

Records and information management in evidence-based decision-making public schools in South Africa

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Received: 25 January 2022

Revised: 14 March 2022

Accepted: 04 August 2022

Abstract

Records are important assets in the decision-making process and promote transparency and accountability. The successful provision of educational and training services in public schools relies on reliable and authentic records. Thus, evidence-based decision-making can help address the challenges in the basic education sector in public schools. The challenges manifest as weaknesses between the different sectors and departments responsible for early childhood development services and poor quality of school education outcomes in public schools. The said challenges were identified in the National Development Plan 2030 and their resolution can contribute to the achievement of education and training goals. The main purpose of this study was to outline the role played by records and information management in supporting evidence-based decision-making in public schools in South Africa. This study adopted the qualitative research approach and used content analysis to identify challenges hindering national development plan goal achievement in the basic education sector. A content analysis of available literature consisting of policy documents, internet sources, books and journal papers was used to identify and describe the challenges and propose solutions. It is guided by the Association of Records Managers and Administrators' Generally Accepted Record Keeping Principles as a framework. The study found that poor educational outcomes could be improved through proper records management practices enabling evidence-based decision-making to thrive. The study recommends that governmental bodies in South Africa utilise the power of records and information management to enable goal achievement, with the professional assistance rendered by the National Archives and Records Service of South Africa (NARSSA) and provincial archives.

Keywords: Decision-making, education, National Development Plan, records and information management, schools, South Africa

1. Introduction and background

The Government of the Republic of South Africa has a long-term national development plan (NDP) (NDP 2030) to address identified national problems across a whole spectrum of the economy (Government of South Africa 2012). National Planning Commission (2011) opines that NDP 2030 and Vision for South Africa is intended to go beyond the normal conservative policy in that it intends to sow the seeds strong enough to give birth to a new social order whose achievement needs the participation from every sector of the economy. The efforts of all the sectors will lead to social development being realised by the wider society of South Africa.

Friedmann (1964:61) indicates that “planning is primarily a way of thinking about social and economic problems, planning is oriented predominantly toward the future, is deeply concerned with the relation of goals to collective decisions and strives for comprehensiveness in policy and programme.” Old as this definition may seem, it still rings true of what a national plan is about. The National Science and Technology Forum of South Africa (2018) views NDP 2030 and vision as a blueprint meant to guide South Africa in tackling its challenges as a nation. The NDP was released by the Cabinet in 2011 and adopted in 2012 as the long-term vision and plan for the country.

Archives and records management play a role in contributing to national development. According to Rhoads (1983), government development efforts are based on information derived from existing records. This information may be records related to the provision of services such as vital statistics (births and deaths); the functioning of agriculture, industry and trade; social welfare programmes (including social security, population control, health and medical services, literacy, education and training; and social behaviour (marriages and divorces, crime and others). Rhoads (1983) adds that the said records and information may not be kept indefinitely but detailed summaries can be used to plan future government programmes at local, regional and even national level. Similarly, Smith (1972) opines that proper records management increases the effectiveness of government in general, specifically for those responsible for economic development. For example, well-classified records are easier and faster to retrieve than unorganised records. According to Hendricks (2013:15), a country needs “comprehensive programmes... clear vision and efficient resource allocation across multiple sectors working together to achieve a common goal.” Good records management has a role to play in enabling the resolution of some problems in the public service, which includes a public health system that cannot meet demand or sustain quality, uneven and often poor-quality public services, poor quality of school education particularly for black people and high levels of corrupt practice (National Science and Technology Forum of South Africa 2018).

Specifically, national archival agencies hold records from the past to be used as reference material to aid current decision-making and future planning. Venson, Ngoepe and Ngulube (2014) point out that although national archives play an important role in the economic, social and political development of a country, this role is invisible and obscure because they do not make their presence felt to the public. On the other hand, Rhoads (1983) opines those archival documents are valuable as most governments frequently refer to them to verify past decisions and continuing obligations to determine precedents and conduct research for legal, administrative, political and diplomatic reasons. For this to realise, such records should be organised and accessible.

1.1 Basic education in public schools in South Africa

The NDP 2030 and national vision of South Africa also identified challenges related to basic education. One such challenge is human capacity weaknesses in teaching, management and school support (district offices) (Government of South Africa 2012:302). Wolhuter (2014:21) conducted a study on the weaknesses of South African education mirrored against the image of international educational development and concluded that the weaknesses in the education system of South Africa were elusive universal secondary and, especially, universal primary

education, low higher education-enrolment ratios, the administrative underpinning of the education system, teacher input, the school environment and inequalities.

The Department of Basic Education (DBE) acknowledges some of these weaknesses whose “Schooling 2030: The Vision” aims to address the problems and challenges through improved professionalism, teaching skills, subject knowledge and computer literacy of teachers throughout their careers and by improving the frequency and quality of the monitoring and support services provided to schools by district offices, partly through better use of e-education (DBE 2019).

Basic education is a basic need in South Africa. According to Marishane (2017), the notion that all children should have the right to basic education is a global human right. Thus, children should receive education in a holistic manner that meets their educational needs such that there is access, quality and safety in the educational environment. The weaknesses of the South African basic education outcomes are clearly given by Mlachila and Moeletsi (2019:4) who observe that:

South Africa suffers from weak educational quality, despite relatively high levels of public spending on education. The country spends on average the equivalent to over 6 percent of its GDP on education, on par with many OECD countries. However, a significant number of sub-Saharan Africa (SSA) countries that spend far less per learner than South Africa have far better educational outcomes.

These are some solutions to the problems bedevilling the basic education landscape in South Africa. These ideals are also recognised by the DBE’s (2019) Vision 2030, which places the stakeholder relationship of parents, teachers, learners and school principals at the centre of the provision of quality basic education services. Addressing them requires hard work and dedication as the Government of South Africa (2012:302) already noted that “attempts to address school education challenges have been characterized by blame and a lack of accountability.”

The resolution of challenges in the basic education sector in South Africa, specifically public schools, will not be complete without the intervention of good records management. The South African Schools Act (SASA) (Government of South Africa 1996) was enacted to bring control to school management and related activities. In relation to records, section 42(a) prescribes that the governing body of a school must keep records of funds received and spent, including assets, liabilities and financial transactions, while section 42(b) demands that an audit of school financial records be done not later than three months after the financial year-end. Mojapelo (2022:29) notes the following regarding the importance of records in public schools for governance and accountability:

As schools are accountable to members of the public, up-to-date, authentic and reliable records are vital to guide school managers and other stakeholders on effective planning and decision-making. In a school, records are pathways to ensure transparency, accountability and good and effective governance. As public institutions, government schools need sound and effective management and leadership to carry out their mandate. The lack of effective and proper records management and keeping leads to ineffective governance, culminating in dysfunctional schools with poor learner outcomes. Effective

records management is, therefore, regarded as a catalyst for the efficient and effective management of activities and operations in a school environment.

The DBE is the overall authority for public schools at national level and works closely with nine provincial counterparts to cater to the educational needs of all learners in the country (Mojapelo 2022). The effective administration of schools is aided by records provided by the DBE and the provincial DBE over and above the records generated in the activities at the public schools themselves.

2. Evidence-based decision-making, records management and national development planning

Evidence-based decision-making (EBDM) refers to the act of making decisions for purposes of deriving a favourable outcome through a conscientious, explicit and judicious effort using available and various sources of information (Barends, Rousseau & Briner 2014). Some government information exists as records used to gain knowledge about an institution, for planning, decision-making, problem solving and interpreting situations, accountability and good governance (Momoti 2017). This makes the practice of records management valuable in EBDM. Barends et al. (2014) opine those records are an important source of evidence for demonstrating the performance of transactions and actions.

Despite the importance of records management in decision-making, they have been poorly regarded for a long time and still are (Smith 1972), and thus are not appreciated for their practical role in national development. In a study that investigated the role of public archives in national development in selected countries in the East and Southern Africa Regional Branch of the International Council on Archives region, Venson et al. (2014) discovered that the national development plans of countries such as Kenya, Tanzania and Zambia were silent on archives and records management. The words ‘archives’ and ‘records’ were not even used once in the NDPs. The NDP of South Africa mentions the need to improve health records, information systems and access to information, while Namibia’s NDP refers to medical records as a priority as well as building of archives and record storage for courts, training of records management professionals and the installation of digital records of deeds and geo-spatial records. Venson et al. (2014) add that the NDP of Botswana is the only one that succinctly recognises records as a strategic resource, which should be properly managed because they contribute to national development. Therefore, this paper contends that records and information are central to evidence-based decision-making and have a role to play in facilitating the attainment of NDP 2030 educational and training goals.

3. Theoretical framework guiding the study

A theoretical framework frames and guides a study (Ngulube, Mathipa & Gumbo 2015). This study uses the Association of Records Managers and Administrators’ (ARMA) (2017) generally accepted recordkeeping principles as a guiding lens. The principles are relevant in this context as they are applicable in both the public and private sector (Smallwood 2014). The principles were developed from best practice standards, including the revered international records management standard, ISO 15489 – 1 (2016), DoD 5015.2, the electronic records management software

applications design criteria standard published by the USA Department of Defense and MoReq2 – Model requirements for the management of electronic records (Stearns 2010). The development of the principles was a collaborative effort from professionals in records and information management, information technology and legal practice. The principles are accountability, transparency, integrity, availability, retention, disposition, protection and compliance.

The principle of accountability entails responsibility should be assigned to individuals with clearly defined roles in an established chain of command. The qualified personnel develop and implement a records management programme (Gable 2015; ARMA 2017). The principle of compliance is about enacting a records and information programme that satisfies existing legislation and policies (ARMA 2017). According to Gable (2015), an organisation must maintain records that prove it does business as regulated by appropriate legislation, and its policies reflect how it interprets them in its operations. The principles of retention and disposition are about developing retention and disposal schedules and implementing them to guide records retention and disposition following their appraisal using applicable and existing legislation and regulatory requirements (ARMA 2017). Keeping records longer than necessary and not keeping records for the required period is risky as it could lead to legal suits and storage costs (Gable 2015; Corey 2017). Another principle is that of availability, which promotes the organisation of records in accordance with business functions and stored likewise to ensure their timely, efficient and accurate retrieval (ARMA 2017). The functional classification of records is key in that regard. The principle of transparency prescribes that there should be procedures documenting how records should be made accessible to all to promote transparency (Gable 2015; ARMA 2017). A records management procedures manual is key for this purpose. The principle of integrity governs access control to records to ensure their authenticity after creation is maintained to support evidence decision-making due to their completeness and reliability, while that of protection promotes controlled access to records through their security classification to secure them (ARMA 2017). All the principles are applicable in this study.

4. Purpose and objectives of the study

Good research is underpinned by a set of clear, defined and meaningful research objectives (Lyons 2017). The main purpose of this study was to outline the role played by records and information management in supporting evidence-based decision-making in public schools in South Africa. The following are the specific objectives of the study:

- a. To identify challenges in the attainment of NDP 2030 and nation vision education and training objectives in public schools in South Africa.
- b. To determine the legislative framework for public school records management in South Africa.
- c. To establish solutions for records management challenges in public schools in South Africa.

5. Methodology

This study was qualitative in nature. Data were collected from document review and available literature, including policy documents such as applicable legislative frameworks, the NDP,

reports, internet sources, books and journal articles. Key words such as evidence decision-making, basic education and records management were used to search for literature using Google Scholar. Conventional content analysis, which is widely acceptable in research, was undertaken in this study whereby codes were directly sourced from literature and turned into themes. It is normally used in a descriptive study whose aim is to describe a phenomenon (Hsieh & Shannon 2005), which, in this case, are the challenges hindering the successful implementation of South Africa's NDP 2030 goals in the education, training and innovation pillar. The findings were presented thematically in accordance with research objectives. According to Hsieh and Shannon (2005), qualitative content analysis is commonly used in research where text data are analysed from sources to make conclusions. This study also used content analysis to outline the role played by records and information management in supporting evidence-based decision-making to address challenges hindering the attainment of South Africa's NDP 2030 goals in the education and training sector.

6. Findings of the study

The findings of this study from three research objectives are presented thematically and sequentially as initially presented.

6.1 Challenges in the attainment of the education and training objectives of public schools in South Africa

The NDP 2030 puts forward aspirations for the South African nation in the various sectors of the economy. Several challenges faced in each sector are outlined in the policy document, as well as proposals of what should be done by 2030 to achieve the stated goals. The challenges identified come from the “*Improving education, training and innovation pillar*”. The challenges related to early childhood development and basic education are applicable in this study.

6.1.1 Weaknesses between the different sectors and departments responsible for early childhood development services

Early childhood development service is diverse due to the multiplicity of stakeholders involved in childcare. These are the Department of Health (DoH), DBE, Department of Social Development, private for-profit operators, community-based organisations and large non-governmental organisations (NGOs) (Government of South Africa 2012). Each has a role to play in the upbringing of a child from birth to the age of preschool education.

Performing the stakeholders' roles generates records that end up serving two purposes (Yunus & Ariffin 2013). The first is the daily management of the stakeholders in supporting decision-making and delivering the organisations' services and activities. Secondly, the records serve as evidence of activities and policy implementation in the organisations. The records provide a verifiable audit trail or evidence of actions carried out during business and the results of those actions, which hold the organisations accountable to those actions taken (Yunus & Ariffin 2013).

To put this into perspective, the DoH interacts with pregnant women, new mothers and young children as part of its antenatal and postnatal services, which interactions are recorded and used

for future reference. The DoH documents the healthcare and nutritional needs of children, which are partly required by the Department of Social Development when it assists home- and community-based early childhood development services. According to the NDP 2030 and national vision, “early childhood development should be broadly defined, taking into account all the development needs of a child, and provided to all children” (Government of South Africa 2012:295). For this assertion to materialise, all the stakeholders involved in early childhood development services should document their activities as they perform their mandate. They should then collaborate and share information to help each other in their individual roles. The National Archives and Records Service of South Africa (NARSSA) (2016) notes that governmental bodies can only be effective and efficient if they do the following:

- Regard and practice records management as a business process designed to support business objectives.
- Consider and use records as a resource to realise business objectives fully and cost effectively.
- Each governmental body creates and maintains a culture that promotes effective and efficient records management to facilitate efficient and timely decision-making.

If taken, the advice offered by NARSSA would ensure that vital information contained in records generated by the various stakeholders could be shared to promote the achievement of education and training. Vieira, Borbinha, Valdez and Vasconceos (2011) agree that records as evidence of past processes, actions and decisions contribute to knowledge sharing and support decision-making.

6.1.2 Poor quality of educational outcomes in public schools

The second challenge faced in education and training identified in NDP 2030 and national vision is poor quality of school education outcomes (Government of South Africa 2012). Without proper records management practices informing decisions used to run schools, there will always be poor educational outcomes. In other words, quality performance, task accomplishment and measurable educational outcomes rely on availability and accessibility of usable records (Ibara 2010). School records are used to communicate the academic performance of students to parents.

Regarding compulsory schooling up to Grade 12 and equivalent levels, compliance with this policy matter will not be possible. For example, the South African Human Rights Commission (2012) shows that the right to basic education is entrenched in the Constitution of the Republic of South Africa (Government of South Africa 1996b). It is also given by the Universal Declaration of Human Rights (UDHR) (1948) and the African Charter on the Rights and Welfare of the Child (ACRWC) (1989), among other international legal instruments. To comply, records should be available from early childhood development up to Grade 12. Records of school dropouts should be available to find their homes and bring them back to school. Children who are not at school but should be at school should be traceable through collaborative efforts with governmental bodies’ partners (using available recorded information). The absence of records-keeping regimes impedes demonstrating compliance with this basic right.

An educational management information system (EMIS) can be implemented in the education system across the basic education level. An EMIS is “a system for the collection, integration,

processing, maintenance and dissemination of data and information to support decision making, policy-analysis and formulation, planning, monitoring, and management at all levels of an education system. It is a system of people, technology, models, methods, processes, procedures, rules, and regulations that function together to provide education leaders, decision makers and managers at all levels with a comprehensive, integrated set of relevant, reliable, unambiguous, and timely data and information to support them in completion of their responsibilities” (Cassidy 2005:27).

An EMIS can be integrated with a truly digital records management system to ensure that digital records generated through the system are safeguarded in the long term. Records in a digital records management system are immutable and remain authentic if all measures required for records protection are followed.

6.2 Legislative framework for public school records management in South Africa

Public schools are part of the South African public administration. Several legislative instruments govern the management of records in public schools in the country. Every public body must comply with existing legislation and policies governing their operation. The NARSSA Act regulates archives and records management practices in South Africa (Government of South Africa 1996b). NARSSA requires governmental bodies to manage records well, including electronic records, by implementing appropriate policies and procedures. Schools are also required to comply with the provisions of the SASA (Government of South Africa 1996c). Section 42 prescribes that schools must keep financial records and have their financial statements audited in line with section 43. This provision compels schools to properly manage their financial records as they aid the audit process (Ngoepe & Ngulube 2013; Mosweu 2018a; Mojapelo & Ngoepe 2021). Poorly kept records may lose their integrity and reliability, and such records cannot be regarded as trustworthy, meaning they cannot be accepted as evidence by auditors (Mosweu & Ngoepe 2021). To comply with the SASA, proper school financial records should be kept.

6.3 Applying the ARMA’s principles of records management as a solution to the challenges

The vision for the NDP 2030 about the education sector is that “by 2030, South Africans should have access to education and training of the highest quality, leading to significantly improved learning outcomes” (Government of South Africa 2012). The challenges identified and discussed in the previous section can be addressed by the implementation of records management principles. The second objective of the study was to demonstrate the application of evidence-based decision-making (as underpinned by proper records management practices) for addressing the identified challenges. This can be done by applying ARMA generally accepted records keeping principles to set records management where there is none. Public sector bodies and community-based organisations receiving funding from government must account for public monies used through records as evidence (Palmer 2000). The ARMA’s (2017) Generally Accepted Recordkeeping Principles serve as a records management framework to support, use and demonstrate records management for evidence-based decision-making in the attainment of NDP 2030 goals. Evidence-based decision-making relies on accurate records and information.

The eight principles are transparency, compliance, retention and disposition, availability, protection, accountability and integrity (ARMA 2017).

- **Accountability** – This is demonstrated through available and verifiable records. Wamukoya (2000) indicates that records management is a key activity in public administration and management. If records of who did what, why, when and how are not available, no one can be held accountable for their actions. Mojapelo (2022) studied the management of records in public schools in Limpopo and discovered that the function of records management in schools is not assigned to someone fit to manage records. School principals and administrators did not have qualifications and capacity to manage school records, leading to improperly kept records, which negatively affected decision-making in schools (Mojapelo 2022).
- **Integrity and protection** – These two principles are related. According Mosweu (2018b), the principle of integrity resonates with guarding the authenticity and reliability of records while that of protection requires some form of protection of records by assigning security levels such as private, confidential, secret and classified to control access and ensure business continuity. The study by Mojapelo (2022:34) noted that “without tight security measures in place, disadvantaged rural schools are vandalised, and the few computers or laptops which store electronic records are often stolen”. Although information and communication technologies can make recordkeeping easier (Hanior, Achor & Gire 2018), if they are not secured, they can be manipulated easily by mistake or deliberately, thus damaging their authenticity (Duranti & Blanchette 2004). Mojapelo (2022) indicates that public schools in South Africa use a computer information system known as the South African School Administration and Management System (SA SAMS) to capture learner details such as their grades. If computer-based information systems are not secured, electronic records stored in them can be modified maliciously or by mistake to the detriment of school administration and management processes.
- **Retention and disposition** – Records cannot be kept forever. Some need to be kept as archives while others need to be destroyed, using records retention schedules as a guide. According to Matina and Ngulube (2019), records retention and disposal schedules result from the appraisal of records. Without records retention and disposal schedules, schools risk keeping records for longer than necessary or destroying records prematurely. Mojapelo (2022) realised schools in Limpopo did not have records retention and disposal schedules. According to Mojapelo (2022:33), “without procedures to appraise, retain and dispose of old records, in some cases, records with enduring value that can be used in the near future are either burnt or recycled instead of being preserved”. In Zimbabwe, Matina and Ngulube (2019) discovered that due to the absence of records retention guidelines, schools kept records for longer than necessary without disposing of them, leading to a shortage of space to store them. A well-thought through records retention and disposal programme censures that records are disposed of timeously, leading to faster retrieval times which, in itself, facilitate quick decision-making.
- **Availability** – Decisions made in schools are based on available records and information. According to Mojapelo (2022), there is a need to keep and store records properly and

securely in storage facilities to guide and direct all stakeholders in decision-making in public schools. The administration of schools needs records to function well (Nakpodia 2009). Lack of proper training, knowledge and skills in records management by school administrators means school records are stored poorly and haphazardly, making their retrieval difficult, thus delaying decision-making (Mojapelo 2022). Amanchukwu and Ololube (2015) observe that schools need to keep records to facilitate school administration. School records are central to a well-functioning school system.

- **Transparency** – There should be documented and transparent procedures communicating how records should be made accessible to all to promote openness (Gable 2015). A records management procedures manual can be used to document how various records management processes should be done, such as file tracking, incoming mail registration and more. NARSSA (2003) produced a records management manual policy that governmental bodies can use to develop records management policies customised to their operational needs. The manual provides details for records management requirements in the context of the public sector of South Africa, including schools. A records management procedures manual can become the backbone of a school records management system, especially because school administrators and principals lack capacity to manage school records (Mojapelo 2022).

7. Conclusion and recommendations

This study showed that there were challenges impeding the achievement of NDP 2030 goals. Credit should be given to the Government of South Africa for recognising the need to keep records as part of the realisation of the national vision. Among others, the NDP calls for the improvement of health records, information system and access to information (Venson et al. 2014). This is not enough, but is a good starting point. It is through well-kept records as evidence that the problematic area of collaboration by stakeholders in early childhood development services can be documented and shared to enable the coordination of effective decision-making. Student records management assists in monitoring students' performance at basic education level and applying corrective interventions before they reach university level. Universities also need records to account for the management and disbursement of student bursaries. These are some examples that shed light on the importance of records as a resource that enables attainment of NDP 2030 goals. How then can records and information be elevated to play a significant role as an enabler for NDP 2030 goal achievement?

Adopting the ARMA Generally Accepted Recordkeeping Principles as a framework (ARMA 2017) to guide records management practice is important for schools. A survey of records management practices can be undertaken in schools to assess the status of records management, and develop and implement a customised records management policy to guide a comprehensive records management programme. NARSSA, provincial archives and archives and records management professionals in governmental bodies should offer expert advice. A successful records management programme needs to be well resourced in terms of putting in place an appropriate infrastructure for proper records management, including the employment of a qualified practitioner. NARSSA has the following guidance documents that can be consulted to

develop a compliant records management programme. Among others, the following area available on the website of NARSSA:

- Prototype Registry Procedure Manual
- Template for Email Records Management Policy
- Guidelines for electronic records management
- Guidelines for developing a file plan
- Performance criteria for records managers

Venson et al. (2014) showed that good records management practices can aid decision-making in government circles and thus should be recognised for this role. Smith (1972) argues that archives and records management was a lower priority than other competing needs in public administration. However, if effective support for the function is to be given the priority it deserves, it must show its value add, that it has cultural value and that there is an integral relationship between them and governmental efficiency, economic development and national unity. Ngulube (2004:23) sums up the role records play in evidence-based decision-making by saying that, “change brings uncertainty, but records make decision making during uncertainty possible. Changes that are not informed by reliable information are likely to be unsustainable, unjustifiable, and lacking transparency.” The case for records and management as a factor contributing towards goal achievement in national development planning has been made.

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