

The Education versus Training and the Skills versus Competency debate

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Summary

The essence of modern medical education lies in the ability of defining and developing its terminology, which all too often is used in a less than thoughtful and inappropriate manner. Educationalists place emphasis upon the concept of learning rather than teaching; learning which is specifically student centred and student directed learning rather than teacher centred didactic teaching. However within this change environment we still prefer to use the word training, as in vocational training, to describe a specific programme and aspire to levels of competency that hopefully match the learning outcomes of the programme. This article opens the debate on whether the satisfactory completion of a learning programme is sufficient (cf completion of vocational training) or whether we should be assessing the learner through levels of defined competency relevant to their professional career.

“Personally I am always ready to learn, although I do not always like to be taught” **Sir Winston Churchill.**
(*SA Fam Pract* 2004;46(10): 5-6)

The Oxford English Dictionary defines education as “*the process of educating or being educated, the theory and practice of teaching*” whereas training is defined as “*teaching a particular skill or type of behaviour through regular practice and instruction*”.

Despite these apparently clear definitions the words “education” and “training” are often used interchangeably when in many cases they are occurring simultaneously. If one breaks down the processes of education into its four fundamental components:

- Training (skills acquisition)
- Instruction (information acquisition)
- Initiation (socialisation and familiarisation with social norms and values)
- Induction (thinking and problem solving)

Training can be seen as only one of these four integrated components.

This can be a useful way of thinking about education, but if one begins to think about learning in a clinical environment where conceptualisation between all four components is necessary, further distinction between **education** and **training** is necessary.

Education is a learning process that deals with unknown outcomes, and circumstances which require a complex synthesis of knowledge, skills and experience to solve problems. Education refers its questions and actions to principles and values rather than merely standards and criteria.

The concept of training, on the other hand, has application when:

- a) there is some identifiable performance and/or skill that has to be mastered.
- and
- b) practice is required for the mastery of it.

Some aspects of medicine fall into the

“training” category such as learning basic clinical skills or procedures, but many more aspects are much more complex than this and deal with ethical or social questions which have no clear answers or parameters. Effective learning in medical education at all stages includes elements of training set in the context of life long learning.¹

If we take this approach, then facilitating this learning is much broader than the formal teaching carried out directly by the teacher. It can also include directing the learner towards another sources of learning (the world wide web, an e learning resource book or journal), to another colleague, teacher or patient.

The drive in all areas of medical practice is now to assess progress and performance by achievement of defined competencies. This is especially becoming evident in the “training” element of medical teaching with reliance of “competency based” methods of assessment.

The idea of competences can be found in many areas of training, specifically when one talks of training for a specific vocation or speciality, and where trainees are assessed against stated competences and are deemed either "competent" or "not yet competent".

However, when we begin to discuss the issue of vocational training for a specific subject or sub-speciality, do we really mean training? Or is it more appropriate to use the term "vocational education" which we hope will encompass a more holistic attitude to that which must be learned by the trainee/learner, and applied in various approaches dependant upon the circumstances or situation.

Competency in medical training both in the United Kingdom and South Africa is in the process of development and is beginning to use a model of portfolio based learning as a basis of assessment. This requires the trainee to assemble a portfolio of learning.² This portfolio can be skills based; a simple process of stating that a specific skill has been taught-learned-accomplished and now capable of product. Or it can be made to be broader than that in which deeper educational principles are applied, which necessitate deeper comprehension and appropriate application. Assessment of each is based accordingly.

In medicine the idea of being "competent" or "not yet competent" has been promoted through the use of clinical undergraduate log books and portfolios that are signed off by supervisors once the trainee has demonstrated competence. In post-graduate training, the skills and procedures expected are becoming more clearly defined. We suggest that it is vital to identify those skills with which all trainees should show a high degree of performance and others with which only lesser levels might be expected. Clinical teachers need to decide how "competence" will be defined and determined, whether a competent versus not yet competent approach is taken or whether there will be expected degrees of competence and how these levels are defined. For example, there would be widespread agreement that all medical graduates should be able to interpret a standard chest X-ray. From a very

simplistic point of view, the student can be expected to know the anatomy defined and the normality shown at one stage of learning whilst at the other extreme is the ability to interpret the X ray in the light of a clinical picture and apply a management protocol based on learned and experienced activities, appropriate to that one scenario: this later approach using deeper and higher order cognitive thinking.

In thinking about our ability to deliver a competency-based approach, some principles should be considered. They should be:

- Systematic, based on learning outcomes/competences deemed essential for the working environment. These may be clinical, communicative, professional, ethical and management skills.
- Provide high quality learning activities designed to help them master each task, with periodic feedback designed to correct performance as they go.
- Require trainees to perform tasks to high levels of competency in work-like settings.

Due to the well-rehearsed pressures on medical training it is vital as teachers that we have a clear idea of both

how we are to deliver education and assess progress.

Though a move towards competency based training and assessment seems inevitable, and in many respects desirable, our role as teachers should be to ensure that the more positive aspects of both education and training are married together to provide for the most appropriate development of our trainees both in primary and secondary care.

Points to Ponder

- **Training is only one aspect of education**
- **Skills are learned through training**
- **Competency comprises several levels within the cognitive domain.**
- **Measurement of competency is directed towards the level of competency required**

References

1. Brigden D & Grieson B., Lifelong Learning, Journal of the Faculty of General Dental Practitioners, January 2003
2. Brigden D (1999), Constructing a learning portfolio, BMJ Classified; Career Focus; 3 July 1999 2-3



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