

Research Paper

A SWOT Generated Thematic Analysis of the Perceptions of Staff on the Effectiveness of Knowledge Management Application in Township Schools

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Abstract

Knowledge management (KM) ensures that schools do not forfeit a wealth of tacit knowledge assets that dwell in the minds of individual members of staff. It also ensures that this knowledge is not only externalised but is also documented and deposited into the institutional memory or repository for it to be retrieved and re-used at a later stage. The quantum of this qualitative study was informed by the paucity of literature on the role of KM in South African schools. It adopted a SWOT (i.e. strength, weaknesses, opportunities and threats) analysis both as a theoretical framework and an instrument to evaluate the effectiveness of KM application in two township schools in the locality of Emalahleni in Mpumalanga province. The study revolved around a sample of 14 participants drawn from populations of teachers, administrative clerks, heads of departments (HoDs) and principals. The social constructivist element of the study meant that the researcher took part in understanding participants' constructions of their realities about KM application in their schools. As far as the internal dynamics of the studied schools were concerned, it transpired that even though both schools had supportive school governing bodies, and reasonably efficient ICT infrastructure and connectivity, much of the KM weaknesses were caused by anti-collaborative knowledge-exchange practices, the erosion of Ubuntu-directed ethical undertakings, ill treatment of administrative staff by teachers and HODs, and principals' inaccessibility to the workforce at a lower level; all of which contributed to teacher absenteeism, low staff morale, knowledge hoarding, poor communication of policies and loss of tacit knowledge. The study also presents tabulated findings of the kinds of threats that schools can guard themselves against and the opportunities they can tap into in order to leverage KM.

Keywords Knowledge Worker; Knowledge Management Application; Knowledge Exchange; Township Schools

INTRODUCTION

The rapid invasion of globalisation and the Fourth Industrial Revolution (4IR) redefined future roles of many public organisations, including schools. This invasion continues to precipitate the enactment of educational reforms aimed at phasing out teacher-centred learning practices and phasing in (teacher-mediated but) learner-centred learning practices. This is consistent with Nkambule (2020) who posits that, unlike ever before, educational institutions ought to strategically place themselves (operationally and otherwise) at the pinnacle of the production of the next generation of knowledge workers, innovators and intelligentsia who will either ply trade or facilitate job creation not only in various sectors within the geographical and economical domains of the continent of Africa, but also at global level of the knowledge societies. In view of the indication that surviving in the knowledge economy may require individual contributors to be endowed with self-directed and collaboratively acquired formal and informal training and an avalanche of context specific knowledge, Suknunan (2014, p. 3) comments that for African educational institutions to curate learners' learning experiences and propel "the future" of the continent to greater heights, they need to immediately begin to position themselves as learning organisations. A school that bears a tittle of a "learning organisation" is recognised by the syndicated processes in the management of the inflow and outflow of its knowledge assets and its workers' willingness to continuously learn from one another. Furthermore, in such a school, there is a conspicuous atmosphere of collaborative knowing (also known as collaborative visioning) among its individual employees. Collaborative knowing happens when workers constantly engage each other through various means, mostly via meetings, workshops, briefing sessions, seminars and professional forums. The overriding goal of embedding organisational learning in schools is to entrench a

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thriving knowledge exchange culture (Admiraal et al., 2021). Suffice to mention that, for knowledge exchange transactions to unfold in a coordinated fashion, schools ought to have incorporated knowledge management (KM) as a strategy for coordinating the movement of organisational knowledge and for integrating the knowledge that comes from workers' continual exchange of knowledge into an institutional memory or repository (Nkambule, 2023).

Although schools have long been recognised as knowledge-exchange and creation enterprises, armed with intangible knowledge assets that are crucial to the growth and prosperity of nations (Omigie, Ikenwe & Idhalama, 2019), until recently, very little was known about the role of KM in schools (Nkambule, 2020, 2022, 2023). This view is echoed by Kurniawan (2014, p. 169) who states that KM is a relatively new field that continues to be explored by schools as a management practice and by scholars as a field of research.

In view of the scarcity of literature pointing to the effectiveness (or the lack thereof) of KM in a South African schooling context, the study was set to address the following research questions:

- 1. What are the participants' perceptions of the *internal factors* that strengthen and weaken the integrity of KM application at selected township schools?
- 2. Which *external factors* do participants perceive to be likely to threaten the integrity of KM application and those that may be seen to be opening-up opportunities for improved KM application at selected township schools?

The subsequent sections comprise literature review, methodology, results and discussion, conclusion, recommendations, as well as the study's limitations and implication for future research.

LITERATURE REVIEW

Through literature review, researchers can incorporate a range of literature (i.e. empirical studies and documents) that bears resonances with the content of their research (Snyder, 2019) to strengthen its rationale and to accentuate its novelty by contrasting it with existing studies, as demonstrated below.

Knowledge Management Defined

Galgotia and Lakshmi (2022) define KM as none other than a structured system of integrating human capabilities, technological systems and knowledge processes to accelerate and expand knowledge acquisition, creation, storage and exchange, as well as its application to advance the developmental agenda and to bring about contextually fit solutions to problems that educational institutions confront. Simply put, "KM is the achievement of organisation's goals by making the knowledge factor productive" (Beijerse, 1999, p. 94) through systemisation of its acquisition, storage, transfer and utilisation processes. Essentially, organisations adopt KM as a tool to manage the codification of tacit knowledge into explicit knowledge. According to Nonaka and Takeuchi (1995), tacit knowledge is the knowledge whose storage is in a person's mind and can only be externalised when it is being shared with others. Explicit knowledge on the other hand, pertains to the physical or tangible form of knowledge that can be manually and technologically retrieved, perused and reworked (Nonaka & Takeuchi, 2000) such as e-mails, manuals, road signs and books.

Bearing in mind that the study was situated in a township schooling context, it is worthwhile to understand the conditions that exist in that context. Khumalo and Mji (2014) characterise township schooling as an educational context whereby schools are likely to contend with budgetary constraints, below average infrastructure and inadequate resource allocation. Unfortunately, some of these challenges supress maximal delivery of teaching, learning and administrative processes (Pretorius, 2014). Notwithstanding the hardships that these schools must contend with on a daily basis, Daraei and Navehebrahim (2021) emphasise the urgency with which they should, nevertheless, come to realise how KM can greatly improve their overall effectiveness.

Literature proves that despite being under resourced, township schools too (through proper

coordination, complementary leadership practices and schoolwide employee commitment) do possess in them the ability to succeed in KM application (Nkambule, 2020). This view is consistent with Kurniawan (2014), whose study found that in Indonesian schools, KM technologies improved and modernised academic planning and delivery processes. Awang, Ismail and Flett (2011) found that Malaysian schools greatly benefited from improved administrative processes and administrators' knowledge management efficacy as a result of having adopted KM. In India, Arumina and Pakkeerrapa's (2021) study explicated that KM technologies ameliorated teachers' overall academic preparation and delivery at selected secondary schools. Ngozi's (2018) study demonstrated that KM improved the overall outlook and the efficiency of teachers' performance at selected Nigerian schools. Perez-Soltero et al. (2019) state that, in Mexico, KM improved the coordination of curricular and co-curricular programmes and events planning. Lastly, in a South African province, Osborn, Thomas and Hartnack (2021) found that KM improved information literacy, reading skills and curriculum planning processes. These studies demonstrate that despite hardships it is indeed possible to make the most out of the little resources at a school's disposal and successfully leverage KM application. These studies also chart a way forward for South African public schools to transcend beyond existing contextual challenges and begin to fervently align their daily operations within the realm of KM. Also, through the above cited studies one can realise that people's (workers') role is a strategic resource in the facilitation of KM application, as further enunciated in the next section.

Knowledge Workers' Role in Ethical Knowledge Management Practices

In organisations such as schools, people who interface with KM are, but not limited to teachers, administrative clerks, HoDs, principals and their deputies (Kurniawan, 2014). In KM terminology, school personnel who perform teaching and administrative tasks are called "knowledge workers" (Hoq & Akter, 2012) –a term propagated by Peter Drucker in his 1959 book tilted *Landmarks of Tomorrow*.

More than four decades ago, Drucker pre-empted that knowledge workers would have a lot to offer to the new world order - as the world "shift[s] to a knowledge society" - in their capacity as professionals, entrepreneurs and innovators endowed with implicit know-how skills, self and collective efficacy, adventurous and creative impulses as well as their inclination to productivity and competition (Wartzman, 2014). Drucker (1999) suggests that leaders [who in the context of this study are the School Management Teams (SMTs), i.e. HoDs and principals] whose responsibility is to drive the facilitation of KM, ought to respect and appreciate the autonomy of knowledge workers, for it is this autonomy that stimulates their creativity and willingness to enter into tacit knowledge-exchange transactions with others. Turrigo-Hoyos, Thoene and Arjoon (2016) expound that Drucker regarded collaboration and ethical behaviour as key antecedents of effective knowledge work. They further posit that Drucker pointed to individual knowledge workers' espousal of *intellectual virtues* (tied to their ability to contribute to the success of the organisation through innovative means) and moral character (geared towards acting within the ethical boundaries that abide in the organisation) as non-negotiable qualities that they must possess to if they were to meaningfully augment the value of KM application in their organisations. The crux of Drucker's prediction was to emphasise the need for people in charge of driving KM initiatives to encourage dialogical engagements among groups of workers and to make them understand when it is acceptable to work in silos and when it is not acceptable to do so. As is the case with schoolbased knowledge workers who, despite performing most of their work independently, are equally expected to partake in group or team-oriented knowledge-exchange undertakings. Meaningful participation in such knowledge-exchange undertakings knowledgeable implies that actors broaden each other's knowledge capabilities through what Romm (2019) "collaborative

visioning/knowing". It normally occurs in an organised information sharing format (Wong et al., 2015) such as staff meetings, briefing sessions, workshops, professional learning forums and so forth.

Normally, during the course of these undertakings, power contestations are prone to play themselves out among actors, which oftentimes when not moderated by code of ethics and individual actors' moral campus, can turn into a breeding ground for anarchy and unproductivity. Within this latitude of thinking, Mladkova (2013) highlights the ethical and moral imperatives of knowledge work, especially within the public service space. In view of people choosing to follow or disregard ethics for a variety of factors (Mladkova, 2013), it is prudent for organisational leaders to become the change they would like to see in their own organisations by assessing the extent to which their own moral standing inspires confidence in the people they lead (Harrison, Freeman & Abreu, 2015).

Theoretical Framework

According to Mensah et al (2020, p. 56), a theoretical framework "is a blueprint that is often borrowed' by the researcher to build his/her own research inquiry". It justifies the rationale behind the research inquiry by aligning the research problem within a cognate theoretical perspective. To draw participants' "rich and in-depth insights" (Barret & Twycross, 2018, p. 64), the strengths, weaknesses, opportunities and threats (SWOT) analysis was adopted as both a theoretical framework and a measuring instrument. Keban, Arifin and Wahyono (2019, p. 86) define SWOT analysis as a tool containing a field-based assessment of the interface between internal characteristics (strengths and weaknesses) and external characteristics (opportunities and threats) that have a bearing on the success or failure of an organisation.

Fundamentally, *Strengths* entail a variety of internal factors that are likely to positively affect the achievement of the objectives that a school (as an organisation) has set for itself to achieve. *Weaknesses* are a variety of internal factors that are likely to negatively affect the achievement of the set objectives. *Opportunities* are a variety of external factors that are likely to propel the school to proactively address the factors that obstruct the achievement of its objectives. *Threats* are a variety of external factors that, if not paid attention to, can obstruct the school from achieving its objectives. Using SWOT analysis as an instrument enabled the researcher to identify the set organisational goals, applied processes and systems, mental preparedness and alignment of workers to the vision and mission of the organisation, as well as to understand the general sense of how, with all the mechanisms that are put in place, organisations go about executing the strategies of achieving the set goals (Ommani, 2011).

RESEARCH METHOD

This section of the study shines a spotlight on the methodological processes followed by the researcher to arrive at the findings of the study. Over and above detailing various data management processes (i.e. collection, synthesis and reduction), this section also exhibits ethical measures taken by the researcher to ensure that the study did not trample upon the rights of participants. Hereunder lies a comprehensive discussion of research methods applied in the study.

Research Design

The study was designed in a case study format, which according to Takahashi and Araujo (2019), helps with investigating people's day-to-day real-life experiences. Case studies situate the meaningfulness of the research findings as close to reality as possible (Yin, 2009) and make data collection and data triangulation feasible due to them taking place in a natural setting of the phenomenon (Nkambule, 2023).

Research Approach and Paradigm

This qualitative study has a social constructivism tone and contributed to the establishment of a research atmosphere under which the researcher was able to develop a rapport with participants and zone in on their lived experiences about KM application in a social research setting. Because social constructivism considers the reality upon which a research is narrated as also socially constructed and as influenced and shaped by the pre-existing theories and worldviews of the researcher (Alharahshel & Pius, 2020), locating this study within this paradigm enabled the researcher to illuminate participants' perceptions of KM application in the studied township schools through qualitative transcription. Qualitative research approach did not only complement the adopted research paradigm but also contributed a much needed "insight into the different aspects that needed to be taken into account when designing the study" (Mtshatsha & Omodan, 2022, p. 30).

Selection of Participants and Sampling Procedure

The study encompassed a sample of 14 participants who were purposively sampled to take part in it. Issues of distance, time scheduling and approachability of the school principals were factored into the researcher's decision to purposefully select specific schools and participants. Two schools, drawn from Emalahleni Circuits 1 and 2, took part in the study, with each school being represented by two teachers, two administrative clerks, two HoDs and the principal (meaning: seven participants per school). One of the schools was a combined school (from grade 1 to grade 9) and the other was a primary school (grade 1 to grade 7).

Teachers were selected based on the principle of experience and generational mix. For example, in each school, the selection criterion specified that one teacher participant had to be below the age of 30 whereas the other had to be over 45. Since public schools tend to have a minimum of two administrative clerks, they were automatically selected based on them being few and their close dealings with the capturing and retrieval processes of KM through ICT and manual filing systems. HoDs formed part of the study as they were needed to contribute an understanding of how their considered their role in the supervision of KM. Another automatic selection became principals, who formed part of the study upon having realised the need for them to express how they led the facilitation of KM application in their respective schools.

Data Collection

Data collection took a dual approach, that is, semi-structured individual interviews and document analysis. These interviews (which roughly lasted between 30 and 45 minutes) presented an opportunity for the researcher to obtain individual participants' perceptions about KM application in their schools. It was during that process that the researcher was able to conduct observations of participants' reactions to questions, which he wrote down in his field notes. Documents which Nkambule (2020) referred to in his study as the "knowledge workers' files" were perused by the researcher to form an opinion about KM application in the studied schools. This was also done to identify the elements of KM in curriculum delivery, curriculum management, office administration processes and school leadership.

Data Analysis

Data analysis was informed by Braun and Clark (2012) six steps. Due to the small sample, no software application was used to analyse data (Longhurst et al., 2020), implying that all data analysis steps were done manually. Manual coding has its own advantages. Contrary to computerised coding, which palliates the researcher's intensity of sifting through the data, manual

coding puts the researcher at the foothold of the "interpretative process" of data analysis (Lewins & Silver, 2009, p. 3).

This began with the researcher conducting a comprehensive inspection of all data sets to understand the gist of the collated data. Preliminary codes were then generated using open coding by highlighting interesting participants' responses (Longhurst et al., 2020). Codes were then arranged into general themes, after which they were synthesised to generate reoccurring ones. In keeping with the prescribed SWOT framework, "the researcher assigned these themes to either strength, weaknesses, opportunities, or threats" (Longhurst et al., 2020, p. 308).

Research Ethics

Every research involving human participants must be backed by ethical clearance from a statutory body or institutional committee responsible for promoting best practices in research (University of the West of England, n.a). In keeping with this, prior to the facilitation of data collection, ethical clearance was applied for and granted to the author by the University of South Africa's research ethics committee. The Mpumalanga Department of Education (MPDE) and the schools were informed in writing of the researcher's intention to conduct the study, which they agreed to without hesitation. In addition, through the permission of school principals, briefing sessions were facilitated with participants, during which they were oriented on their expected roles in the study. They were informed about their right to withdraw their candidacy in the study in instances where they felt otherwise about it.

Confidentiality and Anonymity Issues

The researcher's awareness of the ethical responsibility attached to his role in the study implied that, in the course of his interactions with participants, he had to continually reflect on the appropriateness of his approach and attitude towards participants (Saunders, Lewis & Thornhill, 2012). It was incumbent upon the researcher to come up with a method of classifying participants without revealing their personal details. As such, he combined the first initial of each participants' professional title with a number to classify them (e.g. T1-4, A1-A4, H1-4, and P1-2), as tabulated below.

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Occupational Category	Used Classification	Gender
Teacher 1, 2, 3, 4	T1, T2, T3, T4	Male, Female, Female, Male
HoD 1, 2, 3, 4	H1, H2, H3, H4	Male, Male, Female, Male
Administrative Clerk 1, 2, 3, 4	A1, A2, A3, A4	Female, Female
Principal 1, 2	P1, P2	Male, Male

Table 1. Anonymised Classification of Research Participants

FINDINGS AND DISCUSSION

Following an in-depth analysis of the transcriptions of participants' responses, a series of themes emerged. The researcher initially presents tabulated findings, after which a comprehensive discussion of the recurrent themes follows in accordance with the SWOT analysis template.

Table 2. Internal Analysis: School A and B

SCHOOL A: ANALYSIS OF INTERNAL FACTORS			
Strengths	Weaknesses		
Supportive School Governing Body (SGB)Good events planning and fundraising skills	 Subordinate staff excluded from decision-making transactions 		

- Teacher incubator programme
- Reliable internet connectivity in the office block
- Technologically trained young teachers
- Computer laboratory equipped with laptops
- Fully functional office technological equipment is sufficient for knowledge work
- Ubuntu-directed interpersonal skills towards external stakeholders
- Principal's inaccessibility for teachers and administrative clerks
- Senior teachers are resistant to experimenting with KM technologies
- Strained relations between subordinate staff and HoDs
- Confusions caused by too many communicators of the same message
- Teacher absenteeism
- No effective collaboration between novice teachers and senior teachers
- No internet connectivity in the classrooms
- Inconsistent practice of Ubuntu values (i.e. humanity and rationality) among staff

SCHOOL B: ANALYSIS OF INTERNAL FACTORS

Strengths

- Principal's good fundraising skills
- Supportive school governing body (SGB)
- All teachers capture their own data on the South African School Management System (SA-SAMS) and type their own assignment and examination papers
- Reliable internet connectivity in the office block
- Office technological equipment is sufficient for knowledge work
- One of the performing schools in the area
- Partially equipped school library

Weaknesses

- Principal's invisibility in the classrooms and staffroom
- Over-delegation of duties to HoDs
- Subordinate staff are afraid of the principal
- HoDs and teachers overwork administrative clerks
- Teacher absenteeism
- No internet connectivity in the classrooms
- Subordinate staff are only consulted once decisions are taken and are coerced into adopting them
- Without mentoring from senior teachers, young teachers are left to their own devices

Table 3. External Analysis: School A and B

SCHOOL A: ANALYSIS OF EXTERNAL ANALYSIS

Opportunities

- Generation of funds for procurement of KM technological equipment from the private sector and government agencies to capacitate the computer laboratory with printers and scanners and installing internet in the classroom for it to be used for teaching and learning purposes.
- Restoration of collaborative knowledgeexchange initiatives can be realised through school leaders' change of attitude towards workers' capabilities in contributing to the

Threats

- Crime in the area puts schools at risk of losing their KM resources and technological tools (i.e. laptops, internet connection, landlines, etc.)
- Reduced enrolment intake as a result of the dwindling image of the school.
- District's declaration of the school as underperforming school due to continued failure to work towards achieving common goals.
- Reduced productivity and collegiality.

- strategic vision of the school and emulating best practices from their peers in schools around the circuits.
- Improved knowledge-exchange initiative between senior and novice teachers.
- Restoration of Ubuntu, interpersonal consultations between the SMT and teachers will contribute to the reduction of negative perceptions among learners, parents and the community at large.
- Resignation of experienced teachers.
- Severely reduced generation and storage of workers' tacit knowledge especially from experienced teachers.
- Not enough display of Ubuntu at a collegial level.

SCHOOL B: ANALYSIS OF EXTERNAL FACTORS

Opportunities

- Organisational renewal opportunity presents an opportunity for the school to reclaim its credibility among the community as a model school.
- Fundraising skills will enable the sourcing of sponsorship to augment the KM tools and the library in the school.
- Through the support and expertise of various SGB members, the school can facilitate the process of rolling out internet connectivity into the classrooms.

Threats

- Downgrading of the school from being a performing to be an underperforming school due low staff morale and lack of common vision and purpose.
- Knowledge hoarding among groups of staff may give rise to some members wanting to go to schools who actively promote collaboration among staff.
- Loss of staff due to them feeling underappreciated by their leaders.
- Burglary and theft of computers, books and cable theft can jeopardise the progress of knowledge work in the school.

Based on interviews held with 14 participants, the recurring themes are as follows:

Analysis of Internal Factors (Strengths and Weaknesses)

Strengths

1. Supportive School Governing Body

SGBs are mandated to come up with proactive policies and strategies for schools' productivity and monitor schools' adherence to existential educational policies and the implementation of programmes and initiatives that have been put in place (Mphela, 2005). Participants remarked that there was a strong sense of unity among SGB members and that they whole-heartedly endorsed almost all the initiatives put forward for them to endorse. To that effect, T2 said:

"The SGB and SMT meet on a regular basis to discuss issues regarding school infrastructure, hiring of employees, etc. The fact that we see development in terms of building new classrooms, paving the schoolyard, installation of JoJo tanks."

In terms of composition, SGBs are comprised of parents or guardians of learners in the school, teaching, non-teaching staff and learners who are in grade 8 and above (DBE, 2022).

Parents constitute the biggest component of the SGBs.

2. Adequate Technological Equipment and Internet Connectivity in the Office Block

Despite some of the technological equipment being old and prone to frequent breakdowns, administrative clerks remarked thankfully that they were still able to carry out knowledge work through them. A4 commented:

"I use internet to search for suppliers or to search for previous question papers when I am being asked to. Almost every day we receive e-mails and we send some. Plus, working on SA-SAMS, which is an online system."

In the above comment, A4 referred to SA-SAMS. This is a KM software that captures, stores and retrieves all layers of data-related school operations (Mokwena, 2011). To express its importance in their jobs, A2 asserted:

"SA-SAMS is helping us a lot, we can now record information on it and if you are not able to finish, you can save the document and just come back later and continue. I used to struggle with using a pen to record information but now I know that I can use SA-SAMS."

These participants generally considered themselves lucky, as they mentioned that some of the schools in their respective vicinities were worse off in terms of ICT equipment.

3. Fundraising Skills

It transpired during the interviews held with participants from both schools that some of their co-workers possessed good fundraising skills. They remarked that through proper planning they can utilise these predispositions to generate funds to strengthen their KM efforts.

4. Young Generation of Teachers with ICT skills

Both schools have a crop of technologically savvy young teachers. They have reportedly advocated for the use of social media to facilitate knowledge exchange within and outside the boundaries of the schools with parents and other stakeholders. To explain how this worked, P1 added:

"The school has got a WhatsApp group. The phases also have their WhatsApp groups where we can communicate information like meetings and when something is happening or news that have happened; then we use WhatsApp. Facebook – some of the educators do use it. SMSs since the introduction of WhatsApp, SMSs are seldom used. Emails we use to mainly communicate with the Department of Education."

The presence of young teachers also poses a challenge for senior teachers to come on board and experiment with the available technologies. H3 commented:

"All teachers use SA-SAMS so that they can punch their own marks into the SA-SAMS. So that when there are any irregularities now when I moderate, I have to check who did punch the mark into the system."

5. Commendable Schools in their Respective Communities

Although they are far from being model schools, participants remarked that their schools were well respected in their respective localities, and were a preferred destination for many learners who come from other locations outside the vicinities of these schools.

Weakness

1. Principals' Inaccessibility on the Ground

While participants (mainly teachers and administrative clerks) contended that they had nothing personal against their principals, as they were generally good people; however, they did have a problem with their absence on the ground. They contended that principals' infrequent presence in the classroom block often created confusion, especially around issues of the communication of policy and strategy. T1 stated:

"For the most part, I think that we as educators Post Level One report to our HoDs. I think that information gets lost between the principal, the vice-principal and the HoDs before it comes to the teachers."

Teachers were particularly affected by this. They remarked that most of the misunderstanding that happened on the ground was partially caused by the principals' invisibility at the coalface of teaching and learning processes.

2. Unfair Treatment of Administrative Clerks by Teachers and HODs

Participants, specifically administrative clerks, lamented the treatment they were subjected to by teachers and HoDs. A3 stated:

"HoDs would storm into the office expecting you to abandon what you are doing and attend to their work. If you try and explain yourself to them, they do not consider what you say. So, you have no choice but to do as you are told."

Teachers also took advantage of the principals' absence on the ground. They too were reportedly making unreasonable demands to administrative clerks. A1 added: "Teachers ask for copies and when something comes out wrong, they sit on your neck".

Much of what was happening in these schools is consistent with the findings of Bayat, Naicker and Combrinck (2015) whose study established that this was a common trend in most South African schools.

3. No Internet Connectivity in the Classrooms

While there is internet connectivity in the office block, it was not the case with the classrooms. Participants considered this a disadvantage which directly affected their attempts to drastically transition into the fold of the 21st century education, which, among others, places a premium on the use of technology in teaching and learning.

4. Teacher Absenteeism

Teacher absenteeism was the HoDs' worst challenge. They were discontented by this due to it adversely affecting the teaching and learning programmes. H2 expressed that "teacher absenteeism makes it hard for us to share knowledge in class the best we can".

5. Knowledge Hoarding, Low Staff Morale and Loss of Tacit Knowledge

Knowledge hoarding was another issue of concern raised by participants. Young teachers directed this problem at senior teachers who were allegedly not keen on imparting their skills to them (Kalema, Motsi & Motjolopane, 2016).

6. Hierarchal Knowledge Exchange Culture and Exclusive Decision Making

Teachers were generally not happy with playing a second fiddle in decision-making processes. They cried foul about the manner in which their suggestions were being ruled out whenever they tabled suggestions. T4 averred:

"The platforms are very minimal for now because we do not have structures or teams where we can share knowledge."

This was corroborated by T1 who commented:

"I think there isn't really much of a platform. People are just left to their own devices."

7. Inconsistent Practice of Ubuntu Values at a Collegial Level

"Ubuntu is a culturally embedded African philosophy of collective personhood and caring for one another in communal and professional spaces" (Nkambule, 2022, p. 258). Participants remarked that there was an inconsistency in how staff applied the Ubuntu values among themselves, for example, A2 argued:

"The impatience that people have said a lot about the need for the spirit of Ubuntu to come to light in this place. I honestly do not think people even worry about showing that they care harnessing relationships in this school."

Msila (2008) contends that Ubuntu sustains the element of sharing and community among people. Therefore, according to participants, fervent practice of Ubuntu is a factor that is far from being fully realised in both schools.

Analysis of External Factors (Opportunities and Threats)

Opportunities

1. Fundraising Skills

Participants unanimously considered that the fundraising skills that lie within the premises of these schools, through proper planning and execution, could put them in good stead to attract sponsorships from the private and public sector agencies. They further indicated that this predisposition could also open up avenues for the arrangement of a series of fundraising events to draw funds which they can tap into to expand their KM application.

2. Avoiding Loss of Staff to Other Schools by Becoming Learning Organisations

A learning organisation is an entity that leverages collaboration and knowledge workers' talents to sustain a culture of productivity and healthy interpersonal undertakings throughout its operational value chain (Moloi, 2010). Participants remarked that on the basis of their contravention of the above cited traits, full compliance with the constructs of a learning organisation remained a pipeline dream, which was yet to be realised by any of the schools. They

surmised that by becoming learning organisations, these schools could create an environment that does not invoke in them the yearning for leaving the school.

3. Partnering with Community Structures to Prevent Stealing of Schools' Resources

In the wake of criminal elements that frequently took place in the vicinity of the schools, participants recognised the forging of partnerships with community formations to combat the obstinacy of burglary and cable theft.

Threats

1. Loss of Experienced Staff and Tacit Knowledge

Most participants, particularly senior teachers expressed that the prevalent low staff morale, absenteeism and low desire for partaking in organised CoPs were the result of them feeling underappreciated and excluded in key decision-making and knowledge-exchange transactions. Most of the participants, especially the younger ones, revealed they were seriously considering searching for greener pastures where their talents would be more appreciated. Senior teachers indicated that they were no longer planning to remain in the employ of the school longer than the minimum pensionable age.

2. Downgrade of the School, Reduced Public Confidence and Learner Enrolment

According to participants, the internal state of affairs in the schools could eventually compromise the administrative and instructional productivity of the school, which could put them at risk of being downgraded to a dysfunctional category on grounds of poor performance, frequent teacher absenteeism and reduced enrolment intake. Essentially, dysfunctional schools are characterised by "abnormal or impaired functioning" and failure to deliver "effective teaching and learning" (Pretorius, 2012, p. 879).

3. Criminal Elements Within Both Schools Communities

Another concern raised by participants pertained to burglary and theft of ICT equipment and books. P2 commented:

"Sadly, they keep stealing our IT equipment and once it is stolen, it takes time to replace it because we do not have that kind of money lying around. The cost of running a school is very high these days."

Cable theft was another problem that was purported to have frequently affected KM implementation in both schools. Participants expressed that drastic actions needed to be taken both by the schools and the community to address this problem.

The findings reflected upon in this SWOT generated thematic analysis highlighted participants' perceptions on the effectiveness of KM in their respective schools. Several studies whose focus was on investigating the effect of KM in schooling contexts across the developing world (c.f. Arumina & Pakkeerrapa, 2021; Awang et al., 2011; Ferdinandus, Imron & Supriyanto, 2015; Kurniawan, 2014; Ngozi, 2018; Osborn et al., 2021; Perez-Soltero et al., 2019) that are similar to that of South Africa, illustrate the resonance of KM with school administrative operations, curriculum delivery and planning as well as leadership and management. Through the study's adoption of SWOT analysis to evaluate the effectiveness of KM application at selected township schools, it went beyond the findings entailed in the aforementioned studies, as it covered the

positive (i.e. strengths) and negative (i.e. weaknesses) aspects of KM application, as well as several other aspects (i.e. threats) that threaten the integrity of KM application, and the productive outcomes (i.e. opportunities) that these schools stand to attract should they turn things around.

CONCLUSIONS

The findings of the study addressed questions around internal factors that are perceived to strengthen and weaken the integrity of KM, as well as perceived external factors that are likely to threaten the integrity of KM application at selected township schools.

It emerged that although both schools had several strengths including supportive school governing bodies, and reasonably efficient ICT infrastructure and connectivity, much of the KM weaknesses in both schools were caused by the prevalence of anti-collaborative knowledge-exchange practices and culture, the erosion of Ubuntu-directed ethical undertakings and ill treatment of administrative staff by teachers and HODs, mainly due to the principals' inaccessibility to the workforce at a lower level of knowledge work; all of which gave rise to (threats such as) teacher absenteeism, low staff morale, knowledge hoarding, poor communication of policy and loss of people's tacit knowledge assets. The study established that through addressing the weaknesses that pervade KM application, both schools would be able to open-up opportunities for self-renewal, improved fundraising and sponsorship sourcing, reclaiming public respect, extending internet connectivity beyond the office block to the classroom blocks, restoration of collaborative and effective knowledge exchange transactions and resuscitation of Ubuntu relational ethics of interdependence and mutual respect, and in the bigger scheme of things, cultivation of effective and ethical KM application.

In view of KM being an epitome of collaboration and ethical relationality (Romm & Nkambule, 2022) whose success or failure lies more in people's active participation in its sharing, acquisition, creation and application processes rather than in technological systems (Cong & Pandya, 2003 cited in Nkambule, 2020), it is recommended that both schools should reconsider ways of fostering a KM culture in which all workers' talents are, regardless of their occupational level, equally appreciated and recognised as the missing link in KM's success formula. Lastly, in their capacity as school leaders, it is recommended that principals should consider exploring the viability of incorporating Ubuntu as an ethical basis upon which to resuscitate the ailing state of interpersonal and non-discriminatory undertakings as well a collaborative KM culture among staff.

LIMITATION & FURTHER RESEARCH

Limitations of the study refer to several issues that the researcher fells might have affected the research proceedings, and these issues may include contextual factors, methodological processes and the interpretation of the results (Akanle, Ademuson & Shittu, 2020). Drawing only two participants from combined groups of 10 HODs and 29 teachers, constituted the first limitation of the study. Also, the COVID-19 induced participants' apprehension towards the researcher (Nkambule, 2023), may have also constituted another limitation in terms of "the extent to which participants responded openly and honestly" in the interviews (Aya et al., 2022, p. 90). Thus, it recommended that prospective researchers whose focus of attention is on researching variables that interface with KM application in schools and the education sector at large, should consider employing a mixed methods approach to be able to incorporate a larger sample size and heighten data transferability and credibility issues in their research.

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