School-based Management and School Expenditure:
A Case Study in Selected Primary Schools in the Gauteng Province of South Africa

R. J. (Nico) Botha

Department of Teacher Education, College of Education, University of South Africa,
PO Box 392, Pretoria, 0003, South Africa
Telephone: +27 824116361, E-mail: botharj@unisa.ac.za


ABSTRACT School-based management has become a reality in South African schools, and South African education legislation and education policy documents all bear this out. This policy framework for decentralised decision-making is also embedded in the South African Schools Act 84 of 1996. School-based management is, therefore, not a fad or a cosmetic change, but an enduring phenomenon in South African schools. In spite of its widespread implementation, little attention has been paid to assessing the impact of school-based management on a school’s spending or expenditure. This article, based on a case study of selected South African primary schools, offers a dynamic perspective on the effect of school-based management on school expenditure. An analysis of financial reports coming from 10 self-managing South African primary schools over a four year period reveals that some schools have increased their spending on certain issues, but during the same period, schools’ expenses on other, more important items, were slightly reduced. Based on the findings, the study concludes that a so-called needs-based funding formula is essential to ensure that financial autonomy granted to schools via school-based management will enhance their educational potential, rather than broaden the gaps between schools operating in different settings and serving learners from different socio-economic backgrounds, so prominent in South African society.

I. INTRODUCTION

School-based Management and Decentralization

During the past 20 to 30 years there have been continuous and major educational transformation trends in educational institutions throughout the world. One of them is the shift towards greater self-management and self-governance in schools. This trend, evident in a number of countries (Cuban 2008; Johnston 1996; Murphy and Beck 1995), is related to a move towards institutional autonomy, the so-called school-based management or self-management of schools (Botha 2006; Bush and Heystek 2003; Marishane 2003; Marishane and Botha 2011; Taylor 2004).

The shift towards school-based management, as well as other reform initiatives such as political and curriculum changes that have taken place over this time, has presented enormous challenges to role-players at every level of the education system, with many of the effects felt by those at the school level. The school is a mini-arena in which educational reforms’ challenge to the status quo is evident. School principals, as key players at this level, are at the receiving end of various impacts generated by educational reforms. Like their counterparts in commerce, industry and business, principals have to transform their roles, functions, behavior and mindsets and adapt themselves to the changing world of their special business if they are to bring about and sustain improvements (Botha 2006; Marishane 2009).

In response to widespread demand for educational reforms resulting from intense disaffection with the centralisation of education management, the move towards decentralisation of school management has appeared on the education reform landscape and is gaining momentum, as various studies indicate (Caldwell et al. 1999; The World Bank 2007). While decentralisation in education is generally understood to refer to the devolution of decision-making authority from a higher central level to the lower local level, it specifically refers to the shifting of decision-making power from the state office of education to the school level. This results in the focus falling squarely on the school as a primary unit of educational change. The move in support of decentralisation is motivated by the belief that a school can improve if those closer to it have power and freedom over the use of resources geared towards its improvement. Principals might regard educational reform initiatives and the
resultant new challenges as institutional inconveniences if they are not adequately prepared to address them. This has led to many countries developing policies of decentralisation and introducing various strategies to implement these policies. One such strategy is called school-based management or site-based management, as it is popularly applied in Britain, Canada, Australia and the United States of America (Marishane and Botha 2011).

Decentralisation of management policies through the application of school-based management strategy has, among other developments, brought about the emergence in different countries of different types of school with different degrees of authority. These include “Charter schools” in the United States (Vanourek 2005), “Foundation schools” in Britain (West and Pennell 2005) and “Section 21 schools” in South Africa (Marishane 2003).

Among the various initiatives aimed at increasing school autonomy and flexibility, school-based management is nowadays one of the most prominent expressions of the tendency towards decentralisation (Marishane and Botha 2011). It suggests “delegating authority from the central authority to schools within a centrally coordinated framework” (Boyd 1990:90) in order to increase schools’ control over the educational processes.

Based on the premise that those closest to a situation should make the decisions affecting the situation (David 1989), school-based management argues for the need to increase schools’ flexibility by transferring decision-making authority to them and enabling them to “tailor educational decisions to the needs of the local community they serve” (Clune and White 1988:14). Flexibility and freedom of choice are assumed to increase the correspondence between aims and means and, at the same time, to promote schools’ organisational health and school staff’s proficiency (Malen et al. 1990), commitment (Reyes and Liable 1993) and accountability (Burke 1992).

The shift to school-based management or self-managing schools has also influenced a school’s freedom of choice with regard to various educational and management issues. Freedom of choice also fosters a better congruency between individual beliefs and actions. At the same time, it may promote the relevance and efficiency of these actions by granting individuals the opportunity to invest their efforts and resources in accordance with what they perceive as the unique qualities of their surrounding social context (Nir 2007). Therefore, freedom of choice is highly praised by individuals and organisations as a means for enhancing effectiveness, especially when operating in turbulent and complex environments such as the South African school context.

Developing a genuine pedagogical agenda that takes into account the particular needs of individual learners at the local level is certainly not a simple task. It may become an impossible task, however, if self-managing schools lack sufficient means and the flexibility to use those means while pursuing their goals. Therefore, according to Nir (2007), one underlying premise of school-based management is that schools’ financial autonomy should be expanded to enable the translation of their pedagogical agenda into tangible educational processes.

The Financial Autonomy of Schools

Consequently, one of the most prominent changes created by school-based management in schools may be evident in their enhanced financial autonomy. Under school-based management, governmental budgets are assigned to schools based on a transparent formula, and schools are permitted to receive additional funds from private self-generated sources. Moreover, Section 21 schools are allowed to use their funds in accordance with the local agenda and the priorities they set, and they are not required to obtain the approval of high-ranking officials to do so. These changes are assumed to increase schools’ efficiency in using funds and to provide them with the opportunity to secure more resources for educational activities likely to benefit learners.

However, as one could expect, the proposed changes brought about by school-based management provoke controversy between those who view school-based management as a catalyst for improving both school pedagogical performance and effectiveness and efficiency (Caldwell 2005) in using resources, and the opposing view, which sees in school-based management a threat to educational equity because of its assumed negative consequences for moderating social gaps among learners of different socio-economic backgrounds (Le Grand 1991).
The Role of Funding Formulae in Self-managing Schools

Naturally, these assumed negative consequences become a major concern for policy makers around the world, encouraging them to adopt various funding formulae to ensure that schools are treated fairly (Downes and Forster 1999; Rubenstein 1998). A funding formula offers “an agreed set of criteria for allocating resources to schools which are impartially applied to each school” (Caldwell et al. 1999:9). Therefore, not surprisingly, the importance of funding formulae is stressed, particularly when reform processes seek to decentralise central authority to the school level while maintaining equity in the distribution of educational resources (Caldwell et al. 1999).

As Caldwell et al. (1999) note, employing a needs-based formula that offers improved equity based on the educational needs and costs per learner and per school is critical if self-managing schools are to make use of their extended authority for the benefit of learners. This may be better understood by considering that a needs-based formula is directly derived from an analysis of what the school needs to spend in order to provide a specified quality of education for its learners (Caldwell et al. 1999).

However, not all school funding formulae developed in these reformed systems are fully needs-based (Caldwell et al. 1999). While needs-based formulae may be viewed as the most sophisticated and progressive formulae in the sense that they encompass all aspects involved in the operation of schools, other types of formula are prevalent. Funding formulae can be based on the assumption that all learners in a given grade level have the same educational needs and, hence, cost requirements. It can also account for differences in learning needs, thus allocating funds to schools according to the concentration of disadvantaged learners and may be designed to encourage schools to act in ways consistent with agreed educational policy objectives (Nir 2007).

Needs-based formulae, however, may be viewed as the most comprehensive, as they typically encompass four main components, namely basic learner needs, curriculum enhancement, learner supplementary educational needs and school site needs (Levacic and Ross 1999). Unfortunately, not all funding formulae address these main components even in educational settings, which explicitly emphasise school empowerment (Nir 2007).

Although a funding formula may moderate to some extent the existing inequalities among self-managing schools, it does not necessarily compensate for the inequalities caused by income derived from parental payments or from schools’ self-generated sources (Rubenstein 1998). It is, therefore, rather surprising that, in spite of the ongoing debate, there is relatively little empirical evidence of the implications that financial autonomy on one hand and various funding formulae on the other have for the pedagogical capacity and conduct of schools (Murphy and Beck 1995). Most existing evidence discusses the amount of savings related to building maintenance (Simkins 1994) or to schools’ efficiency in using their financial resources (Knight 1993).

The Link between School-based Management and Funding Formulae

Limited evidence relates to the implications of school-based management for schools’ financial and/or pedagogical capacity, while accounting for the characteristics of the funding formula employed in a particular educational context. Considering that formula funding is an integral part of educational policy, as it conveys powerful policy messages (Levacic and Ross 1999), it makes much sense to evaluate the correspondence between school-based management policy messages intending to empower schools and the funding formulae employed.

School-based Management in the South African Context

The promise embedded in school-based management for amplified relevancy of schools’ pedagogical conduct for learners’ needs and expectations was not ignored by the highly centralised South African educational system, which resorted to school-based management based on the recommendations of a steering committee appointed by the South African Department of Education during the 1990s. The committee recommended introducing school-based management into the South African educational system based on a set of guidelines: inter alia, that schools will develop a clear definition of focused goals; schools will develop a clear work plan that corresponds with their
defined goals; schools will use and implement extensive monitoring and assessment methods; schools will be granted full independence in using their budget; schools’ authority with respect to personnel matters will be broadened; and there will be a governing body for each school (Marishane 2009).

Based on the committee’s recommendations, school-based management policies have been gradually implemented in the South African educational system since 1996. This move followed previous decentralisation attempts that failed to empower schools and to significantly increase their organisational autonomy. The employment of a funding formula was one major policy tool attempting to ensure equity in the South African educational system. This formula may be classified as a second-generation type of formula (Caldwell et al. 1999), as it compensates schools mainly according to the ratio of disadvantaged learners they serve. This formula did not refer to unique aspects of the school site, since the construction of new school buildings and building maintenance was at that time the responsibility of the local authorities.

It is important to note, however, that this funding formula was not replaced by a different one following the introduction of school-based management, although the responsibility for school building maintenance was transferred to schools.

II. RESEARCH PROBLEM

This study, based on an earlier, similar study by Nir (2007), proposes assessing the extent to which the introduction of school-based management in South African schools affects schools’ culture of expenditure and the equity among schools that serve learners from different socio-economic backgrounds. The research question for this study can therefore be phrased as follows: To what extent does the introduction of school-based management in a few selected Gauteng primary schools affect the schools’ culture of expenditure? In addressing this main problem, three sub-questions emerged:

• To what extent are schools able to negotiate lower costs with suppliers following the introduction of school-based management?
• To which extent do self-managing schools increase their financial investment in educational activities and programmes?
• Do self-managing schools that serve learners from different socio-economic backgrounds differ in the amount of funds they secure for educational activities and programmes?

III. METHODOLOGY

The population of the study was all the primary schools in one district in the Gauteng Province of South Africa. The study was eventually based on a sample of 10 primary schools randomly selected from the population, serving learners from different social-economic backgrounds. The large variation in schools’ socio-economic backgrounds within this particular district enabled evaluation of the influences of school-based management on schools of different backgrounds, using schools as the unit of analysis.

Although the schools sampled obtained financial autonomy following the introduction of school-based management, they must still keep records and submit an annual financial report to the Department of Education (2009), which then summarises schools’ reports and submits a comprehensive report to the Ministry of Education. Hence, this case study analyses the annual financial reports of these 10 schools over a period of four years (2006-2009), totalling 40 (10 x 4) annual reports approved by the Department of Education. It is important to note, however, that these financial reports refer only to schools’ “soft budgets,” that is, to funds that schools control and are allowed to use according to their local agenda. These funds are made up on average of only 20% of the total expenditure of the schooling system, since the Department of Education (2009) continues to centrally control and pay most educational expenses related to the operation of self-managing schools. The central payment and monitoring of school staff salaries may serve as a prominent example of this tendency (Marishane 2009).

The biographical data of the 10 schools’ socio-economic backgrounds (SEB) are depicted in Table 1.

IV. RESEARCH FINDINGS

School size was identified as a major consideration in the construction of funding formulae, as schools serve as the unit of analysis and all measures are calculated as income per learner (that is, the sum total of school income
Table 1: Schools’ background data

|                | Low SEB | Inter-
|               |        | mediate
| SEB           |        | SEB
| N             | 2      | 5
| Mean SEB* score and standard deviation | 7 | 3.6 | 1.56
| sd = 1.0      | 2.37   | 6sd = .52
| Average number of learners | 278 | 340 | 401
| Average number of classrooms | 12 | 13 | 15
| Average annual school incomes (in thousands R*) | 445 | 642 | 920

* SEB (socio-economic background) ranges between 1 for high and 10 for low socio-economic schools
** R = South African Rand

Table 2: Average school income* per learner

<table>
<thead>
<tr>
<th>Year</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>High SEB=3</td>
<td>2242</td>
<td>2190</td>
<td>2341</td>
<td>2328</td>
</tr>
<tr>
<td>Intermediate SEB=5</td>
<td>2008</td>
<td>1880</td>
<td>2009</td>
<td>2111</td>
</tr>
<tr>
<td>Low SEB=2</td>
<td>1579</td>
<td>1625</td>
<td>1668</td>
<td>1754</td>
</tr>
</tbody>
</table>

* All incomes are computed in South African Rand based on the price level of December 2009

Moreover, the figures show that schools serving learners coming from low socio-economic backgrounds have increased their budget to a greater extent (11%) than schools serving learners of intermediate (5.1%) or high (3.8%) socio-economic backgrounds. In considering the controversy between those favouring and those opposing school-based management, fearing its negative consequences for social equity, the findings show that although the basic income gaps between schools remain, they are slightly lessened rather than made larger following the implementation of school-based management.

The next phase was the analysis of schools’ expenses. As mentioned earlier, school-based management grants schools financial autonomy to enable them to use funds in ways that better correspond to the needs of the learners they serve. Schools’ financial reports indicate that they spend their funds in three main areas, namely:

- general and administrative purposes, mainly school cleaning and office maintenance;
- purchases of fixed assets such as furniture, computers, photocopying machines and accessories and the renovation of the school buildings; and
- other educational and pedagogical purposes, including purchases of new instructional materials, developing new programmes, personnel development and social activities (trips, parties and ceremonies).

Table 3 indicates that over the four years studied, schools’ expenses for general and administrative purposes (mainly school maintenance and cleaning) significantly increased, although their financial autonomy allowed them to bargain for the services they purchase.
Moreover, the financial reports show that schools serving learners from low socio-economic backgrounds invest a larger portion of their total budget in general and administrative purposes compared to intermediate and high socio-economic schools. In considering that the cost of maintenance services is calculated as income per learner to account for school size, this last finding may be a result of the relatively smaller budget that low socio-economic schools have.

Table 4: School expenses for equipment and fixed assets: percentage of the total income

<table>
<thead>
<tr>
<th>Year</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>High SEB (N=3) %</td>
<td>15.0</td>
<td>7.2</td>
<td>7.6</td>
<td>3.5</td>
</tr>
<tr>
<td>NIS</td>
<td>338</td>
<td>157</td>
<td>179</td>
<td>81</td>
</tr>
<tr>
<td>Intermediate SEB (N=5) %</td>
<td>11.1</td>
<td>6.0</td>
<td>5.3</td>
<td>4.5</td>
</tr>
<tr>
<td>NIS</td>
<td>223</td>
<td>113</td>
<td>107</td>
<td>96</td>
</tr>
<tr>
<td>Low SEB (N=2) %</td>
<td>17.0</td>
<td>7.6</td>
<td>5.8</td>
<td>7.4</td>
</tr>
<tr>
<td>NIS</td>
<td>268</td>
<td>123</td>
<td>97</td>
<td>130</td>
</tr>
</tbody>
</table>

*All expenses are computed in South African Rand based on the price level of December 2009.

Excluding the 2006 school year, which was influenced by the “first-year effect” discussed earlier, it is evident that the schools have invested a decreasing portion of their budget on educational and pedagogical activities and programmes over the years. This decrease takes place in all schools, although it is most evident in schools serving learners of intermediate or low socio-economic backgrounds. These figures suggest that, contrary to theoretical suppositions about school-based management that connect financial autonomy with increased capability to transfer larger funds for pedagogical purposes, schools have not increased their investment in educational activities and programmes in the years following the introduction of school-based management.

Taking into account the existing gaps between learners coming from different socio-economic backgrounds, a further analysis was used to assess whether these differences translate into the number of teaching hours that schools may potentially provide. The results are shown in Table 6.
When translating funds that schools invest in educational activities into teaching hours, and combining these hours with the teaching hours allocated per learner to schools by the Department of Education (the Department uses a compensating formula which takes into account learners’ socio-economic level), it is evident that the number of teaching hours per learner is slightly higher in low socio-economic schools than in high socio-economic schools. However, it is hardly likely that an additional nine teaching hours per learner per year will bridge the gap between learners coming from such different socio-economic environments.

Hence, although the financial reports indicate that the income gap between schools serving learners from different socio-economic backgrounds is slightly moderated following the implementation of school-based management, it is evident that low socio-economic schools fail to secure sufficient funds for pedagogical activities and programmes to bridge the existing discrepancy between these schools and schools serving financially established communities (Department of Education 2009).

It is interesting to note, however, that while the financial reports reflect an overall decrease in the schools’ investment in pedagogy in the four sequential years studied, a summation of their expenses compared with their incomes reveals that schools, regardless of their socio-economic background, use their financial autonomy to save and transfer from one academic year to another approximately 12% of their total annual income. This practice may testify to school principals’ tendency to save funds for a “rainy day” and to better enable their schools to cope with unexpected events that require financial expenditure. However, this managerial behaviour may also shed light on school principals’ mistrust of centrally initiated policies that explicitly argue for school empowerment and financial autonomy, yet implicitly fail to achieve this, as argued in earlier academic works (Marishane and Botha 2011; Volansky and Bar-Elli 1995).

V. CONCLUSION

A major theoretical argument supporting the tendency towards decentralisation and school-based management emphasises the assumed contribution of financial autonomy to schools’ ability to obtain more value for their funds. It is believed that, contrary to schools operating in centralised structures, self-managing schools are likely to be better able to negotiate for the services they purchase and to increase the correspondence between these services and learners’ particular needs.

The analysis of the schools’ financial reports reveals that while school-based management seems to gradually increase the amount of disposable funds available to schools, schools’ expenditure on services and the commodities they purchase continues to increase over the years. The spending on school building maintenance during the four years studied may serve to support this last claim. Considering that inflation is controlled for in all the analyses, it is possible to conclude that the introduction of school-based management in schools did not encourage school principals to boost their bargaining proficiency to an extent that significantly reduced schools’ expenses on building maintenance and consequently made more funds available for pedagogical purposes.

Another central theoretical assumption about school-based management argues for the contribution of financial autonomy to improving and expanding schools’ pedagogical conduct. Financial autonomy is connected with improved pedagogy, since it enables schools to set their priorities in accordance with learners’ needs and to shift funds accordingly to support their pedagogical agenda. The findings show that schools’ pedagogical potential is reduced to some extent following the introduction of school-based management, as the funds they secure for educational activities decrease over the years.
Although one could argue that schools’ investment in fixed assets (purchasing furniture, computers, photocopying machines and accessories and renovating school buildings) may also indirectly foster pedagogical processes, the connection between the two is rather vague and less obvious compared to investments in items that are more directly linked to the teaching and learning processes, such as instructional materials, initiation of new programmes, personnel development and social activities. It seems therefore that financial autonomy does not easily translate into greater pedagogical investment, as the theoretical suppositions about school-based management imply. Instead, it increases the burden of responsibility on school principals and therefore encourages them to secure funds for future unplanned events instead of using existing funds to sustain and expand current educational endeavours.

It is important to note, however, that assessing the quality of schools’ pedagogical plans and activities was not within the terms of reference of the current study. Instead, the aim was to discover the extent to which schools manage to shift an increased portion of their financial resources to serve pedagogical purposes following the introduction of school-based management.

One obstacle to the implementation of school-based management is its assumed negative consequences for social equity. Such consequences are even more manifest when school-based management is introduced in centralised educational systems that emphasise equity of educational services, as in the South African educational system.

The analysis of schools’ financial reports reveals that granting schools financial autonomy with permission to allocate funds from self-generated sources did not expand the differences between different socio-economic schools, as frequently argued by social activists. Indeed, school-based management seems to foster an opposite tendency to some extent, as the financial income discrepancies between schools of different socio-economic backgrounds lessened slightly over the four years studied.

Yet the findings of this study suggest that granting schools financial autonomy is not in itself a sufficient mechanism to promote their educational capacity and to moderate the pedagogical discrepancies between schools. The findings show that employing a funding formula to compensate for the differences between schools in learners’ socio-economic backgrounds is an essential policy tool to moderate income inequalities.

VI. RECOMMENDATIONS

However, in considering that low socio-economic schools dedicate approximately 40% of their budget to maintenance and acquiring supplies and assets, it may be argued that this goal could be better achieved by employing a needs-based funding formula. Such a formula takes into account not only learners’ socio-economic features but also the level of building maintenance and equipment, and therefore allows for compensation to schools operating in poor buildings. A needs-based funding formula that accounts for “site-specific” factors is essential to ensure that schools in disadvantaged settings are not penalised.

In summary, increasing schools’ financial autonomy following the introduction of school-based management provides schools with the potential to improve their pedagogical conduct and to increase the relevance of the educational processes they offer learners. However, it appears that financial autonomy in itself cannot compensate for the variance in the condition of school buildings unless a needs-based funding formula is employed. Hence, it is imperative that the various policy measures aimed at school empowerment correspond and mutually support one another.

Therefore, the introduction of school-based management in an educational system that traditionally featured a highly centralised structure should not focus solely on the transition of the power relationship within the system’s hierarchy, but also on the shift towards needs-based funding. This measure and the introduction of school-based management in schools must be undertaken simultaneously if this restructuring initiative is not to widen the gaps between schools that differ significantly in their site-specific characteristics, but instead to enable them to increase their investment in pedagogical processes and activities for the benefit of learners.

REFERENCES

SCHOOL-BASED MANAGEMENT AND EXPENDITURE


