

The emperor's new clothes: from objectives to outcomes

Experienced educators are frequently called upon to explain the terms aims, goals and objectives to their not-so-experienced colleagues. When I am asked this question I willingly attempt an explanation but not without some sense of unease that I am complicit in a process that imposes a level of complexity and technical jargon on what is a fundamental yet simple set of principles.

The use of objectives in education dates back to Ralph Tyler's seminal work in 1949 on *Basic Principles of Curriculum and Instruction*.¹ Popular rumour has it that Tyler left his lecture notes lying around and his students arranged for them to be published. Perhaps if Tyler could have predicted some of the directions in which his work has been taken he would not have been so careless.

Tyler's basic message was simple and sensible. The essential purposes of education should be translated into objectives or statements of changes in the learner which could be readily measured. The focus should be on the learner and learner behaviour. Tyler had a broad view of the nature of objectives, a view which was not necessarily shared by those who came after him, particularly those who advocated the use of 'behavioural objectives'. Mager,² one of the leading advocates of behavioural objectives, argued that they should contain statements of 'behaviour', 'conditions' and 'standards'. The 'behaviours' had to be very specific. Verbs such as *to know*, *to understand* and *to appreciate* were out while *to write*, *to recite* and *to identify* were in. Behavioural objectives became complex to write, so complex that educators would not necessarily write them but would choose from pre-prepared examples stored in item banks.³

The debate about the use of behavioural objectives intensified in the 1970s. Car bumper stickers were issued and displayed by disputing parties. British curriculum writers such as Lawrence Stenhouse provided much of the critique of their use.⁴ It was claimed that by focusing on specific behavioural objectives other, and frequently significant, outcomes of the educational process were ignored. Stenhouse argued that there were four fundamental processes of education:

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

Stenhouse claimed that behavioural objectives were only important in the first two processes yet much of education was concerned with the initiation and induction where the use of behavioural objectives was not appropriate. Thus, according to Stenhouse they would not be appropriate for professional development, problem-based learning or clinical problem-solving within the context of medical education.

The debate about objectives raged in the 1970s and 1980s and alternative approaches to curriculum design which did not depend on statements of specific objectives, such as Reynolds and Skilbecks 'situational model', became popular.⁵ However, by the end of the 1980s a reasonable compromise was reached. Objectives should be specific and clear but not necessarily behaviourally stated. Skilbeck himself took this latter view despite his earlier critique of objectives-based approaches.⁶

The 1990s has seen the advocacy in the educational literature of the use of learning outcomes to define curriculum.⁷ The approach has become known as 'outcomes-based education' (OBE). Through the work of Harden and others at Dundee, this approach has recently been applied in medical education.^{8,9} Again the message of OBE is simple and sensible. Educators should think about the desirable outcomes of their programmes and state them in clear and precise terms. They then work backwards or 'design down', in the jargon of OBE, to determine the appropriate learning experiences which will lead to the stated outcomes. This is not too different from Tyler's message. By using an outcome approach educators are forced to give primacy to what learners will do and to organize their curricula accordingly. Indeed, it has been observed that the move to adopt OBE represents a return to Tyler's basic conception of objectives before it was corrupted by others.¹⁰

However, outcomes should not befall the same fate as objectives. We must guard against the narrow specification of outcomes. In Hamilton's words medical education outcomes must be 'wide, long and deep!'.¹¹ Outcomes that are difficult to define or

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hard to measure, but at the same time are educationally and professionally significant and worthwhile, should not be omitted because of their supposed 'imprecision'. Creativity, judgement and responsibility must not be ignored because they are qualities that are not readily translated into specific outcomes. Finally, outcomes must not become so difficult to write that educators must select from pre-packaged versions.

Contemporary experienced educators are now called upon to distinguish between *outcomes* and aims, goals and objectives. When I am asked this question I usually find it difficult to explain the difference between a significant and worthwhile objective and a well-written and well-defined outcome, and again I ask myself whether such fine distinctions really matter. After all, it is not the statements of objectives or outcomes in themselves that are important but the questions that must be posed and answered in arriving at their definition. Questions such as those listed below are important.

- What are the significant and enduring outcomes of medical education?
- How can we ensure that such outcomes are included in the curricula of medical schools?
- How can we ensure that the complex and difficult to define outcomes are included along with those that are more easily discerned?
- How can we ensure that learning experiences that lead to the stated outcomes are selected and used?

It is to these questions that medical educators should continually and consistently turn.

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References

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