South African Deputy President Kgalema Motlanthe opened the Higher Education Summit in April 2010 by putting his finger on the nub of the problem – the fact that over 65% of 18–24 year olds in South Africa are neither working nor engaged in any form of further education or training. Of those who were in 2008, 875 000 were enrolled at universities and 640 000 at Further Education and Training colleges. At universities, 35% of students drop out of degree studies, 52% out of certificate or diploma studies and 70% out of distance higher education, whereas, only about 29% of those who enrol at colleges eventually pass. In both categories, only a minority complete their qualifications in the prescribed period (for case studies of three universities see http://www.che.ac.za/documents/d000206/). When assessing the significance of these statistics, two things become clear. Firstly, the 70% increase in higher education enrolment since 1994 has been achieved at a price and, secondly, a sensible way must be found to provide some kind of tertiary qualification for additional school leavers.

Blade Nzimande, the Minister for Higher Education, began with the disarmingly frank admission that the schooling system is unlikely to deliver better-prepared undergraduate students in the near future. For all the brouhaha about the new National Senior Certificate and the one-third increase in those gaining a university exemption which has accompanied it, much remains the same in at least one crucial respect: at the end of 2009 only 6% of candidates gained over 60% in mathematics and only 4% passed physical science. This is very similar to the last year of the old Matric system (2007), in which 4% and 5% of those who wrote mathematics and physical science, respectively, passed on the grade. More students may have qualified for university entrance, but these two subjects remain the bottleneck which prevents most candidates from pursuing careers in science, medicine, engineering and some business degrees. Once faculties have fine-tuned their admissions criteria to cater to the peculiarities of the new curriculum, do universities succumb to the temptation to admit more students to degrees which do not have these entrance requirements? Or, taking their cue from Nzimande, do they take upon themselves the task of identifying students with potential and training them in the basic mathematics and physical science that they should have learned at school?

The latter would seem the sensible option, as a declining and far too small (27%) proportion of South African graduates qualify in science, engineering and technology (http://www.hea.org.za/hea/index.php/component/booklibrary/?task=view&id=25&catid=83). An obvious mechanism for achieving this, and improving graduation rates across the board, would be for government to tinker further with the funding formula for universities, in order to provide greater financial incentives to institutions which offer bridging courses or alternative streams for degrees (usually amounting to 4-year programmes for degrees which otherwise take 3 years to complete). The best of these (e.g. that of the Faculty of Science at the University of Cape Town, which has been running for 25 years) have been very successful. In particular, not offering students a choice between 3-year and 4-year degree programmes has reduced the number of drop-outs and improved throughput rates for both categories; and making criteria for admission a simple function of school-leaving performance has avoided the stigma associated with labelling students as ‘disadvantaged’.

Nzimande has re-opened the debate about differentiation, abandoned a decade ago when the then Minister of Education, Kader Asmal, canned the report of the commission chaired by the then University of Cape Town Vice-chancellor Mamphela Ramphela. This suggested that the country’s higher education system would be best served by having three categories of institution: those offering degrees up to doctoral level; those offering degrees up to master’s level in areas in which they had particular expertise; and those offering undergraduate degrees only. The advantage of such a system is that the last category, in particular, can concentrate on providing high quality teaching to undergraduates, particularly those who might display potential but are inadequately prepared for university. But despite their great majority in the legislature, government embarked instead on a programme (http://www.nature.com/nature/journal/v417/n6887/pdf/4176737a.pdf) of rationalising South Africa’s 36 universities and technikons (which it fashionably renamed ‘universities of technology’) into the current 23, many of which now comprise campuses in more than one town or city. However this policy may have been successful, it does not appear to have improved throughput rates.

But, a decade on, perhaps the time for differentiation has come? With the exception of Stellenbosch University, none of our universities now has a student body that is predominantly White. In terms of research, the reality is that a large proportion of the subsidy funds from government (on the basis of postgraduate outputs and peer-reviewed publications) are allocated to half a dozen institutions in any event. While it is critical that what John Higgins describes as a ‘nexus of researched-based teaching’ (http://www.universityworldnews.com/article.php?story=20100521161220679) is maintained at these universities, this form of teaching is probably not taking place in the majority of the remaining ones. Would some institutions be prepared to accept that their function is to teach and either have only a limited number of research-active departments, or none at all?

There is no disgrace attached to concentrating on teaching – in the United States of America, a country with arguably the world’s most successful tertiary education system, the majority of institutions do just and only that. But such a system requires mobility – both for students and for academics. In a differentiated system, it would be crucial for the best students from teaching universities to move at honours level to research-based ones. Academics at teaching institutions who were interested in pursuing research could elect to spend their time outside the teaching terms attached to groups at research-based universities, as they can in the USA. Both interventions would require financial resources, but savings should be made by not throwing research funding at institutions which are not using it effectively.

A change of mindset is required to one that abandons the snob-value attached to research. Perhaps, even more importantly, we should abandon the snobbery associated with studying at a university rather than undergoing vocational training. It is commendable that Nzimande has promised to pay attention to Further Education and Training colleges, for it is this sector which should undergo the greater expansion.

How to cite this article: The Higher Education Summit re-opens the debate on differentiation (Leader). S Afr J Sci. 2010;106(7/8). Art. #368, 1 page. DOI: 10.4102/sajs.v106i7/8.368