Managing a School Project in a South African Context: Who is Really in Charge?

G. T. Molepo and A. Mji

Tshwane University of Technology, Pretoria, South Africa

ABSTRACT The purpose was to explore who really was in charge of managing school projects in the South African context. Participants were 65 in all comprising 13 principals, 13 teachers and 39 parents who were school governing body members. There were 31 women and 34 men whose ages ranged between 21 years and 55 years (*M* = 35.4; *SD* = 9.6). Participants indicated their views about school projects on a Likert type scale. Validity and reliability of scores from the scale are reported. Results indicated that three subscales emerged, where participants saw the school principal as a project organiser; a project leader; and a project time manager. Further, in spite of the powers given by governmental authority, governing body members felt that principals should be project leaders within schools. It is recommended that further studies should be conducted to determine the efficacy of the questionnaire used here in other contexts and samples.

INTRODUCTION

In all spheres of life projects are used as a means to accomplish specific objectives. A project may be described as the "… achievement of a specific objective, which involves a series of activities and tasks which consume resources. It has to be completed within a set specification, having definite start and end dates" (Munns and Bjeirmi 1996: 81). Sometimes some people see projects and project management as one thing hence they use these interchangeably. It should be pointed out though that project management focuses more on overseeing the processes leading to the accomplishment of the project. It is pointed out in fact that project management is the "… science (and art) of organizing the components of a project, whether the project is development of a new product, the launch of a new service, a marketing campaign, or a wedding" (Wideman 1999: 4). In concurrence with the above Munns and Bjeirmi define project management as the process "… of controlling the project objectives" (1996: 81).

One important aspect in running a project is making sure that it is completed successfully. Successful completion is a prerequisite in many ways because if a project fails that may impact negatively on the finances of an organisation. In a related manner it is argued that the process of managing a project "… revolves around good planning, organising, directing, and controlling resources for a relatively short-term objective" (Kerzner 2009: 4). Also, if projects are to be successful it is important that they are undertaken by good teams led by competent leaders. In fact Wideman (1999: 4) stresses that "… at any given time, the project's team must have a single point of responsibility, a project manager, ... Such person must have the skills, experience, dedication, commitment, authority and tenacity to lead the project to success". This view implies that a project leader is central in all project activities. The leader is central because it is this person who ensures that processes are properly followed and the focus is on successful completion, in good time and cost effectively. So, typically the role of a project manager is "… to bring a project to completion on time, within the budget cost, and to meet the planned performance or end-product goals" (Simpson cited by Dvir et al. 2003).

Belzer (2001: 1) is of the view that the success of a project is dependent on the project leader, including the leader's understanding of when and how to use their skills for the purpose of:

a. Working within an organization,
b. Defining the business value,
c. Clarifying vision,
d. Determining requirements,
e. Providing direction,
f. Team building,
g. Resolving issues and,

Address correspondence to:
A. Mji,
Tshwane University of Technology,
P/Bag X680, Pretoria, 0001,
South Africa
Telephone: +27 12 382 9932.
Fax: +27 865 600 315;
E-mail: mjia@tut.ac.za

h.   Mitigating risk.

It is important for those who are in charge of projects to possess the requisite skills to see these through. Skills are about "… an ability that can be developed which is manifested in performance … an ability to translate knowledge into action" (Odusami 2002: 61). In fact it has been opined that project managers should be encouraged to work toward the development of leadership skills that "… include the ability to monitor and track project scope, project time, project cost, and project quality" (Sumner et al. 2006: 48). Further, it has been argued that when managers follow appropriate processes and utilise the correct tools and techniques then chances of project success will be high (Belzer 2001).

South African Context

The South African Schools Act (Department of Education 1996) apportioned responsibilities to governing bodies to oversee certain activities within schools. This effectively allows governing bodies "… to maintain and improve the school`s property, and buildings and grounds occupied by the school ..." (Department of Basic Education 2011). So among other activities, governing parents are mandated to oversee the finances of schools. Governing bodies are "… democratically elected and reflect parent, educator, non-educator staff and, in secondary schools, learner constituencies. Parents have a majority stake in order to ensure … a greater voice (Dieltiens 2005: 9 - 10). This means that chairmanship of meetings is a role taken up by one of the parents with the principal serving as an *ex officio* member. Effectively the legislation was meant to enhance parental involvement and contribution to "… whole school development" (van Wyk 2004: 50).

In a sense, the legislation afforded governing bodies the ability to identify projects and work on accomplishing them. In a school situation, a project may involve building a perimeter wall, constructing additional classrooms or setting up and running a school garden. The fact of the matter though is that governing bodies comprising selected teachers, students and school governing body members do not necessarily possess the requisite skills to run projects. There has been a dialogue on this issue in literature. For instance, it has been argued that "… a considerable proportion of teachers are not sufficiently qualified or trained and they lack the competences to ei-

ther implement … policies capably or take part in the decision-making processes in the school (Swanepoel 2008: 42). There are also other potential problems that persist regarding parental involvement in school governing bodies. For instance, because of its historical past, South Africa has a majority of adults who are not educated (especially among the African population). Mncube (2007: 129) for example lists some of the problems as "… the lack of clear demarcation between the roles of the teaching staff and those of the school governing body (SGB), lack of time, lack of confidence from some parents, … lack of training which results in lack of knowledge of the Act and roles and responsibilities …" It is these very adults, with all the barriers listed above, who as school governing body members are expected to be in charge of and lead projects at schools.

In South African schools a parent is effectively expected to assume the leadership role whenever a project is to be undertaken. For all intents and purposes however this is not the case. From personal experience of one of the researchers as a school principal and in addition to communication with contemporaries, in most instances the leadership role in projects is not assumed by one of the parents. The researchers' experience has shown that in most instances school projects are actually conceptualised, led and managed by the principal. In this study the researchers wanted to determine the views of governing body members in respect of, who really assumes the role of project leader at schools? They felt that answering this question was significant for two reasons. First, the official (government) understanding is that parents are in charge. Providing a researched view would therefore give an indication of what pertains in reality in terms of school projects. Second, they were of the view that poor parental education and experience was the main hindrance with respect to project running skills. This knowledge the researchers argue would be valuable in ensuring that systems are put in place to train parents for the leadership roles they are expected to assume at schools.

METHOD

First, the researchers point out the main objectives of this study. This is followed by a description of the participants, as well as the instrument and procedure. The objectives of this study were two-fold: (a) to establish the reliabil-

ity and validity of scores from the participants' responses; (b) to establish participants' views about the principal on project leadership.

Participants

The targeted population comprised teachers, principals and school governing body members from one district in the North West province, South Africa. All were from a rural district within the province. The district has 128 schools including primary, middle and high schools. In this district there are 128 principals, about 1 500 teachers and approximately 750 school governing body members. In selecting the participants, simple random sampling was used. The researchers selected approximately 10% of the schools in the population. The 10% was seen to be an ideal number considering that the population of 128 schools would in essence have meant that there were 2 378 eligible participants. That number of participants would be difficult to reach and the cost of conducting the study would be high. In selecting the 10% of the schools a table of random numbers was used and 13 schools were finally included in the study. Specifically, each of the 128 schools was given a unique number. The numbers were then defined in the Research randomizer (2011) which generated different sets of 13 numbers. Set 5 resulting from this process was selected randomly. With 13 schools selected, this meant that automatically 13 principals were eligible participants. In selecting teachers from each school, the researchers assigned numbers from 1 to n (where n was the number of teachers in a particular school) and the Research randomizer (2011) was used to select one. Similarly, three school governing body members representing each school were selected following the procedure used for the teachers. This means that the resultant sample was 13 principals, 13 teachers and 39 school governing body members.

Instrument and Procedure

Permission to conduct the study was granted by the provincial education authorities. The authorities were assured that the participants' identities would be anonymous and that any information they provided would be kept in confidence. Also, it was indicated that all participants would only partake subject to informed consent. Following this, the purpose of the study was clearly explained to each individual. All ques-

tions and queries were addressed to everyone's satisfaction. Examples of questions asked included (a) "... will you put my name in your report?" (b) "... will you report what I say to the department of education?" and so on. It was further indicated to the participants that if they so wished they could decline to participate. In fact all the selected people consented to participate and agreed to sign a consent form.

A questionnaire comprising two sections was used to collect data. The first section requested the participants to provide biographical data in terms of age, gender, and work experience. The second section was a 16 - item Likert type scale developed by the authors based on ideas gleaned from project management literature. Specifically we wanted to establish participants' *Views about the Principal on Project Leadership*. In this scale respondents were requested to rate their agreement or non-agreement on a five point scale anchored by 1 = Strongly disagree and 5 = Strongly agree. For example they were asked to rate the following: *The principal is knowledgeable about project leadership and channels all resources towards efficient and effective use in a project*. It should be mentioned that we intentionally used item statements that reflected the principal as in charge of projects. This was done because we felt it would give the participants the chance to dispute what was not true in their school.

RESULTS

Biographical Data

Participants were 65 including teachers, principals and school governing body members. There were 31 women and 34 men with ages ranging between 21 years and 55 years ($M = 35.4$; $SD = 9.6$). Participants' work experience ranged between 5 years and 22 years ($M = 12.2$; $SD = 5.3$).

Reliability and Validity of the Questionnaire

In establishing the reliability of the *Views about the Principal on Project Leadership* scale scores, Cronbach's (1951) alpha as a measure of the internal consistency was computed. The value of alpha was found to be .77 [95 % CI: $\alpha = .68 - \alpha = 84$]. This alpha value was seen to be fair since it is greater than .70 and less than .80 (Ciccheti 1994). So participants' scores on the *Views about the Principal on Project Leadership* scale were adjudged to be reliable. To establish the validity of the scale, two processes

were followed. Firstly, the researchers requested three academics to provide expert opinion on the scale. The aim was to ascertain face validity. The researchers explained what the purpose of the scale was and requested the three to provide expert opinion on any issue about the scale. The first recommended input was about changing the researcher's four point scale into a five point scale. Regarding this, we had four rating points for the scale namely, 4 = Strongly Agree, 3 = Agree, 2 = Disagree and 1 = Strongly Disagree. The academics suggested that a fifth rating point be added. The researchers duly added the rating point 3 = Uncertain. In the original scale we had divided the questions into four areas each with its heading. In doing this, the researchers thought that the questions were about (a) project management, (b) principals' pressure from other duties, (c) the principal as a resource provider, and (d) the principal as a human resource manager. Regarding the four areas, the researchers were advised to remove these. The academics argued that if principal components analysis was to be conducted then the headings would be derived from resulting factors. Finally, the academics suggested a change in a few item statements. For example, an initial statement was: *The principal is often seen at the project site for checking on the project progress.* This statement was changed to read: *The principal frequently visits the project site to check on progress.* After all this process the academics certified that they were happy with the resultant scale. In this instance face validity of the scale was accepted.

Secondly, the researchers conducted an exploratory analysis where the scale scores were subjected to a principal components analysis. Here the aim was to ascertain content validity of the scale. In computing the principal components analysis a varimax rotated matrix with eigenvalues greater than unity indicated a five factor solution. This solution had a total explained variance of 68.1%. However an inspection of the resultant components for the five factors did not make theoretical sense. Also, there were overlaps in terms of significant loading in different components. In fact four of the five factors had three items and these items represented a mixture of ideas. The researchers then explored a four and a three factor solution. The three factor solution appeared to make better theoretical sense. Table 1 shows the structure coefficients of the three factor solution. The three factors had eigenvalues of 3.71, 2.67 and 1.93 respectively as well as accounted for 51.9% of the variability in the scores. The internal consistency scores of the three factors were found to be fair and acceptable (Ciccheti 1994). Because the three factor solution could be interpreted and scores from the scale were internally consistent (reliable), content validity was then accepted. From the results of the principal components analysis we named the factors in terms of the principal as: *a project organiser* (Factor 1, six items), *a project leader* (Factor 2, five items) and *a project time manager* (Factor 3, five items).

Views about the Principal on Project Leadership

Analysis of the views about the principal on project leadership, were based on the three factors established from the principal components analysis.

The Principal as a Project Organiser

Table 2 shows the measures of central tendency and the standard deviations of the items statement relating to the principal as a project organiser. The Table shows that the responses were consistently clustering around a score of four (median). In all the six item statements, a majority of participants agreed or strongly agreed that the principal was a project organiser.

As an illustration, Table 3 provides a rating of three item statements about the principal as a project organiser. The statements in this regard were: (a) *The principal provides staff development opportunities*; (b) *The principal is knowledgeable about projects*; and (c) *The principal is considered as the most important part of the project*. The Table reveals that for the three statements, agreement ranged between 84.1% and 88.4%. This was interpreted to suggest that participants viewed the principal as a project organiser.

The Principal as a Project Leader

Table 4 shows the measures of central tendency and the standard deviations of the items statement relating to the principal as a project leader. Similarly as in the previous instance the table shows that the measures of central tendency were around a score of four. In fact the median here was 4.3. In all the five item statements, a

Table 1: Structure coefficients from principal components analysis of the views about principals on project leadership, three-factor model (N = 65)

	Factor		
	1	2	3
1. The principal assists new workers on the project	.82		
2. The principal ensures a conducive atmosphere	.74		
3. The principal is considered as the most important part of the project	.66		
4. The principal organizes enough funds on time	.65		
5. The principal is knowledgeable about projects	.56		
6. The principal provides staff development opportunities	.50		
7. The principal has a good understanding of project management		.77	
8. The principal is able to advise other stakeholders		.74	
9. The principal is accepted as the project manager		.71	
10. The principal frequently monitors the project		.63	
11. The principal gives frequent feedback		.54	
12. Unscheduled visits by members of the Department of education officials and parents often disrupts the principal's plans			.78
13. The principal's activities are thorough and the project does not interfere with his daily schedules			.77
14. The principal's office is often flooded by educators and learners' matters hence taking his project management time			.74
15. Promotes quality in the project at all times			.52
16. Attends to project worker's problems promptly and objectively			.33
α	.78	72	.69
Eigenvalues	3.7	2.7	1.9
Variance (%)	23.2	16.7	12.0

Table 2: Measures of central tendency and standard deviations relating to the six items of the principal as a project organiser (N = 65)

	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6
No response	5	5	5	5	5	0
Mean	4. 20	4.33	4.13	4. 13	4.13	4.12
Median	4.00	4.00	4.00	4.00	4.00	4.00
Mode	4	4	4	4	5	4
SD	1.08	.68	1.00	.91	1.02	.94

majority of participants indicated that they agreed or strongly agreed that the principal was a project leader.

Table 5 shows an example of the ratings by participants on three item statements on the principal as a project leader. Here the item statements were: (a) *The principal is able to advise other stakeholders*; (b) *The principal has a good understanding of project management*; and (c) *The principal is accepted as the project manager*. In this instance agreement with the statements raged

between 81.1% and 92.7%. This level of agreement indicated that participants felt that the principal should be a project leader.

The Principal as a Project Time Manager

Table 6 shows the measures of central tendency and the standard deviations of the items statement relating to the principal as a project time manager. The table shows that the responses were consistently clustering around a score of

Table 3: Percentage distributions of participants on an item about the principal as a project organiser

	Item 1		Item 2		Item 3	
	n	%	n	%	n	%
Strongly disagree	1	1.4	1	1.4	1	1.4
Disagree	5	7.2	7	10.1	6	8.7
Uncertain	2	2.9	3	4.3	2	2.9
Agree	35	50.7	28	40.6	31	44.9
Strongly agree	26	37.7	30	43.5	29	42.0

Table 4: Measures of central tendency and standard deviations relating to the five items of the principal as a project leader (N = 65)

	Item 1	Item 2	Item 3	Item 4	Item 5
No response	5	5	6	6	5
Mean	3.90	4.43	4.07	4.31	4.33
Median	4.00	5.00	4.00	4.00	4.50
Mode	4	5	4	5	5
SD	1.10	.72	1.10	.91	.86

Table 5: Percentage distributions of participants on an item about the principal as a project leader

	Item 1		Item 2		Item 3	
	n	%	n	%	n	%
Strongly disagree	0	0	4	5.8	4	5.9
Disagree	3	4.3	9	13.0	5	7.4
Uncertain	2	2.9	0	0	0	0
Agree	29	42.0	35	50.7	32	47.1
Strongly agree	35	50.7	21	30.4	27	39.7

four (median). In all the five item statements, a majority of participants agreed or strongly agreed that the principal was a project time manager.

As an illustration of the participants' view of the principal as a project time manager, Table 7 provides a rating of three item statements relating to this. The statements were: (a) *Unscheduled visits by members of the Department of education officials and parents often disrupts the principal's plans*; (b) *The principal's office is often flooded by educators and learners' matters hence taking his project management time*; (c) *The principal attends to project worker's problems promptly and objectively*. It is observable from the table that agreement ratings ranged between 84.1 and 88.4%. This indicates that participants viewed the principal as a project time manager.

In summary, participants were 31 women and 34 men who had working experience of five years and more. In order for findings to be credible and meaningful it is important that issues of reliability and validity should be addressed. Using statistical analysis it was shown that the scores from the questionnaire were reliable and valid. Participants' views on project leadership revealed that the principal was seen as a project organiser; a project leader; and a project time manager. In essence the participants felt that the principal was critical from conception of, to the completion of projects in schools.

Table 6: Measures of central tendency and standard deviations relating to the five items of the principal as a project time manager (N = 65)

	Item 1	Item 2	Item 3	Item 4	Item 5
No response	5	5	5	5	5
Mean	3.85	3.70	3.83	4. 20	4.12
Median	4.00	4.00	4.00	4.00	4.00
Mode	4	4	4	4	4
SD	1.26	1.25	1.25	.99	.92

Table 7: Percentage distributions of participants on an item about the principal as a project time manager

	Item 1		Item 2		Item 3	
	n	%	n	%	n	%
Strongly disagree	8	11.6	4	5.8	2	2.9
Disagree	3	4.3	11	15.9	2	2.9
Uncertain	1	1.4	1	1.4	4	5.8
Agree	35	50.7	27	39.1	36	52.2
Strongly agree	22	31.9	26	37.7	25	36.2

DISCUSSION

In this study the principal was identified as one who should organise, lead, and time manage school projects. On the one hand, it is observable that the school governing body members were keen to shirk their duties. This is to be expected in a sense because, as indicated earlier most parents given the powers by law were not sufficiently educated and therefore could not be expected to be *au fait* with all the tasks and responsibilities they are expected to fulfil. This is a view Xaba (2011: 201) has also observed in indicating that "… school governing bodies are not really succeeding in facing the challenges of their roles and responsibilities and that the possible cause for these challenges resides in the specialist nature of most prescribed functions …" Similarly, Bagarette (2012: 104) points to the fact that "… SGBs do not understand their roles and functions; … the dominance of principals over SGBs; poor literacy levels of SGBs; the reliance of SGBs on the principal; and the SGBs' poor financial knowledge …"

On the other hand, the advantage of principals being the *de jure* project leaders, as suggested by the school governing body members here, is important. It is important because when parents approve the principal would then integrate the school's administrative requirements with governing body responsibilities. If the school needed to build a science laboratory for instance, the utility of the principal's expertise would help ensure that not only the building is completed but equipment needed to run such a facility is also bought. In fact, Brijraj (2004) seems to concur in pointing out that principals realize that they are the only common factor (between a school's administrative requirements and school governing body members' responsibilities) so they use the position carefully for the school's advancement and success. This view is extremely sensible because it resonates with the sentiment that principals as leaders motivate, inspire and unite others on common goals while having the ability of persuading them "… to join their vision and share their ideals" (Botha 2004: 240). Also, as project managers principals would be expected to be knowledgeable about appropriate processes, and techniques that would help guide others to achieve quality project results (Belzer 2001).

It is argued that governing body members are expected to identify the tasks that the statutes allocate to them (Knight 1993). What this study seems to suggest though is that governing body members in a sense were also conscious of their limitations. The results presented here seem to indicate a good working relationship and trust between governing body members and principals. This however is in contrast to what has been found elsewhere in South Africa, where it has been averred that "… the relationship between school principals and the SGBs of public schools in South Africa is not always very good" (Bush and Heystek 2003: 10).

There are threats however to good working relationships and trust between governing body members and principals. One threat is that governing body members' eligibility ceases immediately their children leave the school. This means that the services and skills of good innovative parents may be lost to a school once their child or ward leaves a school. Another threat stems from the fact that the term of governing body members is generally three years. In fact it is argued that "Establishing a lasting relationship is complicated since it must be renewed or re-established every three years when the new SGB is elected or sometimes even more frequently when there is a new principal in the school" (Heystek 2004: 311). An implication emanating from this study is that principals as 'natural' leaders at schools should be granted the authority to assume leadership in school projects. This is extremely important in the more rural contexts where parents are not as educated as necessary to handle the technicalities of modern and complex projects. It is also important though that government officials should assist parents by providing necessary training rather than assuming everybody's competence in managing projects.

CONCLUSION

In South Africa, school governing bodies were, among other duties, allowed by law to oversee the maintenance and improvement of the school property and buildings. This law effectively meant that parents of students could determine how school projects were to be planned and managed to completion. The results of this study have shown however that the parents felt it was the principal who should organise, lead, and time manage school projects. What these results

illustrate is that the intentions of government may have been good but at this stage are not appropriate. These intentions are not appropriate at this stage because historically predominantly African parents were not educated. This therefore means that they could not be expected to have the necessary skills and nous to deal with financial matters as well as running school projects for instance. The fact that the parents were prepared to cede these duties to the principal is an illustration of the acknowledgment of their shortcomings.

RECOMMENDATIONS

The results have shown that parents from a rural context acknowledged that the principal should manage school projects in the South Africa. It is recommended therefore that the knowledge levels and skills of the parents should first be determined by government before they are given tasks that they cannot fulfil. Such a determination will assist in ensuring that the necessary training is organised. This study was carried out in a single site in a rural area. It is recommended therefore that similar studies should be undertaken in other rural areas in order to determine whether the findings would be replicated. Such studies will be useful in providing a more global perspective of what pertains from a rural schools perspective.

An important aspect about the results presented in this study is that they are based on reliable and valid assumptions. It is important however that further studies should be conducted to determine the efficacy of the questionnaire used here in other contexts and samples. Additionally, the study was conducted in one rural area of the North West province so it is important that the findings are not generalised to all rural areas. This is why it is recommended that the efficacy of the questionnaire should be determined in other areas.

REFERENCES

Bagarette N 2012. Partnerships between SGBs and principals in public schools: Reasons for the failure of the partnerships. *International Journal of Educational Sciences*, 4: 97-106.

Belzer K 2001. Project Management: Still More Art Than Science. From <http://www.pmforum.org/library/papers/2001/ArtthanScience.pdf> (Retrieved on November 01, 2011).

Botha RJ 2004. Excellence in leadership: Demands on the professional school principal. *South African Journal of Education*, 24: 239-243.

Brijraj R 2004. The Role of the Principal as an Ex-officio Member of the SGB Versus His/Her Role as the Professional Manager of the School. *Paper presented at the Conference on School Governance,* Matthew Goniwe School of Leadership and Governance, Johannesburg, June 12 to 13, 2004.

Bush T, Heystek J 2003. School governance in the new South Africa. *Compare: A Journal of Comparative and International Education,* 33: 127-138.

Ciccheti DV 1994. Guidelines, criteria and rules of thumb for evaluating normed and standardized assessment instruments in psychology. *Psychological Assessment*, 6: 284-290.

Cronbach LJ 1951. Coefficient alpha and the internal structure of tests. *Psychometrika*, 16: 297-334.

Department of Basic Education 2011. *Basic Education Laws Amendments Act 15 of 2011 of the South African Schools Act No. 84 of 1996*. Pretoria: Government Printers.

Department of Education 1996. *The South African Schools Act No. 84 of 1996*. Pretoria: Government Printers.

Dieltiens V 2005. *Transformation of the South African Schooling System, the Fault-lines in South African School Governance: Policy or People?* Braamfontein, Johannesburg: The Centre for Education Policy Development.

Dvir D, Raz, T, Shenhar AJ 2003. An empirical analysis of the relationship between project planning and project success. *International Journal of Project Management*, 21: 89-95.

Heystek J 2004. School governing bodies - the principal's burden or the light of his/her life? *South African Journal of Education*, 24: 308-312.

Kerzner H 2009. *Project Management: A Systems Approach to Planning, Scheduling, and Controlling*. Hoboken, NJ: John Wiley & Sons, Inc.

Knight B 1993. *Financial Management for Schools*. Oxford, England: Heineman.

Mncube VS 2007. Social justice, policy and parents' understanding of their voice in school governing bodies in South Africa. *Journal of Educational Administration and History*, 39: 129-143.

Munns AK, Bjeirmi BF 1996. The role of project management in achieving project success. *International Journal of Project Management*, 14: 81-87.

Odusami KT 2002. Perceptions of construction professionals concerning important skills of effective project leaders. *Journal of Management in Engineering*, 18: 61-67.

Research Randomizer 2011. From <http://www.randomizer.org> (Retrieved June 17, 2011).

Sumner M, Bock D, Giamartino G 2006. *Information Systems Management*, 23: 43-49.

Swanepoel C 2008. The perceptions of teachers and school principals of each other's disposition towards teacher involvement in school reform. *South African Journal of Education,* 28: 39-51.

van Wyk N 2004. School governing bodies: The experiences of South African educators. *South African Journal of Education,* 24: 49-54.

Wideman RM 1999. Fundamental Principles of Project Management. From <http://www.pmforum.org/> (Retrieved December 01, 2011).

Xaba MI 2011. The possible cause of school governance challenges in South Africa. *South African Journal of Education*, 31: 201-211.