

## Mediocrity and the Fraud Called Education: The Case of South Africa's Curriculum Statements in English

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**ABSTRACT** This paper examines the changes effected in the curricular statements that have guided English Language education in South Africa since 1994. It questions the philosophical, pedagogical and instructional logic that has informed the changes by centring on the frequency of political pronouncements and the ripple effects these have had on the delivery of the language curriculum and the performance of the learners at the exit level, the matriculation examination. Ultimately, this paper submits that whereas the logic of political redress sought to universalise the South African curriculum, the subsequent revisions and overhauls have had a deleterious effect on performance, teaching-learning materials and the general readiness to implement the changes.

### INTRODUCTION

English language education in South Africa is currently mired in controversies ranging from whether or not English should be the primary language of learning and teaching (LoLT), to issues of quality of assessment (Evans and Cleg-horn 2014). Wolhutter (2011) and Nkosana (2011) observe that many parents actively seek schools where English is the sole medium of instruction since these parents perceive proficiency in the English language as a distributor of power and access. This paper, instead of critiquing the monolingual habitus of English as LoLT, traces the quality of assessment in English as gleaned from the examination question papers and the marking memorandum for 2013 and 2014.

In just eighteen years, from 1994 to 2012, the Department of Education (DoE) in South Africa has “invented” three curriculum statements: the National Curriculum Statement (1995), the Revised National Curriculum Statement (RNCS 2005) – which was also re-versioned in 2009 – and currently, the Curriculum and Assessment Policy (CAPS 2012). As one teacher aptly remarks in an unstructured interview, there are “too many changes in the curriculum statements and practices in South Africa to the extent that these overhauls have had a debilitating effect on schools’ readiness to deliver.” Consequent upon the multifarious changes, or rather, in spite of these changes, performance standards in English Language have plummeted (PIRLS 2010; ANA 2012; Jansen 2013). Coetzee and Johl

(2009: 19), including Paton (2007) have documented a discernible drop in the quality of the matriculation examination. They have both, on separate occasions, bemoaned the “decimation of the standard of papers and the bullying of statisticians to raise the marks” and this constitutes a new “politics of protecting the pass rate” (Coetzee and Johl 2009: 19).

### Historical, Philosophical and Theoretical Foundations of the Curriculum

The debilitating effects of apartheid and segregated schools and chromatic-specific curricula in South Africa have been ably documented (Jansen 2011, 2013; Heugh 2010; PIRLS 2011; Oswald and Engelbrecht 2013). Post-independence curricular statements, crafted specifically to redress the imbalances and “deficits” created by apartheid have also been critiqued for their perceived inadequacies in terms of rigour, depth and breadth, more specifically the fidelity of the curriculum to its stated goals (Hopkins 2001). Too many changes in the curricular statements and practices in South Africa have become, consequently, the scapegoat for the lack of problem-solving skills, critical thinking skills, and cultural sensitivity skills in the products of the school system. Such changes have become a staple political diet to the extent that commonplace banter in South Africa perceives the old matriculant as a better product than the “new” matric. Jansen therefore is able to point out, sarcastically, the inadequacies of the current educational practices in South African high schools:

The purpose of teaching is to open up the mind; to challenge misconceptions; to destabilise everyday truths; to sharpen the capacity to question; to broaden the scope of what is known; to instil the habits of thought (Jansen 2013: 54).

Jansen juxtaposes current practices with the old school system and wryly concludes that “the teachers of that generation spoke perfect English: flowing, measured, intellectual and eloquent.” With a tinge of nostalgia, Jansen insists that “homework was regularly assigned, feedback carefully given and assessment records were carefully stored” (Jansen 2013: 233).

Historically, any curriculum invites a re-examination and undergoes change in order to relate to evolving trends such as modernisation, technological innovation and instructional methodologies. J. Abner Peddiwell (1988) bequeaths to curriculum theory the parody and satire of *The Sabertooth Curriculum*. New Fist Hammer-Maker, progenitor of this curriculum, prescribes Fish-grabbing, Sabertooth tiger-stabbing and Horse-clubbing as the undying testaments of an unchanging and unchangeable curriculum till the incipient progress of a glacier generated new practices and new ways of experiencing an educational world that all had taken for granted. In the Sabertooth Curriculum, those that were PhD holders and professors in ichthyology (fish studies and fish-grabbing) found themselves redundant because the glacier had made the one-time clear waters extremely murky. Tiger-stabbing and Horse-clubbing waned since the target animals had disappeared. The Sabertooth curriculum satirises curricular entrenchment and a narrowly defined utilitarian-oriented philosophy in curriculum design, implementation evaluation, and assessment. In a nutshell, the National Curriculum Statement of 1995 ought to be seen in this light: South Africa emerged as a democracy and there was an urgent need, under the new Constitution of 1996, to carve a curriculum that dispelled racial inequality and one that would address the knowledge demands of an industrial economy among the rest of the nations. The new National Curriculum Statement of 1995 was a historical document, a document to mark transition and embrace change: it sought relevance. CAPS came into vogue in 2012 and its resemblance to C 2005 reveals stagnation and a lack of innovative approaches to Language education in particular.

In a Freirean sense, a curriculum is hinged on the notion of “intentionality”, where students and educators together formulate what gets taught, how and why (Freire 1975/2012). From this orientation, the curriculum is both planned and guided learning; it is a dynamic process where the entirety of activities, methods, materials and personnel interact in transforming their world and the knowledges necessary to deal with change. In sum, the curriculum becomes a *syllabus* to be transmitted, a *product* where outcomes are measured, a *process* that emphasises interactivity and *praxis* that emphasises an explicit commitment to emancipation. Hopkins (2001) emphasises that the curriculum is a social construct, while Dennis Lawton (1980) is more accurate in observing that curriculum development is about *selecting* the most important aspects of *cultures* for transmission to generations to come. Curriculum then is a selection from cultures and, crucially, Lawton poses the question: who makes the selections from the diverse cultures?

From the NCS to CAPS, the overarching philosophy has been the outcomes-based education (OBE), a philosophical underpinning that makes explicit what the South African learners should be able to do and demonstrate (Jansen 2012: 2) and where outcomes are a measure of accountability. Jansen (2012: 3) continues to argue that an OBE orientation in the curriculum statements displaces an emphasis on content, therefore signalling what is worthy in a content-heavy curriculum. Outcomes have their roots in behaviourist pedagogy (Skinner (1978/2004), Tyler (1949/1987) and Bloom (1956/2005) and vocationalism (Mahomed 1996). To this extent then, “competencies” in the behaviourist orientation are reframed as “outcomes” and at points “critical outcomes” in the DBE documentation. Whereas NCS in 1995 sought to replace a chromatic-driven curriculum, it is a moot point that curriculum diversification and responsiveness to economic conditions in CAPS 2012 does not necessarily yield changes in the economic fortunes of South Africa. A means-ends OBE stance, *stricto sensu*, violates the epistemological foundations of specific disciplines such as complex reading, critical thinking skills, poetry analysis and inferential skills in English language.

Changes in assessment practices that were part of the NCS have had a dramatic impact on the intentions of the new CAPS. This paper con-

tends that assessment practices are intended to discover authentic ways of assessing learning in order to improve teaching and learning, a view that is endorsed by Evans and Cleghorn (2014) and Busch (2010). It is also generally agreed that for any curriculum change to succeed, educators need a sense of ownership and inclusivity that empowers them in order to lead the change process (Oswald and Engelbrecht 2013: 11). Continuous assessment (CASS) has become a new incorporation into external assessment in SA, and the question is whether or not written assessment tests per se are inappropriate instruments of assessing reading and writing, as Gopal and Stears (2007) argue. This question also ties in with the related concept of ownership where current sentiments suggest top-down facilitation and a sense of disempowerment on the part of the educators. "Authentic" and performance-based assessment instruments such as projects, research activities, assignments, oral presentations, interviewing, conferencing, observation and portfolios appear to have been conscripted into the service of CAPS assessment and curricular practices in South Africa without the adequate preparation of the educators and the learners to perform at appropriately and comparatively benchmarked levels.

### Research Questions

This paper is bent to answer the following research questions:

- What changes have been made in the National Curriculum Statement of 1996, RNCS 2005 and the current Curriculum and Assessment Policy of 2011?
- What have these changes targeted: learning materials, assessment practices or performance and proficiency in English Language?
- Have the changes in the curriculum statements informed stakeholders regarding the extent to which each learner meets the demands of assessment and the workplace?

### Objectives

This paper

- Identifies the language components assessed in the new CAPS,

- Comments on the gaps in both the question papers and the marking memorandum for English language examinations set for 2013 and the exemplar question paper for 2014, and
- Compares the South African matriculation examination in English language with other similar assessment instruments such as the Cambridge International Examinations (CIE) in order to identify and explain the perceived mediocrity of the former as an assessment instrument.

### RESEARCH METHODOLOGY

In order to address the research questions, this paper explored the qualitative research paradigm. It used document analysis to compare and contrast the essential ingredients of each of the curriculum statements. The researcher also conducted open-ended interviews with teachers, policy makers, learners and UMALUSI officials, who are the custodians of "standards" in the assessment of learning in South Africa. Field notes were compiled, together with extensive literature review related to the antecedents of NCS, RNCS and CAPS with a view to giving a comprehensive context to the ramifications of curricular changes. The difficulty index, which is the number of candidates who get an answer correct divided by the total number of test-takers, was used in order to establish the cognitive demands exerted by the English Language examinations at the exit level of secondary education in South Africa. Distractor analysis, which is applied to multiple choice questions, is employed in this study insofar as it provides information about the quality of each of the distractors provided for the multiple choice questions in the ESAL question paper for 2012.

### FINDINGS AND DISCUSSION

Reactive decision-making has been evident in the introduction of Annual National Assessment (ANA) at grade 10 in South Africa. ANA is a home-made gauging tool that was developed after damning comparative studies by PIRLS. More indicting even have been the ANA results themselves that reveal critical knowledge gaps in both Mathematics and English Language (ANA 2012).

**Table 1: The language test papers: Conceptual and cognitive demands**

<i>Language aspect and cognitive demand</i>	<i>English home language November 2012</i>	<i>English second additional language November 2012</i>
<p>HL has 70 marks while ESAL has 120. Marks appear arbitrary with no justification.</p> <p>HL specifies what it seeks to measure: spelling and sentence structure but ESAL is quasi-silent. HL has more face-validity.</p>	<p>3 Sections: Comprehension: (30); Summary: (10); Language in context: (30)</p>	<p>4 Sections: Comprehension (30); Summary (10); Language (60) and Literature (20)</p>
<p>Incomparable text length to assess "reading for meaning and understanding", which is explicit in HL paper and not stated in ESAL.</p> <p>HL paper seeks a reason while ESAL seeks basic recall.</p> <p>ESAL paper asks a simple question that 12 year olds would tackle; the marking scheme is more lenient even if the quoted word is spelt wrongly and inverted commas are left out.</p> <p>Quotes acknowledge sources in academic writing and such condonation at matric level significantly impairs aptitude at tertiary level argumentative writing, with "copy and paste" practices exacerbating the challenges of plagiarism.</p> <p>HL seeks candidates to interrogate the implication of subjective versus objective voice, while a similar question from ESAL asks candidates to suggest a title, derived from the 26 line excerpt. The cognitive demands of evaluation, inference and discourse level of the HL question are not comparable to the other ESAL question.</p> <p>3.4. in HL is pitched at the level of critical discourse analysis;</p> <p>Q3 in ESAL seeks candidates to list. As observed earlier, candidates who can copy sentences into which are embedded the summary points would pass this examination. The length of the summary is 60 words: even if the response is a simple list, the paucity in writing engagement is disturbing.</p>	<p>Instruction: Pay special attention to spelling and sentence construction</p> <p>Section A's subheading advises that the text elicits "reading for meaning and understanding."</p> <p>None of the questions are MC/one word responses or true/false options.</p> <p>The reading passage is 68 lines long.</p> <p>Q1.1. asks: Why is theatre considered a dynamic form? (2 marks)</p> <p>Q1.3 Discuss the imagery used in lines 14-16 (2marks)</p> <p>Q 1.7. Refer to lines 65-68... Is this subjective approach in the concluding lines appropriate in comparison to the rest of the passage? Justify your response (3 marks)</p> <p>Q 3.4. Critically discuss the effectiveness of the style and language in conveying the intention of each of the advertisements (4 marks)</p>	<p>Quasi-silent on this aspect Question paper explicitly advises candidates to answer all questions in sections A, B, and C. It states that candidates should, for MC questions, write only the question number and the corresponding correct answer. For one word response, it instructs candidates to write only the question number and the one word answer. All in all there were 8 true/false/ one word or multiple choice questions in 2012. The comprehension text is 26 lines long</p> <p>Q. 1.1.1. What role did Neil Sharrock play in order to be called a hero? (1 mark)</p> <p>Q.1.3. Quote ONE word which tells us that his fame did not make him a proud man.(1 mark)</p> <p>Q1.5. Give a suitable title for this passage (2 marks)</p> <p>Q 3. You have been chosen as one of the speakers at the Grade 12 assembly at your school. Your task is to give your peers tips on how to write a proper CV. List the seven points in full sentences Number the sentences 1-7 Your 7-point summary should not be more than 60 words (10 marks).</p>

The CAPS document intimates that the NCS (Grades R - 12) of 1995 “stipulates policy on curriculum and assessment in the schooling sector” (2011: 2) and what CAPS does is merely “repeal and replace the subject statements” for Grade R-12. The Minister of Basic Education, like New Fist Hammer-Maker, is still empowered to “determine the minimum outcomes and standards, as well as the processes and procedures for the assessment of learner achievement” (2011: 2). The CAPS document further states that the NCS “promotes the idea of grounding knowledge in local contexts, while being sensitive to global imperatives” and that the ultimate assessment results “provide employers with a sufficient profile of a learner’s competencies” (2011: 3). Sadly, the assessment results appear to be constantly “massaged” in order to give a misleading profile about learner competencies. It must be emphasised that even though CAPS has been heralded as a new curriculum, it is, in fact an amendment to RNCS. The NCS of 1995 overhauled apartheid education and sought both parity and relevance. CAPS, on the other hand, seek to be more accessible to the teachers in terms of what content to teach and assess at each grade level. CAPS replace “outcomes and assessment standards” with “topics and themes and learning areas.”

For English Language in particular, matriculants are expected to identify and solve problems, collect, analyse and critically evaluate information, and they are also expected to communicate effectively while demonstrating an awareness of the world as a set of related systems. CAPS discourage “rote and uncritical learning of uncontested truths” (2011: 3). Table 1 categorises the examination questions, cognitive demands and offers a critique of salient gaps in the 2012 English Language Examination papers.

**Marking Memoranda**

The marking memorandum guides mark allocation and distribution. As such, it is a critical measure of standards; it is the final instrument from which grades and competencies are assessed. There are 7 levels of achievement in the matriculation examination, as shown in Table 2.

In the marking memorandum for English HL, EAL, FAL in 2012 and 2014, the documents clearly state, against all the epistemological foundations of English language pedagogy, that spell-

**Table 2: CAPS levels of achievement, South Africa 2012**

<i>Achievement code</i>	<i>Competencies</i>	<i>Percentage</i>
7	Outstanding	80-100
6	Meritorious	70-79
5	Substantial	60-69
4	Adequate	50-59
3	Moderate	40-49
2	Elementary	30-39
1	Not achieved	0-29

ing errors shall be condoned, that all first language words that are inserted into the English Language composition and creative writing pieces shall be condoned as long as the meaning of the writing is conveyed (2012: 1). To the discredit of the English Language examination and its stated objectives and promises to stakeholders, these pronunciations in the marking memoranda become bastions of fraudulent assessment practices, endorsed by the examination authority, and implicitly, by the CAPS. Verbatim, the statements below are vexatious and violate the principles of test fidelity, test validity and test reliability:

This memorandum is a guide and is neither prescriptive nor exhaustive. Candidates’ answers should be considered on merit... holistically...in terms of decisions taken at the standardisation meetings...Incorrect spelling in one-word answers should not be marked wrong unless the spelling changes the meaning of the word. Incorrect spelling and language errors in longer responses should not be penalised because the focus is on understanding. For questions which require quotations from the text, do not penalise candidates for omitting quotation marks or for incorrect spelling within the quotation. If a candidate uses words from a language other than the one being examined, disregard those words, and if the answer still makes sense, do not penalise...(Marking Memorandum 2012: 1). Similarly misleading practices are registered in the 2014 marking memorandum for the exemplar paper.

Further inconsistencies are evident in the instructions for marking the summary question, which in ESAL and FAL test papers for 2012 and 2014 is a travesty of summary writing skills:

Accept dialectal variations. No penalty if a candidate has between 0-3 whole sentences quoted. For a candidate who lifts 4-5 whole sentences, examiners should subtract 1 mark. Ulti-

mately, for a candidate who lifts whole scale 6-7 sentences, examiners should subtract 2 marks (Marking Memorandum 2012: 2).

The marks that examiners are instructed to deduct are the “language allocation” marks. For the evidence of summary points, there is no deduction and if such points are embedded in the sentences lifted, then the candidate passes the examination. This suggests that a candidate could “copy and paste” sentences that contain the summary points and still pass this summary skills examination with 7 out of a possible 10 marks.

Another observation from the document analysis undertaken is that the cognitive demands for the comprehension questions are very elementary. Questions are generally at the comprehension and application level and few, if any, are at the synthesis, evaluation and analysis cognitive levels. In the ESAL English Language 2012 paper, there were a total of fifty-six questions, and using the difficulty index as a measure of question paper validity, 16 questions in the language usage and editing segments of this question paper were between 0.1 and 0.2 difficulty levels meaning that between 80% and 90% of the candidates could correctly get the answers. Question 5.7 asks matric candidates to “Give the plural of ‘his’”; another question offers 2 marks if candidates can provide antonyms for “difficult” and “forget.” There were 3 application questions in the Language usage segment that asked candidates to change sentences into the passive voice, the past tense and one into reported speech. Such an imbalance in the question paper suggests an overtly politicised examination that passes candidates because they can respond correctly to the simple questions that populated the question paper.

Further analysis revealed that in the selection procedures at the University of Limpopo for the 2014 academic year, prospective entrants should have scored a minimum of 30 points. This 30-point admission policy is 9 points above the national university entry norm of 21 points. The selection committee decided that a pass in English Language is at competency level 4, which in CAPS is defined as acceptable. This competence level ranges between 50% and 59%. It must be clarified that the HL, ESAL and FAL English Language test papers are not congruent or equivalent assessment instruments. This observation implies that candidates who earn a competence level 4 in HL are significantly better performers than those who earn the same grade in ESAL.

Yet, as indicated above, the university selection does not consider these misleading indicators in qualification and competence equivalence in its selection and admission processes. The “competencies embedded and promised to stakeholders” from the matric examination constitute fraudulent benchmarks, perhaps explaining why most universities have now been trapped into offering bridging courses and mandatory academic language programmes in order to adequately prepare first year students for the rigorous demands of a tertiary curriculum.

### **Learning and Teaching Materials for the Implementation of CAPS**

In terms of teaching and learning materials for the CAPS, it was observed that even reputable publishers have participated in the mass production of inadequately prepared materials. In “The Oxford Story”, a marketing pamphlet for Oxford University Press, the following statement is indicative of “a momentous feat” of fraud:

The Department of Education’s announcement in 2010 of the implementation of the CAPS across Grade R to 12 – and the subsequent call for brand new learning and teaching support material posed a momentous challenge to educational publishers across South Africa. The standard eighteen months in which a book was developed – from manuscript stage through to editing, typesetting, more editing and finally publication – was whittled down to an average of just three months... (2013: 15).

Even though the publisher boasts a tradition of excellence, such a feat in the production of learning and teaching materials must have compromised the quality, depth and rigour of these materials.

### **CONCLUSION**

Current curricular approaches insist on developing schools as inclusive learning communities that ensure a collaborative, problem-solving and sustainable response to their particular student diversity. A major derivative from this foundation is that schools should, as sites for the explicit, implicit and hidden curriculum, enable both educators and learners to be involved in language learning as active and reflexive co-constructors of knowledge. The level of examination questions explored in this study, especially for the ESAL paper, buttress the impression that the test instruments are flawed, low in

terms of cognitive demands for matriculating candidates and therefore inadequate measures to reflect the highly overstated curriculum and assessment objectives that are enshrined in CAPS 2012.

Examination questions that ask candidates to state answers in the facetious domains of recall and basic comprehension do not allow the candidates to challenge misconceptions; neither do they nurture a capacity to question. The range of examination questions in the ESAL paper, 2012, are fundamentally regurgitation ones and a far cry from “destabilising everyday truths.”

Finally, current perceptions about “unsafe schools” discuss turf wars between gangs, high pregnancy rates, bullying and lack of security. This paper contends that an unusual safety hazard in schools, and one that is understated, relates to teaching and learning issues, more specifically underprepared teachers, teacher absenteeism, weak command of the language of teaching and learning (LoLT) and poor assessment instruments.

A more nuanced investigation into teacher-readiness and their competencies to deliver the English Language curriculum is long overdue. A majority of candidates who eventually enrol at university demonstrate startling inadequacies in sentence construction, and presenting logical, coherent arguments since, apparently, the 2012 and 2014 exemplar question papers did not assess “critical language awareness, effects of selection and omissions on meaning, prejudice and discrimination, relationships between language and power.” In a nutshell, the ESAL examination in particular, dismally failed to elicit responses that “demonstrate how texts are constructed, or use language appropriately by taking into account audience, purpose and context.”

### RECOMMENDATIONS

CAPS posit that it promotes active and critical approaches to learning rather than rote and uncritical learning. If such high knowledge and high skills are to be attained, then the question paper for English language must test learners to exhibit these instead of low order skills as identified in this paper. The summary question at matriculation level ought to test high order skills such as comparing, contrasting and synthesising information rather than mere listing as test-

ed in the 2012 and 2014 exemplar papers. It is also recommended that the assessment instrument focuses on critical language awareness and elicit learners’ understanding of emotive and manipulative language, language varieties and inferences. In the same breath, the marking memorandum should not compromise proficiency standards through compensatory marking that rewards mediocre answers.

### REFERENCES

- Ainscow M, Booth T, Dyson A 2004. Understanding and developing inclusive practices in schools: A collaborative action research. *International Journal of Inclusive Education*, 8: 125-139.
- Annual National Assessments (ANA) 2012. Department of Education, South Africa.
- Apple MW 1979. *Ideology and the Curriculum*. London: RKP.
- Coetzee W, Johl R 2009. Monitoring the standard of a Grade 12 English First Additional reading, comprehension, summary and grammar paper. *Journal for Language Teaching*, 43(2): 18-34.
- Eisner E 1979. *The Educational Imagination: On the Design and Evaluation of School Programmes*. New Jersey: Merrill Prentice Hall.
- Evans R, Cleghorn A 2014. Parental perceptions: A case study of school choice amidst language waves. *South African Journal of Education*, 34(2): 1-19.
- Heugh K 2010. The Case Against Bilingual and Multilingual Education in South Africa. PRAESA, *Occasional Papers*, No. 6.
- Hopkins D 2001. *School Improvement for Real*. London: Routledge and Falmer.
- Jansen J 2011. *We Need To Talk*. Johannesburg: Mac-Millan.
- Jansen J 2013. *We Need To Act*. Johannesburg: Mac-Millan.
- Lawton D 1980. *The Politics of the School Curriculum*. London: Hodder and Stoughton.
- Nkosana L B M 2011. Language Planning and Policy in Botswana. The African Symposium, 11(1): 129-156. From <[http://www.ncsu.edu/aern/TAS11.1/TAS11.1\\_Nkosana.pdf](http://www.ncsu.edu/aern/TAS11.1/TAS11.1_Nkosana.pdf)> (Retrieved on 15 September 2014).
- Oswald M, Engelbrecht P 2013. Leadership in disadvantaged primary schools: Two narratives of contrasting schools. *Educational Management, Administration and Leadership (EMAL)*, 41(5): 620-639.
- Oxford University Press 2013. *The Oxford Story*” *Marketing Brochure*. Pretoria: OUP.
- Paton C 2007. The Roots of Matric Failure. *Financial Mail*, 12 January 2007, P. 4.
- Peddiwell JA 1939. The Saber-tooth curriculum. In: HRW Benjamin (Ed.): *Saber-tooth Curriculum, Including Other Lectures in the History of Palaeolithic Education*. New York: McGraw-Hill, pp. 89-97.
- Progress in International Reading Literacy Study (PIRLS) 2006 and 2011.
- Thompson C 2011. Critical thinking across the curriculum: Process over output. *International Journal of Humanities and Social Science*, 1(9): 1-7.