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Creating a high-performing school management team: bringing talent to the table for effective service delivery

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The primary goal of this article is to help members of School Management Teams (SMT) in developing their abilities, which will lead to successful service delivery in secondary schools. The study used a qualitative research technique with an exploratory research design with a structured interview questionnaire to determine if SMTs had certain competences, knowledge, or attributes that increase their abilities and to provide recommendations for enhanced service delivery. The research enlisted the help of n = 12 participants from four different secondary schools to get first-hand experience of the phenomena under inquiry. Participants were specifically picked for their expertise, knowledge, and talents. Data were collected from participants via interviews, and the data were evaluated using content analysis. Atlas-ti (Version 8.2) was used to evaluate data collected from participants. The researcher used a qualitative research approach, namely a phenomenological strategy based on constructivism. With no data modification, this technique was adopted to understand the viewpoints of the SMT inside the selected schools. According to the research results, SMTs have competences, knowledge, and characteristics that increase their abilities, and strengthening these talents leads to efficient service delivery. Leadership, communication, collaboration, and problem-solving abilities were among the talents assessed. Understanding school legislation and regulations, curriculum creation, and teaching strategies were all part of the expertise. Among the characteristics were flexibility, resilience, inventiveness, and enthusiasm. The research advises that SMTs be provided opportunity to develop their abilities via training and mentoring programs based on the results. Several of the duties that School Management Teams (SMTs) are in charge of include procuring teaching and learning resources, updating physical buildings, coordinating community support for funding, and utilizing communication channels. The provision of inclusive learning support in schools is strongly related to these responsibilities. The study determined a certain set of talents and characteristics needed by SMTs, such as interpersonal skills, managerial skills, emotional intelligence, effective communication, and teambuilding skills. These qualities are essential for SMTs to carry out their duties and contribute to better service delivery. The future improvement of service delivery focus on three critical areas: strengthening academic performance, advancing social justice education, and raising student achievement. It is recommended that, by addressing these issues, service delivery within the educational system will be considerably improved in the future.

KEYWORDS

developing talent, educational sphere, effective service delivery, school management team, skills and talent management

Introduction

The paper is crucial because its objective is to assist School Management Teams (SMT) members to develop their talents and making their work easier, enjoyable, and manageable in the future leading toward effective service delivery. Poposa and Kumar (2019) cited, in the era of intense globalization, an organization's ability to thrive and survive depends on how much value it places on and how much it invests in the education and training of its professionals to raise their level of productivity and maximize return. The Department of Basic Education proactively made sure that management mechanisms, such as designating SMT in schools, were in place to ensure that schools have the appropriate support. This paper is essential since the SMT must do vital tasks such as planning, making decisions, managing conflicts, developing teams, negotiating, and overseeing school finances (Department of Education (DoE), 2021). Motivation can be characterized as the satisfaction of certain prerequisites through the exploration of the necessary conditions that encourage employees to work enthusiastically toward achieving organizational objectives and to increase productivity. In the realm of management research, motivation is typically defined as the drive to initiate, guide, and sustain desired business behaviors. The primary objective of motivation is to ensure that employees act willingly and effectively in alignment with the organization's goals. Consequently, heightened employee motivation has a direct impact on organizational performance and ultimately drives organizational success (Demir, 2015; Lee and Raschke, 2016; Yalçınkaya et al., 2019). The majority of the available research on School Management Teams (SMTs) focuses on examining the roles, management strategies, and leadership philosophies of SMTs in educational settings. There is, however, a huge study gap when it comes to pinpointing the precise competencies needed by SMT members to improve their gifts and aptitudes. This gap is especially obvious in the absence of thorough recommendations that could help to enhance service delivery in South African schools. The gap necessitates the following question: Which skills are needed for SMTs to improve their talents and which suggestions can be made to assist SMTs toward improved service delivery?

Problem statement

Lack of clarity on which type of talents are necessary for SMTs: Without a clear knowledge of what talents are required to boost service delivery, identifying methods for developing those talents may be challenging. As a result, the scientific study could require concentrate on identifying the skills needed for SMTs to enhance service delivery. Low availability of talent development resources means that even if the needed skills are identified, SMTs may encounter a lack of resources to develop these talents. This might include a limitation of training programs or professional development opportunities, which could restrict the efficacy of any offered alternatives. Difficulty in assessing the effect of talent development indicates the measuring of the impact of talent development programs on service delivery may be difficult, especially in the near term. This may make assessing the efficacy of any recommended solutions challenging. SMTs may be discouraged to participate in talent development initiatives if they do not see the benefit in such programs or see them as a poor priority in comparison to their other duties. To address these issues, a detailed examination of the present situation, including feedback from SMTs and other stakeholders, as well as a review of existing literature on talent development and service delivery in education, may be required. This information might be used to establish focused initiatives for boosting SMT talent development and service delivery in schools. The likelihood of successful advancement at a school greatly rises with the presence of an effective School Management Team (SMT). The success of the school is largely fueled by the presence of talented people in the SMT. The aspects investigated during this study are which talents or skills must a successful SMT possess, and what must a SMT do to ensure the successful operation of a school?

Conceptual and theoretical framework

Talent management focuses on the systematic identification of critical positions that contribute to the long-term competitive advantage of the organization. It entails identifying, developing, and managing talent pools comprised of exceptional individuals with the potential to be appointed to these positions both now and in the future (Collings and Mellahi, 2009; King and Vaiman, 2019). This conceptual and theoretical framework was done to answer the study's research questions which was to establish if SMT have certain competencies, knowledge, or traits to enhance their talents secondary schools and to come up with suggestions toward improved service delivery. The literature and findings according to the Department of Education, South African Schools Act (Republic of South Africa, 1996: 27), stresses that management should "not be considered as the work of a few" and should "be seen as an activity in which all members of educational organizations engage." The demand for immensely talented and knowledgeable school administration teams in the academic field, cited by Ntuzela (2008:11) indicates that "there is a gap in the South African literature with regard to teacher leadership and distributed leadership theory." Sharp disagreements and conflict were present during the policy-making process that resulted in the South African Schools Act, as well as areas of agreement (Karlsson et al., 2002).

Developing talent in the educational sphere

The success of talent management within an entity is closely related to how well the talent system is designed to address both micro and macro-level interactions across various relevant contexts affecting the company (King and Vaiman, 2019). According to Jarvin and Subotnik (2021), talent development and expertise entails using one's talents to acquire, retain, and apply both explicit knowledge and implicit or tacit knowledge within a field. This knowledge can be used to effectively identify and resolve significant problems.

School management team and it's role

Competent management team leaders can evaluate situations professionally and skillfully, actively seeking opportunities for the growth of their school or organization. When carrying out their

responsibilities, they exhibit strong character traits and qualities such as leadership competence and integrity, exemplifying a dynamic leadership style. To elaborate a bit on the term "competency" describes a person's aptitude or proficiency in a certain subject or profession. The significance of SMTs in the educational system is acknowledged by research, but there is little advice on the fundamental abilities that SMT members need to have to perform their jobs well. For SMTs to operate at their best and to promote successful outcomes in South African classrooms, it is essential to comprehend and define these abilities. Müller-Bloch and Kranz (2015), wrote that it describes the skills, abilities, knowledge, or competency needed to successfully carry out a task, achieve a goal, or play a role. Competencies might be more generic, signifying a broader collection of abilities and traits useful in multiple circumstances, or they can be more specialized to a career or trade. As a result, effective managers must embrace leadership principles, taking on the roles of a follower, a leader, and a communicator in any given situation. According to Wisittigars and Siengthai (2019), the core competencies needed by professionals in management in developed countries have been the subject of numerous research studies. In 2009, for instance, facilities management practitioners from 62 different countries participated in a thorough review of occupational activities that resulted in the identification of eleven key competences. Communication, emergency preparedness and business continuity, environmental stewardship and sustainability, finance and business savvy, human factors, leadership and strategic thinking, operations and maintenance, project management, quality assurance, real estate, and property management, as well as technology are just a few of the areas that these competencies cover (Charlesraj, 2014). A competent manager fosters teamwork, encourages team spirit, and effectively communicates to their followers a clear and concise organizational vision. They provide direction, which is backed up by well-informed and timely decisions aimed solely at improving the institution (Naidoo, 2019). Ntseto (2015), cited that the South African educational system is distinguished by a wide range of complicated features, and educators, academics, and researchers from all over the world concur that good leaders and managers are essential for schools to deliver the best possible education to their students. In the context of educational support for students with special education needs and learning barriers, the term "learning support" is frequently used. In this situation, learning support is essential to helping these students succeed academically. The roles of SMT's are:

- Procurement of teaching and learning resources
- · Improvement of physical facilities
- SMTs mobilization of parents and community on sourcing of funds
- SMTs use of communication channels

Skills and talent management

According to Stahl et al. (2012), active participation from management is a critical component of effective talent management implementation in large multinational corporations. As noted by Collings and Mellahi (2009), talent management entails differentiating

the workforce and relies on a distinct management framework, as described by Becker et al. (2009). Some elements of this framework may go beyond the HR architecture, as evidenced by management's direct involvement in talent development within the operational line and through in-role assignments.

Effective service delivery in schools

Many African countries face widespread poverty, which has a significant impact on their ability to provide high-quality education. Rural schools face unique challenges because of their location. Parental disinterest in their children's education, insufficient state funding, resource scarcity, underqualified teachers, and the practice of multi-grade teaching are all barriers to effective education in these schools. These impediments arise from a variety of sources, both within and outside of the school system, including local communities and educational authorities. Despite 25 years of democracy, progress in improving educational standards and learner performance in rural schools has been slow (Du Plessis and Mestry, 2019). Collective action for service delivery, according to Chowns (2014), is commonly perceived as a way for local communities to address delivery challenges by collaborating and co-producing services. Communitymanaged water pumps and community-run schools are examples of such initiatives. Donor efforts to support collective action, on the other hand, have had mixed results. Numerous government reforms in the education sector have aimed to reduce the state's cost of service provision by involving school communities in local service production and management (Tomkinson, 2007; Körling, 2011; Anunobi, 2022). Schools become more effective when professional learning communities dedicated to improving student performance are established, resulting in transformative changes in leadership and teaching practices (Naidoo, 2019).

Research question

- 1. Which skills are needed for SMTs to improve their talents?
- 2. What suggestions can be made to assist toward improved service delivery?

Empirical investigation

Due to a lack of clarity and limited resources for talent development, the research study focuses on identifying those necessary talents for SMTs to improve the delivery of services. Evaluating the effectiveness of talent development programs and including SMTs in such endeavors may be challenging as well. To address these difficulties, the research may need to conduct a detailed investigation into the current situation, including stakeholder input and a review of existing literature, to design specific tactics to improve SMT talent development and service delivery in schools. The research design in this study is exploratory research design. In this study, the researcher used interviews, document analysis, group discussions, and surveys to gather data. The data obtained from these methods were analyzed to identify patterns, themes, and relationships among the

data. The results were used to provide new perspectives on the research problem and to generate hypotheses that can be tested in future research. The exploratory research design in this study was effective in providing new perspectives on the research problem. By using a variety of data gathering methods, the researcher was able to generate new insights and hypotheses that can be tested in future research (Takhar-Lail, 2014; McNabb 2015; Saunders et al., 2016). Müller-Bloch and Kranz (2015) suggested that finding study areas that need more investigation is the main goal of performing a literature review. There are currently no methodological standards that ensure thoroughness and reproducibility when finding research gaps within qualitative literature reviews, despite the fact that it is widely acknowledged that literature reviews should reveal these research gaps.

Research strategy and methodology

Pathak et al. (2013), noted, the qualitative technique is used to comprehend people's attitudes, interactions, behaviors, and beliefs. It produces data that is not numerical. The researcher used qualitative research, namely a phenomenological strategy underpinned by constructivism as proposed by Blake and Pope (2008:59). Social interaction, knowledgeable other, and the zone of proximal development are three of Vygotsky's key elements (Dimitriadis and Kamberelis, 2006:2). Bodnar et al. (2013), cited that there is no data manipulation while using the qualitative research approach. The situation at the schools was documented and portrayed in its original form. The rationale of this approach was to understand the views of the SMT within the selected schools.

A well-organized data collection approach was used to collect information that is thought to be relevant to the research's goal, hypothesis, and open-ended questions as proposed by Grove et al. (2014). For this study, a qualitative research strategy with an exploratory research design was used by recruiting n=12Participants from SMTs at four secondary schools to get first-hand knowledge of the phenomena under investigation. Atlas-ti (Version 8.2) was used evaluation of data gathered from Participants. The function of related and relevant documents for the purpose of this study is an important source of data for this qualitative research study. The document analysis process is also reviewed in light of actual research experiences (Bowen, 2009). A methodical electronic worksheet was created to perform a SMT related document analysis. The diverse researchers team used all relevant search engines on the related topic as part of the methodical search of the international literature as well as their combined knowledge on SMT's in schools (Toivonen et al., 2020). Interviews were used to collect data, which was then analyzed using content. All ethical standards required for the investigation were followed. Semi-structured interviews were used to gather data, subjected to content analysis. The analysis's conclusions are addressed and supported by those of the literature review. In the end, this offers a thorough understanding of the research and gathers the solutions to the research questions. Openended questions used during the interviews helped the dialog to flow, allowing the interviewee to freely share extensive, reliable, and pertinent information based on expertise with the topic under discussion (Burns et al., 2017). Audio recordings of interviews with the participants' consent and collected data was transcribed, grouped into themes, and coded to initiate the data analysis. The researcher ensured protection of participants' identities, in line with the written agreement made between prior the interviews. The constructivism philosophical paradigm is a powerful instrument used to conduct research in a variety of fields of study and to carry out teaching and learning activities at any level of education (Adom et al., 2016). To represent individuals and participating schools in the study, the researcher employed pseudonyms in the codes. The reliability or rigor of a study is defined as the level of assurance in the data, interpretation, and methods used to verify its quality as suggested by Sekaran and Bougie (2016:374). In this study, trustworthiness criteria—credibility, reliability, confirmability, and transferability were accomplished. Ethical considerations were applied, strict ethical guidelines were followed, ethical considerations included confidentiality, informed permission, anti-plagiarism measures, anonymity, and privacy including adherence to COVID-19 protocols were implied. The POPI Act also formed part of the ethical principles that the researcher adhered to.

Findings

The findings of this study is presented and explained in detail here under:

The research paper focused on four schools located in Mahikeng, in the North West Province of South Africa. These four schools are all classified as secondary schools and are given a code of "SecS" for the purpose of this study. They are fairly distributed within an average distance of 10 km from each other. The research paper also includes a sample size of n = 12 participants consisting of SMT's, each of whom is allocated a code for identification purposes. The codes are presented in Table 1 and follow a specific pattern. The codes are structured in a way that allows the researcher to identify which school the participant belongs to and which group within that school they belong to. For example, the participants from School 1 (SecS1) are given codes P1a, P1b, and P1c, while those from School 2 (SecS2) are given codes P2a, P2b, and P2c and so on. The same pattern applies to participants from Schools 3 and 4. These codes allow the researchers to analyze data according to school and group, making it easier to draw conclusions and make comparisons. Overall, the research paper focuses on four secondary schools in Mahikeng and includes a sample size of 12 participants, each of whom is identified by a specific code. The codes are structured in a way that allows for easy analysis of data according to school and group.

The age, gender and qualifications ranges and number of years employed of participants in the Senior Management Teams (SMTs) research at four secondary schools in Mahikeng, North-West Province, South Africa will be briefly discussed.

TABLE 1 Schools and SMT's selected.

School	Code	Participants	
Secondary School 1	SecS1	P1a, P1b, P1c	
Secondary School 2	SecS2	P2a, P2b, P2c	
Secondary School 3	SecS3	P3a, P3b, P3c	
Secondary School 4	SecS4	P4a, P4b, P4c	
Total (n = 4)		Total (n = 12)	

- (i) Age: Participants were between the ages of 31 and 35, three were between the ages of 36 and 40, and the remainder of participants were beyond the age of 40. Therefore, having more knowledgeable SMT members participating in the research improves the dependability of the perceptions obtained. This is because of the reality that age and experience are often favorably interrelated. People tend to develop greater knowledge, abilities, and competence in each profession as they have more experience in that profession. As a result, the fact that many research participants were over the age of 40 suggests that they had greater experience and understanding of working as SMT members in secondary schools. As a result, their views and insights are more likely to be trustworthy and useful. As a result, it is reasonable to assume that the participants in the research of SMTs at secondary schools in Mahikeng, Nort-West Province of South Africa, were mostly over the age of 40. This implies that they have greater expertise and knowledge in this subject, which boosts the dependability of the study's observations and insights.
- (ii) Gender: The gender distribution of participants in the study of Senior Management Teams (SMTs) at four secondary schools in Mahikeng, South Africa's North West Province were as follows: male participants outnumbered females in the research. This reflects the gender discrepancies in South African culture, where men often occupy positions of power and authority while women are underrepresented in positions of leadership. In South Africa, gender differences are mirrored in a variety of industries, including education, where males often occupy higher posts such as headmasters and principals, while women are more likely to be teachers. This is due to a variety of causes, including society standards, cultural beliefs, and gender discrimination. The gender gap in the study's participants may impact the trustworthiness of the study's results since the experiences of male SMT members may vary from those of female SMT members. As a result, it is critical to examine gender diversity in research projects to ensure that genders' all viewpoints and experiences effectively reflected.
- (iii) Qualifications: The participants' highest educational achievements in the study of Senior Management Teams (SMTs) at four secondary schools in Mahikeng, North West Province, South Africa; many participants had a bachelor's degree, with two participants having an Honors degree. Just one of the participants has a master's degree. The large number of participants with bachelor's degrees understands the context of the study and can contribute to answering the research questions. This is because a bachelor's degree is the minimum requirement for many professional occupations, including teaching and educational management. As a result, SMT members with a bachelor's degree are more likely to comprehend the educational environment and the issues that schools and educator's encounter. Nonetheless, it is worth mentioning that the participants' academic credentials are not extremely diversified, with just one participant possessing a master's degree. This may restrict the study's depth and breadth of findings since individuals with greater

- educational achievements may have distinct viewpoints and experiences.
- (iv) Number of years employed: This study intended to explore the experiences of Senior Management Teams (SMTs) in four secondary schools in Mahikeng, South Africa's North-West Province. The research included obtaining comments from people with prior experience in these occupations as SMTs. There were twelve participants in the research. Two of the participants had one year of experience, one had two years, and another one had three years of experience. Yet, most participants had five years of experience as SMT members. The results prove that, because of their extensive engagement in the area, replies recorded from the participants with five years of experience are regarded as evidence of appropriate responses to the study questions. This suggests that the researchers feel that participants with more expertise are more likely than those with less experience to deliver insightful and correct replies to the study questions.

Table 2 in this qualitative study provides an overview of the research themes, categories, and corresponding codes used in this qualitative study. The first theme, "Unique/Necessary Skills," delves into the categories and codes associated with this theme, which include "Necessary skills" (NS), "Competent persons" (CP), and "SMT's fully skilled to perform the work they were hired for" (FSPW). The categories and codes associated with the second theme, "SMTs Training experience," are described. These include "No training was received" (NTR) and "Training received" (TR), which reflect the SMT members' training experiences. The third theme, "Set of skills or qualities needed," focuses on identifying the specific skills or qualities that SMT members must possess. This theme's codes cover a wide range of topics, including "Interpersonal skills" (IS), "Emotional Intelligence Skills" (EIS), "Management Skills" (MS), and "Team Building" (TB). These codes represent the specific skills and qualities that SMT members are expected to have in their roles and responsibilities. As a result, Table 2 provides a thorough breakdown of the themes, categories, and corresponding codes used in this qualitative study, providing a clear representation of the key elements explored in the research. These will be elaborated in detail hereunder.

TABLE 2 Themes, categories, and codes.

Theme		Category	Code
1. Unique/ Necessary skills	1.1	Necessary skills	NS
	1.2	Competent persons	СР
	1.3	SMT's fully skilled to perform the work they were hired for	FSPW
2. SMTs training experience	2.1	No training was received	NTR
	2.2	Training received	TR
3. Set of skills or qualities needed	3.1	Communication skills	CS
	3.2	Interpersonal skills	IS
	3.3	Emotional intelligence skills	EIS
	3.4	Management skills	MS
	3.5	Team building	ТВ

Theme 1: unique and/or necessary skills

Category 1.1: necessary skills

The question posed to participants was:

"Do you think that SMTs have all the necessary skills to manage schools most efficiently?"

While stakeholder involvement in school activities is critical, it is widely acknowledged that many parents and educators serving on school governing bodies (SGBs) lack the necessary knowledge and skills to make meaningful contributions to school governance (Mestry and Hlongwane, 2009). The South African Schools Act 84 of 1996 requires school governing bodies (SGBs) to take on the responsibility of managing school finances. Nonetheless, studies in this area have revealed a significant lack of essential knowledge and financial skills among SGB members, impeding their ability to manage school finances properly. As a result, principals have assumed additional financial responsibilities, seeking assistance from other members of school management teams (SMTs), such as heads of departments (HoDs) and deputy principals (Basson and Mestry, 2019).

Category 1.2: competent persons

Views from the participants extracted are as follows:

Participant from SecS1 R2a, said that:

"Some SMTs do not really qualify to handle the administration of the school, they are given the position due to lack of competent persons to handle the position."

Participant from SecS2 R4c, said that:

"I may say that some SMTs are elected through the act of nepotism. There is a lot of politics going on in the school environment. Some people who do not merit the position finally sit on the position."

Category 1.3: SMT's fully skilled to perform the work they were hired for (FSPW)

A question that was raised weather the participants felt that the SMTs are fully skilled to perform the work they were hired for, and the participants responded as captured in Table 2 of this paper. Several schools are dealing with difficulties such as poor discipline, teacher and student absenteeism, and high failure rates. Research indicates that personal initiative has a beneficial impact on both individuals and organizations. Individuals who possess personal initiative attain improved academic outcomes, demonstrate increased entrepreneurship, secure employment more readily, and exhibit greater perseverance in pursuing their aspirations. In contrast, business environments that foster personal initiative are perceived as being more productive, profitable, and adaptable. Despite consistent assertions from managers across diverse industries regarding the

importance of resourceful employees, personal initiative remains a subject that has not been sufficiently explored in the realms of school administration and organizational psychology (Frese and Fay, 2001; Frese, 2009; Tymon and Batistic, 2016; Yalçınkaya et al., 2019). These concerns suggest that the schools may not have a comprehensive system in place, which might be linked to the fact that the SMTs are not adequately qualified to handle the duties for which they have been appointed.

Participant's views of whether they are fully skilled to perform the work they were hired for, were as follows: SecS1 P1a: "No, they are not fully skilled. Some of them when they got the post of becoming part of the SMT, it was a very long time ago and I believe that there should have been workshops or development sessions arranged for them to get them into par with the current education system as compared to how things were done in the past when they became SMT. So I believe that they need growth." SecS2 P2a stated: "No I would not say they have a full skill for what they are doing because, when they.

have been appointed as SMT members I have never seen anything of training them or going for leadership courses. So, it means they still need to be trained." The last participant SexS3 P3a argued: "They are not fully skilled as everyone needs or requires an on-going development to enhance their skills."

The information above demonstrates that three participants agree that SMTs are not fully competent. Other input from participants were that:

"I think most of the SMT members find their feet whilst they are already serving. You will notice that most of the teachers, have been teaching without looking at the senior positions. It is only once they get there that they get trained to become the leaders... I know that at some stage when I was still in one of the sister-schools, I was sent to a training which lasted for five days wherein teachers were to be taken through the process of how to be best managers in their respective schools. So many teachers when they get promoted, they do not know what they are going to do."

This suggests that certain school administration teams are aware of a skills gap. SMTs may struggle to successfully administer the school and solve concerns if they lack the requisite abilities. Disciplinary issues, absenteeism, and high failure rates may all have a substantial impact on students' academic progress and the school's overall performance. As a result, it is critical that SMTs be effectively trained to handle these difficulties and deliver successful solutions. It should be noted that the abilities needed of an SMT may differ based on the environment and requirements of the school. Leadership, communication, strategic planning, financial management, and conflict resolution are all typical abilities required for successful school administration. The skills gap among SMTs may be contributing to the issues that schools are facing. As a result, schools must prioritize the training and development of their management teams to ensure that they are sufficiently able to handle the complexities of school administration and lead their schools to success.

Theme 2: SMTs training experience

According to Pasban and Nojedeh (2016), the importance of human skill is critical at all levels of employment. Human skill refers to the ability to interact, communicate, and collaborate effectively with others in the

workplace. It includes characteristics like emotional intelligence, teamwork, leadership, and interpersonal skills. Human skill is important at all levels of employment, from entry-level positions to managerial positions, in fostering positive working relationships, improving teamwork, and promoting a harmonious work environment. Employees with strong interpersonal skills are often better at establishing rapport, resolving conflicts, and effectively communicating ideas and information. These abilities are especially beneficial in collaborative projects, teambased tasks, and customer interactions (Tapala et al., 2021).

Category 2.1: no training was received

Participant P3c from SecS3 responded:

"No, I just went straight to my post. I have never been trained. There was no support at all. I am just using my experience form my JL1 post because you will know some of the things that you have been doing as the teacher given by the head of department as she will be monitoring you. Yeah, that is how you acquire some of the knowledge or skills."

Other Participants confirmed:

P2a from SecS2:

"No, I have never been formally trained. It is just through observation and past experience as a teacher that you get to know what the role of an SMT is, but there has not been formal training."

P2b from SecS2I:

"No, no, no, I have never received any formal training when switching from JL1 to JL2 position."

P1c & P3a from SecS1, and SecS3 respectively:

"No, I have not been trained. I had to do everything myself." "There are no workshops conducted after the SMT have been appointed to their position."

Participant P1b from SecS1 mentioned that:

"They work without knowing their roles... in fact I must say that school management team should among other things play a role in developing teachers at PL1 level for leadership roles; for management roles so that there will always be someone to step in and assist when it is required; however, there is no such development of teachers."

Participant P1a from SecS1 indicated that:

"I went to training here and there but it is not... I believe it is not enough. The training that I have been to is not enough. I have attended training in subject teaching. When I became an SMT member I did not go for any training in order to explain the roles that I was supposed to carry out and how I was supposed to carry out those roles."

Category 2.2: training was received

Participant P4a from SecS4 had a different viewpoint as the participant confirmed that:

"Yes, I was fortunate that when I got appointed I went through training. It was conducted by North-West University Potchefstroom Campus. What was good about it was the people who trained us were people who have been to the classroom before; people who have escalated through the stages to the senior positions, and as a result they were knowledgeable about so many cases."

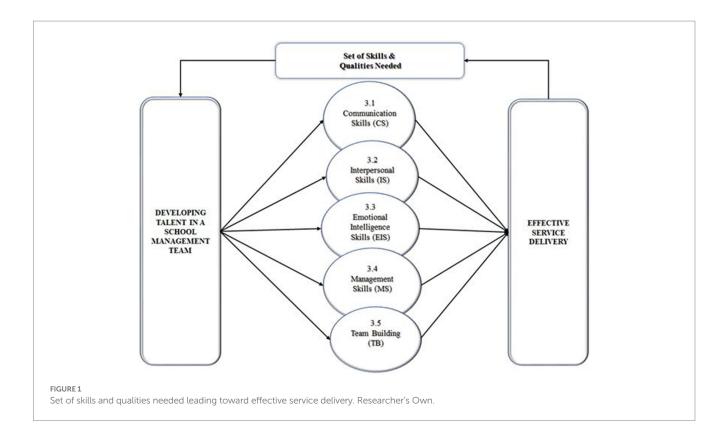
Both P4b & P4c both from SecS4 were in agreement that:

"Yes I have been trained... we go through leadership skills training and management." "I only got trained once through a workshop."

There are certain difficulties, particularly for post level one (PL1) educators who are promoted to post level two (PL2), which compels them to take on administrative responsibilities. In most instances, the post level one (PL1) educator would have been supervised by the SMT. Unfortunately, in the absence of training, new managers are often at a loss in defining and carrying out their new responsibilities. This is particularly the case for SecS1, SecS2, and SecS3 schools. Participants in these schools said that they simply use their intuition about what they think an SMT member should do. Since they had little or no training, they must depend on their own notions of what the position should include. A lack of training and introduction for post level one (PL1) educators going to the post level two (PL2) level may be harmful to good school administration. It may result in a lack of clarity in duties and responsibilities, which can lead to confusion and inefficiency. Participants from SecS4 schools, on the other hand, reported receiving some introduction training and follow-up programs, suggesting a more proactive approach to tackling these difficulties. Overall, 2 participants said "yes." and the majority (6) answered "no," therefore the need of providing proper training and support for educators promoted to management roles is stressed. This will ensure that they have the essential skills and knowledge to properly carry out their new tasks, eventually (See Table 2). It is essential that employees are motivated. In today's business landscape, competition is on the rise, and the pursuit of success underscores the significance of employee motivation for both the individual and the organization. Motivation impacts not only employee morale but also their attitudes and behaviors toward the organization, playing a vital role in achieving individual and organizational objectives. To rally individuals with diverse characteristics around a shared goal and drive success within an organization, effective coordination and motivation by the manager are essential (Tekin, 2019; Yalçınkaya et al., 2019).

Theme 3: set of skills or qualities needed

According to Pascoe et al. (2020), SMT play the role of authority figures in the realm of managing school climate and learning policies, steering the school toward improved teaching and learning practices. The SMTs active participation and the impact of the school culture on



shaping the overall atmosphere of the institution are the primary duties for SMT in fostering a positive school climate.

In this study, Theme 3, which deals with "Set of skills or qualities needed" (SQN) the focus is on identifying and comprehending the specific skills and qualities deemed necessary for the SMTs in the study. This theme seeks to shed light on the specific characteristics and competencies deemed important for participants in their respective roles. Communication skills, interpersonal skills, emotional intelligence skills, management skills and team building skills were identified and are thus elaborated hereunder (see Figure 1).

Category 3.1: communication skills

According to Hallam et al. (2013), a school's effectiveness and progress are dependent on its SMTs communication abilities (Mehmood et al., 2023). Reading, writing, speaking, and listening are all interconnected macro skills in communication (Tizon, 2019). Each of these abilities entails complex processes aimed at achieving specific objectives. Reading, for example, entails deciphering written symbols to understand their meaning (Barrot, 2017). In contrast, listening entails not only hearing what someone says but also engaging psychologically with the speaker (Tyagi, 2013). Writing is a process that involves the creation of meaning by expressing and exploring one's thoughts (Baliya et al., 2013). Finally, speaking entails the creation and sharing of meaning in various contexts through both verbal and nonverbal communication (Bahadorfar and Omidvar, 2014). SMT's in schools should improve communication skills, according to Mutunga (2022), managers spend more than 70% of their time on communication, making it a crucial component of

management. Without clear communication, comprehension could be compromised by the daily noise and distractions at work. Effective communication requires good flow between supervisors, subordinates, and co-workers in all three directions—down, up, and sideways—as well as the provision of insightful feedback. Establishing clear and concise communication channels is also important to prevent drawn-out bureaucratic procedures and complicated pathways that might degrade the quality of the information being delivered. Scherer et al. (2019), technology has a huge impact on almost every element of society. There are two major tendencies that have evolved in the field of education. First of all, curricula and evaluations in educational systems around the world are including digital capabilities (Beller, 2013; Siddiq et al., 2016; Flórez et al., 2017). The use of technology in the classroom is also recommended (Straub, 2009; Shute and Rahimi, 2017), either to facilitate learning or to conduct formative assessments (Shute and Rahimi, 2017). According to Fraillon et al. (2014), the main goal of education has changed to giving pupils the digital literacy skills necessary to successfully traverse the intricacies and dynamics contemporary cultures.

Category 3.2: interpersonal skills

Creating a positive school environment is a critical component of school improvement. According to studies, school management's interpersonal skills are critical in improving the general environment of the school (Mehmood et al., 2023). According to Yulianti (2019), trustworthiness and honesty are essential interpersonal skills for principals. Yulianti also stated that changing school policies without

consulting teachers has a negative impact on the school climate and erodes teachers' trust in the SMT.

Flexible Learning Programs that surround them (MacDonald et al., 2019).

Category 3.3: emotional intelligence skills

The social and behavioral performance of adolescents can be significantly influenced by their emotional intelligence (EI). Numerous studies have demonstrated that individuals with higher levels of EI tend to exhibit greater empathy, leading to more positive social interactions and relationships with their peers (Beauvais et al., 2017; Dolev and Leshem, 2017; Tiwari and Bhat, 2020; Trigueros et al., 2020).

Category 3.4: management skills

Management is made up of several well-known procedures such as planning, budgeting, job structuring, job staffing, performance measurement, and problem-solving. These processes enable an organization to consistently and predictably execute its known skills. On a daily and weekly basis, management ensures that promised products and services are delivered with consistent quality and within budget. Taking on this task is extremely difficult, especially in organizations of varying size and complexity. We frequently underestimate the true complexity of this responsibility, especially if we are not in positions of senior management. As a result, while management is necessary, it should not be confused with leadership (Sebastian et al., 2019). Financial management skills, accounting information systems are becoming more significant and popular across a range of industries, including education. These systems have shown to be helpful in managing financial data at educational institutions, covering duties like budget allocation, expense monitoring, payment of student fees, and general accounting. Automating school operations has become necessary in accordance with government policies to enable effective management. Despite the huge rise in computers purchased by Kenyan schools in recent years, their influence on service delivery has received little attention (Bii et al., 2021).

Category 3.5: team building

Mullins and Mclean (2019) define the factors that influence both team cohesiveness and performance as four key elements: membership, work environment, organization, and group development and maturity (Aung et al., 2021). Educators working in alternative education settings in Australia are frequently motivated by a desire to effect change and transform educational pathways and opportunities for young people. Relationship building, both among staff and with young people, is regarded as critical in this endeavor. Teachers in flexible learning environments, on the other hand, have noticed a prevalent sense of individualism among students, with the youth viewing learning solely in terms of personal fulfillment. Their ability to reengage in education is thought to be dependent on their own motivation and actions. Recent findings, however, paint a different picture, as young people recognize the collaborative nature of team building within the

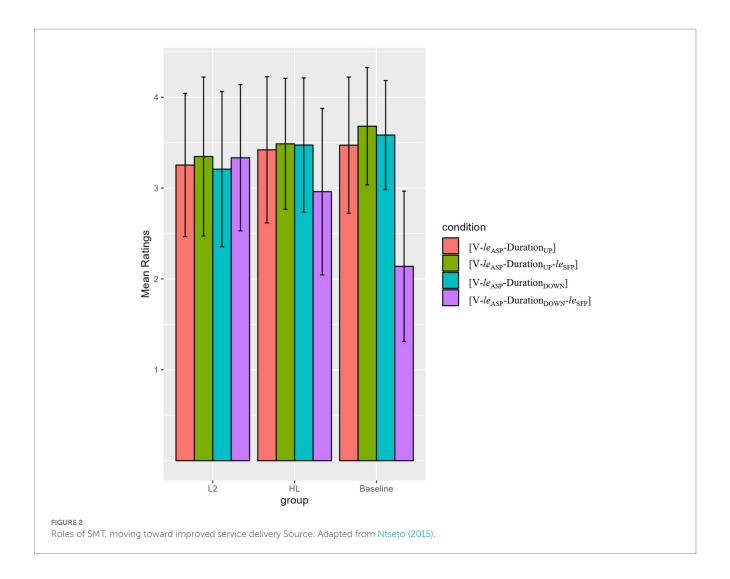
Implications of the findings for enhancing service delivery in secondary schools

The study's set of abilities and skills needed are outlined in the paper, this section will highlight in detail how these findings might improve secondary school service delivery. The report also suggests that schools create a climate that fosters talent development and that SMTs be acknowledged and rewarded for their work. According to the research, fostering talent in a school management team leads to more efficient service delivery. The research delves into the capabilities, knowledge, and attributes that boost SMTs' abilities and recommends approaches to improve secondary school service delivery. The report also underlines the need of offering chances for talent development and recognizing the achievements of SMTs. The study emphasized the importance of specific skills for SMT success in driving school improvement. Effective communication, strong interpersonal relationships, emotional intelligence, competent management abilities, and effective team building were identified as critical for SMTs to facilitate progress and create a cohesive work environment. These abilities are critical for information exchange, collaboration, conflict resolution, emotional understanding, resource allocation, and fostering a shared vision, all of which lead to long-term school improvement.

The acquisition of teaching and learning resources, the upgrading of physical facilities, the organization of parents and the community to secure funding, and the use of communication channels are only a few of the tasks played by School Management Teams (SMTs) in Figure 2. The provision of inclusive learning support in schools is strongly tied to these duties of the SMTs. For the purposes of this study, a particular set of abilities and traits were determined to be required of the SMTs. These include interpersonal, managerial, emotional intelligence, effective communication, and team-building abilities. For SMTs to effectively carry out their duties and contribute to the enhancement of service delivery, several abilities and characteristics are essential. It is essential to underline that three crucial areas have been emphasized to improve service delivery in the future. The improvement of academic performance is seen as the first important component. Second, it is believed that social justice education needs to receive more attention. As a final goal, raising student achievement is also emphasized. Future service delivery within the educational system can be greatly enhanced by addressing these issues. Figure 2, is a consolidation of the roles of SMT leading toward improved service delivery which includes the findings from this study to guide and assist to better understand how these skills can be developed and used to address the issues faced by SMTs in the schools going forward, and therefore the findings of this paper suggest the following to assist improving service delivery in schools: -.

Improved academic achievement

Researchers have known for a while those elements such as the school curriculum, school rules, and socioeconomic status (SES) have



a substantial impact on the learning process (Daily et al., 2019). Learner's academic achievement has a big impact on how they develop because academic skill mastery, especially in reading and math, has a big impact on many other areas of life. These include longevity, physical and mental health, work performance and income, and educational attainment (Wrulich et al., 2014; Calvin et al., 2017; Peng and Kievit, 2020).

Increased social justice teaching

Lambert (2018), highlight how an open course or textbook might adhere to the social justice principles in three different ways. To obtain the greatest socially just result, it should ideally adhere to all three principles. It is crucial to remember that offering an open textbook to every student—especially if they are largely already privileged in terms of education—may not always advance social justice. As it may permit a variety of outcomes for a different group of learners, the impact of such offering relies on the specific cohort and their requirements. Those who already have additional advantages because of their circumstances may benefit even more in top cohorts.

- Redistributive justice: For students who, owing to their sociocultural conditions, are unable to afford them, free educational resources, such as textbooks or courses, are made available. This is crucial for students who might otherwise be denied access to educational opportunities or face a higher chance of failing their classes.
- Recognitive justice: By incorporating pictures, case studies, and
 information from women, First Nations people, and other
 marginalized groups within any given national, regional, or
 learning environment, the open curriculum celebrates sociocultural diversity. Both in open tasks and in the given feedback,
 it acknowledges and values the legitimacy of many opinions
 and experiences.
- Representational justice: The right to self-determination allows
 marginalized people and groups to tell their own stories rather
 than having others tell them for them. Open educational resources
 (OER) books and materials are encouraged to be co-constructed,
 allowing people of color to offer their opinions on other people of
 color, women to share their experiences regarding other women,
 and homosexual people to express their thoughts on gay life. To
 guarantee that silent and minority perspectives are given equal
 time in open online conversations, facilitation is crucial.

Improved learner achievement

Mweli, the director-general of basic education, highlighted several factors that influenced the latest cohort of matric students' results during a recent briefing. These factors include a trimmed curriculum that focuses on fundamentals, revised assessment programs, the cumulative impact of learning losses, insufficient psycho-social support, fewer exams, and the general challenges of learning under Covid-19 conditions (Labuschagne, 2023). Wahono et al., 2020, cite that the teaching, learning, and integration of science, technology, math, and engineering disciplines and skills within STEM courses are all included in what is known as STEM education. A key topic in education is how STEM education affects students' learning results. The main emphasis is on using application and problem-solving techniques to address problems and difficulties in the actual world. STEM education places a strong emphasis on practical applications (Cameron and Craig, 2016; Yildirim and Turk, 2018) to give students the knowledge and skills they need to succeed in a world that is constantly changing and highly competitive. The main emphasis of STEM learning activities is on the development of soft skills, which are crucial for students' learning. Soft skills include problem-solving, higher-order thinking, and collaborative work (Meyrick, 2011; Li et al., 2016).

Discussion

The School Management Team (SMT) is primarily responsible for professional management, while the School Governing Body (SGB) is entrusted with governance duties, according to the South African Schools Act (Republic of South Africa, 1996). Principals have dual roles because they serve on the SGB and oversee the day-to-day operations of the school on behalf of provincial heads of education. Furthermore, the principal is a member of the SMT (Basson and Mestry, 2019). The SMT does not have the necessary skills and does not know what is expected of them in their roles, otherwise the school system would not have been in the tight situation it currently finds itself. According to Labuschagne (2023), despite an improvement in the official pass rate, the actual pass rate has declined. The pass rate for the Grade 10 cohort is 52.5%, which is slightly lower than the 53.4% recorded in 2021. However, it is still approximately 10% points higher than previous years' average rates, dating back to at least 2010. The highest official pass rate of 81.3% was reported in 2019. This increase in pass rate can be attributed to a variety of factors, including a higher number of matric students taking the exams this year compared to previous years. There will be a 3% increase in full-time candidates and a 14% increase in part-time candidates by 2022. In addition, changes were made to the assessment system for Grades 10 and 11 to account for lost learning time due to the Covid-19 pandemic. These changes included a focus on the essential curriculum in Grades 10 and 11, changes to the assessment program, and a shift to school-based assessments with a 40/60 weighting in comparison to exams. The study emphasized the importance of specific skills for school management teams' (SMT's) success in facilitating and advancing school improvement efforts. Communication abilities are required for effective information exchange as well as fostering clear and concise communication within the team. Interpersonal skills allow SMT members to effectively build positive relationships, collaborate, and resolve conflicts. Emotional intelligence skills aid in the understanding and management of emotions, the promotion of empathy, and the creation of a supportive work environment. Shet et al. (2019) stressed that although the concept of competence has many facets, it all stems from the same desire to help people perform better at work. Management skills include a variety of competencies such as planning, organizing, and decision-making, which enable SMTs to allocate resources effectively and achieve organizational goals. Competencies are frequently used in the workplace to specify the desired skills and abilities for a certain position. They describe the abilities, competencies, and conduct needed for people to be successful in their positions. Competencies can comprise both hard and soft talents, such as communication, problem-solving, and leadership skills, as well as technical skills like programming or data analysis (Coussement et al., 2017). Finally, team-building skills are critical for developing a cohesive and motivated SMT, promoting collaboration, trust, and shared vision, all of which are critical for driving long-term school improvement. Connolly et al. (2017), cited that, although it usually and frequently does, carrying a responsibility of this kind is a state of mind that does not require action. Educational talent is taking some sort of action and involves persuading others to accomplish goals in educational contexts. People in charge of a delegated responsibility influence others and are so leading when they act with that obligation. Although responsible educational talent management should always be practiced, this is not always the case. Leadership in education does not always imply being accountable for the operation of the educational system. The educational process is being impacted by rapid changes and increasing needs, leading to emerging social demands. As a result, educational institutions are under pressure to become more dynamic. These institutions are crucial as they deal with human input and products. Therefore, they must adapt to meet the needs of the 21st century's information age and identify and educate potential leaders. School administrators play a fundamental role in this process. Effective management, a strong cultural foundation, and strategic leadership are necessary for utilizing the resources of educational institutions and ensuring their sustainability amidst changing global conditions. Schools are particularly dependent on sustainable leadership as they are the primary organizations responsible for education (Yukl, 2008; Vélez et al., 2017).

Limitations of the study

This study is limited to the experiences of SMTs in schools in the North West Province of South Africa. Its empirical results can help management within the Department of Education, principals and SMT's to develop appropriate training programs for those identified skills needed to improve their own talents/abilities as well as guidance toward policy development and the complicated south African educational system in particular for SMTs. It can also assist newly appointed SMTs to in their early appointment stage, identify and plan toward developing talents which are essential for SMT in the educational sector linking it toward improved service delivery in schools in the future.

Conclusion

In addition to basic leadership skills, school administrators are expected to foster a strong school culture. This requires demonstrating leadership behavior that establishes positive relationships with all stakeholders and activating the school's dynamics. It is important for the educational institution to have a positive organizational image, as this reflects the school's value and acts as a form of institutional identity in the eyes of society. This perception is crucial for the school's ability to adapt to environmental changes and create a sustainable organization (Altınay, 2015; Kalkan et al., 2020). The SASA (1996) emphasizes that self-management will assist schools in carrying out their mission-driven values. Internal devolution of authority within the school must go hand in hand with selfmanagement (Ntuzela, 2008). The paper concludes with future recommendations cited by Hambrick et al. (1998) although there is a significant body of research on the management of talents and how the top executive influences organizational performance leading to effective service delivery and applicable recommendations to address the improvement moving forward.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

The studies involving human participants were reviewed and approved by NWU-01122-20-52. The patients/participants provided

References

Adom, D., Yeboah, A., and Ankrah, A. K. (2016). Constructivism philosophical paradigm: implication for research, teaching and learning. Global journal of arts humanities and social sciences. Global J. Arts Human. Soc. Sci. 4, 1–9.

Altınay, F. A. (2015). Are headmasters' digital leaders in school culture? *Educ. Sci.* 40, 77–86. doi: 10.15390/EB.2015.4534

Anunobi, O. (2022). Teachers' deployment and utilization for quality service delivery in public secondary schools in rivers state. $Journal.\ Pract.\ 6:112.$

Aung, Y. M., Yangon, M., and Lu, L. H. (2021). Strategic planning process impact on management functions, employee engagement and team cohesiveness: a case of small Enterprise in Myanmar. *Int. J. Innov. Sci. Res. Technol.* 6, 219–221.

Bahadorfar, M., and Omidvar, R. (2014). Technology in teaching speaking skill. Acme Int. J. Multidiscipl. Res. 2:13.

Baliya, R., Teacher, K. V. N., and Jammu, G. N. (2013). Enhancing writing abilities of primary class students through cooperative learning strategies: an experimental study. *Int. J. Behav. Social Movement Sci.* 2, 294–305.

Barrot, J. S. (2017). Research impact and productivity of southeast Asian countries in language and linguistics. Scientometrics~1, 1-15.~doi:~10.1007/s11192-016-2163-3

Basson, P., and Mestry, R. (2019). Collaboration between school management teams and governing bodies in effectively managing public primary school finances. S. Afr. J. Educ. 39, 1–11. doi: 10.15700/saje.v39n2a1688

Beauvais, A., Andreychik, M., and Henkel, L. A. (2017). The role of emotional intelligence and empathy in compassionate nursing care. *Mindful. Compass.* 2,92-100. doi: 10.1016/j.mincom.2017.09.001

Becker, B. E., Huselid, M. A., and Beatty, R. W. (2009). The differentiated workforce: Transforming talent into strategic impact. Harvard: Business Press.

Beller, M. (2013, 2013). "Technologies in large-scale assessments: new directions, challenges, and opportunities" in *The role of international large-scale assessments: Perspectives*

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from technology, economy, and educational research. eds. M. Davier, E. Gonzalez, I. Kirsch and K. Yamamoto (Dordrecht: Springer Science+Business Media), 25–45.

Bii, B., Rugutt, W., and Rotich, J. K. (2021). Effect of accounting information software use on service delivery in public secondary schools in Kericho County. New York: SAGE.

Blake, B., and Pope, T. (2008). Developmental psychology: incorporating Piaget's and Vygotsky's in classrooms. *J. Cross Discipl. Perspec. Educ.* 1, 59–67.

Bodnar, M., Namieśnik, J., and Konieczka, P. (2013). Validation of a sampling procedure. *TrAC Trends Anal. Chem.* 51, 117–126. doi: 10.1016/j.trac.2013.06.011

Bowen, G. A. (2009). Document analysis as a qualitative research method. Qual. Res. J. 9, 27–40. doi: 10.3316/QRJ0902027

Burns, A. C., Veeck, A., and Bush, R. F. (2017). Marketing research international edition, 8th Edn. Boston, MA: Pearson.

Calvin, C. M., Batty, G. D., Der, G., Brett, C. E., Taylor, A., Pattie, A., et al. (2017). Childhood intelligence in relation to major causes of death in 68 year follow-up: prospective population study. *Business Manag. J.* 357:2708. doi: 10.1136/bmj. i2708

Cameron, S., and Craig, C. (2016). STEM labs for middle grades, grades 5–8. Illinois: Mark Twain Media.

Charlesraj, V. P. (2014). Knowledge-based building information modelling (K-BIM) for facilities management. Paper presented at the 31st international symposium on automation and robotics in construction and mining (ISARC 2014).

Chowns, E. (2014). The political economy of community management: A study of factors influencing sustainability in Malawi's rural water supply sector. Birmingham of Birmingham

Collings, D. G., and Mellahi, K. (2009). Strategic talent management: a review and research agenda. *Human Res. Manag. Rev.* 19, 304–313. doi: 10.1016/j.hrmr.2009.04.001

Connolly, M., James, C., and Fertig, M. (2017). The difference between educational management and educational leadership and the importance of educational responsibility. $Educ.\ Manag.\ Admin.\ Leadership\ 47:17745.\ doi: 10.1177/1741143217745$

Coussement, K., Lessmann, S., and Verstraeten, G. (2017). A comparative analysis of data preparation algorithms for customer churn prediction: a case study in the telecommunication industry. *Decis. Support. Syst.* 95, 27–36. doi: 10.1016/j. dss.2016.11.007

Daily, S. M., Mann, M. J., Kristjansson, A. L., Smith, M. L., and Zullig, K. J. (2019). School climate and academic achievement in middle and high school students. *J. Sch. Health* 89, 173–180. doi: 10.1111/josh.12726

Demir, M. (2015). The relation between the teachers motivation and inspectors vocational guiding level to class teachers. Master's thesis. Uşak Üniversitesi, Uşak, Turkey.

Department of Education (DoE). (2021). Information Guide.

Dimitriadis, G., and Kamberelis, G. (2006). Theory of education. Adapted from theory for religious studies, by William E. Deal & Timothy K. Beal. Available at: https://www.taylorfrancis.com/books/mono/10.4324/9780203958933/theory-education-greg-dimitriadis-george-kamberelis (Accessed January 26, 2023)

Doley, N., and Leshem, S. (2017). Developing emotional intelligence competence among teachers. *Teach. Dev.* 21, 21–39. doi: 10.1080/13664530.2016.1207093

Du Plessis, P. R., and Mestry, R. (2019). Teachers for rural schools–a challenge for South Africa. South African J. Educ. 39, 1–9.

Flórez, F. B., Casallas, R., Hernández, M., Reyes, A., Restrepo, S., and Danies, G. (2017). Changing a generation's way of thinking: teaching computational thinking through programming. *Rev. Educ. Res.* 87, 834–860. doi: 10.3102/00346543177 10096

Fraillon, J., Ainley, J., Schulz, W., Friedman, T., and Gebhardt, E. (2014). Preparing for life in a digital age – the IEA international computer and information literacy study international report. New York: Springer International Publishing.

Frese, M. (2009). Toward a psychology of entrepreneurship an action theory. Perspect 5, 435–494.

Frese, M., and Fay, D. (2001). "Personal initiative (PI): an active performance concept for work in the 21st century" in *Research in organizational behavior: Staw, B.M.* ed. R. M. Sutton, vol. 1 (Amsterdam: Elsevier Science), 133–187.

Grove, S. K., Burns, N., and Gray, J. R. (2014). *Understanding nursing research: Building an evidence-based practice. 6th Edn.* Amsterdam: Elsevier Health Sciences.

Hallam, P. R., Boren, D. M., Hite, J. M., Hite, S. J., and Mugimu, C. B. (2013). Headteacher visibility and teacher perceptions of headteacher trustworthiness: a comparison of the Ugandan context to existing theory. *Int. J. Educ. Dev.* 33, 510–520. doi: 10.1016/j.ijedudev

Hambrick, D. C., Nadler, D. A., and Michael, L. (1998). Navigating change: How CEOs, top teams, and boards steer transformation. Boston: Harvard Business School Press.

Jarvin, L., and Subotnik, R. F. (2021). "Understanding elite talent in academic domains: a developmental trajectory from basic abilities to scholarly productivity/ artistry" in *The handbook of secondary gifted education*. eds. F. A. Dixon and S. M. Moon (New York: Routledge), 217–235.

Kalkan, Ü., Altınay Aksal, F., Altınay Gazi, Z., Atasoy, R., and Dağlı, G. (2020). The relationship between school administrators' leadership styles, school culture, and organizational image. *SAGE Open* 10:215824402090208. doi: 10.1177/2158244020902081

Karlsson, B., McPherson, G., and Pampallis, J. (2002). A critical examination of the development of school governance policy and its implications for achieving equity. Routledge: London.

King, K. A., and Vaiman, V. (2019). Enabling effective talent management through a macro-contingent approach: a framework for research and practice. *BRQ Bus. Res. Q.* 22, 194–206. doi: 10.1016/j.brq.2019.04.005

Körling, G. (2011). In search of the state: An ethnography of public service provision in urban Niger *Uppsala University Library, Uppsala*. Uppsala: Acta Universitatis Upsaliensis. Uppsala Studies in Cultural Anthropology. 299.

Labuschagne, H. (2023). South Africa's real 2022 matric pass rate — 53%. https://mybroadband.co.za/news/trending/476959-south-africas-real-2022-matric-pass-rate-53.html (Accessed March 23, 2023)

Lambert, S. R. (2018). Changing our (dis)course: a distinctive social justice aligned definition of open education. *J. Learn. Dev.* 5, 225–244.

Lee, M. T., and Raschke, R. L. (2016). Understanding employee motivation and organizational performance: arguments for a set-theoretic approach. *J. Innov. Knowl.* 1, 162–169. doi: 10.1016/j.jik.2016.01.004

Li, Y., Huang, Z., Jiang, M., and Chang, T. W. (2016). The effect on pupils' science performance and problem-solving ability through lego: an engineering design-based modeling approach. *J. Educ. Technol. Soc.* 19

MacDonald, F., Easton, B., and Bottrell, D. (2019). "Beyond me-ism: teamwork, team building and cooperation in flexible learning environments" in *Harnessing the transformative power of education*. eds. B. Shellely, K. Te Riele, N. Brown and T. Crellin (Leiden: Brill), 167–179.

McNabb, D. E. (2015). Research methods for political science: Quantitative and qualitative methods. 2nd ed. New York: Routledge.

Mehmood, T., Hassan, D. H. C., and Taresh, S. (2023). The role of the interpersonal skills of the school principals in optimizing positive school climate: a concept paper. *Int. J. Emerg. Issues Soc. Sci.* 1, 38–54.

Mestry, R., and Hlongwane, S. (2009). Perspectives on the training of school governing bodies: towards an effective and efficient financial management system. *Africa Educ. Rev.* 6, 324–342. doi: 10.1080/18146620903274654

Meyrick, K. M. (2011). How STEM education improves student learning. Meridian K-12 School Computer Technol. J. 14, 1–6.

Müller-Bloch, C., and Kranz, J. (2015). A framework for rigorously identifying research gaps in qualitative literature reviews. Proceedings of the 36th International Conference on Information Systems, Fort Worth, 1–19.

Mullins, L. J., and McLean, J. E. (2019). Organisational behaviour in the workplace. Harlow: Pearson.

Mutunga, S. L. (2022). Effects of communication on quality service delivery in Mission hospitals in Meru County, Kenya. *Int. J. Bus. Manag. Rev.* 10, 39–50.

Naidoo, P. (2019). Perceptions of teachers and school management teams of the leadership roles of public-school principals. South African. *J. Educ.* 39

Ntseto, R. M. (2015). The role of school management teams (SMTs) in rendering learning support in public primary schools. (Doctoral dissertation, University of the Free State)

Ntuzela, M. A. (2008). The role of school management team in developing teacher leadership: the case of two public primary schools on the lower south coast of Kwazulu-Natal, South Africa. https://researchspace.ukzn.ac.za/xmlui/handle/10413/81

Pasban, M., and Nojedeh, S. H. (2016). A review of the role of human capital in the organization [paper presentation]. The 3rd international conference on new challenges in management and organization: Organization and leadership, Dubai, UAE.

Pascoe, M. C., Hetrick, S. E., and Parker, A. G. (2020). The impact of stress on students in secondary school and higher education. *Int. J. Adolesc. Youth* 25, 104–112. doi: 10.1080/02673843.2019.1596823

Pathak, V., Jena, B., and Kalra, S. (2013). Qualitative research. Perspect. Clin. Res. 4:192.

Peng, P., and Kievit, R. A. (2020). The development of academic achievement and cognitive abilities: a bidirectional perspective. *Child Dev. Perspect.* 14, 15–20. doi: 10.1111/cdep.12352

Poposa, K. K., and Kumar, Y. M. (2019). Impact of training and development practices on job satisfaction: a study of faculty members of technical education institutes. *J. Manag. Labour Stud.* 44. doi: 10.1177/0258042X1985164

Republic of South Africa. (1996). Act No. 84, 1996: South African schools act, 1996. Government Gazette 17579

SASA. (1996). South African Schools Act, 1996.

Saunders, M. N. K., Lewis, P., and Thornhill, A. (2016). Research methods for business students. 7th Edn. Harlow, England: Pearson.

Scherer, R., Siddiq, F., and Tondeur, J. (2019). The technology acceptance model (TAM): a meta-analytic structural equation modeling approach to explaining teachers' adoption of digital technology in education. *Comput. Educ.* 128, 13–35. doi: 10.1016/j. compedu.2018.09.009

Sebastian, J., Allensworth, E., Wiedermann, W., Hochbein, C., and Cunningham, M. (2019). Principal leadership and school performance: an examination of instructional leadership and organizational management. *Leadersh. Policy Sch.* 18, 591–613. doi: 10.1080/15700763.2018.1513151

Sekaran, U., and Bougie, R. (2016). Research methods for business: A skill-building approach. 7th Edn. West Sussex: Wiley & Sons.

Shet, S. V., Patil, S. V., and Chandawarkar, M. R. (2019). Competency based superior performance and organizational effectiveness. *Int. J. Product. Perform. Manag.* 68, 753–773.

Shute, V. J., and Rahimi, S. (2017). Review of computer-based assessment for learning in elementary and secondary education. *J. Comput. Assist. Learn.* 33, 1–19. doi: 10.1111/jcal.12172

Siddiq, F., Hatlevik, O. E., Olsen, R. V., Throndsen, I., and Scherer, R. (2016). Taking a future perspective by learning from the past – a systematic review of assessment instruments that aim to measure primary and secondary school students' ICT literacy. *Educ. Res. Rev.* 19, 58–84. doi: 10.1016/j.edurev.2016.05.002

Stahl, G. K., Björkman, I., Farndale, E., Morris, S. S., Paauwe, J., and Stiles, P. (2012). Six principles of effective global talent management. MIT Sloan. *Manag. Rev.* 53, 25–32.

Straub, E. T. (2009). Understanding technology adoption: theory and future directions for informal learning. *Rev. Educ. Res.* 79, 625–649. doi: 10.3102/0034654308325896

Takhar-Lail, A. (2014). Market research methodologies: Multi-method and qualitative approaches: Multi-method and qualitative approaches. Hershey, PA: IGI Global.

Tapala, T. T., Van Niekerk, M. P., and Mentz, K. (2021). Curriculum leadership barriers experienced by heads of department: a look at south African secondary schools. *Int. J. Leadersh. Educ.* 24, 771–788. doi: 10.1080/13603124.2020.1740796

Tekin, T. (2019). The relationship between initiative levels and problem-solving skills of school administrators. Master's Thesis. Gaziosmanpaşa Üniversitesi, Tokat, Turkey.

Tiwari, P., and Bhat, A. K. (2020). "The effect of emotional intelligence, empathy and perceived social pressure on predicting social entrepreneurial intention: a field research" in *Methodological issues in social entrepreneurship knowledge and practice*. eds. S. Majumdar and E. Reji (Singapore: Springer), 137–158.

Tizon, C. M. (2019). Senior high school teachers' perceived level of communication skills and teaching performance. *Int. Linguis. Res.* 2, p17–p19. doi: 10.30560/ilr.v2n3p17

Toivonen, K., Salokekkilä, P., Puustelli, A., and Häggman-Laitila, A. (2020). Somatic and mental symptoms, medical treatments and service use in aftercare–document analysis of Finnish care leavers. *Child Youth Serv. Rev.* 114:105079. doi: 10.1016/j.childyouth.2020.105079

 $Tomkinson, R.\ (2007). \textit{Shared services in local government: Improving service delivery.} \\ Canada: Gower Publishing, Ltd.$

Trigueros, R., Sanchez-Sanchez, E., Mercader, I., Aguilar-Parra, J. M., López-Liria, R., Morales-Gázquez, M. J., et al. (2020). Relationship between emotional intelligence, social skills, and peer harassment. A study with high school students. *Int. J. Environ. Res. Public Health* 17:208. doi: 10.3390/ijerph17124208

Tyagi, B. (2013). Listening: an important skill and its various aspects. The Criterion. Int. J. Eng. 12, 1-8.

Tymon, A., and Batistic, S. (2016). Improved academic performance and enhanced employability? The potential double benefit of proactivity for business graduates. *Teach. Higher Educ.* 17, 1–18.

Vélez, S. C., Lorenzo, M. C. A., and Garrido, J. M. M. (2017). Leadership: its importance in the Management of School Coexistence. *Procedia Soc. Behav. Sci.* 237, 169–174. doi: 10.1016/j.sbspro.2017.02.059

Wahono, B., Lin, P. L., and Chang, C. Y. (2020). Evidence of STEM enactment effectiveness in Asian student learning outcomes. *Int. J. STEM Educ.* 7, 1–18. doi: 10.1186/s40594-020-00236-1

Wisittigars, B., and Siengthai, S. (2019). Crisis leadership competencies: the facility management sector in Thailand. *Facilities* 37, 881–896. doi: 10.1108/F-10-2017-0100

Wrulich, M., Brunner, M., Stadler, G., Schalke, D., Keller, U., and Martin, R. (2014). Forty years on: childhood intelligence predicts health in middle adulthood. *Health Psychol.* 33, 292–296. doi: 10.1037/a0030727

Yalçınkaya, S., Dağlı, G., Altınay, F., Altınay, Z., and Kalkan, Ü. (2019). The effect of leadership styles and initiative behaviours of school principals on teacher motivation. Sustainability 13:2711. doi: 10.3390/su13052711

 $Yildirim, B., and Turk, C.~(2018). The effectiveness of argumentation-assisted STEM practices. {\it Cypriot J. Educ. Sci.}~13, 259-274.~doi: 10.18844/cjes.v13i3.3457$

Yukl, G. (2008). Leadership in organizations. New York: Pearson Education.

Yulianti, K.~(2019).~Transformational~leadership~and~parental~involvement~in~children's~education:~A~study~in~elementary~schools~in~Java,~Indonesia~(doctoral~dissertation).