

PUBLIC POSITIONS PAPER: HOW DOES MATRIC MEASURE THE HEALTH OF OUR EDUCATION SYSTEM?

Stephanie Allais
Centre for Researching Education and Labour
School of Education, University of the Witwatersrand
24th November 2014

Is Matric failing?

Arguments about problems with the Matric exams are well-rehearsed in an annual public conversation. Two commonly voiced concerns are falling standards—believed to be evidenced by the high pass rate, the low marks required to pass, and the fact that the results are subjected to statistical moderation—and that the system is failing—said to be evidenced by lack of preparedness for higher education and work. Comedian Tom Eaton perhaps captures much of the national view when he says on twitter that when the results come out, “we celebrate 33% of those who started school 12 years ago getting 33% of exam answers right”. In another tweet he says “Umalusi has declared 2013 Matric exams free of any irregularities. A pity they’re also free of any educational relevance.” Much of the substance of the debate has remained the same since Matric was institutionalized under the Joint Matriculation Board in 1918 (Lolwana, 2006). The furor is unhelpful because different issues are conflated. Instead, we need to separate out at least the following issues:

- what kind of assessment could support the school system educationally as well as providing useful insights into what individuals have and have not mastered, and how should the assessment results be used and reported?
- what is/are the purpose/s of senior secondary education, and what kinds of certification could assist learners in future pathways from education?

Teaching to the test

Notwithstanding our specific problems, around the world debates about falling standards, irrelevant curricula, narrow exams, learners who are poorly prepared for university, weak performance relative to other countries, and rising youth unemployment dominate debates about secondary education. Many countries are engaged in serial reform of their senior secondary systems, in terms of the nature and composition of their certificates, the nature of assessment systems, the curriculum, the degree and nature of streaming learners, and so on. English reformers look to the rigours of the Japanese curriculum, while Japanese reformers want more creativity and lateral thinking that they believe is achieved through Western curricula (Green, 2000). One of the key issues up for grabs is the nature of assessment.

The notion of ‘standardized assessment’ and its cousin high stakes assessment dominate much educational commentary, as many countries are increasingly caught up in a frenzy of attempts to compete with each other, and the volume of national and international standardized tests is growing. This has led to a huge body of educational literature discussing the negative sides of tests and testing. Critics argue that standardized tests lead to a narrowing of curriculum content, an increasing prescriptiveness of curricula, narrow notions of what is ‘worthwhile knowledge’, and a shallow approach to learning which

stunts creativity and problem solving (Hyslop-Margison & Sears, 2006). Critics also out that the tests which are the easiest to standardize and cheapest to administer are multiple choice, which can only measure very particular types of concepts. There is general agreement amongst most educational researchers that ultra high stakes testing is a bad idea (Hoadley & Muller, 2014).

Certainly, the focus on Matric pass rates has had negative consequences for our system. Following the dismal pass rates of the early 1990s, sanctions, rewards, and many direct interventions focused on the Matric year (Lolwana, 2006). The pass rate has been raised, but serious problems have been caused in the system, including the ‘culling’ of students in grade 11, and encouraging students to do weaker subjects.

But none of this makes the assessments themselves bad or good. There are problems with the exams themselves. But part of the problem is the way the results are used and interpreted. In Kenya all learners who write the centrally administered senior secondary examinations are given a certificate which contains a record of their grades, without a notion of passing or failing. Adopting this system could allow us to concentrate on improving the exams, without fussing about how many attain the magical cut off of 30 and 40 per cent.

Having a single metric for measuring the health of the education system distracts attention and distorts policy interventions. The general logic of a pass/fail mark is that learners cannot proceed to a next level of study or attain a specific job. But all learners leave school, with or without a certificate. It would be better for our system if they all left with a certificate, some with good grades, and others with poor grades.

Externally set and marked examinations, if not given undue status in a system, are useful and important. Testing is essential to see what people have learnt, both to inform teaching and to allow people to move to specific areas of work or further learning. There is considerable evidence of how testing actually leads to learning, and that it can make educational inequities visible, pointing to where state funding should be directed (Hoadley & Muller, 2014). Good exams nationally set against a nationally prescribed curriculum can play an important role in building educational equality and supporting the universalizing potential of education (Green, 1990).

There are examples of successful school systems where much assessment is conducted at a school level—such as in Finland, which also scores very high on international achievement tests. But this system works in a small, wealthy, relatively homogenous country, in which teaching is the second most difficult university degree to gain access to, and teachers have Masters degrees. In the absence of these factors, decentralized assessment generally leads simply to radically different educational standards—and South Africa has a long history of this, across different examination boards, as well as some disastrous experiments in entirely school-based assessment, and dramatically divergent standards of that component of the Matric which is assessed at a school level (van den Berg & Shepard, 2009).

Completing school is not the same as learning to conduct surgery or fly a plane or put pipes in the right place. There is no magical competence cut-off which can be invoked to clearly and unambiguously say children can or cannot leave school, and it seems unfair to do invoke such a cut-off when young people are obliged to stay in school until they are around 18. Numerous commissions and investigations have taken place over the 100 years of Matric, and many different reforms experimented with. For example, the system of having higher, standard, and lower grade subjects or passes was an attempt to enable a

large number of students to attain a certificate for leaving school, at the same time as differentiating between those who were likely to have mastered the academic knowledge and skills necessary for higher education success and those who had not. So you used to be able to get a conversion to a lower grade pass, effectively passing Matric with some subjects on 25%; important to remember in the hysteria about our current system whereby students can attain a National Senior Certificate with three subjects at 30% if they have the other three at 40%.

Different purposes

Changing the assessment and certification systems can have major impact on the system, and there are many different options around the world, none of which are entirely satisfactory. One possibility is having a limited set of strong but different qualifications, one of which prepares learners for an academic track, and one or two others which are more vocationally oriented, as is the case in many European countries (Alberts, 2001; Cam, 2001). This generally works well for universities as it supports a strong academic track. Where mid-level occupations are regulated in the labour market or there are substantial good career options for mid-level occupations, and where companies offer apprenticeships, such as in Switzerland where around 60% of the age cohort move to apprenticeships after leaving school (Gonon & Maurer, 2012), this is a viable option for all learners, although it has the disadvantage of funneling people at a young age. Where good mid-level jobs are *not* available, vocational education has a low status. This leads to most people choosing academic education, which can weaken academic education through, amongst other factors, weak semi-vocational education—partly the case in our system. Quality vocational education is almost impossible to achieve in the absence of quality jobs in defined occupations.

Another possibility is completely separating senior secondary school from university entrance, as is done in the US. This can benefit the university system by having a slightly stronger and more accurate predictor of success. For the rest of the system not having a single set of examinations may have negative affects, such as dramatically divergent standards at secondary school, and, in the absence of a central curriculum, a proliferation of attempts to assess school performance through non-curriculum linked external standardized assessment. It is this type of standardized assessment that is most associated with the negative affects described above. Then there is the UK model—not having a certificate at all, but simply a set of high stakes examinations in individual subjects, and the number of subjects and grades attained in each is what opens (or shuts) doors for students. All these options have problems of their own; part of the difficulty is that senior secondary school has to serve a range of different purposes.

100 years ago a tiny percentage of the world's population was in secondary school—only about 30 per cent of the age cohort in *primary* education. Today primary school enrollment is close to universal in most countries, secondary completion rates are high, and many countries have moved beyond 50% of the age cohort for tertiary enrollment. In the past schools were expected to teach a reading, writing, and a few set bodies of knowledge to small groups of children who were, in the main, highly motivated (whether intrinsically or extrinsically) to work hard and to learn. Today schools are expected to make sure people get jobs, in an economic context in which there are no jobs, to maintain social cohesion, to prevent teen pregnancy and alcoholism, to teach good citizenship, and various other assorted aims.

Many countries are pushing people through more and more education, partly as a short-term way of keeping young people off the streets, and partly because policy makers seem

to believe that economic growth will follow, or that it is lack of education that is the primary reason young people are unemployed (Keep, 2012; Keep & Mayhew, 2010). One unfortunate consequence of this is that education institutions are blamed when unemployment does not decrease. Despite international outcry skills shortages, the literature on industrializing and developing states shows that skills and education generally follow economic development; it has not happened the other way round. And while most countries around the world are grappling with increased youth unemployment, education levels are substantially outpacing the educational requirements of much work.

All of this places pressure on school curricula. For some, social justice requires academic curricula for all learners, as more and more learners want to or feel obliged to attempt to go to higher education, and others suggest that the skills and knowledge obtained through an academic curriculum benefit all learners. For others, however, school curricula should expose learners to ideas about the world of work as this is believed to prepare learners for work better than academic education¹. A common justification for increasing the vocational content of the school curriculum is that in the past many children would not have been at school. These children, it is argued, cannot cope with the academic curriculum of a general liberal education, or, have no interest in it. Such children, it is argued, could still gain useful skills through school, and academic education for them, many argue, is alienating, too difficult, boring, irrelevant, or oppressive.

Curriculum and exam changes

Our curricula have improved since the disastrous outcomes-based education experiment, but much remains to be done. Vast numbers of our children enroll for semi-vocational subjects that are not teaching them either robust academic skills by building concepts and knowledge, nor preparing them for work in any meaningful way. For example, *Business Studies*² is taken by 40% of secondary school learners across the five school quintiles³:

| Quintile 1 | Quintile 2 | Quintile 3 | Quintile 4 | Quintile 5 |
|------------|------------|------------|------------|------------|
| 37,522 | 42,210 | 44,149 | 35,018 | 45,754 |

Tourism is taken by 20% of secondary school learners across the five school quintiles:

| Quintile 1 | Quintile 2 | Quintile 3 | Quintile 4 | Quintile 5 |
|------------|------------|------------|------------|------------|
| 19,404 | 21,860 | 23,735 | 18,802 | 17,860 |

The curricula of many of these subjects is very weak: there is little disciplinary knowledge in the curricula, and consequently very little conceptual coherence or depth, but also no

¹ The most extreme example of this is the unpaid internship phenomenon, largest in the US, whereby taxpayers, parents, or students with onerous study loans, enroll and pay for educational courses which entail getting credit for work experience. So employers get free labour, students don't get taught anything, and academic institutions argue that they are making their courses more 'relevant' and 'useful' (Perlin, 2011).

² Data supplied by UMALUSI, July 2013

³ The quintiles are a system which attempts to divide schools into different socio-economic categories, with quintile 1 being the poorest, and 5 being the richest, although the indicators are controversial.

clear sense of an occupational role which learners are being prepared for (Shalem & Allais, 2014). Concepts and tasks are not distinguished or sequenced in any particular way, and there is no visible ordering of breadth and depth. Information is presented mainly as re-contextualized from practice, albeit in no clear order of a practice. It is unclear how the knowledge presented could be foundational for further study, even in the field of business studies or related areas, and no applied empirical knowledge from the disciplines. For example, in *Business Studies* there is no reliance on discipline knowledge even in complex issues such as inequality and poverty, unemployment, cultural and demographic issues, quality and ethics, and the curriculum is very ideologically loaded. *Tourism* similarly, as a social phenomenon, could have been designed with some grounding in foundational concepts in disciplines that inform the field (Geography and History but perhaps also political science to mention just a few). Instead the curriculum is more like a list of information.

Another crucial reform that is required is improving the *English First Additional Language* curriculum and examination is probably the most important priority nationally. In 2013, just over 500 000 learners were entered for the matriculation examination, and 454 666 of them wrote English First Additional Language. Recent research from Umalusi (McCusker et al., 2014) suggests serious problems with the curriculum, including that it does not prepare learners well for university study, that it is too broad which makes in inevitably shallow—too many texts but not enough long texts are read; there is little progression across the years; and there is no time for remediation.

In sum

We also need to remember that reforming exams and curriculum can only do limited good without good teachers. And good teachers can only do limited good in the context of poverty, hunger, violence, and social volatility. Secondary education was only really introduced for all South Africans in the 1970s, and was destabilized by the 1980s; further, the legacy of Bantu education, particularly through its weak teacher preparation, will be with us for years to come. Improving education takes time, and there is much good work happening to improve our very poor levels of language and Maths achievement at earliest grades. Matric cannot be the starting point for interventions.

But there are changes to Matric which could improve our system in the short and long terms. One is to remove the notion of pass or fail. This would enable all learners to leave school with a certificate. We need to improve our exams without making more learners fail. We do want our children to learn important bodies of knowledge, and improving how this is assessed can improve how it is taught. In particular we need to substantively improve the curriculum, teaching, and assessment of *English First Additional Language*, and to reduce the number of empty vocational options, or strengthen these curricula.

References

- Alberts, R. V. J. (2001). Equating Exams as a Prerequisite for Maintaining Standards: experience with Dutch centralised secondary examinations. *Assessment in Education: Principles, Policy, and Practice*, 8(3).
- Cam, P. (2001). The French Baccalaureat Since 1985: level of qualification or type of diploma? *Assessment in Education: Principles, Policy, and Practice*, 8(3).
- Enders, J. (2010). Political science and educational research. Windows of opportunity for a neglected relationship. In A. A. Jakobi, K. Martens, & K. D. Wolf (Eds.), *Education in Political Science. Discovering a neglected field* (pp. 205–217). Routledge/ECPR Studies in European Political Science.
- Gonon, P., & Maurer, M. (2012). Educational Policy Actors as Stakeholders in the Development of the Collective Skill System: The Case of Switzerland. In M. R. Busemeyer & C. Trampusch (Eds.), *The Political Economy of Collective Skill Formation* (pp. 126–148). Oxford and New York: Oxford University Press.
- Green, A. (1990). *Education and State Formation: the Rise of Education Systems in England, France and the USA*. London: Macmillan.

- Green, A. (2000). Converging Paths of Ships Passing in the Night? An “English” critique of Japanese school reform. *Comparative Education*, 36(4), 417–435.
- Hoadley, U., & Muller, J. (2014). *Visibility & pedagogic agency: investigating the epistemic potential of systemic tests*. Presented at the European Conference on Educational Research, 2nd – 5th September 2014, Porto, Portugal.
- Hyslop-Margison, E. J., & Sears, A. M. (2006). *Neo-liberalism, Globalization and Human Capital Learning. Reclaiming Education for Democratic Citizenship*. Dordrecht: Springer.
- Keep, E. (2012). *Youth Transitions, the Labour Market and Entry into Employment: Some Reflections and Questions* (SKOPE Research Paper No. 108). Cardiff: SKOPE, Cardiff University.
- Keep, E., & Mayhew, K. (2010). Moving beyond skills as a social and economic panacea. *Work, Employment and Society*, 24(3), 565–577.
- Lolwana, P. (2006). The history of falling matric standards. In V. Reddy (Ed.), *Marking Matric. Colloquium Proceedings* (pp. 18–29). Cape Town: HSRC Press.
- McCusker, D., Maithufi, S., Kloppers, E., Cilliers, L., Suliman, F., Bernard, T., ... Booysen, C. (2014). *What's in the CAPS package? Ms J Moore Prof L Makalela Dr LG Bull Ms N Zindela Mrs P Voller Ms N Nonkwelo* (A Comparative Study of the National Curriculum Statement (NCS) and the Curriculum and Assessment Policy Statement (CAPS)). Pretoria: Umalusi.
- Perlin, R. (2011). *Intern Nation. How to Earn Nothing and Learn Little in the Brave New Economy*. London and New York: Verso.
- Shalem, Y., & Allais, S. (2014). *Vocational subjects in the secondary curriculum -- what criteria count?*. Paper presented at the European Conference on Educational Research, Porto, 2nd – 5th September 2014, Porto.
- Van den Berg, S., & Shepard, D. (2009). *Signalling performance: An analysis of continuous assessment and matriculation examination marks in South Africa*. Pretoria: Umalusi.