Chapter 19
Inequality in Education: What is to Be Done?

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19.1 Introduction

In any of South Africa's nine provinces you could within 30 min or less drive from one of the most affluent schools in the world to one of the poorest and most dysfunctional schools anywhere. The one set of schools would boast rolling green sports fields and state-of-the-art computer laboratories and the other would be fitted with pit latrines into which, from time to time, a child falls and even drowns.[1] This is the most visible face of inequality in the nation's schools but what is less obvious are the many other ways in which education institutions remain unequal more than two decades since the end of legal apartheid. While *face inequality* draws dramatic attention to the inequalities of school infrastructure (buildings, sports grounds, libraries and laboratories) much of the research attention has focused on differences in learning outcomes between well-resourced and poor schools.

The purpose of this final chapter is to offer a critical synthesis of this rich body of research on those many ways in which schools remain unequal despite small and large-scale interventions to shift the needle in the quest for equality (the sameness of treatment) and equity (the distinction of treatment through, for example, the redistribution of resources from the privileged to the poor). This review of the research presented in the book seeks not only to be critical and synthetic but also

[1]The two cases of pit-latrine drownings that received considerable media attention was that of five-year old Lumka Mketwa in Bizana (Eastern Cape) in 2018 and of five-year old Micheal Komape in Polokwane (Limpopo) in 2014.

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generative in that the very process of making sense of existing knowledge asks whether there is new knowledge that can be developed from what we now know about inequality in education.[2]

19.2 Face Inequality

The continued co-existence of vastly unequal school infrastructures in South Africa is itself an enigma. That these most visible forms of inequality are not challenged or disrupted speaks to a social narrative of aspiration rather than disdain. The aspirant black middle class wants access to former white schools because of their association with quality education. It is the very contrast—desegregated white schools that work and segregated black schools that often do not—which pushes black parents towards the more impressive institutions. This is what the research of Tshepiso Matentjie (2019) in this book so powerfully demonstrates; the quest as well as the costs of black middle class aspirations for access to the well-established and privileged schools.

But the settled images of face inequality unbuttons some difficult political and policy dilemmas in this redress society (Barnes 2006).[3] Those emphatic images of contrasting wealth and poverty in school infrastructure betray a set of compromises made on the eve of South Africa's transition from apartheid to democracy (Bell 2016). There would be no radical redistribution of material resources from white schools to black schools; in fact as the research by Motala and Carel (2019) demonstrate, government's allocations in resources were incremental and lacked what the education finance literature calls *adequacy* to redress the massive inequalities in what is often described as two school systems. Nor would there be any redistribution of school personnel—teachers, principals and other administrators—despite the inherited differences in qualifications and competence between staff in white schools compared to those in black schools. What this means, in effect, is that the structural racism that created these inequalities in society were not being addressed even at the school level (see Noguera 2017) and it is a concern that only the chapter by Matentjie (2019) in this volume even begins to address racism as a factor in inequality.

The decision not to radically redistribute resources from white, privileged schools to black, disadvantaged schools only partly explains these continuing inequalities; it is also the fact the political transition allowed for private funding (read, parent

[2]It is my view that a major shortcoming in edited books is the lack of a conceptual framing chapter at the beginning (impressing intellectual focus and coherence on the multi-authored contributions) and a generative knowledge chapter at the end (offering new knowledge on the central topic—in this case, inequality in education—that is garnered from the separate author chapters). This is what our book hopes to do differently as a contribution to research on educational inequality.

[3]It is worth remembering that *redress* as an instrument to resolve inequality was a founding rationale for educational change in South Africa.

contributions) to supplement declining public funds in the privileged school market (Motala and Carel 2019, in this book). What this meant, in practice, is that the inequality gap remained unresolved, and even widened, between the poorest and the wealthiest schools.

19.3 Schools as Settled Arrangements

The ugliness of face inequality in the school sector hardly stirs reaction, let alone revolt, in this otherwise "protest nation" (Duncan 2016). Where students rebel it is more often against inequality on campuses whether in terms of the exclusionary costs of higher education (the so-called #FeesMustFall movement) or the alienating cultures of former white universities (the so-called #RhodesMustFall moment) as witnessed since 2015 (Jansen 2017). When communities revolt it is typically in response to what is known as "service delivery protests" because of the lack of housing or sanitation or the timely payment of social grants (Twala 2014).

Where schools are implicated in protests, it is far more likely to be led by teacher unions in regard to salaries and conditions of service (Pattillo 2012).[4] There has not been since the advent of democracy in 1994 the kind of spontaneous protests against the poor quality of education except in one instance. The NGO *Equal Education* often leads protests (i.e. Hendricks and Washinyira 2016 and Groundup 2017)[5] and brings legal challenges against the poor standards of infrastructure in the provinces. Yet outside of such organized protests by one organization, students, parents and teachers seldom take to the streets to engage in mass protests against the unequal quality of education across the country's 27,000 schools. It is as if communities have come not only to accept these settled arrangements but to seek participation within the advantaged schools. Why there is such social acquiescence in the face of rampant *educational* inequalities requires depth research in the sociology and politics of education not covered in the contributions to this book. One reason might be the assumption that inequality only exists because of limitations of resources.

19.4 If Only There Was More Money

There is a long established discourse in South African education and society about "the lack of" things that are needed to correct problems such as quality education. If

[4]It is most unusual to cite a pre-doctoral study thesis as evidence in a research book but this is one of the most exceptional qualitative studies yet done on teacher unions in South Africa by a young student.

[5]Sample of reports on Equal Education's activism from Cape Town in the Western Cape to King Williams Town in the Eastern Cape.

only there were more textbooks or better teachers then education would improve. To address this problem the answer given was typically more money. But as research has consistently shown during the early transition from democracy (Crouch and Mabogoane 1998; Fiske and Ladd 2004) and more recently (Motala and Carel 2019), South Africa has made significant shifts in education spending as evident in global indicators—percentage of GDP (about 7%) and proportion of national expenditure (around 20%)—or in direct, corrective funding measures such as the Equity Share Formula (the education component) and the School Fee Exemption Policy. And yet, as one study after another has demonstrated, despite these relatively strong investments in education South Africa still appears last or second last when compared with other nations in international tests of achievement (Reddy et al. 2019). The problem is, as studies in this book has shown, the incapacity of the system to translate resources into results (Crouch and Mabogoane 1998).

This claim should not, however, be used to discount the massive amounts of additional funding needed to achieve face equality given the vast and visible disparities in infrastructure. These simple facts—such as the fact that 4557 out of 23,495 schools still have pit latrines as toilets and 45 have no toilets at all—imply serious capital expenditure demanded of the national government.[6] And this is where the collection of research contributions in this book pivots far too easily from the infrastructural argument for equity to more narrow pedagogical arguments for equality. Face inequality is not simply a question of an embarrassing optics in politics but a concern about social justice in how a country provides education to the poorest of the poor.

And yet even if there was some awakening of the political conscience within government to accelerate attention to equity of infrastructure that in itself would not translate into equal learning outcomes. This is where the argument has merit—the system is inefficient given the failure to translate resources available into results required. With about 80% of government expenditure on basic education going towards teacher salaries, it would make sense to regard this important human resource as key to turning around the unequal outcomes in the public school system. But how unequal are those outcomes to begin with?

19.5 What We Know About Learning Outcomes in Schools: A Note on Measurement

The chapter contributions in this book reveal an interesting trend in the trajectory of South African educational research over time. For a long time schools research came largely in the form of small-scale qualitative investigations such as case study research or critical policy studies. Three developments changed that: South Africa's participation in international achievement studies (principally TIMSS, SACMEQ

[6]Data drawn from the National Education Infrastructure Management System (Neims) of 2017.

and PIRLS),[7] the timely establishment of quantitative education research units in the Human Sciences Research Council (The Education, Science and Skills Development Research Programme) and at the University of Stellenbosch (Research in Socio-Economic Policy or RESEP) and the capacity for such research created within the government's Department of Education. The blend of textured qualitative research and rigorous quantitative research that resulted has extended but also strengthened the range of studies available on educational inequality.

It has to be said, in passing, that the quest for ever more refined studies of intervention impact deserves a word of caution. The notion of moving from bland statistical summary studies to quasi-experimental research to randomized control trials (RCTs) in an attempt to "really, really know" the effects of intervention X on learning outcomes Y is not beyond criticism. What such admirable studies do achieve is to give us a summary sense of "what works" but they cannot explain how, why and under what conditions the specified treatment delivers the narrowing outcome—the overstatement of findings is not uncommon in such studies. We are not dealing here with the clinical trial of drugs on patients but with very complex organisations in which cause-effect relationships are notoriously difficult to pin down. As Nelson et al. (2018) and his colleagues point out in their feature article; *Can measures change the world?*—"the social and institutional context of measurement … has been relegated to the periphery of measurement theory and practice" and this may "limit the potential impact of the measures" themselves. And Samoff (2018) makes the same point that "by design, quasi-experimental approaches ignore context and complexity" and that with few exceptions "the experimental model is misplaced for education, where the effort to hold things constant is a problem not a solution."

19.6 So What Do We Know?

We know that there have been improvements in "the education system's underlying performance" (Van der Berg and Gustaffson 2019). What we also know is that those improvements are from a very low base, that the comparative scores still places South Africa at or near the bottom of achievement tables, and that whatever progress made seems to have stalled in subsequent achievement studies. In fact, the more recent 2016 PIRLS data provided a sobering counterpoint these optimistic accounts of "system improvements" when it was reported that almost 8 out of 10 South African children in Grade 4 cannot read for understanding (Howie et al. 2017).

Regardless of claims about aggregate achievements in the national frame, we know that inequality in schools still remains a major blight on the post-apartheid

[7]Trends in International Mathematics and Science Study (TIMSS), The Southern and Eastern Africa Consoritum for Monitoring Educational Quality (SACMEQ) and The Progress in International Reading Literacy (PIRLS).

education system. So much so that researchers in this book speak regularly about "a two-tiered bi-modal schooling system" (Spaull and Pretorius 2019) with high performing schools (about 20%) at one end of the achievement distribution and low performing schools at the other end (about 80%). This classification however might oversimplify a more complex distribution in that a large number of schools are located at neither of the extremes and occupy a stable middle group of institutions. These are schools with moderate functionality and reasonable achievement scores but certainly not located at either end of a bi-modal distribution. As Van der Berg and Gustaffson (2019) point out, there is also "inequality within the bottom 80% of the system, the historically disadvantaged part of the system."

Still, the research reported here makes it clear that who you are (race), where you come from (urban/rural), what your parents earn (class) and which school you attend strongly determines the educational outcomes and the life chances of a student. Put plainly, a black child born to poor parents in a deep rural area while attending a dysfunctional school on average has little to no chance of escaping a life of poverty despite the education received. Over and over again the data reported in this book shows that education policy since 1994 has not reversed unequal outcomes. For students of inequality this finding is perhaps not surprising since the first major study on the subject found that "schools bring little influence to bear on a child's achievement" and that *the inequalities imposed on children by their home, neighborhood and peer environment are carried along to become the inequalities with which they confront adult life at the end of school.* (Coleman 1966).

What is also clear from the South African data is that long before children come to school their futures are already being determined even during prenatal development (Ashley-Cooper et al. 2019—in this book). That said, we know more about the specific operations of inequality. For example, the education levels of the mother is a good indicator of children's futures (Reddy et al. 2019). The quality of the preschool determines subsequent academic success. The home environment is telling—books and the internet—of both educational and life chances. All of this before a child even reaches Grade 1.

The worse news, however, is evidence that suggests that even though poor children coming from such impoverished social backgrounds start with a clear academic disadvantage relative to their privileged peers, that achievement gap is likely to remain over subsequent years of schooling (Spaull and Pretorius 2019). Here the South African research finds confirmatory evidence from studies elsewhere. For example, a recent report in the USA found that:

> the bulk of inequality in reading and math scores is already present at the start of kindergarten, and changes very little over the next three years. This result implicates early childhood as the primary source of inequality in reading and math. (Von Hippel et al. 2017)

Which begs the question; what happened to the liberal view of education as an instrument for overcoming inequality in school and society?

It turns out the reproduction theorists such as Bowles and Gintis—the famed authors of *Schooling in Capitalist America (1976)*—might have been right all along: schools tend to reproduce the social order rather than reduce the inequalities within

society (Bowles and Gintis 2011). In this regard there are two striking examples in this book about the inner workings of education in South Africa. One is the finding by Spaull and Pretorius (2019) in their study on reading literacy in the early grades: "Those [children] who do not learn to match the sounds of language with the symbols of text remain in catch-up mode for the rest of their lives." And another observation that poor students from dysfunctional schools attend weak universities to become inadequately trained teachers in the same class of schools from which they barely graduated. In fact, shows this research, "some of the fourth-year BEd students were not functionally literate"[8] (Taylor 2019) and that "the most distressing aspect of these inequalities is their reproductive nature."

This does not mean that *individuals* might not escape the poverty trap through a unique combination of favourable circumstances or even that the occasional school surrounded by rural disadvantage might not excel in its academic endeavours (Jansen and Blank 2014; Hoadley 2012). We now know that these exceptional cases of individuals or schools do not and cannot represent the majority. We also know that the lessons from "effective schools" in ecologies of disadvantage cannot simply be transplanted into other contexts. That is because each school has unique social, cultural and political characteristics that makes some effective but the majority less so.

And yet it is true that schools (if not systems) do change as a result of external intervention and in the process alter the learning and the lives of children. This is what several studies report in this book and the findings are remarkably consistent. We now know that the kinds of interventions that work in dysfunctional schools bring to the change project three important elements—scripted lessons, quality materials and in-classroom coaching. The refinement of measurement methodologies in some of these studies demonstrate—such as the research of Fleisch (2018)—what can happen when his "triple cocktail" is applied to the change project.

There are however critical shortcomings underpinning the new evangel for school reform. Such highly scripted lessons with strict instructions on what to teach, when and how on a tight timetable have one serious consequence—it changes our understanding of who the teacher is and what we understand by teaching. In this new image of teaching the teacher is no longer the autonomous professional with the capacity for independent decision-making with regards to knowledge, pedagogy and assessment but a compliant instrument that dutifully delivers on the prescriptions of a government-sanctioned curriculum regardless of context. This in other literatures is called the deskilling of teachers and while scripted lessons "may improve examination results for some students [it] cannot resolve South Africa's education crisis, reduce inequality, or promote social justice" (Samoff 2018).

[8]In South Africa there are two main pathways towards achieving a university-based teacher qualification. One is through a four-year professional Bachelor of Education (BEd degree) offered in a Faculty or School of Education. Another path is through a Postgraduate Certificate in Education (PGCE) which is a single year of pre-service teacher education after a first degree was attained with school subjects (e.g. Mathematics III in a BSc degree) in another Faculty (e.g. Science).

Nor is this the critically conscious teacher of progressive education who is able to discern truth from fiction and empower learners with the democratic competences to act on the world. This narrowly scripted, socially anemic teacher is what's left of a once elevated notion of teachers as professionals let alone activists within their classrooms (Jansen 2001; Cappy 2016).

How education change thinking in South Africa got to this point is understandable—decades of frustration at not being able to significantly improve cognitive outcomes among the majority of children has led to a narrowing down of the curriculum under considerable pressure for greater content coverage and improved learning achievements. The tight timelines and an overloaded curriculum are supposed to enforce greater accountability among teachers. The very language of reform, inconceivable in the heady days of progressive pedagogy, is now reduced to bloodstream metaphors like "dosage" (how much of an injection of the reform intervention is needed to ensure gains in learning outcomes?) and "cocktails" (what potent mix of drinks can be swallowed to produce desired effects?). And yet the inequalities of inputs, processes and outputs remain as the contributions in this volume attest. Again, what is to be done?

19.7 Coverage or Competence?

The research in this book is unequivocal about the fact that the school system remains highly unequal in terms of learning attainments by race, class and gender. In this respect the South African data is to some extent exceptional—girls do better than boys in the school system. Indeed, "in all the studies where there was a statistically significant difference in performance based on gender, girls were at an advantage over boys" (Zuze and Beku 2019). Girls do better in reading and boy's progress through the system slower than girls. There is much speculation but little solid evidence that explains these differences in gender outcomes. Gender differences notwithstanding, the strongest and most enduring inequality association is between race and educational achievement (Van der Berg and Gustaffson 2019).

When it comes to acting on research knowledge, however, there is a flailing to the left and right among contending change initiatives about what needs to be done. One of the key contrasting actions recommended is between coverage and knowledge.

The coverage advocates see a direct link between curriculum coverage and improved learning outcomes. The *Programme to Improve Learning Outcomes* (PILO) accordingly seeks to improve management capacity at all levels of education so that "the policy intentions of government [is made] routine in the work of officials and schools" (Metcalfe and Witten 2019). We know that in a national school system that operates at such high levels of dysfunctionality, almost any intervention at the lower end of that system will yield positive learning results. But there is no evidence that curriculum coverage in itself produces sustainable, systemic and scaled-up learning effects across a school system. Nor would it be easy given the state of the bottom schools, as one of PILO's own reviewers rightly observed: "a certain

pre-existing level of functionality may be necessary for curriculum coverage to be achieved" (Pam Christie, cited in Metcalfe and Witten 2019).

The knowledge advocates, on the other hand, locate the problem not in curriculum coverage but in teacher competences; not in capacity at upper levels of the system (province, district and even school) but in "what happens inside the classroom" (Muller and Hoadley 2019). From this vantage point the research points to marked inequalities—disciplinary knowledge (mathematics, in this case) is "highly inequitably distributed" between those teachers in the privileged or quintile 5 schools and those in poorest or quintile 1 schools (Taylor 2019). Subject matter knowledge (knowing enough mathematics, for example) correlates with pedagogical content knowledge (knowing how to teach mathematics efficaciously) and here too there are inequalities of performance inside classrooms.

In Hoadley's (2017) qualitative accounts of what happens inside South African classrooms she found deeply embedded classroom practices marked by a "communalizing pedagogy" in dysfunctional schools and "individualized pedagogies" in established schools. In the latter schools the students encounter teachers with specialized knowledge and considerable autonomy that enables individual learning, active exchange and in-class participation. In the former schools there are rituals and routines marked by memorization, chorusing, as well as rote and repetitive learning. Furthermore, in poor schools "the encounter with knowledge is primarily an oral rather than a textual one" (Muller and Hoadley 2019).

Is teacher development the answer to bridging the gap between competence and coverage of the curriculum? South Africa has come a long way from experiments with the centre-based, cascade model of teacher training to the in-classroom, coaching model of teacher support (Shalem and De Clercq 2019). The evidence in this book certainly points to the benefits of coaching over centralized training (Taylor 2019) which perhaps unintentionally resolves another problem—inspection. Given the intense emotional reaction to inspection systems among teacher unions—deemed judgmental, top-down and reminiscent of the old apartheid system of teacher evaluation—coaching implies mentorship, support and peer review inside the classroom. But individual coaching of teachers in their classrooms is an expensive model even though the developmental benefits are more likely to be sustained over time.

The important observation to be made here is that the school system needs to develop competent teachers (knowledge, teaching) to make curriculum coverage effective in terms of learning outcomes (Shalem et al. 2016). The evidence however shows that when insecure and ill-prepared teachers are placed under the pressure of coverage, there is an inevitable drift towards *curriculum mimicry*—meaning the pretence of compliance where teachers appear to be conforming to coverage requirements without actually doing so in practice.

Hobden and Hobden (2019) are not alone in observing "paper compliance" and found "teachers frantically marking and signing learner books as we arrive for collection." So too the PILO (forthcoming) researchers found evidence of "a culture of assumed bureaucratic compliance" [which] often leads to the exercise of "ticking

off boxes" rather than allowing for substantive engagement with the work of change and improvement (Metcalfe and Witten 2019).

This is a danger in all education systems where the political pressure for coverage and compliance comes up against the realities of teacher incapacity in the face of difficult conditions for teaching and learning such as overcrowded classrooms. And it is in the disadvantaged segment of the school system where such superficial compliance is more likely to occur with the result that the inequality dilemmas remain unresolved. The routines of compliance behaviours in the face of external pressure points, however, to something deeper in the malaise of public schooling in South Africa—that of school cultures and how they impact on learning.

The shift from a fixation on measured outcomes (the economics of education chapters in this book) to research on "opportunities to learn" (OTL) is an important one since we have little evidence as to the processes that produce those results. It is in fact the case that "we know far too little about inequality of opportunity, relative to what we know about inequality of outcomes" (Carter and Reardon 2014).

The assumption among OTL researchers is that if we understand the distribution of opportunities within school and classroom processes, it is possible that the outcomes that result from inequalities could be altered. OTL holds that "learning is to some degree a function of time and effort" and that *engaged learning time* is consequential in terms of the quality of learning outcomes (Schuh Moore et al. 2012). Time—or rather how instructional time is used—is one of the "invisible inequalities" that continue to separate privileged schools from poor schools in terms of learning outcomes.

There are however several concerns that should accompany discussions about time as a critical variable in the inequality stakes. In the first place the availability of time in and of itself does not guarantee learning. It is what is done with that time; in other words, constructive learning time at the very least has to mean the active organization by a competent teacher of structured learning opportunities that draws out students into meaningful engagement with the teacher and the texts (broadly defined) made available in the classroom. Such a conception of time and teaching means that coverage is not enough especially when a crowded curriculum and/or a less capable teacher or a crumbling infrastructure constrain learning.

Furthermore, what is seldom addressed in such time-on-task research are the cultures of *schools* as "(dis)organisation" in which such opportunities to learn are embedded (Christie 1998). That is, OTL's do not float free from organizational cultures that enable or disable productive learning cultures. In such cultures the inequalities are stark—schools that use time efficiently to translate available resources into optimal results compared to schools where time is lost to absentee teachers, union strike actions or the lethargy of the educators on the school premises (Jansen and Blank 2014; Hoadley 2012). In other words, simply placing competent teachers with adequate materials in a classroom does not itself translate into productive learning environments when the school culture and climate are not conducive to achieving positive learning outcomes for all children. The contributions to this book by economists and sociologists of education would no doubt be strengthened by future research on school cultures by anthropologists of education.

19.8 Why Inequalities Persist

Simply conducting and restating through more and more refined research what is already known—that the school system in post-1994 South Africa remains highly unequal in outcomes—is not enough. The fixation with such a perspective could leave the impression that inequality is simply an economic reality or even "a sociological necessity" (Reardon 2011). More commonly, such a perspective on inequality assumes that the problem lies within the system (lazy teachers, inattentive learners) rather than within the social and political arrangements that sustains the status quo (Oaks et al. 2006).

Yet educational inequality is neither inevitable nor immutable. It is of course a consequence of the burden of a divided past but also the result of choices made in the present.

The important analytical question therefore is this—"what are the precise mechanisms that sustain the inequalities in South African schools?" Understanding the mechanics of inequality can lead to informed action that changes the settled arrangements of two school systems.

The first and by far the most important inequality-preserving factor is *politics*. The decision to retain whites and the middle classes within the public school system is admirable from a humane point of view but also least disruptive from a political standpoint. The political conditions at home and the threat of global repercussions abroad were real considerations contemplated by the negotiating parties in matters of economy and society. But leaving such arrangements in place has not changed the educational outcomes and social forecasts for the majority. Such decisions in fact kept redistributive questions off the table except in the smallest, ineffectual ways as we saw with education finance. The political frame that governed decisions in the transition from apartheid to democracy can and should be revisited.

But a major contributor to the politics of education and the problem of inequality remains, without question, the role of the largest teacher union—an ally of the ruling party—the South African Democratic Teachers Union (SADTU). In this respect the evidence is clear that privileged schools are hardly affected by prolonged strike action whereas in the lower two-thirds of schools "the magnitude of the effect is roughly equivalent to a quarter of a year's lost learning" (Wills 2014). This disruptive effect of the majority teacher union on teaching and learning has been identified as one of the "binding economic constraints in South African education" (Van der Berg et al. 2016). It is however not only strike action that constrains education in the poorest schools but also criminal activity on the part of the union through the corruption of educator appointments. As a Ministerial Task Team investigation found,

> the Department is effectively in control of one-third of South Africa's provinces… where authority is weak, inefficient and dilatory, teacher unions move into available spaces and determine policies, priorities and appointments achieving undue influence over matters which should primarily be the responsibility of the department [thereby] defeat[ing] the achievement of quality education (Department of Education 2016, p. 18)

What this means is that strike action and corruption together contribute to the growing inequalities between privileged schools with predictable timetables and poor schools which are disproportionately affected by chronic instabilities in the sector.

The second and related factor is policy. It was the policy decision to not set a ceiling on private funding—by which I essentially mean parent contributions—for tuition. Under these arrangements white and middle class parents in quasi-private public schools could pay exorbitant fees that ensured more qualified teachers and therefore smaller classes, more subject specialisations as well as an extended and enriched curriculum. To understand the ways in which inequality is sustained in this instance the research reported in this book by Motala and Carel (2019) found that in the Western Cape province, 20% of schools charge fees of R1000 or less; 55% charge R7040 or less; and 10% charge more than R35,794 per annum.

All of this happens at the same time as the poorer provinces under severe budget constraints continue to assign teachers to much larger classrooms (60 and more students are not uncommon). Then there is the policy, mentioned earlier, not to redistribute new and existing teachers to schools where highly qualified and experienced teachers are most needed.

The third factor is *planning*. The government did not have in place from the beginnings of democratic rule a systematic plan that ensured the timely delivery of adequate infrastructure or delivery of textbooks or the allocation of teachers in the poorest areas of the country. When such plans did emerge—such as the Regulations relating to Minimum Norms and Standards for School Infrastructure—they were not implemented even under legal challenge from civic organisations (Equal Education 2016).

Budgets were not prioritized for these purposes. Monitoring was inadequate as corrupt service providers defrauded the state. And the capacity for usage and security of brand new equipment such as computers were simply not installed. For the first decades of post-apartheid education, the glamour of policymaking took precedence over the routines of solid planning.

In their groundbreaking research report, *Planning to Fail*, Equal Education found "the absence of a capable state" in poor provinces like the Eastern Cape where 31% of all schools without water supply, 31% of schools without electricity and 91% of schools without sanitation facilities (Equal Education 2016). The reasons for this incapacity had to do with inherited dysfunction from the old apartheid administrations (including the ethnic homelands), the political interference by the main teachers union, and endemic corruption at all levels of the provincial government (Equal Education 2016). The political and administrative capacity to plan for a more equal education is strikingly lacking within the poorer provinces in particular.

The fourth factor sustaining inequalities is *programming* and here I refer in particular to curriculum change as an instance of new programmatic reforms within schools. Our research has shown that when complex curricula are introduced into schools those institutions with available teacher capacity are able to translate those new ideas into advantage for their students while weaker schools fall further behind

because of an incapacity to make sense of new programmes to the benefit of their charges (Jansen and Christie 1999). Take the simple example of project work as a requirement of the new wave of curriculum reform in the early post-apartheid period; children with additional resources from the home (the internet, parent education, financial resources) had a clear advantage over those from informal settlements. Small wonder that the research reported in this book found that "test scores reflect the knowledge mastered from all sources, not only from the school" (Muller and Hoadley 2019).

19.9 Conclusion

Almost 100 years ago the progressive educator George Counts wrote a pamphlet bearing the provocative title, *Dare the schools built a new social order?* Counts recognized then, as is the case now, that the roots of inequality lay beyond the school in an unequal society. Short of a social revolution that upturns a capitalist economy and overthrows the class-based system of inequality, school systems will continue to for the most part reflect and reproduce rather than challenge at its roots an unequal society. The question raised in these research chapters is rather *how much* schools can make a difference in the lives of individuals, communities and even a country.

The policy options available to a democratic government are invariably tempered by the political economy in which it functions. It is unlikely therefore that there will be a radical redistribution of *private* resources from privileged former white public and independent schools to the majority black schools in South Africa. There has already been an equalization of *public* resources which is less controversial and some measure of redress built into imperfect policy instruments such as "no-fee schools." What can be done is a much more effective and efficient deployment of existing resources preceded by a massive, once-off infrastructural grant that once and for all eliminates the inadequate infrastructure and facilities of schools. This will have to be managed and implemented with great diligence and smart politics to ensure that no corruption of this capital facility is tolerated in provinces like the Eastern Cape. Such a concerted action will do much to create greater face equality in South African education.

The most important political decision that can and should be taken is that the relationship between government and the majority union has to be redefined. This will take considerable political skill and determination by the leadership in government to strike a new deal with two critical commitments—that schools will be run by the government and teacher concerns are the domain of the unions. In this respect no school—which happens to be the poorer schools—will sacrifice its academic calendar for the sake of teacher union concerns. That agreement must be sacrosanct for the unstable school calendar and the loss of instructional time in poor schools is a major reason for sustained inequalities.

There is a case from the evidence available for an urgent national intervention in the teaching resources available to disadvantaged schools. The incremental, small-

scale efforts to change schools on a regional or local basis will take years before any sustained change becomes evident. Then it is not even clear whether system-wide effects will be achieved. The focal point should be the most expensive resource in the budget and the most direct target for change in classrooms and schools—teachers. Given the research reviewed, the change effort should focus on teachers (competence, capacity and commitment).

In this regard the specific focus of teacher competence should be less on behaviours and more on the subject matter knowledge and the pedagogical content knowledge (how to teach) which, the research in this book illustrates, is the bridge between curriculum coverage and learner outcomes. The interventions that build teacher competence should, however, include all three dimensions of change that impact on teacher identities in South Africa—the practical, the professional and the political.

The narrow, specific focus on the *practical knowledge* needed to competently cover the scripted curriculum is important as a starting point in the development and support of disadvantaged teachers. That basic competence should consciously migrate towards *professional knowledge* where the teacher is empowered to make choices about the selection of knowledge, materials and forms of assessment judged to be appropriate in a particular classroom context. And both forms of competence should enable *political knowledge* such that the teacher is capable of teaching critical concepts of democracy, equality and justice across the curriculum. How do teachers best acquire these competences?

An important policy instrument available to government is teacher deployment in the weakest schools. In this regard government should make a significant investment in the in-classroom mentoring (coaching) of teachers through a model of peer review and support; this is an area in which private resources can and should be mobilized to supplement governmental resources to make a targeted difference in teaching and learning at the classroom interface. There are various sources for the recruitment of these teacher mentors—recently retired teachers *with a track-record of achievement* in the subject or phase of schooling (this cannot be a simple employment strategy for teachers out of work; that would defeat the purpose of such an expensive intervention) and an appeal to the privileged schools to release at least two teachers per school for work alongside their peers in disadvantaged schools. The winning over of teacher union support for such a drive is something that should be resolved at the level of government leadership.

The evidence suggests that such interventions should happen in the foundation years of primary schooling. This is where inequality is received—from unequal preschool or early childhood opportunities—and where inequality is sustained if not widened between the children of the privileged and the children of the poor. Near universal enrolments in primary schooling has been achieved; quality education offered equally, has not. And the research reviewed shows clearly that whatever equalization of funding or enrolments has been achieved this is 'washed out' by the unequal access to quality education (Lam et al. 2011, p. 135) and the limiting access to higher education (Branson et al. 2012, pp 1, 12). In other words, it makes

sense to build the South African education system on its foundations—early primary education.

None of these interventions will be as effective over the long term without a policy determination to offer quality pre-school education to all South African children. This is where the inequality already pre-determined by the socio-economic status of the home is bedded down. The increase in pre-school or Grade R enrolments is not in itself an achievement. The research shows that it is the unequal quality of these early interventions that produce unequal outcomes that remain so over the course of the 12 years of education. A policy commitment to invest in quality early childhood education combined with building the foundations of early primary education will move the needle on key concerns such as reading literacy and basic numeracy.

That the South African school system struggles with the legacy of apartheid is clear. That there are policy choices and fiscal capacity within government to alter that legacy are equally evident. That there is also the moral clarity and political commitment to act on the knowledge available to reduce inequality in school and society remains to be seen.

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