical schools (recognised by the GMC), the National Health Service (NHS) - who is the primary employer of medics, The Royal Colleges - who oversee the content of specialty training including specialty examinations, The Postgraduate Medical Education and Training Board (PMETB) - who is involved with the governance of postgraduate medical education (along with the GMC), The Quality Assurance Agency (QAA) - who ensure the quality of degrees etc within the university sector, the Deaneries - who are responsible for the education, organisation and management of postgraduate trainees, the Trusts – where postgraduate training is undertaken, The Department of Health (DoH) and the Strategic Health Authorities (SHA's) - who represent such things as work-force planning and other government interests including curricula developments. The Specialty Committees and other such bodies devoted to medical education have representative groups and, as the UK is part of the European Union, we also have to comply with the EU regulations. The main doctor's union The British Medical Association (BMA) also contributes to the field of medical education, primarily through its publications and conferences.

It is probable that our number and range of stakeholders relates both to the fact that in the UK we have had several hundred years of medical education - for example the Royal College of Physicians was established 1518 and the Royal College of Surgeons was evolving from

1540 - and we also have a National Health Service which provides free healthcare, at the point-of-delivery, for all our citizens. The range and variety of interested parties creates both equilibrium and flux within medical education, and again arguably, the dialogues and debates contribute to continual development of our processes.

The role of the GMC

As noted, the General Medical Council (GMC) is one of the primary bodies overseeing medicine and medical education in the UK; its purpose is to; 'protect, promote and maintain the health and safety of the public by ensuring proper standards in the practice of medicine' (GMC 2009¹)). Their legislative areas of responsibility under the *Medical Act 1983* are: keeping up-to-date registers of qualified doctors, fostering good medical practice, promoting high standards of medical education and dealing firmly and fairly with doctors whose fitness to practice is in doubt.

Within their educational remit, the GMC oversees and provides the 'outcomes and standards for undergraduate medical education' (op cit) and their document Tomorrow's Doctors outlines what they 'expect medical schools to deliver' in terms of the organisation and content of undergraduate training for doctors. They state; 'The GMC, the medical schools, the NHS, doctors and students all have different and complementary roles in medical education' (GMC 2009²⁾), and the following are examples of these expectations a) the GMC itself and b) the medical schools (NB a full list of all stakeholders' responsibilities is in Tomorrow's Doctors):

"The GMC is responsible for:

- a) Protecting, promoting and maintaining the health and safety of the public.
- b) Promoting high standards of medical education.
- c) Deciding on the knowledge, skills and behaviours required of graduates.
- d) Setting the standard of expertise that students need to achieve at qualifying examinations or assessments.
- e) Making sure that:
- i. the teaching and learning opportunities provided allow students to meet our requirements
- ii. the standard of expertise we have set is maintained by medical schools at qualifying examinations."

[& etc...]

"Medical schools are responsible for:

- a) Protecting patients and taking appropriate steps to minimise any fist of harm to anyone as a result of the training of their medical students.
- b) Managing and enhancing the quality of the medical education programmes

- c) Delivering medical education in accordance with principles of equality.
- d) Selecting students for admission
- e) Providing a curriculum and associated assessments that meet:
- iii. the standards and outcomes in Tomorrow's Doctors
- iv. the requirements of the EU Medical Directive
- f) Providing academic and general support to students.
- g) Providing support and training to people who teach and supervise students."

[& etc....]

As can be seen the two lists above offers the framework for duties. The content, or syllabus, of the educational programme is also outlined by the GMC in Tomorrow's Doctors³⁾ - the following is an example:

"Outcomes 1 – The doctor as a scholar and scientist.

The graduate will be able to apply to medical practice biomedical scientific principles, method and knowledge relating to: anatomy, biochemistry, cell biology, genetics, immunology, microbiology, molecular biology, nutrition, pathology, pharmacology and physiology. The graduate will be able to:

- a) Explain normal human structure and functions.
- b) Explain the scientific basis for common disease presentations
- c) Justify the selection of appropriate investigations for common clinical cases..."[& etc...]

What is important to note is that within all their frameworks the GMC has created processes which have thus far avoided a 'national curriculum' i.e. a set of tightly specific, highly detailed, items with which individuals and institutions have to comply. By offering a broad-based set of criteria to each area, it allows medical schools the scope to create programmes which offer a variety of approaches to undergraduate medical education. Such flexibility enables a constant review and comparison of methods, content and processes and, in my view, thereby gives strength to the system as a whole.

Professionalising Medical Education

Another of the stakeholders mentioned above is the Department of Health. This next section is a description of one initiative from the early nineties – to give insight into an aspect of the relationship they have with the GMC (another reason for its inclusion will become clear later in this text). At that time the DoH offered monies to medical schools specifically to facilitate the curriculum reforms proposed in the GMC's original 1993 Tomorrow's Doctors. The funding came under the heading; 'Undergraduate Medical Curriculum Implementation

Support Scheme' (UMCISS) and enabled medical schools to recruit educationalists into the field. The posts required people conversant with the discipline of education, i.e. understanding of elements such as; curriculum development, assessment, teaching and learning methods, staff development, educational theory and practice and educational philosophy. Also, in that time frame, in addition to the content suggested by Tomorrow's Doctors, there was an new expectation that courses would 'clearly define aims and learning outcomes, modes of delivery and assessment' (McKimm and Jollie 2003⁴⁾) and those involved would need to understand and manage the technical aspects of education and curriculum development - to better meet the demands of the GMC. In some respects this whole drift could be interpreted as the 'professionalising' of medical education, and the appointment of educationalists directly into the team was perceived as both supporting curriculum and facilitating staff development.

Parallel to these initiatives in medicine there were also changes being implemented within all higher education institutes. Barnett⁵⁾ pointed out, "...higher education remains largely amateur in the construction of its curricula... many departments have teaching committees but they lack the conceptual resources to construct curricula on an informed basis." Thus the professionalising process was sector-wide and not just targeted toward medical education. 'The Dearing Report'⁶⁾, (1997), stated: "The higher education sector will comprise a community of free-standing institutions dedicated to the creation of a learning society and the pursuit of excellence in their diverse missions....[and] all will be committed to scholarship and to excellence in the management of learning and teaching."

Professionalisation as an overarching driver and goal was facilitated directly by the UK Government – from the recommendations of the Dearing Report – when it funded the Institute for Learning and Teaching (ILT), since re-formed into the Higher Education Academy (HEA). Both initiatives had the central aim to ensure that lecturers and teachers working in higher education had access and support to become educators as well as subject specialists. Most universities now have their own staff development units and many other bodies have set up programmes and courses to meet the needs of faculty.

From the perspective of medical educators, however, it was also been perceived that general teacher education programmes might not meet the needs of clinical teachers, indeed my own early observations in the field noted that many of the initiatives offered by the wider higher education contexts were predicated on classroom based teaching, which clinically-based teaching is necessarily not. The Academy of Medical Educators (AoME), created in 2006, states: 'The AoME⁷ (2009:2) recognises that medical education is distinct from teaching in higher education in general because of the central place that patient care occupies not only in teaching and learning but also in assessment and feedback, and in quality assurance.' Alongside this, Hays⁸ (2007) noted that many healthcare professionals were not expecting to have to tackle 'any further academic training outside their own field'. So although there has been a broad level of take up of professional development this is by no means across the board – nor has it penetrated completely into the generality of senior colleagues.

An Educationalists view of Medical Education

This section is offered to give some insights into the understandings of medicine and medical education and although it is a personal view it hopes to give a defensible outline of its purposes, views and typical constructions. This is a broad account of what I believe to be the various elements that characterise medicine and medical education, and their impact on those in the system.

Some background and my professional warrant for constructing these theories; my first degree and PhD are in education and I previously worked in a university department of education and educational research. I gained my initial experience of medical education in a medical deanery setting, which oversaw postgraduate training, and was recruited into undergraduate medical and dental education in the early nineties with support from the dental version of UMCISS monies (ref earlier section regarding DoH projects). Very early on in my post in the undergraduate setting, the work I had been involved with as a teacher educator came to the fore and, with the support of the Deans and the Principal of the Medical and Dental Schools, I set up a programme of teacher education - which was accredited through the university. However, and perhaps more importantly, through the interactions with colleagues and with some background in ethnography I learnt about medical education - with its 'totality' as an educational activity and context.

Medical Education - its processes, practices and philosophy.

This section is an exploration of significant factors which I believe have particular impact on medical education - each divided into elements and with the totality giving a picture of its specific context and practices.

Element 1. The length of training. The process is a long one in comparison to other professional groups, e.g. mainstream teaching, law or architecture. At its absolute quickest, before full qualification and consultant post (which equals professional autonomy), the training pathway is a commitment of 11 years (approx). However, this is extended to between 13 -15 years before Consultant status can be obtained in some of the specialties. In some respects medicine is an all-encompassing profession, where the impact on the individual's life is huge and professional progress requires extremely high levels of commitment - over what amounts to lengthy time-frames.

Element 2. The knowledge base. Medicine as a subject area has a huge knowledge base. The length of the undergraduate programme alone attests to this, coupled with the range and diversity of subjects that have to be covered at both under and postgraduate levels. And, in spite of the influence of the information age, to practice in medicine individuals will still need to 'know' i.e. to have in their heads, a great deal of often disparate and complex information.

Element 3. The teacher base. Throughout the whole training period, except possibly for the first two years of their undergraduate programme, neophyte doctors are taught by practising clinicians i.e. by the doctors who deliver medical care. Furthermore, from their sixth year (year one, post-graduate), these new, first-stage qualified doctors (FY1s), become both practitioners, delivering the medical service, and part of the cohort of teachers engaged in educating doctors more junior than themselves. Thus not only is the commitment in terms of time and energy going to be significant, also both the professional and social world of each individual will likely be dominated by medicine. This means that the socialisation (i.e. the taking on of the norms of the culture) effectively becomes the 'total' experience in medical education. Descriptive work such as Becker's 'Boys in White' (Becker⁹⁾ et al 1961) - which gives a close-grain, sociological, account of medical education - shows clearly this process of enculturation. It illustrates how individuals learn the skills, habits and customs (i.e. norms) of medicine and although, in some respects, the book might be considered dated on the whole it presents a useful account of the process of becoming a doctor. Using Becker's assertions, from the perspective of the two points raised above, i.e. the length of training and the core cohort of medical teachers, it is worth thinking about the consequences such socialisation might have. In the essay 'Making the Grade Revisited' (Becker et al 1995¹⁰⁾) the authors draw attention to processes and the personnel students were 'subjected' to. The point being made is that like others in such positions medics have found a way to adapt themselves to being 'subjects'. Because their professional autonomy will be a long way in the future and that the learning processes are not in their gift to influence, Becker et al argued: '...students created specific cultural practices as a way of dealing with the problems created for them by their subjection to the faculty'. They went as far to say; 'that the problems created by subjection lead to the development of culture, of ideas and practices which serve to cushion or oppose the effects of subjection'. Anecdotally, and in summary, culturally medics in training are professional (perpetual) adolescents; i.e. are continually in a position of dependence. From any standpoint not least education this is an interesting place from which to develop your attitude toward your subject, your learning and your teachers. Furthermore, as the development of judgment is central to becoming a good clinician, the problems raised by these 'dependant' educational processes may well negatively impact on doctors learning the fundamentals of their craft effectively.

Element 4. The theoretical standpoint. The paradigm that underpins medicine as a subject area is science, and science itself adheres to the paradigm of positivism – encompassing notions such as explanation, causation and laws. The positivist viewpoint, with its essential reduction to either 'true or not true', is an intellectual model which fits most closely to the content and structures within the medical knowledge base (and has become the frame that determines most medical understandings). To operate within such a paradigm is hardly surprising when recognising points such as the reduction or elimination of error as obligations placed upon medicine by all its stakeholders. Luhmann in talking about risk states: 'risk is harm that is caused by our own decisions' 11). Thus we see both the medical profession and

doctors individually respond directly to this challenge by endeavoring to minimise any such risk - and the positivist position offers itself as a most compelling practice-base by apparently being; 'reliable', 'rigorous', and 'replicable'. The significance of this is explored below.

Element 5. Medical teaching. To support and promote the particular intellectual position suggested by positivism medical teaching is in itself generally traditional. Primarily a 'technical rational' approach, which comprises the 'transmission' process whereby nuggets of knowledge are handed from the teacher to the learner and then back - in both direct teaching and settings such as exams - this also features within medicine's other key teaching process that of the apprenticeship, and both are essentially training models. That such a transmission model is replicable has great appeal to the truth theories held by those with a positivist or scientific mind i.e. medicine

From the perspective of medical education the problem, as alluded to above, is that medicine also favours this particular theoretical base to give meaning to, and understand, most of its other practices – including teaching and education. However, the reality is that medicine and education, in common with all other forms of human learning, is an amalgam of knowledge, experience, skills, responsibility and values - activities somewhat more complex than simply transmit/receive, true/false. The acquisition of knowledge is not just a quantitative thing, it is also qualitative. Indeed, as Coles¹²⁾ states 'when we learn something we don't end up knowing more but knowing different'. So learning becomes transformational – that through learning we are changed and not merely 'added to'¹³⁾ and, therefore, we must also acknowledge the psychological and emotional dimensions of learning and being a learner.

Element 6. Medicine's internal conflict; is it art or science? Critically, in this discourse, we can see that medicine's positivist standpoint must also paradoxically deny one of its favorite maxims - that medicine is both an art and a science. Sir William Osler the early 20th century physician, commented that; 'if there were no individual variability, medicine would have been science not an art' - meaning that the patient or human element actually, and centrally, must confound any pure science approach. Experience has shown that the more senior the clinician, the more s/he appreciates the notion of medicine as an 'art' as a central definition of his/her working practices. My explanation is that such clinicians come to acknowledge that professional practice can never be 'absolute' because, indeed, it is never complete or total. They can never know all there is to know, as 'all' and 'everything' are simply myths, like perfection. Each patient is different and therefore, to an extent, each solution must be contingent. Eisner¹⁴⁾ offers a useful definition; that of the 'cultivation of productive idiosyncrasy', which moves us from a classic apprenticeship model - with its unquestioning hand-over of knowledge - to one where information is mediated, and possibly contested, and which understands that competence is not the same as needing to 'know' everything. On the contrary, it may well concern knowing when you don't know i.e. knowing your own limits. Medical practice, from this standpoint, can be characterised as applied science, mediated by

clinical judgment and conducted through interpersonal and communication skills. So competence is not merely a simple 'can do' but also implies professional maturity and ease with making difficult decisions and complex judgments. (Needless to say, such practice brings medicine in line with other professional groups, even if medicine's consequences and/or imperatives are somewhat different). In my experience, to improve their practice and toward 'best judgments', mature and responsible doctors engage themselves in what I would describe as an ongoing cycle of; professional action, reflection, and new action etc, i.e. a holistic integration of understandings, abilities and professional judgments – in other words 'educational' processes and practices. And, just to remind us, the key differential between education and training is that training is about teaching for a known outcome, while education covers the known and is about discovering the unknown and also furthering such explorations of what the 'known' might mean.

This moves us to the final section of my text which is a consideration of teacher education within this context.

Teacher Education for Clinicians

As I alluded to earlier, I have spent much of my time in medical education constructing and delivering teacher education programmes to clinicians. From my experiences working with colleagues, it is clear that they appreciated the teacher developments I introduced because their primary delivery point was the workplace. Indeed, when we look at medics as a 'client base', we can see that the majority of medical teaching takes place in the workplace e.g. ward rounds, theatre, outpatients, clinics, surgeries and etc, and although some teaching is classroom or lecture based the vast majority for most practicing clinicians is not. I would estimate the teaching duties of some of our clinician educators to be 95% 'service based' and 5% 'chalk and talk'. Further to this we must also understand that clinical teaching is generally opportunistic, ad hoc and relating to the patients as they present, and therefore not in the gift of the teacher to pre-plan or control. Both of these elements now recognised specifically by the institution and work of The AoME.

The most popular programme I designed meets both individual staff development requirements and 'quality assures' teaching for institutions (i.e. a QA and QE model). Since developing it in the mid nineties it is my understanding that its now been delivered to some 1,000+ medical consultants, under the auspices of the London based deaneries.

Teacher Coaching – a programme of support

At a theoretical level, and in reference to my points above, commonly 'teaching skills' refer to and are understood as the abilities teachers display in classrooms; such as the management, preparation and delivery of the learning materials - all built around the specific

subject knowledge. But, as alluded to before, teaching comprises more than just these elements. In the example of medicine (a science, mediated by clinical judgement and conducted through interpersonal and communication skills) doctors in both clinical practice and teaching must not only know their subject, but also skills which encompass the understandings and considerations of the effect and affect they as individuals may have on others i.e. the skill of self-awareness. Described by Gardner¹⁵⁾ as 'a) *inter* personal skills; the affective, interpersonal intelligence modalities, [which are] the ability to understand other people, what motivates them and how to work co-operatively with them, and b) *intra* personal skills; which encompass the capacity to form an accurate model of oneself'.

Furthermore, alongside self-awareness, they must also develop their ability to 'reflect on practice' (Schön¹⁶⁾ 1983). Holly¹⁷⁾ (1989) reminds us: 'Conscious reflection and deliberation concerning students, curricula, oneself and the profession, are inherent in professional practice'. Essentially, she is saying that such deliberations are integral to the professional practice of any educator – whatever their background. From this perspective, we expect teachers to consider in a reflective manner the work they do. This type of reflection aims to help individuals to both consider their own processes and understandings and also the processes and understandings of those they teach. Moon¹⁸⁾ describes the activities embodied within this type reflective practice, as a way to:

- Consider the process of our own learning a process of metacognition (thinking about thinking).
- Critically review something our own behaviour, that of others, or the products of behaviour.
- Build a theory from observation: we draw theory from generalizations sometimes in practical situations, sometimes thoughts, and/or a mixture of the two.
- Engage in personal or self-development
- Make decisions or resolve uncertainty.
- Empower or emancipate ourselves as individuals or to empower/emancipate ourselves within the context of our social group.

An important aspect of reflection is the process can often makes explicit, in a way previously not easy to access, our own meanings - somewhat like engaging in a conversation with ourselves - through which the tacit becomes explicit and offering us a way of standing back from ourselves and looking, as if a stranger, to what we are doing. By reflecting effectively on what we already do we will be enabled to expand and augment what we know and understand of our practices – to be able to see pattern and difference and to use these to our and the student's advantage. From these perspectives a major part of my one-to-one coaching work has been to ask teachers to reflect on how (and why) their actions and activities may influence or affect others, putting to them a humanitarian, liberal, philosophy that in the name of education, as professional educators, they should neither harm nor permit harm to

others. A notion similar to a section of the Hippocratic Oath which states: 'I will prescribe regimens for the good of my patients according to my ability and my judgment and never do harm to anyone.'

In terms of format the programme is, as mentioned earlier, entirely workplace based, with candidates observed and supported one-to-one during a series of (clinical) teaching events. It runs through three cycles of observation, feedback and reflection. The observations are constructed loosely around a time-line process and offer a narrative for the teacher to use in their reflections. Essentially the whole process is 'bespoke' i.e. teacher education tailored exactly to the individual's needs. The method is modeled on mainstream teacher training practices and as it is workplace-based it creates little disruption to service delivery and avoids the cost and inconvenience of absence from clinics or departments. Given the clinical context, with its shift away from a teacher controlled environment of the classroom, I have evolved four key areas to frame the observations against: a) interpersonal skills, b) communication skills, c) classroom management and d) learner management, and these give the teacher a focus for their reflections and actions. The following, taken from the course handbook ¹⁹⁾, gives an explanation of each of these.

i. Interpersonal Skills.

These are the professional interpersonal relationships that the teacher develops, to maximise the learning potential of their students. Essentially, these are key to any teaching activity particularly as teaching is not simply a monologue, it must be a dialogue. For some candidates, the issue of purposely trying to appreciate the position/standpoint of their students proves to be the critical shift in their understandings and practices as teachers. Experience has shown that the simple question: 'how do you think the student felt about what you said or did?' has produced extremely fruitful reflections for the teacher on their actions and activities.

As a process, we connect the notion of 'empathy' to a simple measure of 'do as you would be done by'. By linking this to a maxim (see above) that: 'education should neither harm us nor permit us to harm others', we create a tool against which to judge our activities. Therefore the question: 'how would I feel if that had been done to me?' helps us to not only reflect on our practice, but also to judge it with some confidence.

ii. Communication Skills.

This is the manner in which the teacher puts the relevant information across - i.e. the organisation of their materials, if this is relevant, and/or the use of technologies if appropriate. Also key, of course, the more simple factors such as the use of voice, gesture and body language. For those working within the field of communication skills, we are fully aware that we have disaggregated interpersonal skills and communication skills. This has been

done because when interpersonal skills are subsumed within communication skills some of their subtleties are lost. We wanted to emphasise that communication skills comprise many levels and that a key task for the teacher would be the recognition of the impact of themselves as individuals (through personality, role, status etc) on their learners. A further point is that it is incumbent upon teachers to make sure that their actions and interactions promote the learning of their students, not disrupt it.

iii. Classroom Management.

This involves the organisation of the space and equipment to facilitate the achievement of the teacher's desired aims. In many respects this is simply the physical organisation of the spaces, i.e. the chairs and tables that are allotted to the session - but this is not to underestimate the impact that simply moving the furniture or yourself has on the learning potential of a session. The discussion that won't happen because the teacher remains standing in front of the board or the interaction between the groups that won't flow because the chairs appear fastened in rows to the floor... Simple things, but easily missed.

iv. Learner Management.

The organisation of the situation that makes it possible for the students to undertake what is required of them. Again we disaggregate – as generally learner management is seen as substrata of classroom management. But, we believe that learner management can be seen more fruitfully as a separate topic and gives the candidate a better chance to consider it more fully.

So what does learner management cover? For example, from within the medical context: You want all the students to listen to some 'interesting heart sounds', but Mrs. Smith, the 'owner' of the heart sounds, is too frail to manage more than one or two of your group of eight listening to her chest. How then might you maximise this important learning experience for the whole group? This type of dilemma is typical, especially in an environment where the learning materials are patients, an environment that can be ad hoc and opportunistic. There is of course no easy answer to these problems, as it is clear that the best experience will be had by the ones who actually do get to hear these heart sounds. However, teachers taking time to consider 'what' in terms of 'why' can often help themselves open up some creative responses to 'how'. So maybe getting the 'listening' students to explain to the rest of the group what they have heard (and use their comments as a base for your own interjections) will enable all to be engaged and as many as possible to share the understandings of the few who could hear. Their descriptions and questions will also give you insights into how students make meanings from their experiences."

Holding these four areas in mind consider this example of a clinically based teaching

session (a short excerpt taken from an observation of a consultant teaching undergraduates). You will note the 4 key areas are not necessary explicit indeed as in this instance they are mostly implicit, however they are present and can be used by the observer and the teacher as part of their 'tool-kit' to deconstruct and analyse the teaching event.

- "2.25. It is nice that the students help each other that they are paying attention to each other's needs. You explain some of the niceties of listening to the back patients breathing through mouthpieces etc.
- 2.30. You ask a direct question of the students and a couple of them have a go.
- Could you characterise what you are listening to when you have asked a question?

The discussion is around what they might expect to hear and why. You invite the students to have another go.

- It is good that you went back to the practical examination as this enabled the students to consolidate the teaching points you have made.
- A nice exchange about "walking in the snow", "creaking in the timbers" as ways of understanding chest sounds. It is good that you are not creating the impression that these are set in stone. You are taking time with this patient as you have found that her condition allows for the students to get a real example of the point you have raised.
- 2.40. Very nice intervention of the student who admitted that he could not hear any difference between the two sides. You discussed the point and at no stage made him feel inadequate indeed you supported him by saying that it is always easy for people to forget what it was like to not know immediately."

The 4 key areas and the observation text both offer insight to how this process fosters the full breadth of interactions needed to achieve the professional reflection and a holistic integration of understandings, abilities, skills and judgments of the professional educator.

In conclusion

This paper has outlined medical education in the UK from a broad structural and personal perspective and the areas covered would be typical to any educator's areas of understanding - not just medical education. In this end-stage I must also acknowledge some significant points not covered in the text - which are: The issues raised by the politics involved in the competing stakeholders needs, the power differentials that remain in medical education and the difficulties of scale involved in any change management processes (such as teacher

education interventions). Each of these areas would be worthy of a paper in themselves and therefore are beyond the scope of this paper which why they have not been explored directly. However a point I feel worth making (as guidance to those embarking on educational interventions in medicine), the work I have undertaken which has been the most successful has always had a champion from the senior levels of medicine, a feature noted by others working in medical education, so for those embarking in a career in medical education you would be well advised to identify and align yourselves with such individuals (or groups), or no matter how exceptional, innovative and relevant your ideas are, they will never see the light of day.

Danë Goodsman. February 2010

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