Editorial introduction

The status of education finance research in South Africa

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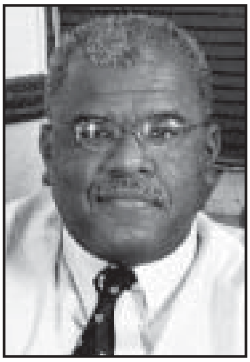

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Introduction

Within a relatively short period of time, education finance has emerged from its Cinderella status within local educational scholarship to become one of the most prolific and exciting areas of research and deliberation within South Africa. Though driven largely by international scholars and consultants, there is now a rich collection of analyses available on both historical dimensions of finance equity (Fedderke & Luiz 2002; Fedderke, de Kadt & Luiz 2000; Case & Deaton 1999; Moll 1992) as well as on the reach and impact of equity-focused education reforms of the post-apartheid government (Fiske & Ladd 2004b; Reschovsky 2006; Fiske & Ladd 2004a; Crouch & Mabogoane 1998). Whereas earlier studies in education relied mainly on simple (if not simplistic) comparisons of racially differentiated spending inequalities under apartheid, or on simple trade-off studies (Moll, 1991), the new wave of studies offers sophisticated technical analyses of complex data on education finance, economics and school performance before and since the political transition of the 1990s (see the series of papers by the then government consultant in South Africa, Luis Crouch 1997; 1998a and 1999b with Mabagoane; 1999; and 2000).

There can be little question that this escalation in studies on education finance is possible in part because of growing improvements in the coverage, uniformity and quality of the data available for secondary analysis. Finance data is now centrally managed for all schools using multiple data sources on a common collection and analysis framework; this situation is light years away from the apartheid government's incompetent and skewed management of data that differentiated white and black students and teachers, as well as homeland and urban schools in the allocation of public resources. As a result, national data were not only incomplete but highly unreliable. This does not suggest that post-1994 education finance data or management information systems are anywhere close to perfect. It does suggest however that there has been a marked improvement in the management of education finance data across various offices of government as well as within independent organisations. Here mention should be made of the highly regarded *Intergovernmental Fiscal Review* of the National Treasury, on the one hand, and the highly cited monitoring research of the Institute for Democratic Alternatives in South Africa (IDASA) which tracks national and provincial data and government performance through the parliamentary system in fields that include education.

What has also emerged in recent times is a sharp focus within government bureaucracies such as the national Department of Education on education finance and school-level performance in South Africa. One of the most comprehensive analyses on the state of education was presented in a 115-page Report to the Minister of Education in early March 2003, titled *Review of the Financing, Resourcing and Costs of Education in Public Schools*. After almost a decade of the most ambitious reforms to build equity in education, the Ministerial mandate for this study clearly recognised a lack of systemic progress against historic levels of investment in the new education system:

> This review was commissioned because of concerns in Government and society as a whole over conditions of degradation at schools, persistent backlogs in infrastructure development and maintenance, and inadequate allocations to some schools for teaching and learning materials. In addition, there was concern over the increasing costs of education relating to transport, textbooks, uniforms and other educational materials.[1]

The review then identified ten major areas of education finance for analysis that include the optimal and effective use of teachers, the focused allocation of non-personnel resources, the reduction in the prices of education inputs such as textbooks and uniforms, the relief of school fees for poor households, and the translation of school resources into higher levels of academic achievement.

In short, the national education system has identified key issues for analysis and intervention, and this is to some extent reflected in the range of contributions that appear in this Special Issue of *Perspectives in Education* (PiE) on the subject of education finance. However, this Special Issue is not a consultancy report or a government-commissioned study; it is a scholarly endeavour and therefore a laundry list of what needs to be fixed is not very useful for deeper inquiry into the underlying problems that sustain the inequalities within South Africa's education system.

A conceptual framework for the review

In this regard we find considerable utility in the conceptual schema recently provided by Rolle and Houck (2004) in their Introduction to the *Peabody Journal of Education's* Special Issue on the Future of School Finance Research. They identify four foundational perspectives or, what they also call, four pillars of education finance (Roulle & Houck 2004, 2):

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1 Minister Asmal's Foreword to the Review of the Financing, Resourcing and Costs of Education in Public Schools in Message from the Minister, p. i.

- *Equity* – the degree of fairness in the generation and allocation of resources, services and outcomes in education.
- *Efficiency* – the degree of flow between financial inputs and educational outcomes.
- *Liberty* – the degree of freedom on the part of citizens to choose without coercion given policy options and educational options available.
- *Adequacy* – the degree of sufficiency of resources to achieve stated educational outcomes.

We use this framework to both assess the status of education finance research in South Africa and to organise the research papers contributing to this Special Issue on the subject.

The state of education finance research in South Africa

Equity

Perhaps unsurprisingly, the bulk of education reforms and scholarship in post-1994 South Africa has focused primarily on the vexing issue of racial **equity** in the distribution of governmental resources. This weighting is also reflected in the contributions to this Special Issue, in which five of the articles have an explicit focus on equity. The anti-apartheid struggle discourse centred on the problem of equity, and the high moral tone of the first democratic policy documents in education followed suit. Few asked at the time whether equity was even possible given the scale of interracial deficits in funding (the so-called legacy problem), the aggregate available resources, the economic policies of the emergent state, and the constraints of the politics of transition. Even fewer within the political or the academic domain asked questions of efficiency, adequacy and, least of all, liberty with respect to the achievement of the noble education goals articulated in national policy after apartheid. Until now.

Analysts realised very quickly that the achievement of equity was not simply a problem to be located within per capita spending on individual students; it was also something that expressed itself in inter- and intraprovincial inequalities; in physical infrastructure; and in the salary structures of white and black teachers, a function of qualifications and experience biased in favour of the former category of educators. As former white schools started to racially (if not socially) integrate, equity was problematised not simply as a racial problem but one that started to express itself in stark socio-economic or class terms; in the memorable phrase of Shireen Motala (this issue), we increasingly find "a deracialised middle class" in South Africa's urban schools whereas the large majority of institutions remain unmistakably black and poor. The study of equity has therefore become much more complex and nuanced than what is expressed in simple racial counts of who-received-how-much-money before and after the transitional high-water point of 1994.

But there remains a problem in current studies that confuse equality (the sameness logic) with equity (the social justice logic). In our view the problem goes even further in that available studies, including some in this collection, declare correctly that government has equalised funding but succumb to what we call *a snapshot analysis of equalisation*. The problem with a snapshot analysis is that it takes what government allocates at a particular moment or period of time, without referencing the differential starting points of the two entities being funded. Consider an elite *public* high school (School A) with expansive grounds, high technology facilities, highly qualified teachers and school fees in excess of R10 000 per annum in an urban centre like Cape Town or Pretoria (several come to mind as we write) and a recognised public 'school' in which some of the classes are conducted under a tree in Limpopo province (School B) because of overcrowded classrooms in the bare, dilapidated buildings. Of both entities it could be said that government has equalised funding; it is probably also possible to claim that funding favours School B as part of the pro-poor funding schemes of the post-1994 government. But no analysis can even begin to anticipate reasonable, let alone comparable, educational outcomes for School B given that the resource starting points of the two schools are so demonstrably different. In other words, while resource discrimination has ended, inequality has not (see Moll, 2000).

Adequacy

What is beginning to surface, however, is not simply whether equity has been achieved in terms of resources allocated, but whether there are enough resources available to begin with – in other words, the problem of **adequacy**. In the euphoric period following the release of Mandela and the anticipation of a democratic state, adequacy was assumed rather than questioned. Yet the stark reality of the scale of inequalities slowly started to sink in as liberation movement personnel occupied government bureaucracies. The opening gambit in the Introduction to the 2003 Review begins with, revealingly, a comment on sufficiency: "Government had been concerned for some time about the adequacy of resources available to poor learners …" (Department of Education, 2003, 6) and recognises that even with class corrective reforms, "the pro-poor impact is often diluted because budgets are too small" (1).

It is a concern, however, that the analyses of adequacy in education finance, both in South Africa (De Villiers & Steyn, Amsterdam, and Fisk & Ladd, this volume) and abroad (see for example, King, Swanson & Sweetland, 2005; Alexander, 2004) are in essence *internal arguments*. That is, the majority of analyses surveyed tend to focus on criterial (or definitional) features of, and operational contexts associated with, the concept of adequacy. There are rarely efforts to relate the concept of adequacy to the nature of the state or the kind of economy that sets the *external limits* on the resource capabilities available for governmental action. The next generation of education finance studies in South Africa will have to link school-level adequacy investigations to broader social analyses that define what is adequate or sufficient in specific national and, indeed, transnational contexts.

The notion that adequacy could be seen as the ideal state of vertical equity (Swanson & Sweetland, 2005, 3) begins to link the two concepts – adequacy and equity – in ways that resonate with the post-apartheid context. Vertical equity justifies racially differentiated allocation of resources on the basis that adequacy requirements in School B (the earlier example) necessitate discriminatory levels of expenditure relative to School A. Consequently in South Africa, a steady stream of studies has emerged to focus on whether governmental policies with a pro-poor allocation (such as the National Norms and Standards for School Funding) or alleviation bias (such as no-fee schools) in fact achieve the kind of corrective actions in educational practice. Here all the studies in this collection are in agreement for both schools (Fiske & Ladd for example) and higher education (Steyn & de Villiers): despite the fact that historic levels of funding have accrued to public institutions, there is simply not enough money to make a difference in educational outcomes. The reasons are complex, but include the size of the salary budget and therefore limited spending options in the non-personnel budget, capacity at the point of implementation, and levels of inefficiency.

Efficiency

It is the problem of **efficiency** that has also started to occupy education finance studies in African contexts (see Pillay, Lewin as well as Van der Berg, this issue). A common variable often evoked in explaining underperformance is the management of resources in government departments of education and the impact this might have on opportunities for learning and, indeed, learning achievement. The immediate evidence of the mismanagement of resources is overwhelming. The General Report of the Auditor-General on Provincial Audit Outcomes for the Financial Year Ended 31 March 2004 claims that "Unauthorised, irregular and fruitless and wasteful expenditure" amounted to 3,5% (R5 833 billion) of total expenditure (R167,4 billion). When viewed by sector, the picture is even more dismal. In 2003-2004 education had unqualified reports in only three of the nine provinces (Table XI), a deterioration from previous years (Table XII). Throughout the General Report of the Auditor-General, there are massive indications of wastage in provincial education departments ranging from the lack of service delivery in the form of training, even when such training was accounted for (20); continuous overspending on items such as substitute educators in ordinary public schools (50); over-expenditure of almost R23 million due to poor planning or anticipation of increases in the numbers of learners (55); irregular expenditure of more than R56 million, the result of illegal payments to contractors (56); the transfer of funds to entities without adequate monitoring and financial systems (65); and massive amounts of interest-based payments and penalties, such as R13 million paid to SARS (South African Revenue Services) for late and underpayment of PAYE (Pay-As-You-Earn, tax) in one province (68, 71).

No single study yet available in South Africa has attempted to generate high-quality data and systematic lines of argument that link levels of efficiency to levels of achievement in schools. The closest available study is on how schools use time.

Whereas there has clearly been a gradual improvement in the ways in which especially black schools use instructional time – thanks in large part to the massive drive to improve matriculation scores during the 1999-2004 period under the second Minister of Education – there are still huge discrepancies between former white and black schools in the ways in which this resource is used. The earlier "time on task" research in black South African schools established clearly that the under-utilisation of instructional time remains a major problem in black schools and the use of that time is directly related to student achievement (Ngidi, 1986). More recent research comparing high- and low achievement schools reach the definitive conclusion that "In well-performing schools, educators are punctual and consistent in their academic performance" (Human Science Research Council, 2005, 58).

The problem of time, and more specifically 'time on task,' has recently been quantified nationally and demonstrates the serious inequalities in the use of this resource within schools (see Table 1, p. xv). As Lewin (this issue) points out, using examples from Zambia and Uganda, this problem is common especially in secondary schooling throughout Africa.

The recent report of the Human Sciences Research Council (2005) found for South Africa

1. that teachers in former white schools spend more time on school-related activities than their counterparts in black schools;
2. that teachers in smaller schools (fewer than 200 learners) spend more time on school-related activities than those in larger schools (more than 200 learners);
3. that teachers in classes with more than 50 learners spend "noticeably less" time on school-related activities than teachers with fewer than 50 learners per class;
4. that schools in rural areas spend less time on school-related activities than those in urban areas;
5. that teachers with lower qualifications (matriculation certificates or lower and college teacher diplomas) spend less time on their activities than those with higher qualifications; and
6. that former white schools spend an average of 19.11 hours of teaching per week (almost half the total work time), whereby black schools spend very little time teaching (15.18 hours).

The picture that emerges demonstrates clearly that inequalities in the use of instructional time and time on other school-related activities continue to distinguish privileged schools from their disadvantaged counterparts. This observation does not even begin to address the quality or depth of teaching – merely the fact that teachers show up to teach. It should however be stressed that these are self-reports by teachers, and that the picture might actually be worse if it were possible to gain observational data on the same subject (how schools use instructional time) in a large cross-section of schools.

The argument here is quite simple. If more than 80% of provincial funds are swallowed up in teacher salaries, clearly how teachers conduct their time is the most significant resource in relation to student achievement. One international study after another, as well as Grade 12 matriculation results disaggregated by race (see Van der Berg and Fisk & Ladd, this issue) point to a strong relationship between how schools use time and the academic performance of their students. It is our view that optimising the use of instructional time represents the single most effective intervention that can turn efficiency gains into achievement gains in South African classrooms – without significant increases in the levels of expenditure.

Liberty

In the meantime, while many township and rural schools stagnate, black parents in South Africa are on the move with their children in sometimes desperate efforts to ensure a reasonable education on a predictable timetable. The complexities of the freedom to exercise choice – or the **liberty** principle in education finance, as Roulle and Houcke have it – are detailed in the excellent contribution of Woolman and Fleisch (this issue). What these authors do is to show how a raft of existing policy and legislation enables student migration from poor schools to more privileged schools, mainly white. But Ndimande (also this issue) foregrounds the voices of parents on the move and points to the difficulties of accessing former white schools given prohibitively high school fee structures combined with the local invocation of zoning policies that often exclude poor and black students given the still largely fixed patterns of residential segregation in South Africa.

This set of contributions enriches studies on education finance in South Africa where equity and, to a lesser extent, efficiency tend to dominate this literature. States in the USA have specific and elaborate choice-directed policies built into their education system and informed very much by explicit market logics which assume that by placing purchasing power in the hands of parents, strong schools are affirmed and academic achievement for especially poor students will be advanced; there is a formidable literature in that country that contests these assumptions (Henig, 1994; see also Plank & Sykes, 2003). There are no such elaborate policies on choice in South Africa, yet consequentially, parents have the freedom of choice within the constraints of private resources and school-level policies; in fact, argue Woolman and Fleisch, government policies create markets for education within which choice behaviour is exercised. This is new ground in South Africa, and will hopefully spurn further studies on the nature and efficacy of markets in a highly unequal, race-divided society. But a start has been made.

Synthesis: On the state of education finance research

Given this review, and the collection of articles in this Issue, what can be said about education finance and education policy in developing contexts?

The first and obvious conclusion is that the path from financing a reform to achieving change in an institution (schools or universities) is extremely complex. Any illusions about linearity between a financing intention and a desirable policy outcome is exactly that – an illusion. The complexity of the implementation terrain, the vagaries of national politics, and the authority of global economic order conspire to make well-intentioned reforms falter when policy hits the ground.

The second conclusion is that any financing reform operates within a complex policy ecology in which competitor proposals vie for space and attention. Who, for example, could have anticipated that the equity gap would actually be extended in South Africa by allowing private contributions, in the form of school fees, to further distance former white public schools from their township and rural counterparts? In this context, the smaller financial contributions through corrective policies, such as targeted funding policies, could simply not compete with the capacity for private funding of middle class and mainly white parents.

The third conclusion is that while money matters, it matters only under particular conditions of usage. As Van der Berg (2005) notes in his thorough review of the multicountry SACMEQ (Southern African Consortium for Monitoring Education Quality) data, "As in much of the education production function literature, the message … [is] … not that resources did not matter, but rather that resources mattered only conditionally" (19). The age of innocence is over, and optimistic accounts of policy reforms after apartheid need to come to terms with the fact that resources in and of themselves cannot account for change in the education system, historical deficits apart.

The fourth conclusion is that we still do not know, at least in a narrow empirical sense, what exactly happens in schools between the designation of (resource) inputs and the expression of particular (academic) outputs within schools. The *associational* evidence is strong and should guide planning: high performing schools are associated with qualified and experienced teachers, accessible textbooks and learning materials, and the optimal use of instructional time. But we do not have clear evidence about how exactly schools turn educational resources into achievement gains, and herein lies a challenge for future research in the economics and financing of education, and one that might only be resolved through a combination of quantitative methods and qualitative inquiry.

The fifth conclusion to be read from this survey and collection is the unfortunate gap in the education finance literature, especially in South Africa, where sound technical studies (on expenditure patterns, for example) exist separately from deep theoretical studies (on the political economy of school finance, for example) on the same subject. This is also reflected in the contributions to this Special Issue. Again, our challenge to the next generation of education finance research is to combine the technical (or the empirical) and the theoretical (or the social). For as much as it is important to generate fine-grained quantitative studies on the status of equity or efficiency gains or measures of adequacy, it is equally important to ask more broadly what this kind of data means for social theory and educational change.

The sixth conclusion from this review, and the spread of contributions in this Special Issue, is the serious lack of capacity within South Africa to develop the capability for high-level scholarship in education finance, and to nurture and retain such scholars and practitioners within universities and government, respectively. The same names keep coming up, and while international consultants and academics enrich the local environment with new methodologies and concepts (and this should be retained), there is the real danger of intellectual dependency on ideas and expertise elsewhere, on the one hand, and the lack of local groundedness and contextualisation on the other. It is time that at least one South African university develops a high-level, advanced degree course in education finance and planning with a strong contribution from government departments and groups like UNESCO's International Institute for Educational Planning.

Next steps

Our best judgment at the moment is that in the meantime, the task of reforming South Africa's schools is best pursued through [1] the provision of adequate levels of funding in contexts where [2] levels of capability are high and [3] where education actors are then held accountable for results (see also King, Swanson & Sweetland, 2005, 20). The first condition necessarily means discriminatory funding but it also means sufficient funding against well-defined learning gains. The second condition means that the teachers, and indeed managers, within the school environment should enjoy the levels of training and support that enable them to perform capably. And then only can the third condition be exercised, meaning that schools should then be held accountable for the achievements set against the investments made. While there have been policy concerns about adequacy, and spotted investments in enabling teachers through training, South Africa has neither a credible nor effective model of accountability through which school actors could be held responsible for results (Jansen, 2004). Accountability demands, we suggest, are unethical where teachers have neither adequate resources nor sufficient support to enable them to satisfy such demands. It is, nevertheless, the link between adequacy-capability-accountability that needs to be strengthened in any future investments in education.

Organisation

The excellent set of papers in this Issue is organised as follows. First, we present this Editorial ***Introduction*** in the form of a review on the status of research in South Africa on education finance; in this sense, the Editorial goes beyond a simple re-telling of what appears inside this issue of the journal to a broader set of reflections on the field, including the peer-reviewed papers in this collection.

Second, we present a cluster of ***Empirical Articles*** on education finance organised according to the conceptual schema discussed earlier viz. equity, efficiency, adequacy and liberty. We begin with the lead article on markets, choice and policy by Woolman and Fleisch – a comprehensive account of the policy infrastructure that enables and constrains the freedom to choose (*liberty*) in South Africa. We continue with the conceptual analyses of *adequacy* using the frame of the politico-legal experiences of the United States of America, where Amsterdam concludes with a discussion of the applicability of this concept for the South African context. We also classify the contribution of De Villiers and Steyn, on higher education, as an argument for adequacy as they trace the changing (or, more correctly, declining) patterns of state expenditure on the sector and its implications for resource management within institutions (see also Steyn & De Villiers, 2006). The next set of articles deal with the vexing issue of *equity*, and here the contributions of van der Berg, Gustaffson and Patel, Motala and Fiske and Ladd offer technical and conceptual perspectives on South Africa's achievements and dilemmas in achieving social justice in education through various financial instruments. We conclude with a set of articles on efficiency, where practical financing strategies are presented for improving the use of resources in meeting expanded growth insecondary schools in sub-Saharan Africa (Lewin), followed by an analysis focused on the utility and limits of incentive systems as a means of boosting performance in schools (Mabogoane & Patel).

Third, we present a section that showcases ***New Scholar Research*** in which recent graduates publish out of their doctoral theses. Bekisizwe Ndimande (PhD, University of Wisconsin, Madison) presents his research on the liberty principle in parental decision-making from the dissertation which he prepared under the supervision of Michael Apple.

Fourth, we offer the traditional ***Conversations*** segment of the *PiE* journal in which non-empirical work with high professional and developmental significance appear on matters of pressing public concern. We present a report by one of South Africa's leading economists of education, Pundy Pillay, on problems of *efficiency* in Ugandan education; and a report by a leading journalist on South Africa's proposed "no fees" school policy.

Fifth, we conclude with another innovation, the ***Education Law Update***, which in a few pages will alert *PiE* readers to the most recent controversies in education law in South Africa, as well as positions of legal scholars and government officials on education legislation.

Our hope is that this collection of education finance articles will serve as catalyst for the new generation of education finance research in which local capacity will lead such studies alongside the work of international scholars in the field.

Finally, as Editors of this Special Issue we thank our external reviewers and internal editorial committee, under the leadership of Professor Kobus Maree, for the thoroughness of their evaluations and the dedication with which they pursued their tasks; the professionalism and scholarship demonstrated in the production of this Special Issue helps explain why *Perspectives in Education* remains the only ISI-listed journal in the field of education in South Africa.

Table 1: Descriptive statistics of average total time by former department

Former Department of the school	N	Mean	Std. deviation	Std. error	95% Confidence Interval for Mean		Mini-mum	Maxi-mum
					Lower bound	Upper bound		
Historically white school (ex-House of Assembly	564	49.7465	15.04078	.63333	48.5025	50.9904	1.00	93.00
Historically coloured school (ex-House of Representatives)	609	43.8177	14.55676	.58987	42.6593	44.9762	1.00	100.00
Historically black school (ex-DET, including homeland schools)	2290	38.5777	16.58504	.34658	37.8981	39.2574	1.00	103.00
Historically Indian school (ex-House of Delegates)	102	46.8922	18.17893	1.79998	43.3215	50.4628	5.00	92.00
School established by new government after April 1994	156	36.7115	17.90008	1.43315	33.8805	39.5426	4.00	96.00
Independent school	84	41.6310	15.27087	1.66619	38.3170	44.9449	10.00	87.00
Total	3805	41.2857	16.65958	.27008	40.7562	41.8152	1.00	103.00

Source: Educator Workload Report, Human Sciences Research Council (2005), p.131

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