

Huge challenges in the South African post-schooling system

Can technology enhanced distance education make a difference?

Jenny Glennie

In 2009, nearly 42 per cent of youth in South Africa between the ages of 18 and 24 – nearly 3 million young people – were not in employment, education or training¹. As a recent Green Paper for Post-School Education and Training notes, this ‘is an appalling waste of human potential and a potential source of serious social instability’(p. x)².

The Green Paper goes on to provide a vision of a single, coherent, differentiated and highly articulated post-school system, and sets ambitious targets of expansion by 2030 – 67 per cent growth for the university sector and nearly five-fold for vocational colleges and other post-school institutions. These targets are roughly in line with those set by South Africa’s National Planning Commission³.

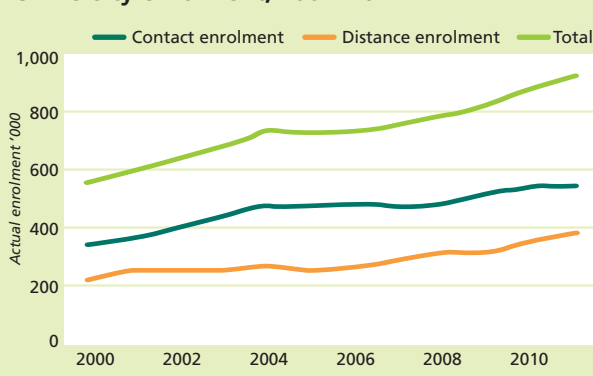
The key question is how this can be achieved, given that South Africa already spends about 5.5 per cent of its GDP on education, and no huge increases in GDP are expected. A further inhibiting factor is that a major proportion of academics are over the age of 55 and there is a dire shortage of suitably qualified college educators.

Traditional models are unlikely to meet this massive challenge. Bricks-and-mortar, face-to-face classes, halls of residence and the requirement that learners come to a central venue for substantial periods of time are all resource-intensive. Rather, we need to think out of the box, evaluating all possibilities, especially utilising the capabilities afforded by new technologies and new arrangements that give open access to educational resources. These capabilities are referred to by educational technologists as ‘affordances’. This article explores the possibilities of these affordances for the post-school sector: both the formal university sector, and, perhaps more importantly, for vocational, community and adult education.

The university sector

Since the dawn of South Africa’s democracy in 1994, there has been huge growth in the university sector. Headcount enrolments increased from 495,000 to 899,000 in 2011 – a rise of almost 82 per cent in 17 years. The demographics have also changed dramatically – from 55 per cent of students being black⁴ and 43 per cent African, to 80 per cent being black and 67 per cent African; and, astoundingly, from 55 per cent male to 57 per cent female. Pleasingly, this growth in enrolments has been accompanied by a dramatic growth in graduates of over 70 per cent. Nevertheless the gross participation ratio – i.e. the proportion of 18 to 24-year-olds in higher education – is around only 16 per cent, compared to 43 per cent in OECD countries in 2007.

University enrolment, 2001–2011



As can be seen in the figure below, distance education has been a key contributor to South Africa’s growing university system, rising to account for nearly 40 per cent of headcount enrolment over the last ten years.

Approximately 85 per cent of this distance education at university level is provided by South Africa’s mega-institution, Unisa. This may be about to change. A recently released draft policy on distance education in universities⁵ proposes that current restrictions on traditional face-to-face institutions to offer distance education be relaxed to allow any public university to offer distance education programmes, provided certain quality criteria are met. At least three of the country’s universities could be well placed to expand their distance education offerings to 60 or 70,000 students each.

Accomplishing the expansion

What is not yet clear is whether the Ministry intends to increase the proportion of distance education beyond the 40 per cent of headcount shown above, in order to meet the ambitious targets set for expansion. In favour of this course of action is that distance education has demonstrated its ability to create increased access to university education for a very wide range of learners – from those with adult responsibilities of work or home care, to those with disabilities, to younger learners who cannot afford face-to-face tuition or who may prefer the flexibility of distance study.

Another advantage is that distance education is cheaper for *both* the student and the state: a distance education enrolment currently costs both parties approximately half of a face-to-face enrolment. The more complex issue is to determine whether the success rate

of distance students complements this 'saving' in order to make it a cost-effective option.

In addition to expanding the proportion of enrolments in distance education for the required expansion of the university system is to be achieved, the state could also encourage a change in the nature of campus-based tuition. It could move away from the predominant reliance on expensive face-to-face communication of the curriculum in costly lecture theatres to the utilisation of so-called resource-based learning. This term was usefully defined by the National Council of Open and Distance Education of Australia, and elaborated upon by Ryan et al. as 'an integrated set of strategies to promote student learning in a mass context, through the combination of specially designed learning resources and interactive media and technologies'⁶.

As well as potentially providing a more engaging learning environment, utilisation of resource-based learning optimises the productivity of academics and other educators. A number of recent developments now herald the increased use of this type of learning to help meet the rising demand for education: growing and cheaper connectivity (even in the developing world)⁷; more affordable devices to access the internet; and, importantly, the availability on the web of a plethora of high quality open educational resources (OER) for use by educators and earners. These OER range from short video clips, through ingenious activities and assessment exercises, to full modules and even programmes. They can be accessed, adapted (depending on the licence) and integrated into a learning environment without the payment of any licence fees.

Other post-school educational opportunities

The above affordances become even more important as one faces the even bigger challenges posed by post-schooling outside of the university system. How are these challenges bigger? When one examines the aforementioned breakdown of the 18 to 24-year-olds neither in education nor in employment, we see that only a third of the 3 million have completed their school-leaving certificate (Grade 12). Of the remaining 2 million:

- Half a million only have a primary education.
- Half a million have less than grade 10.
- Almost 1 million dropped out between grades 10 and 12.
- Half a million have passed grade 12 but are not eligible for degree study.

In sum, substantial numbers of young people have left, or been pushed out of, schooling without any qualification and, worse, without basic skills, knowledge and learning habits. They are joined by millions of adults burdened with the legacy of apartheid, who were systematically denied access in that period to post-primary education and especially to maths and science.

What are the educational opportunities for these young, and older, citizens? South Africa's current college system is dismally small – some 327,000 enrolments in 2010⁸. And our nearly 3,000 Public Adult Learning Centres cater for about 265,000 students, on average a meagre 90 students each! While we are aware that the

private sector is expanding, there is no reliable data on numbers involved, and it is expanding off a low base. Clearly, we need vastly more and diverse provision.

A vision for vocational, community and adult education

So how might the affordances be put to use in contributing to South Africa's non-university post-schooling system?

Firstly, as suggested in the aforementioned Green Paper on Post-Schooling (pp. 56–59), Public Adult Learning Centres, as well as other appropriate sites of learning, could be upgraded and expanded to form a connected network of community and adult learning centres, each of which would provide an enabling learning environment for local learners. The centres would offer information to prospective learners concerning available courses and programmes. Such courses and programmes would:

- Provide vocational and other skills for adults and youth.
- Assist learners to complete a school leaving or equivalent qualification, where appropriate.
- Improve the skills of learners to access further study.

The centres would organise face-to-face tutorial support for high-enrolment courses, and support learner access to digital courses and programmes as well as to online tutoring. In the case of vocational education, they would need to help organise work-integrated learning. Such centres would be open on weekdays and evenings as well as weekends to provide the most flexible opportunity possible. Each centre would need to be connected and equipped with devices to access the internet.

Secondly, these centres would be complemented by a network of education and training providers with their learners distributed across the country. One or two could be large distance education providers offering general education (such as completing or upgrading their Senior Certificates⁹) or popular vocational programmes. Others could offer niche online programmes to smaller enrolments. Providers could be public or private, and would need to be accredited by the relevant state quality assurance bodies. Their responsibility would be to:

- Design and develop learning programmes
- Ensure certification
- Develop and adapt associated learning resources (for independent study and group sessions)
- Devise the assessment strategy and conceptualise a tutoring model
- Appoint and train tutors and facilitators (in consultation with the learning centres where appropriate)
- 'Deliver' the programme through the learning centres.

And finally, both the centres and the providers could be supported by a public agency that would loosely co-ordinate the two networks. The agency would be responsible for identifying and encouraging providers to join the network, collecting programme information for learners, aggregating the information on to an easily searchable database, and collecting and disseminating

information on appropriate learner bursaries. The agency would facilitate collaboration among participating institutions, enable joint development of courses or programmes, and promote and share best practices for the integration of mobile devices.

Conclusion: a feasible scenario

The Ministry (Department of Higher Education) envisages taking a sizeable proportion of the 3 million post-school youth in South Africa into dramatically expanded educational opportunities. Yet this has to be achieved cost-effectively and with recognition of the limited numbers of academics and educators. This article argues that, for university education, substantial growth in distance education as well as the adoption of resource-based learning for on-campus students could play an appreciable role in achieving the proposed expansion of university level education. On a back-of-the-envelope calculation, for an increase of 10 percentage points in the distance share, the Ministry would save 5 per cent on the total university operational costs. Other savings would include obviating the need for expensive residences.

For vocational, community and adult education, the article proposes a different approach. Rather than building large institutions in central venues with the concomitant requirement of huge residence and transport costs, the proposal is for a network comprising a number of education and training providers, each offering distance and online course with their learners distributed across the country. Distributed learning centres would support the learners. To provide 1,500,000 learners with access to a learning opportunity each year, each of our current public centres would need to enrol only 500 learners each.

Both these proposals are eminently achievable. They are probably also essential if the Ministry is to achieve its vision within likely resource constraints.

Endnotes

- ¹ Cloete, N. (ed.) (2009). *Responding to the Educational Needs of Post-School Youth*, Cape Town: FHETI/CHET.
- ² Department of Higher Education and Training (2011). *Green Paper for Post-School Education and Training*, Pretoria: Government Printer.
- ³ National Planning Commission (2011). *National Development Plan*, Pretoria: Government Printer.
- ⁴ In South Africa the term 'black' refers to all those groups who were disenfranchised under Apartheid.
- ⁵ Department of Higher Education and Training (2012), *Draft Policy on Distance Education in Universities*, Pretoria: Government Printer.
- ⁶ Ryan, S. et al. (2000). *The Virtual University: the internet and resource-based learning*, London: Routledge.
- ⁷ There are currently 9 undersea fibre cables landing in South Africa providing a total of 22 terabits per second – about 300 times the cable capacity in 2008 (*Business Day*, 20 June 2012, p.22).
- ⁸ Perold, H. et al. (eds.) (2011). *Shaping the Future of South Africa's Youth*. Somerset West: African Minds.
- ⁹ South Africa's current Kha Ri Gude Mass Literacy Campaign, with over 1 million learners, provides an excellent example. It is a highly structured learning programme with specially designed learning resources filled with learner activities, a corps of distributed and trained tutors, and an efficient distribution and tracking system. Classes are held in communities, at times that are convenient to the learners, and take place in homes, churches, community centres, prisons, etc.

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