Outcomes-based education in the context of three kinds of knowledge

Mark Mason

With all the talk of teaching towards the achievement of competency and skills in the wake of outcomes-based education in South Africa, it is easy to forget that these should not be taught in a vacuum, or to the exclusion of other forms of knowledge. In addition to knowing ‘how to’ do something, we also need to ‘know that’ (content knowledge) and know how to form a judgement about issues (values and dispositions).

In this article, Mark Mason, one of the authors of this module, argues that it is vital to integrate all three forms of knowledge – propositional knowledge (‘knowing that’), procedural knowledge (‘knowing how’), and dispositional knowledge (knowing what our purpose is and whether it is good).

Curriculum 2005 has got everybody talking, and the topic that is generating the most debate is that of outcomes-based education, or OBE, the approach underlying the new curriculum. Curriculum 2005 was proposed as a response to what the defenders and critics of OBE agree is a woeful state of affairs in education. Apartheid’s legacy is both a desperately under-educated population, and a schooling system lying in tatters. OBE is an attempt to seize the opportunities generated by a society in change to address this dismal situation. Why then is there scepticism and opposition to OBE?

Its detractors are worried principally about its emphasis on outcomes. What, they ask, has happened to content, to the meat of academic sub-

Notes

Reading

jects? They’re concerned about the emphasis on performance indicators at the expense, they claim, of a critical orientation that is dependent primarily on a thorough knowledge and understanding of the material. Learners may be able to demonstrate competence in a task, but do they have sufficient grasp of the theory and content to think critically about the issues surrounding that task? Where is the mind in all of this? Do we want to teach learners the skills necessary for employment as a miner, for example, without teaching them the history of migrant labour as the basis for a critical understanding of South Africa’s political economy?

Defenders of OBE, on the other hand, are critical of what they see as an input-based model, which underpinned apartheid schooling. Rote learning and the regurgitation of facts for examinations are, for them, the embodiment of the dehumanization characteristic of apartheid education. What we need in a global economy, they suggest, is a skills-based education for increased economic competitiveness, or at least to enable learners to hold down a job, that most basic aspect of human dignity.

Curriculum 2005 does offer a significant break from our miserable past, but, in encouraging our teachers to employ the best features of an outcomes-based education, we should certainly also offer a critique of OBE that highlights its more problematic features.

A useful way of understanding the controversies in the debate is to examine, carefully, the concept of knowledge. In the broad sense of the term, philosophers talk about three kinds of knowledge:

- **propositional knowledge**, or knowledge associated with facts or content, as in ‘I know that President Mandela was released from prison in 1990’;
- **procedural knowledge**, or knowledge associated with skills, as in ‘I know how to use a software programme to produce a database’; and
- **dispositional knowledge**, or knowledge associated with attitudes, values, or moral dispositions, as in ‘I know to respect the value of human life’.

Note that Mason does not use the word ‘procedural’ in the way it is used of mathematics learning in the PEI (President’s Education Initiative) Research Project Report (see the Learning Guide). In that document, ‘procedural knowledge’ refers to knowledge of relatively low-level operations without necessarily having any real understanding of the reason for doing them (i.e. similar to rote learning). Mason uses the term in its wider sense of ‘knowledge of how to perform a particular task’ at any level (i.e. knowledge of how to proceed, or skill). This includes even the high degree of fully conscious skill necessary to perform complex or difficult tasks.
Defenders of OBE emphasize procedural knowledge, stressing the acquisition of *demonstrable skills*, and criticize apartheid education's emphasis on the rote learning of propositional knowledge. The intellectual currents of the day stress what Jean-François Lyotard, the French philosopher of postmodernism, called the 'performativity' of knowledge: of what *practical use* is your knowledge, or what can it do? It's along these lines that defenders of OBE fashion their arguments.

Critics of OBE point out that procedural knowledge without propositional knowledge potentially treats learners as uncritical members of the workforce. Expecting them to know how to perform a task without providing a theoretical and content-based grounding in, say, its socio-cultural implications, opens learners to the kind of exploitation we saw under apartheid.

Curriculum 2005, through the programme of Lifeskills education, aims to include the teaching of values. But conventional wisdom holds that dispositional knowledge and its associated values and morals are 'caught', rather than taught. Critics of OBE ask whether the acquisition of values can or ought to be measured. By what performance criteria can we measure the internalization of a particular value? And more importantly, they ask whether the attempt to measure values and attitudes doesn't smack of the worst aspects of totalitarianism.

What is clear is that both the defenders of OBE and its critics are presenting each other’s cases in exaggerated and simplistic ways. Obviously *propositional* knowledge is not much good *in and of itself*: learning endless facts is pointless unless we *use* our knowledge to change the way we approach new situations or problems. Equally obvious is that *procedural* knowledge on its own makes us little more than skilled functionaries who rather mindlessly execute the tasks required of us.

In truth, propositional, procedural, and dispositional knowledge are inextricably linked: to talk of one without the other is absurd. Propositional knowledge is an essential aspect of outcomes-based education, and perhaps it is this idea that is being lost. If apartheid education overemphasized propositional knowledge, then a new curriculum should of course stress the importance of procedural and dispositional knowledge. But certainly not at the expense of content and theory.

To describe a learning outcome such as requiring the learner to demonstrate sufficient arithmetical competence so as not to exceed his shopping budget is a caricature of OBE. Curriculum 2005 should have space for outcomes of the type that require learners to demonstrate, for example, the written skills of argument that indicate a critical knowledge and understanding of the forces and events that shaped the colonization of Africa. But such an outcome does not dispense with the core material associated with the discipline of history.

A careful balance among the three types of knowledge is what is needed. And such a balance is probably what our best teachers will seek, despite the best or worst efforts of our curriculum planners and other stakeholders in this debate. For at the end of the day, what makes the
most difference in the classroom is the quality of the teacher. And the best teachers will seek a thoughtful integration of propositional, procedural, and dispositional knowledge in their classrooms.