

## A qualitative analysis of facilities maintenance — a school governance function in South Africa

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*I analysed school facilities maintenance, a school governance function in South Africa. Qualitative interviews were conducted with 13 principals and three deputy principals as coordinators of this function at their schools. The interviews were purposively and conveniently selected to gather data regarding school facilities maintenance and gain insight into the challenges this function presents to schools and their governing bodies. Findings indicate that schools generally do not have organisational structures for planned facilities maintenance, nor do they have policies on facilities maintenance. Evidence of facilities maintenance at schools mainly relates to concerns with facilities repairs, (mostly “as the need arises”) and general campus cleanliness; mostly with emergency and corrective forms of maintenance as opposed to crucial preventive maintenance. Therefore, there is a need for interim facilities maintenance committees and, in the long term, a whole-school approach to facilities maintenance that makes facilities maintenance a strategic lever for school functionality.*

**Keywords:** facilities maintenance; facilities maintenance categories; facilities maintenance inspection; facilities maintenance organisation; facilities maintenance planning; facilities maintenance policies; facilities management; school facilities; school facilities maintenance; service systems maintenance

### Introduction

Numerous studies indicate that most school governance functions prescribed by the South African Schools Act (Republic of South Africa, 1996) are specialist and complex in nature, require specialist skills to execute and there is generally, a dearth of such skills in school governing bodies (Xaba 2011; Xaba & Ngubane 2010; Chaka 2008; Grant-Lewis & Naidoo 2006; Naidoo 2005). This poses mammoth challenges for school governing bodies in so far as executing their school governance functions is concerned. One such function is school facilities maintenance, which by its very nature is a specialist function that requires specialist knowledge and skills to execute.

While not particularly explored in South Africa, the significance of facilities maintenance to school functionality is recognised worldwide to the extent that many education departments have dedicated organisational structures or units responsible for school facilities management and maintenance and it is reported in numerous international studies (Victoria State Government Department of Education and Training, 2006; Alberta Learning Facilities Branch, 2004; Florida Department of Education, 2004; Akram, Anderson, Arent, Ashkin, Ayers & Brittain, 2004; Mearig Crittenden, Morgan & Guess, 1999; Organization of American States General Secretariat, 1998). For example, Asiabaka (2008), wrote about the need for effective facility

management in schools in Nigeria; while Baltimore County Public Schools' (2007) Office of Strategic Planning published a handbook entitled Comprehensive Maintenance Plan. Bastidas (1998) wrote a comprehensive manual on the maintenance of school buildings for schools in the Caribbean and Szuba and Young (2003) wrote a comprehensive planning guide for maintaining school facilities.

Facilities maintenance is also beginning to be recognised in South Africa, with, firstly, its prescription as a school governance function in the Schools Act and, secondly, with the recent proclamation of the Schedule for the National Policy for an Equitable Provision of an Enabling School Physical Teaching and Learning Environment (Republic of South Africa, 2008:25), which states in Section 4.107:

If well maintained and managed, they [school facilities] provide conducive environments that translate into quality education. If well maintained and utilised, they can realise substantial efficiency gains ... also deepen national and sector values of school-community relationships and community ownership of schools.

Other studies also report on the significance of facilities maintenance in school programmes and learner academic achievement. Uline and Tschannen-Moran (2008:55) state that there is a growing body of literature that provides evidence of a link between school building adequacy and learner achievement. Young, Roehrich-Patrick, Joseph and Gibson (2003:2) postulate that an effective school establishes a well-disciplined, secure and wholesome learning environment, and maintains clean and orderly school buildings.

In the light of its significance, it is necessary that school facilities maintenance be accorded a priority as part of school programmes aimed at promoting teaching and learning goals and effectiveness. In this regard, I argue that this is a specialist function and should be assigned to professional facilities-maintenance staff as opposed to being allocated to lay school governors. Since no studies in South Africa explore facilities maintenance, which is a school governance function, I sought therefore to explore this phenomenon.

### Facilities maintenance: conceptual framework

School facilities can be broadly classified into buildings, grounds and service systems. School buildings consist of the external building envelope, which comprises the building foundation and external walls of buildings, which, in conjunction with the roof, windows and external doors, separate accommodation from the external environment (Coll & McCarthy Architects, 1998:3-02) and protects the interior in terms of, *inter alia*, the exclusion of dampness and moisture, and the provision of reasonable levels of thermal comfort (Hoffman Architects, 1997:5). Schools grounds comprise the grass areas and their uses, pathways and paved areas, trees, shrubs and planted areas, car parking, slopes, walls and fences, corridors and steps unimproved grounds and playgrounds (Akram et al., 2004:29, 306; Szuba & Young, 2003:83). Service systems comprise access control, fire control, electrical, plumbing, sanitation, waste disposal, HVAC, signal and communications, safety and security, landscaping and vehicular systems (Szuba & Young, 2003:75).

School facilities maintenance basically relates to the repair, replacement and general upkeep of physical features as found in school buildings, grounds and safety systems (Nhlapo, 2006:42). Szuba and Young (2003:43) make the point that maintenance is concerned with ensuring safe conditions for facility users, be they learners, educators, staff, parents or guests, and is also concerned with creating a physical setting that is appropriate and adequate for learning. Then (1999:463) points out in this regard that facilities maintenance relates to

resource integration with the emphasis on the provision of an enabling working environment. To this end, Leung, Lu and Ip (2004:226) espouse facilities maintenance as aiming to provide end-users with a comfortable, effective and quality environment with minimum resources to enhance organisational effectiveness. Accordingly, Organization of American States General Secretariat (1998:1) and Bastidas (1998) provide a rounded-off definition of school facilities maintenance by stating,

“A school maintenance programme is an organisational activity carried out by the school community in order to prolong the life expectancy of school buildings, its furniture and equipment ... for normal use, (and) should be systematic and pro-active”.

Facilities maintenance comprises *emergency, routine, preventive, predictive, corrective and deferred* maintenance (Szuba & Young, 2003:74). According to UCSC Physical Plant (2004), emergency maintenance is concerned with the repair or replacement of facility components or equipment requiring immediate attention because the functioning of a critical system is impaired or because health, safety or security of life is endangered. Routine maintenance refers to the repair, replacement and general upkeep of the grounds and buildings (Carter & Carter, 2001:3). Preventive maintenance is perhaps the most important category of facilities maintenance. To this end, Szuba and Young (2003:74) posit that it is the scheduled maintenance of equipment, such as the replacement of air conditioner filters every ten weeks or the semi-annual inspection of water fountains and is crucial for ensuring that equipment is always in good working order and provides safety for learners and educators. Szuba and Young (2003:74) describe predictive maintenance as maintenance that forecasts the failure of equipment based on age, user demand and performance measures. This kind of maintenance is rooted in the proper execution of a facilities audit (Gaither, 2003), which aims to assist schools in avoiding emergencies and dramatically reducing damage. Corrective maintenance addresses deficiencies that inevitably result from unforeseen events like vandalism, lightning strikes, hail and flooding but excludes activities that expand the capacity of an asset or upgrade the asset to serve needs greater than or different from those originally intended (Grasmick, Hall, Collins, Maloney & Puddester, 2008:5). Deferred maintenance includes scheduled activities that are delayed or postponed for reasons such as lack of funds or personnel, changes in priorities and use and occurs when preventive maintenance costs are selectively deferred to a future period of time and has merit when a school facility is non-performing or under-performing and when cash preservation is critical (Baltimore County Public Schools, 2007:92).

For **facilities maintenance** to be carried out effectively, the following important aspects must be put into place:

- Maintenance organisation, which relates to creating an organisational structure for facilities maintenance, which should clearly define duties and responsibilities, and should vary with the complexity of the school community (Elghaffar, 2007:60). Since school facilities management is the responsibility of the school governing body in terms of its governance functions, the school governing body must establish a school committee for facilities maintenance, which should then be responsible for ensuring regular maintenance and repairs, raising funds for maintenance activities and educating the school community on how to look after the buildings properly (Wakeham, 2003:5).
- Maintenance inspection, which relates to school building examination in order to prepare a school maintenance plan and most importantly, gather information to form the basis for the maintenance programme, using various forms of inspection checklists for building structures including, roofing, building envelope, grounds and service systems (Bastidas, 1998).

- Maintenance planning, which relates to formulating a maintenance strategy for achieving better use of school facilities and minimising the cost of resources tied up in grounds and buildings (Scottish Executive, 2003:7). Maintenance planning invariably includes maintenance policy formulation and aspects of maintenance funding (Priestly, 1997:12; Howard, 2006).

From its conceptualisation, it is apparent that school facilities maintenance is a challenging function and its execution requires apposite knowledge and skills.

### Research methodology

The study aimed to analyse facilities maintenance, a school governance function. To this end, I was convinced that only the people who have experience in facilities maintenance would be able to shed light on this phenomenon. Consequently, a qualitative inquiry was used for this purpose and it enabled the collection of data at the site, where participants experience facilities maintenance (Creswell, 2009:175). For this purpose, face-to-face interviews with open-ended questions were used.

Twenty participants were purposively and conveniently (Strydom & Venter, 2002:285) selected for interviews. However, due to informational considerations and saturation, only 16 participants were interviewed. Of the 16 participants, 13 were principals and three were deputy principals. The participants comprised six primary and secondary school principals (three each) from suburban<sup>1</sup> schools, four and three township<sup>2</sup> primary and secondary schools principals, respectively, two deputy principals from township primary schools and one secondary school deputy principal from a township school. This was done because the aim was to select participants deemed to be best able to provide insight into challenges in school facilities maintenance (Creswell, 2009:178). It was also noted that while facilities maintenance is a function of the school governing body through the maintenance committee, at operational level the school management team is responsible for its implementation. Although eliciting only the views of principals and deputies may be a limitation in terms of data collection, they provided useful insights into the study phenomenon because they are part of the schools' management teams.

Data analysis was done using *a priori* coding, which means using preset categories into which data are sorted and implies that data coding begins with a list of categories determined in advance (Nieuwenhuis, 2007:109). To this end, data about facilities maintenance at schools were sorted into the following categories: maintenance organisation, facilities inspections, maintenance policies, maintenance planning, maintenance categories, maintenance funding, and service systems. Responses from the participants were then transcribed *verbatim*, read to gain an overall impression of the responses, matched to the preset categories, and analysed through content analysis (Nieuwenhuis, 2007:101; Creswell, 2009:186).

To ensure reliability and validity, a digital data recorder was used for recording interviews; a similar semi-structured interview-schedule with open-ended questions was used for all interviews. The data were transcribed *verbatim*; and the meanings and information provided by interviewees were compared, member-checked and peer-validated to determine the accuracy of findings; and rich descriptions were used to convey the findings with direct quotes being used in the report write-up (Creswell, 2009:190).

For ethical purposes, permission to conduct the research at schools was obtained from the Gauteng Department of Education, the school principals and deputy principals as participants. Furthermore, they were apprised of their right to voluntary participation and to decline to answer questions they felt uncomfortable with. This included obtaining their informed consent.

Furthermore, participants' anonymity was guaranteed and, as such, the report uses only pseudonyms and is carefully written up to conceal any form of possible identification.

## **Research findings and discussion**

### **The profile of participants**

Participants from townships were from schools with enrolments of between 700 and 1,500, although two schools had fewer than 500 learners. Most of these participants' schools were noticeably poorly resourced and had old buildings in need of large-scale renovations. While township schools were generally large, they had few general workers and no custodial workers as compared to suburban schools, which despite lower enrolments had more custodial staff, apparently owing to their being employed in school governing body posts. It must be noted, however, that some township schools were relatively new and presented newer and modern school facilities. Suburban schools were generally old, having existed for 30 to 50 years. The enrolments at these schools ranged from 500 to 1,500.

Participants' involvement in school facilities maintenance ranged from one to 30 years. Ten participants had experience of less than 10 years, three with less than 20 years, two with less than 30 years and one had 30 years of experience. Most experienced principals seemed to have perfected their own ways of maintaining their schools, mainly through trial-and-error over the years, as was evident from their clean and presentable school environments.

### **Maintenance organisation**

Most schools were found to have some organisational structure in the form of committees, variously named Campus Care Committee, Environmental Committee, Building and Grounds Committee, whose functions revolved mainly around cleaning school campuses and effecting minor facilities repairs and upkeep. In this regard, Mr Easy indicated,

“... on the governing body is the Building and Grounds Committee. We've got eh, monthly checks, we take a stroll along the school to see where the areas are that need upgrading and fixing”.

It was remarkable that at one school, the maintenance committee was led by the clerk as indicated by Mr Overly, “We are now working closely with the committee that is led by the clerk”, while at another school, facilities maintenance was “outsourced” as stated by Mr Down who noted that the painted office was recently painted “... by three guys who are doing piece jobs (odd jobs), ... because they are specialist painters”.

It was also found that, generally, schools had only cleaning staff and no staff expressly assigned to facilities maintenance. Because this was a risky undertaking, Mr Prefab indicated that, although the

“groundsman did the maintenance of service systems, in the event of major maintenance works that required specialised knowledge and skills, we outsource such jobs to qualified experts”.

### **Maintenance inspection**

Participants' responses indicated that there were poor systems for facilities maintenance inspection. Inspections were mostly conducted in an *ad hoc* manner and only when equipment broke down or became damaged would an inspection of facilities related to that object be conducted. This indicates inspection for purposes of repair or replacement. This was evident in responses such as:

“No, we do not have a system. We just assess by looking at the thing that needs attention, broken windows, burglaries, broken taps and so on. Then we give attention to such ... we just look at the things that need attention” — Mr Nearby.

Although some participants indicated having their ways for facilities inspections, it was not very clear how this functioned. It was, however, apparent that these systems were unplanned and did not make use of any standardised methods of data collection, such as inspection checklists. It also seemed that there were no records of inspections because only random visual walk-about inspections were done, as opposed to well-planned and systematic processes. However, all participants indicated that their schools had asset registers as these were required by the Department and also indicated that these were detailed as they contained records of movable and immovable assets, dates of receipt and delivery, the condition of assets and the quantity. It was, however, notable that the asset registers were kept by different people. For instance, Mr Ballot commented that their asset register was updated by the gardener, the grounds man and the maintenance committee. Mr Central indicated that their asset register was compiled and updated by the administrative staff, while Mr Down indicated that he, personally, was in charge of the school stock by summarising what educators had compiled for their classrooms.

At suburban schools, extra personnel were employed and paid by the school governing body, specifically for compiling and updating the asset register as part of their job descriptions. However, because there were no organisational structures for deliberate facilities maintenance, inspections were not for purposes of maintenance planning and programming.

### Maintenance policies

Fifteen participants indicated that their schools did not have specific policies on facilities maintenance, with most being forthright and stating categorically that they did not have such policies. Mr F commented, “There is no policy around that”, while Mr Justice and Ms Grounded categorically stated that their schools did not have school facilities maintenance policies. In this regard, Mr Nearby expressed what is perhaps the state prevalent at most schools by actually appreciating the interview as an eye-opener. He remarked:

Yes we do have a policy, but it says security and maintenance. Basically, when I look at our policy, it becomes the issues of security more than maintenance. This interview in a way is an eye-opener. As the SGB (school governing body), we need to account. No, we need to look into that, it must be reflected in our policy.

Only one participant, Mr Highlight, indicated that they had a facilities maintenance policy. He stated: “A policy is there, though I must say, the people do not adhere to it. But it is there”.

### Maintenance planning

Participants were more familiar with and mistook facilities maintenance for school development planning, which is a departmental requirement and a legislative directive (Gauteng Provincial Government, 1997). Examples of this are evident in responses such as,

“No. The school does not have that kind of a plan. We only have a school development plan that looks at the entire school. We do not have a specific plan for facilities maintenance”.

Other participants were explicit in likening facilities maintenance planning to their development or improvement plans. Mr Kingstone stated, “Our school does not have a written maintenance plan, but the maintenance plan is included in our school development plan”. Other

participants indicated directly that their schools did not have facilities maintenance plans, nor did they include maintenance planning in their development plans. They indicated that there was no long-term facilities maintenance planning. This could be because development planning is mainly strategic and focuses on all the functional areas of the schools.

### Maintenance funding

Maintenance funding was found to be the basis of facilities maintenance challenges at most schools. Although the Department of Education allocates money to schools, participants indicated that it was not enough. All participants indicated that, of the overall financial allocation to schools, the department allocated 12% for maintenance, which was “ring-fenced”, implying that even if maintenance needs exceeded the 12%, schools could not use funds allocated for other functions. Most participants, especially experienced principals, indicated that their maintenance budgets were higher than the allocated 12% and they had to raise funds to augment the allocated amounts. For example, Mr Ballot stated:

At times we even go beyond that, as I’m speaking to you we are spending in the range of R50,000.00 towards the renovation of the school which is money that we won from ...<sup>3</sup> competition.

Similarly, Mr Lobbied commented, “The 12% of the whole school budget does not suffice. We augment by fundraising”. It was therefore abundantly clear that the allocated 12% was very inadequate considering the facilities maintenance needs of schools. Although principals at suburban schools indicated that they were also inadequately funded, it was found that the money budgeted for facilities maintenance was more than that of township schools. For instance, Mr Easy commented, “I can tell you that, one, R400,000.00 for maintenance has been allocated ...” while Mr Greensome similarly stated, “... we’re working on a R2m budget and I would say about R500,000.00 is for maintenance ...” This is possible because the suburban schools charge monthly school fees of more than R200.00 per learner. It is therefore not surprising that suburban schools appear better maintained than township schools.

### Service systems

The maintenance of service systems requires specialist expertise, and people responsible for maintenance should be qualified for, *inter alia*, the electrical, plumbing, HVAC and waste management and disposal systems. As alluded to elsewhere in this section, it seems that general workers, gardeners and groundsman play a prominent role in the maintenance of these systems. Some participants mentioned that this was because some of these workers had skills, although elementary in the maintenance of systems like basic electricity and plumbing. It was also mentioned that waste disposal was their responsibility.

It was found that where electricity work was concerned, qualified electricians were hired to fix electrical faults and problems. In this case, principals mentioned that the electrical systems were their responsibility. Ms A indicated that she checked electrical systems and on finding faults, informed the school governing body, except in emergencies where immediate attention was needed.

Plumbing works at schools seemed to be the responsibility of male general workers. It must be stated that reference was made to repairs of plumbing fixtures, rather than actual maintenance in terms of predictive and preventive measures. It was also mentioned that when major works were involved, these jobs were outsourced to professional companies or reported to the department. In this regard, Mr Highlight commented:

Plumbing is done. We got [*sic*] this basic knowledge. It is done by the general assistant but if there is a major problem, we also have people who have better equipment and, in terms of locating those plumbing material [*sic*], we always invite people from ... , actually we hire them.

Township schools did not have HVAC systems. Maintenance in this regard seemed to revolve around repairing broken portable heaters, which are only used in winter. However, at suburban schools there were HVAC systems although all were no longer used. This was well articulated by Mr Dunsta who said,

“There is a system, but it hasn’t worked for years. For many years, like in 12 years. It would be a massive, expensive job to fix that turbine which generates heat to the school”.

Waste management and disposal at schools is a critical aspect of school facilities maintenance because waste affects the environment and public health by degrading water, air and soil, and also seeks to ensure that no injuries occur because of wrongly disposed hazardous material like chemicals. Waste management and disposal at schools seemed to be the responsibility of general workers. Some schools dug holes in which waste was disposed by burning. By her own admission, Ms Alexandra was aware that burning waste was an unacceptable practice since children could be injured. She was also aware that an alternative was to recycle their waste. In other schools, waste was disposed of in large bins collected regularly by the municipality. As regards chemicals, Mr Lobbied pointed out that they hired a person to collect the chemicals for proper disposal. It was, however, clear that the general workers and groundsmen were responsible for managing and disposing waste. This has implications for the safety of learners and staff, as well as the general workers themselves, especially when having to dispose of waste that is hazardous, and since no mention was made of general workers’ skill or knowledge levels regarding different kinds of hazardous materials.

### Maintenance categories

Interviews revealed that school facilities maintenance was an unfamiliar phenomenon for most participants. While there was evidence of facilities maintenance in its narrower sense, it was clear that the nature of the phenomenon was generally unknown. Consequently, responses mostly indicated that only routine, emergency and corrective maintenance were carried out. In most instances, there was evidence of deferred maintenance. There were clearly no systems for predictive and preventive maintenance. Because of that, facilities maintenance was mostly a reaction or response, and comprised repairs and replacement of items deemed indispensable for sections considered crucial for the school to function.

The terminology associated with maintenance categories indicated inadequate knowledge of facilities maintenance as a process integral to school programmes. For instance, participants viewed preventive maintenance as a way of preventing learners from causing damage to facilities, which, while sensible, relates narrowly to preventive maintenance. This could also be gleaned from Ms Alexandra’s remarks,

“We predict that next year we’ll be having this broken, and so many parents won’t pay in time. And what we normally do is, we set aside a certain amount of money from the maintenance fund that is allocated”.

It must, however, be stated that due to “trial and error” experiences, most schools presented facilities in usable conditions and most participants indicated an understanding of the need for ensuring that school facilities were generally sound and served school needs.

## Discussion and conclusion

The analysis of data collected revealed a number of important factors and challenges regarding facilities maintenance practices at schools. Firstly, the general appearance of school environments indicated that maintenance work is carried out, albeit *ad hoc* and unplanned. The average extent of participants' experience as facilities maintenance coordinators indicates that whatever approaches schools used for the maintenance of facilities, is a result of trial and error and experiential knowledge.

Secondly, facilities maintenance at school connotes its narrow definition of facilities repairs and upkeep against facilities maintenance having a strategic dimension covering issues like facilities design and maintenance programmes, upgrading the knowledge and skills of the workforce, and deployment of tools and "manpower" to perform maintenance work and provide a clean and safe environment, as well as creating a physical setting that is appropriate for learning. (Tsang, 1998:88; Szuba & Young, 2003:2). This is perhaps the reason for the lack of knowledge of facilities maintenance concepts. It could also explain the reason for deferred maintenance and the involvement of general workers and groundsmen in maintenance functions requiring people with appropriate qualifications.

Thirdly, it is evident that without policy directives informing school facilities management and maintenance, schools would have systematic processes aimed at ensuring that school facilities maintenance promoted educational programmes. Clearly participants' attempts at facilities maintenance without a policy framework are constrained by numerous challenges, including:

- Creating an organisational structure for facilities maintenance programmes being curtailed by poor resourcing. For instance, there are no qualified and properly trained facilities maintenance people.
- Staffing of general workers at schools being based on the staff provisioning norms, which are also based on the enrolment of schools. This, in essence implies that the number of general workers is determined by the staff provisioning ratio, regardless of the physical size of the school and the nature of facilities. For example, a secondary school with science laboratories would require more maintenance staff than a primary school offering the mainstream curriculum. This results in one school prioritising more security guards instead of maintenance workers.
- Funding for maintenance being less than adequate. Funding is also based on norms that determine the quintile classification of a school. In terms of these norms, suburban schools usually receive less funding than the so-called quintile 1 schools. This is regardless of the nature of facilities at these schools and the concomitant maintenance requirements. This is why most suburban schools, while having HVAC systems, cannot make use of them. As one participant stated, it would be too expensive to repair the systems, let alone sustain their functionality. The non-functionality of the HVAC systems has a negative effect on the thermal comfort of classrooms and thus could adversely affect learner academic performance.

Fourthly, it was evident that participants generally did not have knowledge of school facilities maintenance. This was evident from responses indicating misunderstanding of maintenance concepts, such as different maintenance categories. This clearly implies that facilities maintenance at schools, and possibly at departmental level, is not accorded a priority status that regards it as a component of schools' educational programmes. The candid request for the interview schedule by participants attests to this.

Fifthly, schools seem not to have direction in terms of systematising school facilities maintenance. This is evident in the fact that there were no policies informing facilities maintenance. It is therefore clear that in schools' development and improvement planning processes, facilities maintenance was not considered a component. While development planning caters for school safety and security as a strategic lever, maintaining facilities is not regarded as an aspect of strategic planning in terms of being facilitative of school performance effectiveness.

Finally, it was also evident that stakeholder involvement in planning for facility usage, management and maintenance is lacking. The fact that the administrative clerk heads facilities maintenance at one school attests to this. In essence, this implies that school governing bodies do not have facilities maintenance sub-committees and, consequently, do not engage in strategic facilities maintenance planning where all school stakeholders would be involved. It must, however, be stated that there was evidence of some form of school facilities maintenance, with each school on an *ad hoc* basis, attempting to maintain its facilities in its own way. The main weakness is the fact that these attempts were not formal, planned, and organisationally structured practises.

There is therefore a need for, firstly, school facilities maintenance to be placed at the core of school programmes and since schools already compile school development plans, facilities maintenance should be regarded as one of the major strategic levers in the development planning processes. This will ensure that it is planned and budgeted for, and included in implementation plans of school development processes. Secondly, in the short term, interim school facilities maintenance committees should be established so as to have some functional organisational structure for facilities maintenance, which will assist in determining systems for ensuring planned preventive, routine and corrective maintenance. Where workers and gardeners are also responsible for small-scale repairs of equipment and service systems, they should be provided with training in basic skills in such functions.

The overriding need for school facilities maintenance seems to be on developing comprehensive long-term strategies, because it is evident that maintenance work at schools is unsystematic, uncoordinated, and not holistic. Therefore there is a need for a whole-school approach to facilities maintenance which is, according to International Facility Management Association (2009:5),

“a process by which a facility management organisation envisions its future by linking its purpose to the strategy of the overall organisation and then developing goals, objectives and action plans to achieve that future”.

The whole-school concept firstly propounds the involvement of stakeholders in school educational processes, and secondly, advocates the focus on a programme that embodies all school facilities in the school programme.

This study was limited by the fact that participants were generally not adept and not knowledgeable regarding school facilities maintenance. This, however, helped to engender insight into facilities maintenance at schools, especially because it is not viewed as integral to school performance enhancing programmes. It would have been more useful to elicit insight of the study phenomenon from school governing body members. This also leaves scope for further research on facilities maintenance. Finally, the literature on facilities maintenance is mostly foreign because there is very little in South Africa. However, this study and this shortcoming should place school facilities maintenance as a school governance function in the

academic research domain, and also invoke interest from school governance units of education departments.

## Notes

1. Suburban schools were located in whites only settlements and catered for whites only before democracy in South Africa; while
2. Townships schools were located in blacks only settlements and were meant for black learners only.
3. Name withheld for anonymity.

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