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Reflections

The Incapacitating Effects of Competence: A Critique

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Introduction

Today we are talking about competence-based approaches to education and training. Two or three years ago, it would have been audit or, on the other side of the Atlantic, the impact of Health Maintenance Organizations on education. More recently, the debate has raged about the relevance of evidence-based medicine. Ten years ago, we might all have been extolling the management of education by objectives. For years, we have watched the exponents of problem-based learning very successfully setting out their pitch. We have believed in horizontal integration, vertical integration, adult learning principles, small groups, authentic assessment, ... who knows? Some of us might even be prepared to defend lectures and rote learning. Which one of us has not made up for the child-centred education our children receive by making them chant tables in the car on the way to school?

So, what are we to make of this history of changing educational fashion and practice? Does the truth change so frequently? Does educational research move so fast? Does the problem change so quickly that we constantly need to find new solutions? Probably not. Are we seeking the holy grail of education, unable to convince ourselves that there really is not one? Possibly. But there are other explanations too for our constant hurtle through a Kafka-esque landscape of metamorphosing educational entities which we grasp and believe in until they shrink back into the shadows and become memories of another beautiful outfit that the Emperor wore.

And here we are. This month's panacea is competence-based education [if that is not a contradiction in terms]. And I am here to represent the anti-panacea school of educational development. I am also here to represent the profession of medicine – because someone has to defend it against imported and inappropriate ways of thinking that are quite possibly threatening to the profession itself, and strangely, often the worst enemy of the profession is the professionals themselves.

If it is any compensation, most other professions are being attacked by the same disorder. Law, social work, education – all are displaying signs of narrowing to sets

of practical skills. In the absolute absence of convincing [or indeed any] evidence of the effectiveness of such approaches, I do not find this universality reassuring. I find it worrying and sinister.

So, to begin with, I shall rehearse the discussion of what exactly we mean by competence. I shall then present all the arguments and reservations that are being expressed [by me and many others] about the use of competence frameworks as they relate to medicine and to clinical practice. Next, I shall try to understand why it is that these different views of how education should be managed get such a grip in a profession which, quite rightly, prides itself on its intellect, its judgment and its independence. And I shall end with a simple statement about where I think we should go from here.

Defining terms

But first we had better define our terms. What do we mean by competence and competency? Well, I looked through the journals and the literature for enlightenment on this subject. And I found a lot on competence. Too much, in fact, far too much. But few definitions and in the end, the definition of the term is not really important. It is what people do with it that counts. While we are talking about definitions of competence we might not notice the professional culture being dismantled. Part of my line of argument is that these new ideas very often are not about education at all. They are actually about external, managerial or political control. I shall come back to that point a bit later on.

However, although I am not prepared to discuss definitions, I do think that we should discuss the implications of the fact that the discussion is going on. In a recent issue of Medical Teacher, there is an article entitled ‘What is competence?’ (Hager & Gonszi, 1996) and here we are discussing it again. If we do not know, then why has it been adopted? If no-one has any hard evidence about the effects of using a competence framework, then why are we [or should I say you] prepared to adopt it? There is a serious debate going on in the educational world about the likely negative effects of such a framework [and about the possible beneficial effects, too, I suppose], then why are you prepared to adopt a practice while the jury is still seriously out? Just as medicine, in its time, has adopted problem-based learning, evidence-based medicine, audit, CME, adult learning and whole host of other so far largely unproven ideas. I shall come back to why this is later. In the meanwhile, I leave you to ponder the question of why we are prepared to adopt a practice, even the definition of which we really have not agreed.

So, having decided that we really are not too sure what we are talking about, let us assume that we do and go on to look at the reservations that I and many others have about applying the model to medicine. I do this in the honest hope that it is not too late.

Behaviourist tradition, accountability and efficiency

Firstly, we should consider where the model came from, because this itself indicates some of its dangers. One of the best articles I know is that by Hyland (1993). Let me quote some salient and telling points from Hyland's argument:

Firstly, he criticises its behaviourist basis:

> This attempt to specify exactly what is to be achieved and measured is, of course, nothing more than reconstituted behaviourism .... Constructed out of a 'fusion of behavioural objectives and accountability' ..., the movement provided irresistible appeal to those seeking accountability and input-output efficiency in the new economic realism of the 1980s.'

So, we can see that these twin factors of apparent accountability and efficiency of education or training would appeal to medicine which has become increasingly concerned to demonstrate public accountability in times of decreasing resources and increasing litigation. This has made the appeal of apparently focussed educational effort very alluring.

But these factors of accountability and efficiency are not necessarily delivered by the system that offers them. We have no evidence that it does. And while we might focus on these moral and economic factors, perhaps we are ignoring the real problem, which is the narrow behaviourist approach of competence-based frameworks. Ron Barnett's book 'The Limits of Competence', offers a devastating critique of the competence model for higher and professional education. He refers to the push towards operationalising academic and professional knowledge and skill, which he views as an 'impoverished view' of professionalism.

Inadequacy of behaviourist view

Behavioural objectives, or competences, can never describe complex human behaviour. The sum of what professionals do is far greater than any of the parts that can be described in competence terms. They are making judgments, managing cases in the absence of definitive information, taking a multiplicity of factors into account, dealing with each case on its own merits, almost never replicating precisely the same approach because every case is never exactly like any other. The application of a corpus of knowledge with judgment to an individual client situation is the essence of professionalism. To replace it with prescriptions for behaviour, whether derived from academic debate, management teams, or randomized controlled trials, undermines the core of the profession.

Sometimes it is necessary for a profession to state quite clearly that what it does is often simply indescribable in any generalisable way. I did my PhD and some subsequent research on doctors' thinking processes. While I and many others have contributed to a detailed understanding of many aspects of clinical resoning, one fundamental truth colours all the findings. There is *no* unitary, common, universal, approach to a problem. Quite the opposite – the hallmark of the expert and exper-

ienced clinician is that person's total individuality in what she knows, what she has experienced and how she uses that experience. The greater the expertise, the greater the individuality.

These are the things that make medicine a profession and not a trade. It is precisely these things that make any competence-based or behavioural, measurable description of the professional so utterly inappropriate and dangerous.

Many defenders of the competence framework have recognised the validity of these arguments and have cooked up new sorts of competence statement which allow much vaguer and contextualised definitions of practice. The idea of 'generic competences' is now allowed and 'second order measures' have been introduced which look at performance underpinned by knowledge, skills and understanding. Such developments merely reflect the poverty of the original idea and render it an infertile hybrid.

To summarise this part of the argument: what professionals do cannot be described in behavioural terms beyond the level of specific skills which are meaningless outside of their clinical application. If they cannot be so described, then the competence model *either* has no application *or* it must be modified to such an extent that it becomes meaningless in its own terms.

Competence and knowledge

The next problem we have with competences is the way they deal with the thorny question of knowledge. Despite the worrying fashionable view that medical students and doctors in training learn far too much information and that this information overload must be cut down, the fact of the matter is that all professions and professionals are characterised by mastery of a vast body of knowledge – facts and experience – which is drawn upon in unpredictable and creative ways. In fact, it is my view that the ability to acquire a body of complex knowledge, for itself, in a systematic and unapplied way, is one of the hallmarks of a profession.

The competence model cannot deal with knowledge and how professionals apply it. It cannot deal with the ways in which professionals make the judgment to use those observable competences which are so easily measured. It cannot deal with the latent and selected body of knowledge and experience which contributes to that judgment. In fact the idea of case-based judgment is quite alien to an approach which conceptualises people as a set of competences. In his critique of evidence-based medicine, Hunter (1996) talks of the implicit model of 'certainty and neatness, neither of which can readily be applied to medicine'. Evidence-based medicine and competence frameworks share that same misconception about the job a doctor actually does.

Hager and Gonczi (1996) promote the use of competence frameworks, but can only do so if they use what they call 'a richer conception of competence'. This richer conception essentially states that competence in medicine can only be seen in the context of complex tasks where knowledge, skills, attitudes and thinking are

all integrated and combined, as they are in real life. Those tasks are observable, but the underlying specific competences must be inferred. In other words, the basic concept of competence does not fit.

What we can see is that to deal with the performance of complex, whole clinical tasks, the competence model would have to lose its essential characteristics and become something less apparently neat and compartmentalised: become rather more like medicine actually is, in fact.

Competences and skills

So, this is the case: we really do not need the competence model at all. People might argue that it is useful in relation to specific skills such as putting in a central venous line. But even then we do not need to glorify our identification of those essential skills or our plans for how to teach or assess the trainee in the mastery of them, with the unnecessary and redundant new terminology of competence frameworks. Current approaches to educational design, to blueprinting for decision-making about what to assess and the current very sophisticated state of the art and science of assessment are all you need. The demeaning, deskilling and professionally undermining language of competence is, at best, surplus to requirements.

Competences and assessment

There remains to deal with the main argument that is usually presented in defence of describing the profession as a set of competences: that of its usefulness for assessment purposes. For meaningful assessment to take place, we must know what realm of activity to test. Newble et al. (1994) state the issue succinctly. Valid assessments can:

* identify what problems the candidate should be able to handle
* select those which will be tested to offer a balanced profile of assessment
* for each problem selected, define the tasks in which the candidate is expected to be competent. This will include all the things the candidate should know and be able to do to perform the task

The test method should be chosen to represent the appropriate level of reality. We can already do that; we have OSCEs and simulations and clinical cases and many other methods. We can specify our standards of attainment. We can make the judgments.

This is sufficient in its own right. A competence framework is not required in addition. Indeed, a competence framework will detract from it, for we have seen with Hager and his ‘richer conception of competence’ that once he has admitted that the model does not fit and that we need something more like the professional tasks of medicine, then assessment amounts to examining those tasks being per-

formed and inferring the underlying knowledge and skills. Indeed, in another paper (Hager et al., 1994) he suggests inferring a candidate's competence by such assessment methods as observation, work sampling, projects, log books and portfolios. While much of the concern with traditional assessments in medical education is that they are only inferential, such advice is not only redundant, it is also anachronistic. We do not need it. Medical education is already a long way beyond it.

Competences and teaching

Perhaps the competence model would be useful for teaching. Well, if competences are much the same as objectives, then we have our answer. In the 1960s, schools produced inch-thick books of objectives which eventually ended up as a form of textbook in their own right. People carried on planning and delivering their teaching and learning as they always had, and the enthusiasts for that cause ticked off the objectives afterwards. Hager is even clearer on the point. He says that:

> '....competence standards specify what people should be able to do, but they say nothing about how this state is to be achieved'.

He states clearly that competence standards 'are not a curriculum document.' So they say nothing about educational planning. We shall still do that in the same way. A competence framework has nothing to offer the educational designer.

Why accept it?

So, if the profession rejects the competence model, where does that leave you? It leaves you where we should be: inside the professional culture, using individual and collective professional judgment. There is plenty of evidence in medical education research [from Van der Vleuten et al., 1991 and others] that assessment techniques which rely on the professional judgments of the assessor are no less reliable than those which purport to be more objective. Use those methods of designing assessments and educational processes that support the practice of medicine rather than destroy its essential qualities.

I have a feeling that medicine is perhaps losing its self-confidence with all these constant assaults on the profession: the way you are regulated, whether you keep up to date, the way you educate future doctors, assessment, your use of evidence, the way you make clinical judgments, the way you teach, the way you learn, and what you teach and learn, the way you manage your work. And the solutions you are offered to these real or hypothetical problems [the analysis is rarely done to tell us which], are almost always imported from other fields of greater or less similarity to your own. And as you entertain each new importation, usually without evidence of its worth, you deskill yourselves and demote your professional judgment and your professional culture as though there were something wrong or indefensible about having your own professional ways of doing things.

Competence frameworks is simply another in this raft of assaults on the profession. It has no other use which I am able to identify. Since there is no evidence for this or any other of the supposed educational or professional panaceas, then might I venture to suggest that you should rebuild and reassert your professional self-confidence and where improvements are needed in your professional practice or in the education and training that leads to it, then rely on your professional judgment first. You have taken years to develop it. Don't give it up so easily.

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The Incapacitating Effects of Competence: A Critique. Janet Grant. Published: 1 January 1999. by Springer Science and Business Media LLC. in Advances in Health Sciences Education. Advances in Health Sciences Education , Volume 4, pp 271-277; doi:10.1023/a:1009845202352. Publisher Website. PubMed. Full-Text. The effect of incapacitation often has the unintended effect of incarceration of inmates' families.[7]. MacKenzie found that incapacitating offenders who continue to commit crimes at high rates is effective, it works best as a part of a multi-tiered approach.[8] In addition, the effects of incarceration on the families and children of the inmate may be increasing the likelihood of future criminal activities.[9].Â Another critique of incapacitation is that small increases in prison sentences merely delay crimes rather than preventing them.[16]. See also[edit]. Penology. Competency-based medical education (CBME) can be defined as education for the medical profession that is targeted at a fixed level of proficiency in one or more medical competenciesand medical...Â The incapacitating effects of competence: A critique. Advances in Health Sciences Education: Theory and Practice, 4(3), 271â€“277.CrossRefGoogle Scholar. Gruppen, L. D. (2015). measurement of the production competence concept and its performance effects, respectively, and proposes an alternative and essentially more correct way to research these two constructs. First, previous studies use a single fit index to operationalize production competence, which treats individual competitive priorities identically, irrespective of their importance for customers or the company's performance relative to competitors, and makes the evaluation of individual performance effects impossible.Â Second, most authors assess the operational performance effects of production competence, which makes their analyses tautological. The Incapacitating Effects of Competence: A Critique. Advances in health sciences education : theory and practice, 4(3), pp.271â€“277. â€¢ Hamburger, E.K. et al., 2015.Â Monkey see, monkey do: a critique of the competency model in graduate medical education. Medical education, 38(6), pp.587â€“92.