THE BLAME GAME: MECHANISTIC CONCEPTIONS OF TEACHER EDUCATION AND ITS IMPACT ON SCHOOLING

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ABSTRACT

With all the post-democracy policy directives and reform initiatives, education in South Africa is seemingly mechanistic and carrying prodigious productive logic: to produce students, to advance economic development, and so on. The active language of official educational policies is riddled with words such as 'assessment', 'efficient', 'high skills' and 'progression' that speak to a technical rationality bent on turning everything into 'science' to obscure the general meaning. In this way the process of education is comparable to a sophisticated, intellectual machine – the more complex the machine becomes, the less control

and understanding the teachers have over it (Braverman 1974). In this article, the authors consider the ways in which classroom and university teachers have been brutalised through bureaucratic processes and an allegiance to technical rationality, even while they imagine hermeneutic rationality and emancipatory rationality as radical alternatives to recovering the subject in a bureaucratic tangle of educational control.

INTRODUCTION

The critical theorist Antonio Faundez, a Chilean political exile during Augusto Pinochet's military dictatorship, asks the weighty question: 'Is there a social science that aims to transform society?' (Freire and Faundez 1989, 45); which may be interpreted differently as: If there were a 'science' that guaranteed man's eternal transcendence from pain, suffering, mortality, and injustice; he would have found it and applied it to Chilean society in order to recoup the socialist democracy envisioned by Salvador Allende, rather than the brutality and human rights abuses of Pinochet. According to Faundez, if the best science can offer humanity is a description of social phenomena rather than the material ways to transform human suffering, then the concepts of science serve merely as a means and never as an end (Freire and Faundez 1989). In this way, the misrecognition of concepts as reality is avoided by the constant desire to act out and test concepts as lived experience. Similarly, it would be ill-conceived to believe that an education policy document like the National Curriculum Statement/Curriculum Assessment Policy Statement (NCS/CAPS), based on social transformation through education, which sets as one of its aims to equip students with the skills to use science and technology effectively (DoE 2011, 8−9AP), unreservedly achieves its aims.

So, while selected CAPS concepts seem admirable (social transformation and the effective use of science and technology), the ideology is deceptive given the inequitable resources at schools: What conditions exist to allow for students in mud schools to transcend their reality and use science and technology effectively in their schooling and everyday lives? And in the same vein, we might ask what conditions prevail in education for teachers to achieve a 100 per cent National Senior Certificate (NSC, formerly matric) pass rate, instead of a 75.8 per cent pass rate (Matshediso 2015)? These material dimensions of lived reality expose the theoretical flaws (e.g., in education policy statements) that make us believe that teaching could be considered an objective science where all the components can be quantified, measured, controlled and assessed in order to ensure efficiency. Quite the opposite, CAPS and a 75.8 per cent pass rate describe a condition of schooling that is not objective, not

independent, not neutral and positivist (linked to principles of control, mastery and certainty), confirming that there is no pure science to teaching and learning. Hence, this line of reasoning works to evaporate and poke holes in the tendency to apply the technical rationality evident in education generally, and especially in relation to the agency of students and teachers in teacher development programmes. Seemingly, mechanistic and technical rationality applied to teacher preparation has very few alternatives: either blame the teacher interns or blame the university instructors for their lack of pedagogic skill, and their complicity in perpetuating the poor academic performance of students that causes political discomfort to administrators who prefer to report on a 100 per cent achievement over a 75.8 per cent pass rate. In what follows, an attempt is made to formulate an argument that traces the ideology of technical rationality throughout a particular discourse on teacher training programmes in order to establish certain macro- and micro-understandings of schooling in South Africa − at the level of policy, university training and classroom pedagogy.

HOW SOME HAVE FRAMED THE PROBLEM

Taylor (2014) researched the teacher development programmes in five higher education institutions (HEIs) in South Africa with a view to understand the (human) capacity and the quality of teaching and learning at such institutions as a whole. His findings suggest that there is a problem with the teacher education system and this resultantly leads to ineffective classroom teaching, causing learners to fall behind (Taylor 2014, 6). And while there is a distinction between in-service education and training (INSET) and initial teacher education (ITE), the latter seems to be saddled with the liability of plunging education and educational achievement into lethargy and sluggishness. Specifically, the study gives statutory and regulatory bodies a free pass by proposing that the latter provide a framework for the formal criteria of ITE programmes (Department of Higher Education and Training − DHET; Council on Higher Education − CHE; Higher Education Quality Committee − HEQC; and the South African Council for Educators − SACE) but that they do not either specify the content of or guarantee the quality of ITE programmes. Taylor (2014, 6) submits that programme content and quality of ITE programmes are best evaluated by expert professionals in the field and here he seems to identify university, campus-based practitioners as the relevant parties to adjudicate on teacher quality. The argument on teacher inefficiency is further driven by the conditions in schools which Taylor (2014, 7) appears to correlate directly to ITE, which are:

1.   Low levels of English proficiency which is problematic since 90% of South African schools incorporate English as the medium of instruction.
2.   Lack of reading pedagogies since learners reach Grade 5 essentially illiterate.

3. Lack of adequate pedagogies for basic numeracy since Grade 7 learners employ 'stick counting' to solve complex arithmetic formulations.
4. Low levels of subject knowledge among teachers.
5. Primary school teachers not being deployed according to their subject specialization.

The way that Taylor's Initial Teacher Education Research Project (ITERP) connects the less-than-favourable conditions at schools to ITE programmes is by bringing into question the low entrance requirements for admission to ITE programmes which is corroborated by the low levels of English proficiency and academic writing. Furthermore, the study confirms that little attention is given to reading pedagogies, micro-teaching and lesson planning for both English subject specialists and non-specialists, making it unrealistic to believe that interns will meet the language and literacy challenges of linguistically diverse and complex classroom encounters (Taylor 2014).

Additionally, school classroom numeracy deficiencies are interrelated with the varying degrees of institutional entrance requirements for mathematics subject specialists in Bachelor of Education (BEd) programmes, where:

> Institution A demands 65% on a test given to all first year students, Institution B requires students to have obtained a pass at 50% in Mathematics in the NSC exam, while at Institution C students are permitted to specialise as maths teachers if they scored as low as 30% on Maths Literacy in the NSC. (Taylor 2014, 19−20)

Based on the above facts, justification is given for poor classroom student performance due to trainee teachers' low exposure to mathematics and mathematics methodology. Moreover, Taylor (2014, 21) implies that a campus-based emphasis on mathematics literacy, low cognitive demand tasks and inadequate grounding further provide the rationalisation for why students in schools are considered two years behind curriculum expectations by the time they reach Grade 5. Taken together, the data gathered through the ITERP problematises the standards and quality of university based ITE programmes in the intermediate phase of education (Grades 4 to 6) by indicating the deficiencies present in university capacity (lecturers predominantly) to:

1. Provide formative feedback.
2. Model pedagogic practice and methodology.
3. Establish adequate curriculum coherence and development.
4. Fill in cognitive gaps (In English to teach students to write academic texts and engage in scholarly research; in Mathematics to operate at the level of abstract reasoning for complex problem modelling and problem solving, and to overcome inadequate primary and secondary school grounding in number facility).
5. Meet the demands of high academic and professional and responsibilities. (Taylor 2014, 17−18)

And since the HEIS under study could be regarded as the 'Big Five' as related to ITE provisioning, being collectively responsible for 49 per cent of teacher graduates (BEd programmes) in 2012 and 61 per cent of Post Graduate Certificate in Education (PGCE) teacher graduates in 2013 (Taylor 2014, 9), it might be assumed that the ITERP holds some credibility in highlighting the shortcomings in ITE. However, as we shall begin to outline below, this reductionist view of simplifying ITE provisioning as Taylor has done, excludes certain variables and unhinges responsibility 'at the top' in an ecology that might find convenient blameworthiness at the feet of ITE students and university ITE practitioners.

ITERP CRITICAL DISCOURSE ANALYSIS

Taylor's reliance on technical rationality and a methodological approach enshrined in the logic of formula and observation in the ITERP omits certain central features, such as the fact that there is no value-free 'scientific' inquiry; and the unpredictability, non-linear, inseparable interactive parts that constitute educational research. In this way, complexity is abridged and the problem with ITE is reducible to two primary antagonists, namely: the teacher trainees; and the campus-based ITE practitioners. What is omitted from this perspective is that statutory and regulatory bodies have perhaps not done enough to help ensure that the content and quality of ITE programmes are better developed and coherent. For example, the disparate content and quality of BEd degrees could be regulated through the National Qualifications Framework (NQF) and the South African Qualifications Authority (SAQA 2000). But instead it might be rightly debated that curriculum overhaul in South Africa happened too hastily and that education authorities adopted a progressive curriculum that could have spelt problems for even highly developed countries (OECD 2008, 295). Additionally, it was argued elsewhere that SAQA and the NQF had set unrealistically high competency frameworks for teacher training and development, while ignoring long established insights into the stages of curriculum reform (OECD 2008, 297).

Next, while statutory and regulatory bodies are absolved of responsibility regarding programme content and quality in ITE programmes, the ITERP recommends that: 'The quality of professional standards is best evaluated by experts in the profession, and therefore attempts to improve the quality of teacher education must start within the field itself' (Taylor 2014).

But the oversight and contradiction here (following Taylor's argument) is that if no confidence is invested in both teacher interns and their academic supervisors at universities, where are the 'professionals' imagined to come from; and more importantly where have they laid hold to the skills that are deficient in graduating teachers and university lecturers?

Furthermore, while the data regarding English proficiency, mathematics competencies and general subject knowledge is problematised, these debates are insufficiently contextualised to provide an expanded view of how these circumstances came into being. Taylor's argumentation steers the reader to believe, foremost among other reasons, that low university entrance requirements for trainee teachers, and derisory lecturer pedagogies lead to consequences of poor learner performance in school classrooms. And while this reasoning has legitimacy at some levels, it shamefully ignores an essential historical analysis of South African schooling that de-legitimises certain assumptions Taylor makes. Finally, with the focus almost exclusively on ITE, following Taylor, we lose sight of the equally heavy burden of INSET which should be a national and local department of education priority to provide and maintain educational quality. So, in the interest of political expediency, the emphasis falls on pre-service teacher preparation where easy scapegoats may be identified; rather than the colossal ownership policy engineers should assume in constructing a complex machine (Outcomes Based Education − OBE – immediately following democracy, and more recently CAPS) wherein students and teachers (and dare we say education authorities) lose understanding and control of its functions and processes.

THE HISTORICAL ANALYSIS

The fact that the teaching force remains inadequately reconstructed is a remnant of the apartheid project which had at its centre a racially divided education sector where white schools thrived and black schools were under-funded and under-resourced (OECD 2008, 94). And while post-democracy legislative, policy, research and financial apparatuses were installed to correct past imbalances, it should be mentioned that curriculum policy reform is out of necessity a slow and gradual process − meaning that quick fixes are an inappropriate response to complex problems (OECD 2008, 94). In this light, educational quality in South Africa should be seen as a composite of a range of multifaceted educational inputs and practices. Thus, one of the first attempts at equalising the teaching force was seen in the State's plan for teacher rationalisation with the aim of equal distribution of the pupil-teacher ratio and salary provisioning (OECD 2008, 95). But as Taylor's research attests, legislation and regulation do not inevitably equate to transformation since some poorer schools still struggle with issues, such as learning materials, class size, classroom conditions and pedagogic capability (OECD 2008, 131), as successfully argued below:

> It is clear that vision, idealism and high-minded concern for a greatly reformed education system were very much in evidence among legislators and policy makers in the early years. However, it is also clear that there was an underestimation of the time, resources and qualitative teaching force required to make operational the policy aspirations in the schoolrooms throughout the country. Much research has indicated how difficult and complex

it is to achieve major educational change, even in countries where the circumstances are much more favourable than they were in South Africa. Legislation and regulation could not ensure the transformation of education that was required. Experience has shown that sustained, multifaceted resourcing and supportive action are also required and the timescale for the transformation is much longer than was initially anticipated. (OECD 2008, 127)

With the above understanding and a consideration of the teaching profession as holding low public status, coupled with the alternate career opportunities for blacks post-apartheid, the teaching profession acquired a particular undesirable profile (e.g., conditions of work and flat career trajectories). Furthermore, the State's closing of 120 teacher training colleges shed light on the urgency to recruit new teachers while many skilled and experienced teachers were exiting the profession. It was imagined that by locating pre-service teacher training programmes in universities, the quality and standard of ITE would improve, but a grave inaccuracy was overlooked:

For many black teachers, neither their school education nor their teacher training obliged them to study mathematics, or science. They were now required to teach an altogether new curriculum and to exhibit a set of competences that the most highly skilled professionals anywhere in the developed world would find difficult to demonstrate. Major assumptions were being made about the capacity of teacher educators and teachers that were not based on reality. Furthermore, a dangerous and misleading policy assumption was being made that the policy could be implemented on a universal basis. The on-the-ground conditions of schools varied enormously throughout South Africa, as they still do, from elite, well-equipped schools to mud cabins without heat, water, electricity, or proper blackboards. The policy statements were impressive to read in the abstract, but they did not sufficiently relate to the traditions and circumstances that existed in South Africa. For many schools it was 'mission impossible' in relation to the training and capacities of their staffs, to the conditions of work that prevailed and to the lack of equipment and teaching resources. (OECD 2008, 296)

 In sum, the State's failure to appreciate the complexity of educational change by 'universalizing reform' in unequal material circumstances, set unrealistic expectations for teaching and learning. Moreover, as it relates directly to ITE, the closing of 120 colleges of education and transferring the function of pre-service teacher education to university campuses in the hope of raising quality and standards was misguided. Additionally, the teaching profession is beset with its own pre-existing challenges, such as: high rates of HIV infection; high incidences of tobacco and alcohol addiction; absenteeism; high administrative workload; late arrivals and early dismissals (which impede teaching and learning time-on-task); low teacher retention patterns; high teacher mobility; subject shortages; and, finally, lack of district professional support (OECD 2008, 299−302). Therefore, to argue exclusively on the basis that pre-service teachers and university ITE lecturers impact educational performance (due their low quality programmes and lack of subject conceptualisation), is to ignore all the variables in State, district, school and classroom policy and practices that impact student achievement. The above argument forwarded by Taylor then also

fails to incorporate the 3-I's model of teacher education which is initial, induction and in-service professional education and training, where no greater emphasis is given to pre-service, induction or in-service development, but where all stages are treated as equally important to impact classroom practice (OECD 2008, 308). What has emerged from the above discussion is the challenging of reductionist and oversimplified notions of teaching and learning. And while it will be openly admitted that the ITERP provides some profound statistical insights that highlight the flaws in ITE programmes, it should also be noted that ITE programmes are but a microcosm of a greater educational reality that needs rethinking. What we have attempted to achieve in the above section is the entertaining of an expanded view of teacher development by historically situating it and contextualising it in multi-perspectival view of educational reform, which is to suggest that the latter is still in progress and not final. In the upcoming section, we plan to develop a better understanding of how (university) institutional cultures and identities shape teaching and learning and to discover the ideologies that become perpetuated as a result thereof.

THE INSTITUTIONAL PERSPECTIVE

In his analysis of the five structural identities that HEIs may fall under, Pretorius (2003, 13) proposes that HEIs submit to internal and external determination by way of their social responsiveness and institutional integrity. The advantage this brings is socially engaged knowledge generation which is accomplished by integrating teaching, research and service so that each site provides an opportunity for the diversification of knowledge (Pretorius 2003, 13). Further to this, Pretorius (2003, 14) argues that in a developing society, higher education has an obligation to knowledge aimed at development, yet this arrangement is attendant with noticeable complications. One such problem is that the structural relationship between higher education and its environment implies a difference in the balance of power, as well as a fight for HEIs to maintain autonomy, relevance and integrity (Pretorius 2003, 14). Thus, different structural arrangements produce different approaches to academic practice and knowledge generation (Pretorius 2003, 14). First, according to Pretorius (2003, 16), HEIs may be characterised by internal-determination where the teaching and research is focused primarily on the individualised, self-centred and self-indulgent culture of the institution. Second, HEIs with external determination are the kind owned by the State, a church, commerce or a particular community (Pretorius 2003, 17). Third, HEIs with a pseudo-engagement, walfarist and non-caring agenda have their teaching and research pursuits tailored to meet their revenue requirements (Pretorius 2003, 18). Fourth, HEIs with a promiscuous engagement to the larger community use information and knowledge for market and social value (Pretorius 2003, 19). And lastly, the corporate university holds corporate needs as preeminent,

and abides by corporate culture with regard to the specific requirements and the mission of its charter (Pretorius 2003, 20).

Now, with an understanding of the organisational identities HEIs may assume, it may be safely inferred that a State, church or community-owned university holds better prospects of providing ITE programmes. Yet, this conclusion is not without its own dilemmas. Particularly in light of the fact that a substantial number of colleges of education were closed in the 1990s and with universities having to absorb this function, we need to observe that HEIs previously had their own cultures and traditions. This fact may lead us to believe that ITE programmes were imposed on some institutions through the external control of the State and funding incentives it provides in terms of higher education reform (redress, equity, programme diversity). Hence, the responsiveness of universities to respond to the needs and problems of certain communities (e.g., underserved) or sectors of society (e.g., education) through sophisticated and reflective teaching and knowledge production may have been severely circumscribed. Which simply stated could be interpreted as the loss of autonomy, self-determination and quality assurance, because ITE programmes were imaginably not their initial focus or area of expertise. This fact further diminishes fruitful promise of high quality ITE students and practitioners since the other four university persona are distinctly focused on revenue and commerce – as if to suggest that social development rests entirely on the expansion of mercantile skills and knowledge. Furthermore, while we may have a particular understanding of higher education transformation, we are less informed about the epistemological transformation within HEIs. It has been argued that the shifts in structure and content of curriculum have not yet been actualised since curriculum is intertwined with the institutional cultures of many HEIs (male, white, Eurocentric), which is problematic since the education sector is predominantly female, black and Afrocentric (HESA 2010, 128). Thus, epistemological pluralism becomes another focus when crafting sweeping statements about student achievement since multiple ways of thinking and knowing have to be considered in relation to State policy and regulation, institutional cultures, disciple–specific curriculum, and lecturer development in order to positively influence student performance. For example, the highest qualified academics in HEIs are white males, while generally the majority of the higher education academics are male (Badat 2010, 26–27) which impacts epistemological hegemony in relation to abstract thinking (whereas females may rely on concrete thinking); formal and logical scientific thought (whereas females might rely on other forms of meaning making-informal, non-scientific) (Turkle and Papert 1992). Overall, the misrecognition on the part of the State, HEIs and education faculties to assume that education reform as a concept will perfectly coincide with successful school experiences for a great many students (in such a short time) was grossly overestimated and premature. Yet, this miscalculation is perhaps not altogether surprising given the scientific (objective, technical and mechanistic) rationality that seems pervasive in State and institutional

(HEIs) managerialist approach to education with an accent on efficiency, control, mastery and certainty. Which brings us to a philosophical impasse: If technical rationality, which has dominated Western thinking, is counterproductive in education, what are plausible alternatives? In what follows below, we elaborate on how notions of diverse epistemologies and multiple logics run into conflict with subscribing to a universalising epistemology.

WESTERN CONCEPTIONS OF RATIONALITY VS MULTI-LOGICALITY

Santos (2004, 5) theorises that people's understanding of the world should escape and exceed the Western understanding of the world which is imprisoned in impotent, arrogant and metonymic reason. To him metonymic reason claims to be the only form of rationality, even while it is obsessed by the idea of totality in the form of order which brings about dichotomies and hierarchies (civilized versus primitive, capital versus labour, scientific versus indigenous knowledge) (Santos 2004, 8). In this way, metonymic reason claims to be exclusive, complete and universal to the point that none of its parts can be conceived outside its relation with totality (Santos 2004, 8). Consequently, due to its claim to universality, metonymic reason has no motivation to explain itself but simply imposes itself by productive and legislative thought (Santos 2004, 8). Hence, Santos (2004, 10) concludes that people cannot grasp the world by any single grand theory since it presupposes homogeneity and mono-culturalism. He reflects on the fact that all cultures are incomplete and can be enriched by dialogue and confrontation with other cultures; which implies that all social practices involve knowledge (e.g., traditional biomedicine and other counter-hegemonic practices), which is trained on what is good for the society rather than an enchantment with positivism (scientific and objective truth) (Santos 2004, 44). Following Santos' anti-positivist and multicultural perspectives on knowledge, critical theorists such as Lankshear (2005) and Steinberg (2005) chime in with what needs to be changed in the culture of school curricula − toward hermeneutic and critical experiences, while dangerous ideological undercurrents (scientific and capitalist ideology wedded to empirical data, accountability and assessment) are flushed out. Arguing for a critically-infused approach to teaching, Steinberg (2005) calls for a thicker, more complex and textured form of educational research (over purely empirical studies); as well as for more diverse and reflective knowledge in the form of Africanist studies, post-colonial studies, political economic studies, feminist epistemologies, phenomenology, indigenous knowledges, semiotics, queer theory, critical theory, psychoanalysis, discourse analysis, and post-structuralist analysis; which are regarded as marginal and excluded knowledge forms. Therefore, to link what appears to be scientific rationality in South Africa education − the notion that education is an objective science that can be measured and quantified for greater

efficiency − is to surrender to an interpretation of education that negates human dynamism and human well-being, without fully considering alternatives, which is what the next section grapples with.

POTENTIAL ALTERNATIVES IN CRITICAL PEDAGOGY

To avoid the abstraction of dealing with human complexity, McLaren appeals to teachers as professionals, that is, people who are competent both in terms of subject matter taught and pedagogical disposition, to allow students to create coherence between discourse and practice (Freire 2005). The discourses McLaren highlights are the ethical discourses that defend the marginal (the poor, weak, homeless) where consciousness is as (if not more) important as cognitive development in the exercise of democratic equality (Freire 2005). Thus, in the ethical and pedagogic tradition of Freireian critical pedagogy, teachers are considered as cultural workers and not mere functionaries of pre-packaged curricula; and progressive administrators do not simply maintain elitist and authoritarian programmes in the name of continuity and efficiency (Freire 2005). For example, Freireian anti-positivist reading methodology places emphasis on patience and perseverance: where students and teachers must struggle to make meaning; where studying is a bitter obligation, and doubt about the truth is ever-present as we collectively and individually negotiate the challenge of learning from and with others (Freire 2005). Thus, Freireian (soft) critical pedagogy departs from (hard) mechanistic pedagogy as the former favours axiological orientations in humility (no one knows it all, nor are we ignorant of everything), love, courage (willingness to face our fears) and tolerance (willingness to consider many truths); whereas the latter relies on quantitative outcomes (scores, right/ wrong answers, winners/losers, pass/fail, high-performing/low-performing schools, etc.). Additionally, critical pedagogy is inconsistent with pre-determined curricula, routinised teaching and universalising assessment because it regards knowledge production as social, open-ended and unfolding; which is to say teachers and students use lived experience (consciousness, motives, values and emotions – which is never final) to build into the curriculum, teaching and assessment. In this way, critical pedagogy provides insight into progressive and radical pedagogic alternatives, which Bartolomé (2007) leads us in discussion below, when she considers radicalising prospective teachers' education programmes.

   Bartolomé (2007) places great emphasis on the political and ideological dimensions of teaching when she calls on ITE programme creators to sanction pre-service teachers to examine their own assumptions, values and beliefs and how their ideological postures inform their perceptions and actions, especially when working with subordinated students – who are often misrecognised as being not smart, not talented, lazy, slow, and so on. Her understanding of ideology is that it

exists in the deep psychological structures of the personality; it is constructed of individual needs, drives and passions, as well as by the changing conditions and social foundations of a society (Bartolomé 2007). Thus, to infuse ITE curricula with critical pedagogic principles will create opportunities for teachers to name, confront and interrogate harmful ideologies in curricula, university programmes, school, and classroom practices for greater academic success (Bartolomé 2007). Therefore, to Bartolomé (2007), a critical approach to ITE forces pre-service teachers to understand how their a-critical belief systems might reflect those of the dominant culture and perpetuate unequal social conditions. Furthermore, an examination of the political and cultural role of counter-hegemonic postures in education, hold the potential to contest and transform the exclusionary and undemocratic values and practices of the elite (Bartolomé 2007). Similarly to Freire (2005), Bartolomé (2007) sees teachers as cultural brokers and cultural advocates who are positioned to encourage students to understand a broad social reality that gives rise to systemic inequality. And in such a system where discrimination and economic restrictions assume greater importance than merit and ability, it then becomes an imperative for critical pedagogues to provide knowledge bases and practices that are not typically available to marginal students; and to present knowledge with greater clarity for counter-hegemonic advantage (Bartolomé 2007). But the impressive concepts in critical pedagogy may remain nothing more than abstraction if they are not realised in real pedagogic encounters with students in classrooms; which is what the two cases below will attempt to demonstrate.

CRITICAL PEDAGOGY REIFIED IN SOUTH AFRICAN UNIVERSITIES

To begin with, Waghid (2001) invites readers into a post-graduate class (honours level) in Comparative Education to help illuminate an understanding of what it might mean to be a critical pedagogue. The author describes his posture at this time as one bent on 'refiguring and reconceptualizing classroom pedagogy toward principles of democracy, reflexivity, and criticality to cultivate and advance reflexive democratic discourse' (Waghid 2001, 29). Moreover, the rules of reflexivity which (2001, 29) describes as having 'equal participation, negotiation, dialogism and solidarity', were going to be essential in his pursuit to promote critical classroom pedagogy. To this end, the topics of engagement focused on students' reflected possibilities of transformation and liberation and these latter themes were fused with political, economic, socio-historical power relations that promote context specific values and interests:

> Regarding the content of the course, the author describes it has having contained a core body of knowledge with the accompanying critical readings that would spur in-service teacher

students to participate in critical reflection and personal rethinking of knowledge and the production of shared meanings (Waghid 2001, 30).

The lecturer provided students with analytical summaries of the readings and the students were tasked to interpret the texts within the context of their social and everyday life experiences in order to engage with possibilities of transforming society (Waghid 2001, 30).

In so doing, the lecturer acted as facilitator in the pedagogical process by relating abstract theoretical and methodological perspectives with situational examples of lived experience (Waghid 2001, 33).

Correspondingly, students reciprocated this critical posture by reflecting through debate and questioning the knowledge advanced in the readings to align their thinking with how the issues might resonate with their understandings and ways of seeing the world (Waghid 2001, 30).

Resultantly, students became so emboldened through the pedagogical encounters that they literally refused the lecturer's analytical summaries and opted to navigate their individual perspectives through construction and reconstruction of meanings beyond what the lecturer had imagined or propositioned (Waghid 2001, 30).

And while the lecturer maintained the role of facilitator, it began to emerge that these conditions for collaborative inquiry and critical reflexive thinking opened up possibilities for students to reflect on, to challenge and to reconstruct knowledge to the point where they graduated to a sophisticated understanding of educational developments in South Africa. (Waghid 2001, 30)

These pedagogic encounters resonate with critical pedagogy as follows: first, the participants exhibit criticality by way of negotiating meanings and making responsible decisions in reflexive democratic discourse (Waghid 2001, 35); second, in refusing the lecturer's analytical summaries, the students indicate their meaning-making capabilities and the need to seek their own meanings as a sign of criticality (Waghid 2001, 35); third, the students' ability to understand the education developments in South Africa critically is a testament to their collaborative inquiry and reflexive thinking (Waghid 2001, 36); and lastly, the rejection of certainty, and the reconstruction of knowledge with a view to transformation and emancipation would empower the students to analyse and evaluate knowledge critically all demonstrate a critical disposition (Isaacs 2015; Waghid 2001, 36).

Furthermore, in an instance of curriculum redesign at a college of education, the rigid, authoritarian, rote learning that characterised the past as seen in the philosophy of the apartheid era 'Fundamental Pedagogics' (Samuel 2002, 402), was being transformed to a more progressive interpretation of what it meant to become a teacher. The official government policy was based on the pedagogically progressive learner-centred approach of OBE and its accompanying Curriculum 2005 (C2005), with a decidedly more transparent, egalitarian, and integrated approach to knowledge (Chisholm 2001, 10; Morrow 2001, 88−89). It is within this context that the former University of Durban−Westville (UDW) sought to transform its BEd teacher

development programme, formerly the Bachelor of Pedagogics (BPaed) degree to the Bachelor of General Education and Training (BAGET) degree by restructuring the curriculum over a 6-year period (Samuel 2002, 405). The university teachers were faced, on the one hand, with internal levers of trying to transform a mono-racial institution to embrace greater diversity as well as to transcend the philosophies of Fundamental Pedagogics; and on the other hand, the external forces of having to adhere to national standards of accreditation in the form of the NQF, and SAQA standards (Samuel 2002, 404−405). Coupled with these aforementioned challenges were the changing conceptual approaches of staff toward accommodating more critical educational theories which would impact curriculum design and delivery, all the while striving to create a relevant, contextually appropriate and cost effective curriculum that reflected the new imperatives of OBE/C2005 (Isaacs 2015; Samuel 2002, 397).

As such, the curriculum reorganisation invited the critical education theories of Michael Apple, Paulo Freire and Henry Giroux; embraced sociology of education preoccupied with social justice; and applied a psychology of education turned toward the social construction of knowledge (Samuel 2002, 402). In the new BEd programme, gone were the obvious separations between theory and practice as inter-disciplinary studies, postmodernist education studies, and curriculum policy analysis heralded a new dawn. Additionally, under this new dispensation, university teachers began to see students as resources to the curriculum by incorporating student knowledge and unique experiences as part of the new discourse (Samuel 2002, 402). Furthermore, in this reconstructed curriculum, university teachers favoured an action research orientation and transformed their supervisory engagements during school visits to them (lecturers) being more of a mentor than someone interested in classroom management, discipline and record-keeping (Samuel 2002, 402). In this new arrangement, student teachers were inspired to engage in:

> critical reflective practice as they saw they had the opportunity to create an identity by their actions and role as a teacher, and to celebrate the value of theory and practice as they chart their own trajectory of professional development. (Samuel 2002, 403)

In sum, the above institutional practices have coherence with critical pedagogy in the following ways: the university teachers work in their capacity as researchers and cultural workers by respecting diversity and multiculturalism; critical enlightenment and emancipation is fostered by implementing progressive and critical educational theories; curriculum remodelling makes a critique against instrumental and technical rationality by focusing on the humanist aspects of education (social justice, social construction of knowledge, use of student experience); and the development of a contextually appropriate curriculum that contends against concepts such as hegemony and ideology which were strong features of the outgoing curriculum.

DISCUSSION

The problem that the ITERP presents is a reductionist view of the state of education in South Africa, when in fact curriculum discourse and concrete classroom practice open up the complexity of the political, cultural and economic tributaries that flow into the education debate. The rapidity and frequency of curriculum reconstitution has ushered in many upheavals in classroom practice but the general neoliberal ideology of the official policy has remained constant − first motivated by the aggressive macro-economic Growth Employment and Redistribution (GEAR) policy and now by the more recent National Development Plan (NDP). As such, the scientific procedure as conceived in capitalist society, based on abstraction and mathematisation, collapses very complex categories into neatly solvable chunks in order to put an end to contradiction. However, history has taught us that social problems do not simply vanish with a single application of science; because if there were a social science that could obliterate the racially divided and economically unequal conditions in South African schools (where 80 per cent dysfunctionality is claimed at black schools), then that science would be administered to rectify the imbalance (Wilkinson 2015). By problematising the functional and technical interpretation of school performance, space is created to explore hermeneutic and critical approaches to the curriculum and classroom teaching practice. Nevertheless, such a move would be premature without first having rendered problematic the (undetected) capitalist ideological hegemony present in official policy documents which claim to advertise a progressive and critical ideology when it is nestled within a wider neo-liberal macro-economic discourse. And as part of the double and deceptive discourse in curriculum policy, simple conclusions are drawn on the state of education without historically contextualising school and social experience. For example, NCS/CAPS discourse obscures views of the political trade-offs made post-1994 (that did not ensure equitable distribution and transfer of wealth) or the fact that the curriculum is situated within a middle class reality when in fact 80 per cent of students are poor. In this way, the curriculum is exclusionary to the majority of the students on the basis of culture (which affects language, epistemology, values, ideology and beliefs) and social class (affluent students who pay high school fees are generally the highest academic achievers).

A critical handling of the ITERP mirrors a critical interpretation of the economic, cultural and political undercurrents that lurk beneath official policy and reports (on education performance for instance), in that whatever is revealed simultaneously obstructs what is concealed. Specific to the ITERP conclusions is the omission of the fragmented teaching sector, the profile of the teaching career, the State's political ambitions to restructure society driven through education, and the misguided universalising of curriculum reform. Therefore, the unrepresentative way of correlating university teachers' and pre-service teachers' abilities and achievements to an (80%) under-performing sector, transfers the burden away from

the State to HEIs instead of globalising the debate and considering the numerous factors that impact school performance. And even in this instance, the State could implicate HEIs in perpetuating the problem by subscribing to a largely managerialist and functionalist rationality, whose epistemic cultures and traditions coincide with the neoliberal, market-driven ideologies of capital; rather than socially responsive epistemologies that make ITE programmes relevant to the enormous demands of struggling school students. Nonetheless, from a political perspective, the State relies on HEIs to achieve (developmental) targets by coercing them through funding mechanisms in order to secure electoral support and provide the illusion of public accountability. Yet, it is precisely the State's reliance on metonymic (arrogant, impotent) reason that entrenches productive and legislative thought while avoiding hermeneutic and critical rationality to help thicken education theory and practice. In this way, the State is over-subscribed in a political discourse when it should be invested in an ethical discourse to help students learn for human development instead of economic development.

The impoverishment of metonymic reason and scientific rationality in education could plausibly be counter-balanced by critical pedagogy whose axiological positioning supports humility, love, tolerance and courage in pedagogic encounters. This position shifts ground from the quantitative focus on educational outcomes and a concentration on efficiency, mastery and certainty. As suggested by Bartolomé (2007) and demonstrated by Waghid (2001) and Samuel (2002), radicalising ITE through critical pedagogy provides insights into the counter-hegemonic insertions in education that involve the real life experiences of pre-service teachers; and that have the potential to influence pedagogic practice positively. Critical pedagogy opens up unexplored avenues of being and knowing by testing ideological assumptions; uncovering the political and cultural role of ideology; instituting counter-hegemonic agency to transform exclusionary and undemocratic practices; and providing students with knowledge to enact counter-hegemonic advantage to recoup the humanist aspects of education that spur them on to seek transformation and liberation. Furthermore, critical pedagogy avoids superficial understandings of complex social reality by using multiple logics to unmask asymmetrical relations of power and thereby provides openings for critical agents to name, reflect and transform undemocratic and inequitable circumstances.

CONCLUSION

The divided discourse between official education policy and pedagogic practice renders mottled results in student achievement, where high student performance could be related not so much to talent and ability, but rather to (historic) economic affluence. This consequence is partly due to political betrayal in the case of the State, as well as to the cultural familiarity more affluent students have with curriculum

experience. And while the ITERP makes a statistically convincing argument that the success of the teaching profession rests on the subject knowledge and pedagogic practice of well-trained pre-service teachers, it avoids engagement with the thorny political, cultural and economic factors that also contribute to student performance. However, the fascinating (silent) discourse that the ITERP reveals (through critical inspection) is the success of a neoliberal ideology that permeates South African culture and schooling where the retail, finance, manufacturing and communications sectors are soon to be replaced by the higher education sector as the engine that drives a knowledge based economy. So, if the country is analogous to higher education, on a cultural basis, the former is predominantly African, female and black; while the latter is represented by white males. Economically, the country is predominantly poor with a minority, very rich elite. Moreover, the schizophrenia represented in official education policy and curriculum reflects a predominantly Eurocentric epistemology and neoliberal ideology that portends ominously in terms of social responsiveness but works favourably in the interest of market responsiveness. And while we argued earlier that higher education could be seen as a pawn to achieve political credibility, this position may be revised to higher education working collaboratively with the State to transform South Africa into a knowledge based economy and achieve economic development targets over human development. In this way, the ITERP's technical rationality implicated pre-service teachers and university lecturers in school-based underachievement, yet a critical reading also exposes a deeper reality of other educational stakeholders that deserve equal credit in school-based problems.

REFERENCES

Badat, S. 2010. The challenges of transformationin higher education and training institutions in South Africa. Paper commissioned by the Development Bank of South Africa.

Bartolomé, L. 2007. *Critical pedagogy and teacher education: Radicalizing prospective teachers*. New York: Peter Lang.

Braverman, H. 1974. *Labor and monopoly capital: The degradation of work in the twentieth century*. New York: Monthly Review Press.

Chisholm, L., J. Volmink, T. Ndhlovu, E. Potenza, H. Mohamed, J. Muller, C. Lubisi et al. 2002. *A South African curriculum for the twenty-first century. Report of the Review Committee on Curriculum 2005*. Pretoria: DoE.

Department of Education. 2011. *National Curriculum Statement (NCS) − Curriculum and Assessment Policy Statement (CAPS) Foundation Phase Grades R–3*. Pretoria: DoE.

DoE *see* Department of Education.

Freire, P. 2005. *Teachers as cultural workers: Letters to those who dare to teach*. Boulder, CO: Westview Press.

Freire, P. and A. Faundez. 1989. *Learning to question: A pedagogy of liberation*. New York: Continuum .

HESA *see* Higher Education South Africa.

Higher Education South Africa. 2010. *Sector position paper on the report of the Ministerial Committee on Transformation and Social Cohesion and the Elimination of Discrimination in Public Higher Education Institutions.* Pretoria: HESA.

Isaacs, T. I. 2015. Critical student agency in educational practice: A South African perspective. Doctoral thesis, Stellenbosch University, Stellenbosch.

Lankshear, C. 2005. Critical pedagogy. In *Classroom teaching: An introduction*, ed. J. L. Kincheloe. New York: Peter Lang.

Matshediso, M. 2015. *2014 matric results released.* http://www.sanews.gov.za

Morrow, W. 2001. Scripture and practices. *Perspectives in Education* 19(1): 87−106.

OECD *see* Organisation for Economic Co-operation and Development.

Organisation for Economic Co-operation and Development. 2008. *Reviews of national policies for education: South Africa.* Paris: OECD.

Pretorius, D. 2003. *A tale of three countries: Social sciences curriculum transformations in Southern Africa.* Lansdowne: Juta.

Samuel, M. 2002. Working in the rain: pressures and priorities for teacher education curriculum design in South Africa: A case study of the University of Durban-Westville. *International Journal of Educational Development* 22: 397–410.

Santos, B. 2004. A critique of lazy reason: Against the waste of experience. In *The modern world-system in the longue durée*, ed. I. Wallerstein, 157−197. London: Paradigm.

SAQA *see* South African Qualifications Authority.

South African Qualifications Authority. 2000. *The National Qualifications Framework and Curriculum Development.* Pretoria: SAQA.

Steinberg, S. R. 2005. Critical pedagogy in school. In *Classroom teaching: An introduction*, ed. J. L. Kincheloe. New York: Peter Lang.

Taylor, N. 2014. *Initial Teacher Education Research Project: An examination of aspects of initial teacher education curricula at five higher education institutions. Summary report.* Johannesburg: JET Education Services.

Turkel S. and S. Papert. 1992. Epistemological pluralism and the revaluation of the concrete. *Journal of Mathematical Behavior* 11(1): 3−33.

Waghid, Y. 2001. Reflexivity, democracy and praxis: Reflecting on a critical moment in classroom pedagogy. *Perspectives in Education* 19(1): 29–37.

Wilkinson, K. 2015. *Checked: 80% of South African schools indeed 'dysfunctional'.* http://mg.co.za/article/2015-03-25-are-80-of-south-african-schools-dysfunctional