

# Universities must 'begin at the end'

**The key to implementing change in South African universities is "beginning at the end", ROBERT KLITGAARD argues. The emphasis should be on outcomes rather than on intake criteria or standardised pedagogical processes.**

CHANGES in the South African environment present severe challenges to the country's universities – challenges that, in less strenuous forms, have devastated universities in many other countries and caused them to succumb to a spiral of mediocrity.

How can South African universities meet these challenges? What changes will be required? Are there lessons from other countries?

In July 1991 I participated in a week-long workshop in Kuala Lumpur on higher education, under the auspices of the World Bank. I was struck by some similarities among universities from Columbia to Senegal to India to Papua New Guinea.

Over the past two decades, many universities in low- and middle-income countries have been confronted with versions of the same challenges South Africa now must face: declining real resources; greater numbers of academically under-prepared students; the need to produce an elite capable of leading the country in an internationally competitive economy.

What follows is a description of a simplified version of what I call the "standard university response" to these challenges – a response that has not worked.

With regard to declining resources, the standard response is to not face the long-term implications. For political reasons, budgets for student support remain high, while expenditure on libraries, maintenance and faculty stagnates. Eventually, the physical facility and the university's human resources collapse in mediocrity.

With regard to expanding enrolments of disadvantaged students, debates concentrate on two issues: entrance standards and what happens in the classroom. I call these the start and the middle of the educational process – as opposed to the end, which is the outcome actually obtained: what students learn and what professors contribute in research and service.

The debate over admissions tends to focus on the preservation of old entrance tests and minimum scores. One extreme incorrectly decries the tests as culturally biased and completely lacking predictive power. The other extreme incorrectly treats the tests and minimum scores as sacrosanct. The truth tends to be lost.

Around the world, admissions tests tend to show a relatively strong correlation with academic performance at the university, and somewhat less with various measures of success in later life. Careful statistical studies seldom find evidence that the predictive power of the tests is less for members of disadvantaged social classes or racial groups. There are large gaps in test scores and in later performance among those groups, but, contrary to popular opinion, this does not imply "cultural bias" in the predictive sense.

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The debate of the middle tends to revolve around the "relevance" and "standards" of the subjects taught and the pedagogical methods employed. One side seems to equate high failure rates with evidence of social irrelevance and bias. The other side seems to believe that high failure rates are necessary to preserve standards.

In most developing countries, the first side of these arguments tends to win. Admissions tests are downplayed and standards are lowered, at first with the argument that "the poor should be given a chance at least". But then, when too many of the new entrants fail at university, the next step is pressure to make

sure they pass. Then "the middle" tends to buckle; courses become more "relevant" and less "academic".

Eventually, the pressure point reaches graduation itself. The university degree is devalued, and, as a consequence, unemployed or unproductively employed graduates are a common phenomenon.

The third challenge is to compete internationally. Given the first two failures, it is not surprising that most universities in developing countries have been unable to do this. Even the best students cannot compete with those trained in the industrialised countries. As a result, a country's economic performance begins to lag, and dependence grows.

The message of the Kuala Lumpur meeting was that around the developing world universities are in financial collapse, with vast student bodies serviced by poor quality instruction, producing graduates unable to fulfil national needs.

The situation is truly alarming, yet I believe that the challenge facing South African universities in the decade ahead will be more severe. The pressure on resources will be greater. The numbers of disadvantaged students and the extent of their disadvantages will be greater. Compared to the past two decades, the pressure of international competition and therefore of international standards of excellence will be greater in the 1990s.

The standard response gives us an idea of what not to do. What might we try instead?

We must experiment with structural change. Experiment is a key word here. We have no blueprint with the answers; even if we did, we need everyone to participate, to own the solution, to develop solutions in the plural. No blueprint, then; but many of the needed experiments will have common themes.

To an economist, structural change means, above all, the reform of incentives. Always problematically, never simply (as in "let the market work"), prices and wages must be linked to their social values. Competition



*OUTCOMES: Education is not the transfer to students' brains of boxes of knowledge.*

must be enhanced. Excellence must be rewarded. These themes will be the key to the success of reforms in Russia and in many other shattered economies. I believe it is also the key to avoiding the disasters that have struck many universities in other developing countries.

There are two worrying tendencies. First, the "standard university response" noted above – the response that failed in so many universities – is incipient here. Many faculty members and students do not want to face the prospect of declining resources in the long term. The need to produce many students who can compete internationally has not sunk in – in part because of what I believe is our overly inflated view of our current standards. We still tend to think that an education is the transfer to students' brains of boxes of knowledge, instead of the creation of

powerful and creative thinkers who can adapt and learn for themselves.

Second, when faced with the need for change, many of us tend to react in terms of process, organisation and resources, instead of outcome, information and incentives. We tend too often to seek top-down solutions, rather than ways to free up competition and innovation across the university.

"Beginning at the end" is my shorthand description of an approach that escapes these two tendencies. Let me illustrate the principle with a brief and schematic example.

Imagine the following experiment: choose a sub-set of subjects such as physics, computer science, statistics, economics and biology, for which "international standards" fairly clearly exist. Reconceptualise "international standards" not as a binary variable – yes/no, pass/fail, meets them or does not –

but as a continuum. A "standard" now means a measure, through which it makes sense internationally to say something is excellent, something else good, something else fair, something else poor. For conceptual purposes, think of a scale of 0 to 100.

Now imagine a consortium of educators from these disciplines and from many countries, including South Africa, with participants from organisations like the ANC. Suppose this group, supported by foreign donors, designed tests that measured the continuum of competence in physics, computer science, statistics, economics and biology at the level of first-year courses and after the third year. The tests would measure thinking and problem-solving ability rather than the ability to memorise.

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Using such measures of performance would focus discussion on competencies to be gained at the university, rather than on admissions standards or particular reading lists and lecture schedules; it would avoid the pernicious tendency of university students to think almost entirely in terms of pass/fail; and it would offer a continuum of outcomes, credibly and independently certified, with international meaning. Having such scales would enable a variety of experiments, without the risk of unravelling standards that has sunk universities in other countries.

Today's (binary) credential would be usefully supplemented by a much more fine-grained and internationally meaningful measure of learning. This in turn would enable us to experiment with admissions standards, including the enrolment of many more black students.

Academics could be challenged by incentives, without fear of grade inflation or corruption. A recent view of the voluminous research on pay-performance schemes reaches several interesting conclusions. Although the linkage schemes vary and methodological problems, as always, plague empirical estimation, a good rule of thumb is that linking pay and productivity induces a 20 percent increase in productivity. Another rule of thumb: incentive and bonus payments should not exceed 25 to 30 percent of the base pay.

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Research also indicated, though less robustly, that pay-for-performance schemes work better when employees participate in defining objectives and performance measures.

To the faculty, the idea might be put this way: we all agree that your salaries are too low. In this political climate and economic situation, the only way we can afford or justify pay raises is if we can show that they are linked to increased productivity and better student outcomes.

Teachers would be encouraged to experiment with different educational techniques, and information about the results would be publicised. Because of new incentives, innovations that worked would spread.

With these reforms, teaching would improve, students would work harder, and the value of the (continuous not binary) credential earned would increase. Therefore, those paying for a quality education would be willing to pay more.

The strategy of beginning at the end would provide a unique focal point for donors. Here is a university saying it is committed to international standards, but also not constrained by the usual debates over entrance criteria and defences of *status quo* teaching techniques.

The role of the university's top management would shift away from the perception of centralised decrees and cut-backs. Instead, a central task for the university's leadership would be the development of systems of information about outcome, and strong linkages between outcome and incentives. This in turn would open up opportunities for different teachers and departments to experiment with pedagogies, to work harder, and to learn from each other. And this in turn would create an environment attractive to the very best faculty members.

Beginning at the end might provide the basis for a simple, dramatic and mobilising example of leadership.

But there are problems.

If beginning at the end were easy and natural, there would be no need to call for it. The proposal is radical, and it faces several important objections. A few are listed here and some solutions proposed.

- Measuring results externally violates each department and indeed each professor's desire to set his or her own standards. This objection could be partially addressed in two ways. The departments could still define where on the scale "pass" would be defined. In honours and masters' courses,

the current system of locally defined standards could remain.

- Incentives violate the academic culture, which is egalitarian and not individualistic, motivated by an academic calling and not by money. The way to meet this problem is to note, first, that reforms in incentives are increasingly seen as the key to institutional reform around the world. Team incentives have been the most successful. For this reason, the greatest share of results-based faculty incentives might be awarded by departments.

- International tests would be difficult if not impossible to develop for fields like the humanities and the law. My suggestion in relation to this difficulty is to begin with a few fields for which international standards would be recognised by most people. In other fields the university's leadership would encourage faculty members to develop their own, measurable standards of excellence, imperfect though these might be. From the vice-chancellor on down, the crucial message would be: we must get away from the binary measurement of success; must stimulate more information about outcome; and must link incentives for both students and faculty to those outcomes.

- "Doesn't 'international standards' imply Oxbridge and the Ivy League? Our university shouldn't try to be a haven of excellence, which is what this idea implies." This objection is a serious but understandable misrepresentation of my suggestion. Remember how we reconceptualised the idea of international standards as a continuum, not a cut-off? The point is to escape a binary classification and think in terms of a continuum.

- "Our university does not have the capacity to change. Even if we 'began at the end', we don't have the managerial or entrepreneurial talent or spirit to meet the challenge." The evidence cited for this view is the lackadaisical, unoriginal behaviour of many faculty members. However, evidence from many other areas shows that what looks like laziness or lack of skill in an organisation is the consequence of a lack of information about outcomes and a lack of incentives linked to those outcomes.

When one does "begin at the end" by creating credible and variegated outcome measures and appropriate incentives, one is often pleasantly surprised by the initiative and excellence that ensue.

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**Gagged for decades under apartheid, attacked on the streets and betrayed by the courts, media workers are in sight of deliverance. After 27 April, the Interim Constitution will protect freedom of speech and expression – and the new Constitutional Court is likely to provide occasion for humility to the haughty in the Appeal Court. DENNIS DAVIS reports.**



**M**EDIA freedom has been dealt a number of blows by the Appeal Court, to the shock of those who have grown accustomed to more enlightenment from the institution since Michael Corbett became Chief Justice. Among the damaging rulings was the dismissal of a Lawyers for Human Rights plea to prevent judges from suing those who question their decisions. Another was the decision upholding the appeal of General Lothar Neethling in his defamation action against *Vrye Weekblad* and *The Weekly Mail*.

There can be little doubt that both cases would have gone the other way had they been brought after 27 April, when the Interim Constitution comes into effect and the new Constitutional Court displaces the Appeal Court as the highest court in the land.

Section 15 (1) of the Introduction to Chapter 3 of the Interim Constitution guarantees the right to freedom of speech and expression, including freedom of the press and other media, freedom of artistic creativity and freedom in scientific research. Furthermore, the Constitution requires regulation of all media financed by or under the control of the state to ensure impartiality and expression of a diversity of opinion.

The guarantee contained in this provision protects both speech and expression. The context of expression is far wider than that of speech. Based on American precedent, it would affect a symbolic act such as the burning of a flag, for example.

The legislature could attempt to censor such activity only on the basis of the limitation clause in the Interim Constitution, if it could show that the limitation was reasonable and justifiable in an open and democratic society based on freedom and equality. However, such an attempt would be highly unlikely to pass constitutional muster.

The scope of the freedom of expression clause for promoting free political debate is