## NSC Pass Requirements

## A discussion document for Umalusi on the NSC Pass mark <br> Volker Wedekind

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## Executive Summary

A number of commentators have raised concerns about the pass mark requirements set for the National Senior Certificate (NSC) qualification within the context of wider concerns about the quality of the schooling system. There is a perception that the pass mark is $30 \%$ and that this is too low, either because it signals that learners have only mastered $30 \%$ of the material, that the expectations are lower than they used to be, or that low minimum pass marks set low expectations. This discussion paper seeks to interrogate these concerns and explore possible ways of addressing these concerns. It notes that changing the pass mark does not address fundamental concerns about quality which can only be addressed in terms of the quality of teachers, the materials, the curriculum documents and assessment systems.

The paper is a discussion document. It draws on limited desktop research and some manipulation of statistical records. It begins by exploring the historical background to the NSC by examining what the 'historical future' of the NSC policymakers was. This refers to the imagined future educational landscape that was envisaged when the policy was written. This imagined future located the NSC as a primarily academic and specialized qualification alongside more vocationally oriented alternatives for post-compulsory, post-general education learners. As the policy was put into practice this imagined future transformed into the reality that the NSC, like its predecessor the Senior Certificate, was the main exit point from the schooling system. Despite public perception, the structure of the of the old Senior Certificate set the pass marks for subjects at similar and even lower levels than the NSC, particularly by converting failure at one level into a pass at Standard Grade or Lower Grade.

Given the de facto role that the NSC plays as the main exit point from the schooling system, it is necessary to understand what role it should play, and what the patterns of achievement are that influence learner pathways and destinations. Drawing on a Systems Heuristic approach, four broad groups are identified with an interest in the NSC. The learners (and their families) need both a certificate of completion and a record of achievement that signals something about what the learner is capable of going forward. The 'clients' are the employers and the post-school educational institutions which seek to recruit the learners and want a mechanism that differentiates the applicants and allows for selection into different jobs or learning programmes on the basis of reliable indicators of future success. The decision makers include politicians and civil servants who have political or personal accountability and have the authority to allocate resources. Their concerns are usually focused on managing perceptions and meeting targets such as pass rates at a macro level. The fourth grouping are the professionals and experts whose livelihoods are dependent on the system. Each group, and within each group, represents distinct interests that can be at odds with each other, and the system has to find ways of balancing the demands.

Currently about three quarters of the candidates who pass the exam achieve a pass that provides access to diploma and degree programmes offered by universities, while very few candidates achieve the minimal pass. The school leavers need to be accommodated across a spectrum of post-school institutions including, but not predominantly, at universities. Yet much of the current focus of the debate has been shaped by the NSC graduates' success at university level programmes. The NSC must of necessity fulfil a range of purposes.

Whether the NSC is out of alignment with international norms is addressed through a desktop review of pass requirements of two international systems (the Cambridge International

Examination and the International Baccalaureate) and seven selected countries that have different systems to South Africa. The conclusion that emerges from this is that, while it is problematic to compare systems, there are a number of countries that set their pass marks at the same or even lower levels. The suggestion that $50 \%$ is the norm internationally is not borne out by the survey.

The final part of the paper explores three scenarios by examining their effect on pass rates of the 2008-2011 cohorts of learners. The first scenario sets the pass requirement at a minimum of $50 \%$ per subject written. This would have a major effect reducing the pass rate to around $10 \%$. The second scenario explores the effect that a requirement that students should achieve a $50 \%$ aggregate. Here the pass rate moves up to about $40 \%$. Neither option is deemed realistic given the general concerns about pass rates. A third scenario is based on a strengthening of the routes into higher education programmes by focusing on the requirements for the language of learning and teaching (LOLT) which is currently set at $30 \%$. Research on student success at university suggests that achievement in the LOLT is a good indicator of success in higher education programmes. If this were raised to $50 \%$ for the Diploma and Bachelors pass and to $40 \%$ for the Higher Certificate pass there would be no impact on the overall pass rate, but some re-categorisation of passes within the NSC. If this were coupled with improving standards in the examination, and a much clearer reporting of the category of NSC pass, the effect could be positive at a symbolic level (with a $50 \%$ aggregate being a viable requirement), may provide clearer signals to employers, education providers and students, without generating public hysteria about drops in the overall pass rate.

The paper concludes with recommending the third scenario (or a variation of it) subject to further interrogation of the data and further research.

## Introduction

This report interrogates the appropriateness or otherwise of the pass levels set for the National Senior Certificate (NSC). During the course of 2012 a number of high profile commentators have criticized the level of achievement required by learners to pass the NSC examinations and this generated vigorous, though often misinformed, public debate about standards.

Umalusi, as the quality assurance and standards authority responsible for the schooling system, responded to the debate by correcting some of the inaccuracies, but also by commissioning research into this topic. This discussion paper' constitutes a component of the Umalusi response, and attempts to provide some comparative basis for making suggestions to the Minister for adjustments to the NSC pass requirements. It is noted that Umalusi does not have the authority to make the changes, and this report therefore can only form the basis for proposals. Nevertheless, given Umalusi's statutory responsibilities, it is entirely appropriate for Umalusi to interrogate the issues under review.

Boltanski and Thévenot (2006) describe critique as a contestation of ideas where the critics position themselves by appealing to a range of principles that are often incommensurable or at least based on different logics. Thus when one critic argues that the pass mark is unacceptable, one must understand what discursive rules are being drawn on to make this argument. Equally, when Umalusi responds, it does not necessarily draw on the same set of concerns. There is little scope for an objective resolution to the argument based on empirical fact. Rather, data will be employed (or ignored) by all parties to bolster their specific argument.

This paper does not seek to respond to the critiques that have been raised in order to dismiss them. Rather, what is attempted is to take seriously the various arguments and to look for pragmatic strategies that address aspects of the critique in order to bring about improvement. Underpinning this approach is an understanding of the complexity of social systems, and the inability to fully predict the consequences of reforms (Ramalinga et al 2008). Thus, the adjustments proposed at the end of this paper are deliberately limited so that the system is not unduly shocked by major revisions and that continuities are recognized and understood.

The overarching approach taken in this report is to attempt to answer the questions: What purpose does the National Senior Certificate serve? In what ways does the pass requirement serve that purpose? How can the current situation be improved?

In order to move towards answering these questions the paper begins by revisiting the 'historical future', i.e. the imagined future envisaged by policymakers at the time of the development of the NSC. This is done by sketching in broad strokes the history of the development of the policy that governs the NSC, and how this has unfolded over time.

[^0]This is followed by a discussion of the key trends in the current context, and what the major fault lines associated with the NSC are. In order to place the NSC in an international context and to unpack some of the claims made by critics of the current requirement, the paper reviews a selected group of international examination systems.

On the basis of the historical review and the international comparison, three scenarios in which the pass requirements are changed are explored by examining their effect on the 2008-2011 cohorts. A recommendation for an adjustment is proposed. The conclusion recommends further research to inform the decision.

## Historical Background

It is not possible to provide a full overview of the history of the final school leaving examinations within the limitations of this report, but it is important to draw out some of the key strands of that history. This is important because it contextualizes some of the current issues, and because one of the dimensions of the critique has invoked a logic that argues that examination systems in the past were setting higher standards and that the mark required to pass was historically higher than it is today.

When reference is made to the apartheid education system or its components, Christian National Education and Bantu Education, these overarching terms capture in broad strokes a history of systematic discrimination based on a racist ideology. However, what these terms mask is the complexity of that system and the fact that there was significant variation at a range of levels. At its height the system was comprised of four provincial departments dealing with education for whites, separate authorities for Indians (House of Delegates), coloureds (House of Representatives) and African blacks outside the homelands (DET), as well as separate departments of education in the 'self-governing homelands' (KwaZulu, Qwaqwa, KwaNdebele, etc) and the 'independent' TBVC (Transkei, Bophuthatswana, Venda and Ciskei). In all there were 17 different departments each administering their own examinations and, in some cases, following divergent curricula and assessment regimes.

While there was sufficient commonality across the systems in the overarching curriculum and assessment structure (similar subject choices, rules of combination, broad syllabus congruence) to allow for a fairly quick merger after 1994, this superstructural congruence masked the fact that quite different practices had developed within the various substructures of the education system. To date there has not been a systematic examination of standards across different examining bodies of the apartheid system, but there is anecdotal evidence of quite significant variation in the nature of tasks set ${ }^{2}$. Thus, when people compare with the past, it is not always clear which part of the past is being invoked.

While there was variation in terms of standards, the qualification requirements were constant across the system and the old Senior Certificate had the same pass requirements in terms of marks. What distinguished it from the current system was the fact that three internal levels were allowed - Higher Grade, Standard Grade and Lower Grade (the latter being a technical conversion rather than a separate syllabus and examination) and that the pass was determined by an aggregate. Thus, comparison with the past is problematic in so far as the old system comprised complex rules of passes at different levels. In addition to including subject passes at different grade levels, the old senior certificate made provision for the inclusion of some technical subjects on the NATED 190/191 subject list which further complicates a comparison. The table below summarises the main features of the two categories of pass.

[^1]| Senior Certificate | Senior Certificate with endorsement |
| :--- | :--- |
| 6 subjects offered and written from <br> registered SC subjects. | 6 subjects offered and written from <br> registered SC subjects. |
| Pass 5 subjects | Pass 5 subjects |
| One official language and one language of <br> learning and teaching | $20 \%$ sub-minimum in 6th subject |
| Minimum aggregate of 720 marks | Minimum aggregate 950 marks |
| HG subjects failed with between 25\% and <br> $39 \%$ <br> convert to SG passes | Must present subjects from Group A and <br> three of Groups B to F |
| SG subjects failed with between 25\% and <br> $33 \% ~ c o n v e r t ~ t o ~ L G ~ p a s s e s ~$ | 2 Official languages to be offered and <br> passed at First and Second Language <br> HG level. One of two languages to be a <br> university language of instruction |
| Concession for immigrants - 6 subjects, <br> including one official First Language | Subjects passed from Group A and three of <br> Groups B to F OR subjects from Group A and <br> two of Groups B to F where a second Group <br> C or Group E subject pass compensates for <br> a pass from a fourth group |
| Condonation of 2\% for a pass or 10 marks on <br> the aggregate and conversions allowed | Only HG failures of between 30\% to 39\% <br> converted to SG passes |
| SC can be obtained with inclusion of N3 <br> subjects | 187 senior certificate subjects recognised for <br> endorsement |
| Lower Grade subjects - only for conversion <br> purposes | Condonation of $2 \%$ for a pass or 10 marks on <br> the aggregate and conversions allowed |
| Concession to immigrants - 6 subjects, two <br> languages - second official language can <br> be SG or HG Group D or A-level language |  |

The second aspect of the history of the school exit examination relates to the multiple purposes of that examination. Prior to the introduction of the National Qualification Framework, the Senior Certificate was a crossroad in an individual's educational career. One critical function that it fulfilled was that it was recognised by the Joint Matriculation Board (JMB), a sub-structure of the South African Universities Vice-Chancellors Association (SAUVCA - now Higher Education South Africa), that administered the university entrance processes. It is not commonly understood that 'matriculation' is in fact the process of enrolling into an institution (usually a university) and that universities have the right to set their own entrance examination, known as a matriculation examination. The JMB recognised that certain categories of pass in the Senior Certificate could exempt people from the requirement to write a matriculation examination, and hence they would award people with what became known as the 'matric exemption'. ${ }^{3}$ In reality South African universities did not set their own matriculation tests and consequently the concept of 'exemption' lost some of its original meaning ${ }^{4}$. So strong was the emphasis on getting the exemption that over time the whole assessment became known as matric exams and the final year of schooling became known in most schools as Matric.

[^2]This issue of the 'Matric' and all that it carries discursively is more than just semantics. What it signals is that the school leaving certificate had become strongly associated with one function, namely providing access into university level programmes. Of course, historically and to date, a relatively small (albeit growing) proportion of school leavers actually proceed into degree level programmes. The majority of school leavers either enter into vocationally oriented certificate and diploma programmes at public and private colleges or universities of technology (formerly technikons) or they enter directly into the labour market (or sadly, none of the above). Thus the certificate had to signal something about the recipient to a range of educational providers at different levels with different purposes as well as to employers and the general public. The multiple versions of passes that were possible under the old Senior Certificate allowed for a much greater differentiation amongst the holders of the certificate dependent on whether the learner had higher or standard grade subjects, and whether the combination of subjects included vocational $\mathrm{N} 1-\mathrm{N} 3$ subjects. The question arises again: If one is comparing with the past, what is it that is being compared?

Bill Green has recently pointed to the need for researchers to better understand the 'historical future' (Green 2012). What he means is that we need to understand not only what happened historically, but also what people were imagining their future to be. Thus, in examining the history of the NSC, we must also understand what future the policymakers of the 1990s were working towards, even if that is not what transpired. The introduction of a Further Education and Training Certificate (FETC) was the original vision for the exit point at the end of both schools, FET colleges and workplace training. The intention, articulated in the Green Paper on Further Education and Training, was for a post-compulsory Further Education system (the FET Band) comprising schools that focused on an academic track leading in the main to university entrance, colleges (both public and private) that focused on a general vocational pathway, and work-based learning linked to specific trades and occupations. All three pathways would ultimately lead to the same qualification (an FETC). It was anticipated that the majority of learners (as they were now called) would be found in the vocational streams, as the academic track leading to university entrance would cater for a relatively smaller segment of the learner population.

| Higher Education | Universities | Universities of Technology | Private Providers | 듕 |
| :---: | :---: | :---: | :---: | :---: |
|  | FETC (now NSC and NCV) |  |  |  |
| Further Education and Training | Grades 10-12 in Schools | FET Colleges | Workplace |  |
|  | GETC (GEC) <br> ABET Certificates |  |  |  |
| General Education and Training | Schools Grade R-9 |  | ABET Levels 1-4 |  |

There are some parallels in this envisaged system with the FE system in the UK, or the differentiation between Grammar and Comprehensive schools, or indeed the distinction between Gymnasium and Volkschule in the Germanic system. The one pathway provides an academic preparation for university while the majority receive a rounded education that prepares people for work directly or for further vocationally oriented study. Because the NQF made provision for both recognition of prior learning (RPL) and transfer of credits horizontally and vertically, the pathways outlined in the policy were not intended to be terminal or restrictive. In this imagined future a learner could complete Grade 9 (the end of the General Education band), proceed to a college and work toward a vocational FETC, transfer credits and return to schools in order to gain access to university and so forth.

Very little of this vision actually materialized. The notion of Grade 9 being an exit point from the system was never developed seriously. Because of resource constraints, colleges were not expanded or reconceptualised in the manner envisaged in the Green Paper, where they would accommodate the majority of mainstream learners. The National Certificate (Vocational) was not developed in conjunction with the NSC. Schools remained the institution of choice (or necessity) for more than $90 \%$ of learners enrolled in the FET Band. However, the curriculum that was developed for the FET schools did adopt certain of the assumptions of the imagined future system. The accommodation of vocational subjects from NATED 190 within the structure of the NSC qualification was removed, initially vocationally oriented school subjects were removed (on the assumption that these would now be offered at colleges), and the need for standard and lower grade were removed because the learners that these provisions catered for would not be in the academic stream. In addition gateway academic subjects such as Mathematics were made compulsory (with the introduction of Mathematical Literacy as an alternative for those not planning to enter science and commerce streams at university ${ }^{5}$ ).

The structure of the envisaged qualification signalled that it was already a specialized curriculum, rather than a general or comprehensive one, in that learners were expected to select subjects within a specific learning field, so that their FETC would have a degree of specialisation. This was based on the notion that a post-general education should be specialized, and that all qualifications at this level should specify fundamental, core and elective components. The fundamental component included Life Orientation, while the core comprised Language and Mathematics and the elective was made up of a selection of three subjects, two of which had to be in the same learning field. For example, learners would be required to choose their packages with a science, languages, or agricultural studies orientation. This requirement was only changed days before the rules of combination were gazetted on the advice of a ministerial committee that suggested that these combinations were not workable in many schools.

[^3]
# NCS Subjects 

## - Agriculture

- Agricultral management practices*, Agricultural science, Agricultural technology*


## - Arts and Culture

- Dance studies, Design, Dramatic Arts, Music Visual Arts
- Business, Commerce and Management Studies
- Accounting, Business Studies, Economics
- Engineering and Technology
- Civil technology*, Electrical technology*, Mechanical technology*, Engineering graphics and design*


## - Services

- Consumer Studies, Hospitality Studies, Tourism


## - Languages

- All SA languages at 2AL and many foreign languages
- Human and Social Sciences
- Geography, History, Religion Studies
- Physical, Mathematical, Computer and Life Sciences
- Computer Applications Technology, Information Technology, Life Science, Physical Science

While practical implementation issues shifted the rules of combination in a way that made the structure relatively flexible, the teams that had developed the curriculum statements had worked with a notion of the curriculum being targeted at an academic stream. For example it was assumed that technical subjects would now be accommodated in colleges and that there was thus no need for subjects traditionally taught in technical high schools. This was also revised to a degree at the time of implementation, and a number of the technical and vocationally oriented subjects were not available or in draft form when the curriculum was implemented. (See the subjects in bold italics in the box above.)

When the new National Senior Certificate ${ }^{6}$ was gazetted in 2005 the final structure was the outcome of a number of compromises and debates about what was and was not appropriate for the qualification. Various lobby groups applied pressure to influence the inclusion of specific subjects and there were major debates about the nature of the proposed Mathematical Literacy subjec ${ }^{\dagger}$.

The final outcome, gazetted in July 2005, resulted in a qualification which demonstrated sufficient continuity with the structure of the Senior Certificate, while introducing two key features that were new. Firstly, there was more specification of subjects through the requirement that all learners take two languages, that all learners take either Mathematics or Mathematical Literacy and that all learners take Life Orientation. Secondly, the distinction between Higher Grade, Standard Grade and the conversion to Lower Grade was done away with. In addition, most subjects were significantly revised, renamed or removed. These changes caused much anxiety amongst teachers and officials with concerns about system preparedness. In terms of the assessment structure, there was concern about the impact of doing away with the different Grades, and about the weight allocated to school based assessment ${ }^{8}$ (SBA).

This brief history is important primarily in order to show that the 'historical future' imagined in the policy and the curriculum statement was quite different to what eventually unfolded. There was no significant simultaneous expansion of the FET college sector as a viable alternative to high schools, and the full time vocationally oriented qualification, the National Certificate (Vocational) (NCV) was only developed some years later. Schools remained the institution that the vast majority of Grade 9 s saw as their next step, and in the general public understanding, as well as the understanding of most politicians, Grade 12 remained the de facto exit point from the system. This meant that the Grade 12 examination had to perform a function that it was not strictly designed for.

[^4]
## The Current Situation

## The Reception of the NSC

When the NSC was introduced it was immediately subjected to sustained critique. Concerns were raised about the extension of the outcomes based education approach to the senior secondary school level, about the content of certain subjects, the loss of the Standard Grade, and about the standards dropping in the assessment.

Once the first cohort of learners completed their Grade 12 in 2008 the higher education sector also became directly engaged as universities tried to adjust their entry requirements and points system. The minimum entry requirements for access to higher education had been determined by Gazette, but the specific entry requirements for particular faculties were determined by institutions without much knowledge of the changes in the qualifications. Debates about which programmes required a pass in Mathematics and what the level of competence in English should be were the main focus of these discussions. Higher Education South Africa had commissioned research using an independent placement test (the National Benchmark Test - NBT), and these test results suggested that school-leavers with an NSC were not well prepared for higher education study despite good NSC results. Less than half the 11500 students tested across a range of universities were deemed proficient in terms of literacy and only $7,5 \%$ were sufficiently numerate to not require extra support in mathematics.

These findings and the surge in the numbers of students qualifying for university entrance suggested that the schooling system was not preparing students at the right level. A number of studies tracking particular groups of students have provided a more nuanced account, suggesting that the NSC learners are capable but have a different skill set, or that the NSC is a reliable predictor at the top end of the achievement scale (see for example Essack, et al 2012, Hunt et al 2011, Rankin et al forthcoming, Schoer et al 2010).

In 2011, 2012 and 2013 the critique shifted in focus onto the pass mark itself, with public intellectuals such as Jonathan Jansen, Mamphele Ramphela and others (including senior ANC leaders) suggesting that the $30 \%$ pass required in most subjects was too low, and that this entrenched mediocrity into the system. Jansen, speaking at the Umalusi Conference in 2012 , went on to propose that the pass mark be raised to $50 \%$. This call has been repeatedly echoed, often justified on the basis that this is the level required at university.

Overall, given the general concerns about the quality of schooling and South Africa's poor performance on international standardized tests such as TIMMS, SACMEQ and PIRLS, there is a widespread public concern about educational quality, and one issue that has captured the imagination of the public is the seemingly low pass requirements for the NSC.

In order to assess whether these concerns warrant some adjustment to the current policy, it is necessary to first examine exactly what purpose the NSC must serve.

## What is the purpose of the National Senior Certificate?

A qualification that is effectively the main exit point from the schooling system has multiple audiences, and multiple purposes. A Critical Systems approach suggests that all social policy has a number of groupings involved: Those who are the source of motivation, those that have the power, those that have the expertise and those that are affected (Ulrich 2000). These broad groupings operate within a reference system that determines what observations and evaluations are considered relevant. Each grouping draws on a different set of sources within the reference system. This is in many respects the greatest challenge with policy such as the one under discussion here. What is regarded as legitimate, how improvement is measured and how resources are allocated, are all part of a highly contested space. For purposes of this paper three broad groupings will be discussed: the learners and their parents/guardians (those affected); employers and diverse post-school institutions (the 'clients'); and the political-bureaucratic domain (the decision makers).

For the learner who achieves an NSC, the certificate at one level signals closure on a major period of the young person's life. It is effectively an exit certificate that says to the learner and their guardians that the individual has completed their required years of schooling?. Exactly what school completion means in terms of skills, knowledge, aptitude etc. is clearly spelt out in the curriculum and the assessment guidelines in terms of the specific subjects selected. What is not always clear is what the qualification means as a whole in terms of generic skills ${ }^{10}$. Nevertheless, there is an expectation that the majority of learners will complete Grade 12 and be able to say that they have completed schooling, and that the certificate provides access to one of a number of post-school activities.

For the second grouping, employers and post-school institutions, the certificate needs to signal something about the competence that the learner has that would enable her or him to enter the job market or proceed with a range of study options. A basic pass must signal a level of literacy, numeracy and general dispositions that makes a person employable and able to learn the specific skills required to perform in the workplace. Employers are less concerned with subject specific achievement and are interested in a set of generic skills. In contrast, the various post-secondary education and training institutions look to the results to signal levels of preparedness for further study in a wide range of fields at very different levels (from vocational courses through certificates, diplomas and degrees). This grouping is highly diverse and different requirements are set not only for institutional or qualification type, but also for different programmes within an institution. For this grouping, both generic skills (academic literacy for example) and subject specific performance (achievement in Mathematics for example) are important as part of the placement of students in various programmes.

The third grouping with an interest in the NSC are the decision-makers, i.e. the politicians and the civil servants responsible for the system. Their concerns circulate around public perceptions, resource allocation, system stability and personal performance measures. These often contradictory forces push and pull the decision makers into different directions.

[^5]Given these competing interests, how has the current policy attempted to accommodate the divergent needs? With less than $25 \%$ of the school leavers proceeding on to higher education, universities have a disproportionate influence in shaping the debate on the quality and pass mark required to achieve an NSC. Learners completing the NSC will be seeking to study further towards a wide range of certificates, diplomas and degrees at private and public, local and international colleges, universities of technology, universities and on the job training facilities. It is thus important to ensure that any response to the issue of NSC pass marks takes account of the diversity of these institutions, as well as the needs of the labour market and the individuals, and not just higher education.

The way the current structure of the NSC attempts to deal with this matter is by differentiating four categories of pass. Historically, the Senior Certificate was either awarded with Matriculation Exemption (later changed to Endorsement) or without such endorsement. This distinguished those learners who could enter university level programmes (degrees) from the rest. The NSC by contrast is differentiated by the type of programme that the level of pass gives you access to, i.e. a pass with no access to further study, access to a Higher Certificate, access to a Diploma and access to a Bachelors degree. This is a response from the policymakers to signal the multiple purposes of the NSC.

The differentiating mechanisms that distinguish the categories of pass are based on performance in specific subjects and combinations of particular subjects. The table below presents a summary of the current differences. These have been revised from the original requirements which were under-specified. The basic NSC with no access to higher education programmes requires a learner to achieve three subjects with a minimum of $40 \%$ including the Home Language ( HL ), and a further 3 subjects can be passed at $30 \%$. There also has to be evidence that the School Based Assessment (SBA) (including Life Orientation) has been passed. If one were to convert this to an aggregate, the learner would have to achieve a score of 210 out of a possible 600 (or $35 \%$ ), although provision for one failed subject could pull that aggregate down whilst still resulting in a pass ${ }^{11}$.

[^6]|  | National Senior Certificate |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | NSC | With admission requirements to: |  |  |
|  |  | Higher Certificate | Diploma | Bachelors |
| Home language | 40\% |  |  |  |
| FAL | 3 Subjects |  | The NSC with | The NSC with |
| Life Orientation | passed with |  | a minimum of | a minimum of |
| Mathematics/ Maths Literacy | $\geq 40 \%$ (including the HL ) and 3 | The NSC with <br> a minimum of | $\geq 30 \%$ in the LOLT of the HE | $\geq 30 \%$ in the LOLT of the HE |
| 3 subjects offered from group B | passed with $\geq 30 \%$. <br> Can fail one subject, provided there is full evidence of the SBA having been cmpleted. | $\geq 30 \%$ in the language of learning and teaching (LOLT) of the HE institution | institution, and $\geq 40 \%$ in four recognized 20-credit subjects [that is, excluding Life Orientation] | institution and $\geq 50 \%$ in four designated 20-credit subjects [that is, excluding Life Orientation] |

This baseline pass for the NSC serves little purpose other than providing the learner with a school leaving certificate and perhaps signaling to employers that a basic level of home language competence and numeracy have been achieved. The second tier of pass with access to Higher Certificate programmes is essentially the same, with the distinction that learners have achieved a minimum of $30 \%$ in the language of teaching and learning of the institution that they plan to enroll at. For most programmes this would be English although it is theoretically possible to achieve this category with Afrikaans or another South African language should the programme be available in that language ${ }^{12}$.

Diploma and Degree level passes currently have the same language requirements as for the Higher Certificate, but they require higher levels of achievement in designated subjects agreed to by Higher Education South Africa (HESA) and gazetted as such. This means that the minimum score out of 600 rises to 220 (37\%) for the Diploma and 260 (43\%) for the Degree category.

[^7]The table below provides a breakdown of the patterns of achievement since 2008 per province and nationally.

## What are the pass patterns?

| Province | Year | Number who wrote | Achieved with bachelor | \% <br> Aachieved bachelors | Achieved with Diploma | \% <br> achieved Diploma | Achieved with Higher Certificate | \% achieved Higher Certificate | WITH NSC | \% achieved NSC | Total achieved | \% achieved |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Number | \% | Number | \% | Number | \% | Number | \% | Number | \% |
| Mpumalanga | 2008 | 42153 | 5535 | 13,1 | 8116 | 19,3 | 8193 | 19,4 | 11 | 0 | 21855 | 51,8 |
|  | 2009 | 53978 | 6555 | 12,1 | 10165 | 18,8 | 9107 | 16,9 | 25 | 0 | 25854 | 47,9 |
|  | 2010 | 51695 | 8147 | 15,8 | 11955 | 23,1 | 9183 | 17,8 | 104 | 0,2 | 29352 | 56,8 |
|  | 2011 | 45135 | 8856 | 18,4 | 13195 | 27,4 | 9072 | 18,8 | 54 | 0,1 | 31157 | 64,8 |
| North West | 2006 | 33157 | 6436 | 19,4 | 8832 | 26,6 | 7292 | 22 | 3 | 0 | 22563 | 68 |
|  | 2009 | 30665 | 6356 | 20,7 | 8161 | 26,6 | 6181 | 20,2 | 2 | 0 | 20700 | 67,5 |
|  | 2010 | 28909 | 8021 | 27,7 | 8937 | 30,9 | 4916 | 17 | 1 | 0 | 21874 | 75,7 |
|  | 2011 | 25364 | 7157 | 28,3 | 8373 | 33 | 4177 | 16,5 | 0 | 0 | 19737 | 77,8 |
| Northern Cape | 2008 | 9948 | 1997 | 20,1 | 3044 | 30,6 | 2195 | 22,1 | 1 | 0 | 7237 | 72,7 |
|  | 2009 | 10377 | 1741 | 16,8 | 2060 | 25,6 | 1963 | 18,8 | 2 | 0 | 6366 | 61,3 |
|  | 2010 | 10182 | 2152 | 21,1 | 3001 | 29,5 | 2210 | 21,7 | 3 | 0 | 7366 | 72,3 |
|  | 2011 | 10116 | 2012 | 19,9 | 2871 | 28,4 | 2074 | 20,5 | 0 | 0 | 6957 | 68,8 |
| Western Cape | 2005 | 43966 | 14503 | 33,0 | 12820 | 29,2 | 7164 | 16,3 | 1 | 0 | 34488 | 78,4 |
|  | 2009 | 44931 | 14324 | 31,9 | 12677 | 28,2 | 6988 | 15,6 | 28 | 0,01 | 34017 | 75,7 |
|  | 2010 | 45764 | 14412 | 31,5 | 13734 | 30 | 7524 | 16,4 | 4 | 0 | 34831 | 76,1 |
|  | 2011 | 39960 | 15214 | 38,1 | 12410 | 31,1 | 5480 | 13,7 | 6 | 0 | 33110 | 82,9 |
| National | 2006 | 533661 | 107274 | 20,1 | 124258 | 23,3 | 102032 | 19,1 | 180 | 0 | 333744 | 62,6 |
|  | 2009 | 552073 | 109697 | 19,9 | 131035 | 23,7 | 93356 | 16,9 | 630 | 0,1 | 334718 | 60,6 |
|  | 2010 | 537543 | 126371 | 23,5 | 146186 | 27,2 | 91947 | 17,1 | 677 | 0,1 | 364147 | 67,8 |
|  | 2011 | 496090 | 120767 | 24,3 | 141584 | 28,5 | 85296 | 17,2 | 470 | 0,1 | 348117 | 70,2 |

The drop in the numbers of earners obtaining admission to Bachelor Studies is due to the decrease in overall enrollment.

If one sets aside the far more serious concern that $30 \%$ or more of those who wrote did not achieve a pass of any sort, it is worth interrogating the spread across the categories of passes. What is immediately noteworthy is that the NSC with no access to further qualifications represents an almost negligible number of learners. Of the almost half a million learners who wrote, less than $0.1 \%$ were awarded the NSC with no admission to other levels. One has to question whether this category differentiates the cohort in any way?

The spread across the other three higher education categories is skewed towards the higher level programmes with $52 \%$ of all candidates passing with a degree or diploma pass. These two categories together make up $75 \%$ of all learners that get an NSC pass. Given that the wider societal vision encapsulated in documents such as the Planning Commission's report and the National Skills Development Strategy (NSDSIII) envisages a much more diverse post-school sector with significant expansion of apprenticeships and other technical and vocational qualifications, there does seem to be a skewed emphasis on university level education as the likely next step. Given the limited capacity of the higher education sector to take on students, there is some reason to be concerned about what these current pass requirements signal.

| Year | Candidates | \#Endorsements | \%Endorsed |
| :--- | ---: | ---: | ---: |
| 2004 | 467985 | 85117 | $18.2 \%$ |
| 2005 | 508363 | 86531 | $17.0 \%$ |
| 2006 | 528525 | 85830 | $16.2 \%$ |
| 2007 | 591251 | 89378 | $15.1 \%$ |
| 2008 | 589912 | 119162 | $20.2 \%$ |
| 2009 | 551940 | 109697 | $19.9 \%$ |
| 2010 | 537543 | 126371 | $23.5 \%$ |
| 2011 | 496090 | 120767 | $24.3 \%$ |

The current spread of achievement suggests that it is not easy to pass (given that 1 in 3 fail) but that when you do pass the majority pass with access to high level programmes. Does this spread send the right signals about the learners' capabilities? The key challenge for the NSC is to meet all the different expectations and requirements within one final assessment, and it isn't clear that it currently does this. The fact that the subject choices no longer include NATED courses and the removal of Standard Grade (and Lower Grade) limits the types of passes possible. While one can't compare the old and the new system in all respects, it is possible to compare the percentage of candidates that achieved a university entrance pass. The table below provides the percentage from 2004 to 2011.

There has been a $9 \%$ increase in the number of candidates qualifying for university entrance between 2007 and 2011. It is the numbers endorsed, rather than the percentages, that explain some of the crisis the higher education system went through in 2008 when almost 30 000 more young people qualified for university entrance than was predicted based on the patterns of the previous four years. This coincides with the first group of NSC graduates and suggests that perhaps the university entrance requirement was not benchmarked accurately.

The table below provides a picture of the patterns of participation, pass and exemption for the Department of Basic Education.


The educational history of South Africa is clearly visible in this graph. The various periods of expanded enrolment have a direct inverse relationship with both the pass rate and the exemption rate.

This pattern is strikingly different in the much smaller Independent Examinations Board data.


Increasing enrolment, albeit a small percentage of the national system, has not affected the pass or exemption rate negatively. The reasons for this are beyond the scope of this discussion.

The patterns of pass and university entrance (exemption) provide the backdrop for much of the concern that has been expressed about the pass mark. However, it should be noted that the debate about the pass mark has little bearing on the exemption rate. Before returning to this issue in more detail it is useful to examine what pass requirements are used in a number of other countries and international systems.

## International Comparisons

This section attempts to explore some of the systems used in other countries. The reason for doing this is to attempt to answer two questions: Firstly, is it indeed so unusual to have pass marks set at $30-40 \%$, and secondly, is there something one can learn from the way other systems are structured?

Before looking at a selected number of countries, the report looks at two of the largest international systems, the Cambridge International Examination (CIE) and the International Baccalaureate (IB).

## International Examining Bodies

## Cambridge International Examination

The CIE is an international examination body that enrols about 175000 learners in 9000 affiliated schools throughout the world. It has learners in 160 countries, including South Africa, where a small number of independent schools offer the Cambridge programme. Because the CIE is based to a large extent on the British system, and enjoys equivalence with British school qualifications, the Cambridge system is also often the basis for many national systems in the British Commonwealth.

The CIE offers 55 different subjects which can be taken in almost any combination. This makes the curriculum very flexible but also potentially very specialized as learners are not required to take any compulsory subjects. Good advice on subject choice is crucial for access to further studies.

The CIE grades learners using a letter system from $A^{*}-E$ (where $A^{*}$ represents the higher end of the A spectrum) for the A-Levels and a scale from A-E for the AS levels. Because individual subjects are not examined in the same way and there is no common 'raw' score, there is no aggregate that is calculated. However, in the CIE's own advice ${ }^{13}$ to universities that seek to convert the grades to percentages they recommend the following:

| Cambridge Grade | Recommended Conversion |
| :--- | :--- |
| A $^{*}$ | $90-100$ |
| A | $80-89$ |
| B | $70-79$ |
| C | $60-69$ |
| D | $50-59$ |
| E | $40-49$ |

The suggested mechanism for calculating an aggregate is to convert Cambridge Grades to the mid-point of each scale and add these together. In terms of a pass mark, CIE subjects could be deemed to work with a $40 \%$ minimum.

[^8]In terms of university access, Higher Education SA will grant matriculation exemption certificates to holders of Cambridge International AS and A Levels, provided they meet the following criteria and subject group requirements:

- Pass marks in two A Levels and three IGCSE/O Levels (grades A-C)
- Pass marks (A-D) in four AS Levels including English Language and one IGCSE/O Level (grades A-C) in subjects with SA equivalents
- Pass marks in five full credits (A-D) or four full credits and two half credits in the AICE Diploma that meet the subject group requirements
- Pass marks (1-3) in four HIGCSE Level subjects and one IGCSE/O Levels that meet the SA subject grouping requirements.

The conversions above suggest that the CIE marks are perhaps a little higher than the NSC, and the minimum mark for subjects of $40 \%$ is higher than the South African equivalent.

## International Baccalaureate

The IB is an international examination authority that is not based on any national system and claims to draw on the best practices worldwide. The number of students in the Diploma Programme has increased from 2,800 students in 1980 to nearly 120,000 now. A small number of schools in South Africa offer the IB curriculum.

The IB has a much more structured curriculum than the Cambridge system. The aim of the IB is to produce well-rounded learners and they therefore prescribe what learners must take, much like the NSC. IB Diploma Programme students study six courses at higher level or standard level. Students must choose one subject from each of groups 1 to 5 , thus ensuring breadth of experience in languages (Groups 1 and 2), social studies (Group3), the experimental sciences (Group 4) and mathematics and computer sciences (Group 5). The sixth subject may be an arts subject chosen from Group 6, or the learner may choose another subject from groups 1 to 5 . All students in the IB Diploma Programme take a combination of standard level (SL) and higher level (HL) courses. Standard level courses include a broad curriculum with 150 teaching hours. Diploma Programme students take at least three higher level courses that allow them to explore additional topics in further depth over an extended period of 240 teaching hours.

In addition the programme has three core requirements that are included to broaden the educational experience and challenge students to apply their knowledge and understanding.

- The extended essay is a requirement for students to engage in independent research through an in-depth study of a question relating to one of the subjects they are studying.
- Theory of knowledge is a course designed to encourage each student to reflect on the nature of knowledge by critically examining different ways of knowing (perception, emotion, language and reason) and different kinds of knowledge (scientific, artistic, mathematical and historical).
- Creativity, action, service requires that students actively learn from the experience of doing real tasks beyond the classroom.
- Students can combine all three components or do activities related to each one of them separately.

The assessment system used by the IB is based on a 7 point achievement scale for each subject as well as 3 additional points that are awarded for the core components. A student can score a maximum of 45 points, and requires a minimum of 24 points to have the Diploma awarded. If this is converted to percentages, the student has to achieve a minimum of $53 \%$ to have the diploma awarded. There are sub-minimum requirements for performance across the programme as a whole, but there does not appear to be a failure mark as such. A seven point scale can be converted roughly as follows (my conversion):

| IB Grade | Percentage Conversion | University points ${ }^{14}$ |
| :--- | :--- | :--- |
| 7 | $90-100$ | 5 |
| 6 | $75-89$ | 4 |
| 5 | $60-74$ | 3 |
| 4 | $45-59$ | 2 |
| 3 | $30-44$ | 1 |
| 2 | $15-29$ |  |
| 1 | $0-14$ |  |

According to the IB the 2009 results had the following distribution of grades, although grade distribution varies by subject.


Figure 1 - Source: International Baccalaureate
Only $7 \%$ receive the top grade of a 7 , and more than $50 \%$ of all grades fall between 4 and 5 . However, some $13 \%$ of learners achieve a 3 , which would be roughly $30-45 \%$ on our system.

The IB results show that pass rates have remained consistent at around $80 \%$, and the average score on the IB diploma has been 30 points. Less than $1 \%$ of students receiving the IB diploma obtain a maximum score of 45 points.

[^9]
## National Examining Authorities

A number of national systems have similarities to each other through their particular historical connections. Many African countries that are part of the Commonwealth base their system on the British 'A' and ' $O$ ' levels, while Francophone countries maintain a system that is similar to the French system. The countries selected here represent a few exemplars of the different systems that provide a basis for assessing whether South Africa's pass requirements are indeed significantly out of alignment with international norms.

## Brazil

Brazil's system is federal, with a high degree of autonomy at the state and municipal level. There is thus no single Brazilian norm. However, the federal government has been introducing national standards and standardized tests across the system and this has resulted in increasing standardization across the system.

It should be noted that Brazil generally has a strong Vocational Education system, and there are viable alternatives to high school as well as vocational options within the high school from the second year, with professional training courses such as agriculture available. Entry into universities is controlled through a competitive vestibular entrance examination. The tables below reflect the most common Brazilian grading systems either on a five point or seven point scale. ${ }^{15}$

Brazil Five point grading system

| Requirements to complete high school | Requirements to enter university | Most Common Grading System |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Core subjects (3 languages, academic subjects) Optional training courses | Pass high school and entrance examination | Grade Description | Brazil Grade | Scale 1 | Scale 2 |
|  |  | Excellent | A | 9.00-10.00 | 90.00-100.00 |
|  |  | Good | B | 7.00-8.99 | 70.00-89.99 |
|  |  | Average | C | 5.00-6.99 | 50.00-69.99 |
|  |  | Sufficient | D | 3.00-4.99 | 30.00-49.99 |
|  |  | Fail | F | 0.00-2.99 | 0.00-29.99 |

[^10]
## Brazil Double Letter Grading System

| Double Letter Grade |  |  |
| :--- | :--- | :--- |
| Brazil Grade | Grade <br> Description | Scale |
| SS | Superior | $9.00-10.00$ |
| MS | Medium <br> Superior | $7.00-8.99$ |
| MM | Medium | $5.00-6.99$ |
| CC | Credit Granted |  |
| MI | Medium Inferior | $3.00-4.99$ |
| II | Inferior | $0.00-2.99$ |
| SR | Fail |  |

Brazil Letter Grading System

| Letter Grade |  |
| :--- | :--- |
| Grade Description | Brazil Grade |
| E | (Excellent) |
| MB | Muito Bom (Very Good) |
| B | Bom |
| S | Aceptable (Average) |
| R | Aceptable (Average) |
| I | Fail |
| D | Fail |

The variations in these grading systems and the lack of a national standard make any superficial comparison problematic, and the scales are not even in their distribution with some rungs representing a $30 \%$ range while others are $20 \%$ or $10 \%$. Nevertheless, it is clear that on some of these scales the pass mark is deemed to be at $30 \%$ while others are around $40 \%$.

## Kenya

There are three categories of high school in Kenya - government funded, harambee and private. Government funded schools are divided into national, provincial and district levels and they absorb students according to academic scores. Highest primary school achievers enter national schools, those with average scores enter provincial and district schools, and those with low scores enter Harambee schools.

Students attend four years of secondary school and sit at school leaving examinations at the end of the fourth year, also known as form 4. The exam held from October to November is called the Kenya Certificate of Secondary Education examination.

Private schools offer an alternative, expensive education system and are often favoured for prestige and for having better facilities to offer. Most private schools offer the British education system that uses A-levels and O-levels.

| Requirements to complete high school | Requirements to enter university | KCSE Grading System |  |  |
| :---: | :---: | :---: | :---: | :---: |
| -8 Core subjects (3 languages, academic subjects) Optional training courses | -Pass high school with C+ grade -best 8 subjects if student sits for more than 8 subjects -Performance in subjects relevant to degree courses - B and B- at public university, due to demand - C or C+ with relevant diploma certificate, if they afford full fees | Grading Scale | Number of points per grade | Calculating the Grade Average |
|  |  | A and A- | Each category is given a points from 12 for an A to 1 for an E | The best eight subject points are added together, divided by 8 and allocated a Grade |
|  |  | B+, B, B- |  |  |
|  |  | C+, C, C- |  |  |
|  |  | D+, D, D- |  |  |
|  |  | E |  |  |
|  |  |  |  |  |

Each of the Grades allocated theoretically represents about 8 percentage points. The Kenyan system has a no failure mark, as even the lowest Grade E is allocated a point. It is therefore theoretically possible to score very low marks in one subject (well below 30\%) and still achieve a mid level C Grade KCSE. Much would depend on what the subject was and whether it is a requirement for specific university programmes.

It must be noted however, that unlike South Africa, there is significant filtering of students out of the system at the end of primary school with high stakes examinations determining the type of post-primary institution one can enter. The KCSE is therefore primarily geared toward university entrance and does not perform the generalist role that the NSC has to.

## Botswana

Secondary education in Botswana is not compulsory with all students guaranteed ten years of basic education with a Junior Certificate qualification. About $50 \%$ attend two more years of secondary school for the Botswana General Certificate of Education (BGCSE).

The programme runs over two years and the curriculum structure includes a core of English, Setswana and Mathematics and four further subjects chosen from a restricted set of options. A final non-examined subject is chosen from a sub-group called Enrichment. A minimum of eight subjects must be offered by learners and learners are certificated on the basis of subjects passed.

The grading system is the same as the one used by the CIE i.e. $\mathrm{A}^{*}$ - E with E requiring a minimum of $40 \%$.

[^11]
## Singapore

Singapore conducts GCE ' $N$ ' Level examinations also known as ' $N$ ' Levels annually, after four years in the normal academic or technical stream of secondary education.

The University of Cambridge Local Examinations Syndicate is the examining authority for subjects examined in English, foreign languages and Non-Tamil Indian Languages. The examining authority for mother tongue languages such as Chinese is the Ministry of Education, Singapore.

The Singapore-Cambridge GCE Advanced Level examination uses the same grading system as the CIE described above.

## Tanzania

The Tanzania schooling system follows a 7-4-2 system, which is 7 years of primary school, 4 years of secondary school, with a national assessment exam halfway through, then another two years for the senior secondary school.

There are two secondary qualifications (Certificate of Secondary Education awarded after the four years and an Advanced Certificate of Secondary Education completed after an additional two years) awarded depending on subject combinations, and each can be awarded in one of four divisions. Access to the Advanced Certificate is determined by performance in the CSE although both (appear to ${ }^{17}$ ) provide access to higher education.

The Grading system has five categories of pass (A-E), and a subsidiary pass (S) and a Fail (F). These are given a numeric value of 1-7 and determine a points aggregate where the lower the aggregate the better the pass. Depending on the aggregate and a range of criteria related to specific subjects the Certificates can be awarded in one of four divisions. ${ }^{18}$

Like Kenya and a number of other countries the minimum pass at subject level is roughly at $40 \%$ although there is significant selection prior to students entering the Advanced Certificate programme. Thus one cannot compare it directly to the NSC, and it is probably closer to the 'A' levels in the CIE system.

## Australia

Australia has 7 examining authorities for the different states in Australia. These are:

- ACT Board of Senior Secondary Studies
- NSW Board of Studies
- QLD has Queensland Studies Authority
- Senior Secondary Assessment Board of SA
- Tasmanian Qualifications Authority
- Victorian Curriculum and Assessment Authority
- Curriculum Council of WA

[^12]In 2006 it was agreed to plan towards a single grading system for Australia. This uses a basic 6 point scale as follows:

| Grade | Percentage |
| :--- | :--- |
| A (Excellent) | 90 and above |
| B (Good) | $75-89$ |
| C (Satisfactory) | $51-74$ |
| D (Limited) | $31-50$ |
| E (Very Low) | $26-30$ |
| F (Failed) or UG (Un-graded) | 25 and below |

The actual requirements for the school-leaving certificate vary a little from state to state but are benchmarked on the Australian Qualifications Framework. In Western Australia for example learners are required to complete 10 full year courses over two years. English is compulsory across both Years 11 and 12 and must be achieved at $C$ or above. Eight subjects must be achieved with a C aggregate, of which four have to be at Year 12 level.

In this particular example the individual subject pass requirement is not at $50 \%$ across the board (indeed it is as low as $26 \%$ ) but the rules of combination for the qualification require that most subjects are achieved at $50 \%$ or higher.

Because of the federal nature of Australia's education system, there are myriad admissions requirements (including separate entrance tests) for entry into Australia's universities, but most state systems provide access with a school leaving qualification such as the one described above, dependent on individual faculty requirements.

## Norway

The Norwegian school system grades subjects in its system on a 6 point scale, with 1 being the lowest and representing non-achievement. If one converts the six point scale to percentages this would mean that students achieving $17 \%$ or higher would achieve a passing result.

However, such a simplistic conversion is not a useful comparison because it doesn't look at what the exit point constitutes. Like many European countries in the Germanic/Nordic tradition, there are a number of filtering points before students reach the final year of academic schooling, and a significant proportion will have chosen vocational/mercantile pathways at earlier points, often advised by their teachers. In addition, because the teaching profession is well educated and trained, there is a strong emphasis on continuous assessment and students are usually made aware of their risk status before entering final examinations. There is thus a very low failure rate in the academic stream as students not able to cope would exit prior to final assessment.

## Conclusion

This limited review of international and national systems highlights a number of issues. Firstly, direct comparison is problematic as there are invariably contextual and systemic issues that complicate the picture. In particular, the purpose the school leaving qualification serves varies significantly across systems. Secondly, the pass mark needs to be understood in relation to the curriculum structure as well. The number of subjects taken vary from five to ten, with additional non-examined components and specific compulsory requirements in many. Thus, while subject passes vary, the rules of combination are also quite varied. Given the
above points, it is nevertheless clear that pass marks between $30 \%$ and $40 \%$ are by no means unusual and there are very few school systems that set pass marks at $50 \%$ for subjects. There are however a number of systems that require achievement at that level for most subjects in some aggregated form in order to be awarded the qualification. It is also interesting to note that many systems avoid percentages. This ensures that students are graded in a category rather than having achieved a percentage. Percentages suggest an amount of knowledge that is known or not known. Categories can suggest levels of competence that are not related to units of knowledge linked to a particular score.

Given the background to our own system, the current issues affecting the system and the insights from the international comparisons, I now turn to the recommendations.

## Recommendations

Is there a case for revising the pass mark? The arguments that circulate around this question are premised on a range of different logics. Does a $30 \%$ pass mark mean that learners only need to master less than a third of the knowledge? Is it a symbolic issue related to raising expectations? Is there a decline in standards from the old Senior Certificate? These are just some of the questions that are raised. There is no simple answer to these questions.

From the historical review and the analysis of the current context it is clear that the current qualification was initially intended as a channel that largely fed students into higher education programmes. Yet it is clear that this vision did not materialize, with the vast majority of Grade 9 learners opting to follow the NSC route. As a consequence there are many more learners writing the NSC than can be matriculated into degree programmes in universities.

The international comparison does not point to an immediate answer to any of the above questions. It is certainly not true that South Africa has lower pass mark requirements than most other systems. Some systems have marks as low as $17 \%$ on a converted scale. But this merely emphasizes the problematic nature of comparison at the superficial level of grades or percentages. A comparison of quality across systems has to include curriculum load, cognitive demand, forms of assessment, and quality of examiners and markers before one can make any meaningful judgement about relative standards. Unless we outsource our system to an international examining body we will always have to be cautious about superficial comparisons.

And yet it is possible that for the general public these complexities are of little interest, and that there is a widespread belief, particularly amongst those that have an university education, that $50 \%$ is the normal pass mark. What then would be the consequence of raising the pass mark to this level? There are two possible ways of applying this: The $50 \%$ could be calculated as an average, or the $50 \%$ could be a requirement for each subject. If this were applied to the current system the immediate effect would be disastrous. The figures below show what the pass rate would be if either criterion were to be applied to the most recent cohorts of students. Numbers reflect total number of candidates passed and percentage of those who sat for the examination.

|  | 2008 |  | 2009 |  | 2010 |  | 2011 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Avg 50\% | 178977 | $34,96 \%$ | 186161 | $36,2 \%$ | 213570 | $42,16 \%$ | 206200 | $44,27 \%$ |
| All <br> subjects <br> $50 \%$ | 49665 | $9,7 \%$ | 42556 | $8,82 \%$ | 53274 | $10,52 \%$ | 49972 | $10,73 \%$ |

There would be a number of likely consequences. The failure rate (roughly either 55\% or 89\% in 2011) would be politically and socially unacceptable, further heightening the belief that the system is in crisis. It is likely that either the standard of the papers would drop in order to allow more people to pass, or the marks would be adjusted to bring the range back in line with a normal distribution. This would have little effect on the quality of the system, and would significantly reduce the range of marks that students would be distributed along, making it even more difficult to differentiate between them. Aside the symbolic raising of the standard, there is little value to raising the overall pass mark in this manner.

There is, however, value in looking more carefully at the de facto purpose of the qualification and adjusting the categories of pass. This could both positively address some of the symbolic concerns without significantly affecting the global pass patterns, and make the pass categories more meaningful.

One of the concerns that has been emerging from research into success and retention of students in higher education institutions is that the NSC does generally act as a useful predictor of success in a range of programmes, but that the current Bachelors pass category is not set at the correct level (see for example Hunt et al 2011). The high pass rates in certain subjects and the large number of distinctions make it difficult to predict which students might require more support. And there are simply too many students achieving Bachelor level passes for the number of places in the system. On the one hand the number of places should be increased if the students can cope, but the high dropout rates from university programmes suggests that a Bachelors pass does not signal whether a student is able to cope with university studies.

One of the central problems is the language competence of the students. While students are required to achieve at least $50 \%$ in four designated subjects, the student only has to achieve $30 \%$ in the language of learning and teaching (LOLT) of the university they are applying to. This is clearly a problem that could be adjusted fairly quickly. If the Bachelors and Diploma level admission requirements demand a $50 \%$ pass in the LOLT, and the Certificate had a requirement of $40 \%$, it would potentially address the concerns about the $30 \%$ level, provide a more accurate predictor of success in university programmes, and slightly reduce the pool of learners achieving at this level.

The table below details the revised criteria for the passes.

|  | National Senior Certificate |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | NSC | With admission requirements to: |  |  |
|  |  | Higher Certificate | Diploma | Bachelors (Matriculation) |
| Home Language | 40\% | The NSC with a minimum of $\geq 40 \%$ in the language of learning and teaching (LOLT) of the HE institution | The NSC with a minimum of $\geq 50 \%$ in the LOLT of the HE institution, and $\geq 40 \%$ in four recognized 20-credit subjects [that is, excluding Life Orientation] | The NSC with a minimum of $\geq 50 \%$ in the LOLT of the HE institution, and $\geq 50 \%$ in four designated 20-credit subjects [that is, excluding Life Orientation] with possible minimum aggregate of $50 \%$ overall?? |
| FAL | 3 subjects passed with $\geq 40 \%$ (including the HL ) and 3 passed with $\geq 30 \%$. <br> Can fail one subject, provided there is full evidence of the SBA having been completed. |  |  |  |
| Life Orientation |  |  |  |  |
| Mathematics/ Maths Literacy |  |  |  |  |
| 3 subjects offered from group B |  |  |  |  |

This scenario was applied to the 2008-2011 data to see what effect it would have (see appendix). Interestingly, this change in the requirements for a Bachelors and Diploma level pass does not have a major effect on the overall pass rate and only has a minor effect on the numbers of learners achieving a Bachelors pass ( $0,77 \%$ on average across the four years for which the data was run). It also appears that the majority of the current Bachelors passes are achieving an average of $50 \%$ or higher and so this is unlikely to have a major effect on the spread of results.

The significant effect of increasing the language requirement can be seen in the students currently achieving a Diploma level pass. An average of $12,26 \%$ of the students currently qualifying for Diploma passes would no longer achieve this pass and would qualify either for the Higher Certificate or NSC without any admission. The percentage changes for the years 2008-2011 are summarized in the table below.

|  | 2008 |  | 2009 |  | $\mathbf{2 0 1 0}$ |  | $\mathbf{2 0 1 1}$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Current | Scenario | Current | Scenario | Current | Scenario | Current | Scenario |
| Bachelor | 23,01 | 22,43 | 22,79 | 22,36 | 26,52 | 25,40 | 27,42 | 26,49 |
| Diploma | 25,61 | 15,12 | 25,86 | 16,04 | 29,31 | 14,76 | 30,60 | 16,39 |
| Certificate | 21,10 | 28,58 | 18,56 | 24,22 | 18,26 | 26,45 | 18,42 | 27,37 |
| NSC | 0,04 | 3,64 | 0,11 | 4,71 | 0,14 | 7,62 | 0,11 | 6,29 |
| Fail | 30,23 | 30,22 | 32,68 | 32,68 | 25,77 | 25,77 | 23,46 | 23,45 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

This adjustment to the three categories of pass may be quite useful if the space created on the NQF at level 5 is properly developed, as a much larger grouping of students will be channelled into programmes that could be offered across a range of institutions such as FET colleges and private providers. The problems faced by universities in appropriately placing students will not be significantly resolved by this adjustment, and need to be examined in terms of specific entry requirements related to achievement and subject choice. However, the total number of students achieving a combined Bachelors or Diploma pass will drop significantly, from $58,02 \%$ to $42,88 \%$ in 2011 . If the 'matriculation' requirement were to also include a $50 \%$ average across all subjects, it could be clearly and publicly signalled to learners and their families that to achieve matriculation into a university or university of technology within the NSC requires $50 \%$.

This raises the second recommendation. A much clearer distinction needs to be drawn between passing an NSC and getting an NSC with access to Diplomas and Degrees. Given that the public associates the term Matric with Grade 12 and the NSC, it may be an option to explicitly adopt that term for a pass that meets the revised requirements of entry into Bachelors and Diploma programmes. If these results were reported distinctly, there would be a growing awareness within the system and in the wider community that an NSC pass is not what should be aspired to, and that schools that fail to graduate any learners with a 'Matric' are failing. The pass rate thus needs to be clearly separated into the NSC (with access to Certificates and Higher Certificates) and an NSC Matric (with access to Diplomas and Bachelors Degrees). This would signal clearly to the general public what the level of pass is, and also distinguish more clearly within the cohort.

What has been proposed attempts to address some of the concerns that have been raised about the current NSC in a way that recognises the need for a balance between stabilizing the system and ensuring that there is real pressure for improvement. What the proposal also attempts to do is realign the NSC with the reality that it is de facto the major exit point from the schooling system and therefore cannot be focused solely on the pathways into higher education. To that end, the discussions underway for a revitalized post-school system with new qualifications at NQF Level 5 will also influence the currency of the different levels of pass that can be attained in the NSC.

## Conclusion

To conclude, this paper has attempted to understand the various concerns raised about the NSC and its pass mark. By reflecting on the history and by comparing the NSC to other systems internationally it was argued that there is no strong case for simply shifting the overall pass mark. However, adjustments to what is required to achieve a pass with admission to other qualification types might be warranted. The role of the LOLT was highlighted with respect to further study and adjustments to the requirements were proposed and their impact discussed.

More research is required to assess whether the $50 \%$ required in the LOLT is a potential predictor of success in Degree and Diploma programmes. Ongoing research into appropriate points for particular programmes will also refine additional entry requirements set by universities. The issue of the LOLT also raises the question as to whether the Certificates and Higher Certificates don't require the same minimum level of proficiency in the LOLT in order for students to succeed in those programmes.

Finally, it must be reiterated that the pass mark is not in itself a measure of educational quality. The mark does not tell you what was assessed, how it was assessed and whether the process was well administered. In that respect a change in the pass mark criteria, or indeed an adjustment to the criteria governing categories of passes can never result in improved quality if this is not matched with improvements in the quality teaching and learning in the classroom and rigorous monitoring of the standards in the assessment.

## Appendix



## Average calculations:

Only candidates with 7 or more subjects included
More than eight; used the required subjects for the qualification

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[^0]:    ${ }^{1}$ This paper is not a research report. It is a discussion paper that tries to open up a debate drawing on basic desktop research, some manipulation of statistical data to explore scenarios. The views are the author's and do not reflect an official Umalusi position. My thanks to Emmanuel Sibanda, Gerhard Booyse and Paul Mokilane for assistance with the scenarios.

[^1]:    ${ }^{2}$ For example, in history the Natal Education Department had already adopted a skills-based approach while the DET and Transvaal Education Department (TED) were assessing recall of content.

[^2]:    ${ }^{3}$ There are other ways to be exempted from this requirement such as mature age or other examination systems.
    ${ }^{4}$ This interpretation was disputed by a senior official at HESA and needs to be historically verified. It does not change the substance of the argument and the recommendations made.

[^3]:    ${ }^{5}$ The original intention was that Mathematical Literacy would be a requirement for all learners alongside Life Orientation regardless of whether the learner selected Mathematics as a subject.

[^4]:    ${ }^{6}$ The notion of a commonly named Further Education and Training Certificate (FETC) to be used across the schooling and vocational system was rejected by the Minister at the time and the qualification was renamed as the National Senior Certificate shortly before the gazette was published.
    ${ }^{7}$ This process of accommodating interest groups in the design of the qualification also influenced the General Education curriculum and has continued in subsequent reviews that have led to the Revised National Curriculum Statement (RNCS) and the Curriculum Assessment Policy Statements (CAPS) (see for example Chisholm 2005)
    ${ }^{8}$ The draft gazette had proposed a $50 \%$ weighting to SBA, but this was quickly revised to $25 \%$ with the exception of Life Orientation. The weighting and effect of the SBA has been a concern for Umalusi and they have reduced the real effect of the SBA on the final mark even further.

[^5]:    ${ }^{9}$ While it is true that only the first ten years of schooling are compulsory, there currently is no certificate that is issued at the end of Grade 9. The NSC thus stands in this stead.
    ${ }^{10}$ These generic dimensions were spelt out in the curriculum statement but they are lost in the exam oriented assessment of subjects.

[^6]:    "It is important to note that aggregated scores are not calculated, so this is not an official calculation. It also does not include the seventh subject, Life Orientation. It is also worth noting that the original proposal was that the results in the various subjects would be reported as categories and not percentages. This was changed primarily because higher education did not feel that they could sufficiently differentiate at the top end.

[^7]:    ${ }^{12}$ This raises an interesting side issue. Because the definitions of the Higher Certificate, Diploma and Degree passes are dependent on the language of learning and teaching of the institution, these levels need to be assessed in relation to the programme and institution and may vary. Thus, a learner with isizulu $(\mathrm{HL})$ and Afrikaans ( 1 AL ) can have a Degree level pass only if they go to a university that teaches programmes in Afrikaans or Zulu and would not have access to programmes at English medium universities.

[^8]:    ${ }^{13}$ See http://www.cie.org.uk/qualifications/academic/uppersec/alevel for details.

[^9]:    ${ }^{14}$ Based on University of Johannesburg information.

[^10]:    ${ }^{15}$ Based on University of Johannesburg information.

[^11]:    ${ }^{16}$ http://en.wikipedia.org/wiki/Education_in_Kenya

[^12]:    ${ }^{17}$ awaiting confirmation
    ${ }^{18} \mathrm{http}: / / \mathrm{www} . \mathrm{bibl} . \mathrm{u}$-szeged.hu/oseas_adsec/tanzania.htm

