

# An Analysis of Skills Gaps and Future Skills Necessary to Growing and Advancing Sustainable Municipalities in the Kwazulu-Natal Province

Strinivasan Soondrasan Pillay, Eustache Tanzala Kikasu

Department of Public Management and Economics, Durban University of Technology, Durban, South Africa

Email: [tanzalak@dut.ac.za](mailto:tanzalak@dut.ac.za)

**How to cite this paper:** Pillay, S. S., & Kikasu, E. T. (2024). An Analysis of Skills Gaps and Future Skills Necessary to Growing and Advancing Sustainable Municipalities in the Kwazulu-Natal Province. *Open Journal of Political Science*, 14, 334-373. <https://doi.org/10.4236/ojps.2024.143021>

**Received:** February 6, 2024

**Accepted:** July 7, 2024

**Published:** July 10, 2024

Copyright © 2024 by author(s) and Scientific Research Publishing Inc. This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

## Abstract

Since municipalities oversee resources, policies, and laws governing a specific area and, ultimately, the welfare of its residents, they can play a special role in advancing solutions. South African municipalities, particularly those in KwaZulu-Natal province, are battling with a range of issues relating to skills gaps and low performance that impede the province's ability to grow and progress sustainably. This paper examines the skills gaps and future skills required to foster local government performance and quality service delivery in order to create and promote sustainable municipalities in the KwaZulu-Natal province. The rapid pace of technological advancement presents additional problems for municipalities seeking to adapt to and integrate digital solutions in this digital transformation era. Many municipalities are having trouble keeping up with the most recent technological developments and are falling behind due to skills gaps about future requirements linked to the quick speed of emerging technologies. A deficiency of knowledge in domains such as cybersecurity, IT, and data analytics, however, could make digital transformation less successful. Municipalities find it challenging to implement environmental programmes and sustainability initiatives due to the shortage of skilled professionals in industries like renewable energy, and sustainable design. Moreover, various economic constraints (such as shortages in the supply of electricity) are making it difficult for municipalities to attract and retain businesses. This situation can hinder investment and economic growth in the province. A lot of municipalities (mostly in rural areas) often lack enough training facilities or educational establishments to provide future skills courses and certifications. Because of this situation, it becomes more challenging for the community to acquire the skills necessary for long-term

progress. The lack of infrastructure, such as high-speed internet connection or sophisticated communication systems, might also make it difficult for future skills to be developed and applied in a municipality. Therefore, adopting and using emerging technologies would be challenging without the proper infrastructure. Also, without developing and maintaining the skills required, municipalities' long-term sustainable growth will be difficult. Thus, if nothing is done, skills gaps and the lack of anticipating future skill development (deficits in essential skills) will continue to hinder municipal performance and service delivery. This paper suggests a proactive strategy for workforce planning and development that emphasizes bringing in and developing individuals with the right kind of capabilities.

## Keywords

Sustainable Municipalities, Skills Gaps, Future Skills Development, Growing and Advancing KwaZulu-Natal Province

---

## 1. Introduction

This paper addresses skills gaps or the deficit of indispensable skills as a key barrier to the sustainable growth and development of municipalities in the KZN province. It also discusses the development of future skills that can drive economic growth and create a thriving and conducive environment for individuals and businesses. Municipalities, which are defined as towns, cities, or other administrative entities with local government, are directly impacted by sustainability issues and can play a special role in advancing solutions because they oversee the resources, operations, and laws governing a particular area and, ultimately, the welfare of its residents (Petrarca, 2023). The major players in municipal governments are usually elected politicians (such as mayors, council members, and legislators) and professional staff (such as managers, public works directors, economic planners, and community planners), who make decisions on behalf of the municipality's residents (Beukes & de Visser, 2021). A sustainable municipality refers to a local government or community that aims to meet the needs of its present residents without compromising the ability of future generations to meet their own needs (Mashamaite & Lethoko, 2018). Sustainable municipality involves adopting practices and policies that prioritize environmental, social, and economic sustainability (Bick & Keele, 2022; Mensah, 2019). However, in terms of skills gaps and required future skills development, a sustainable municipality refers to a local government that recognizes and addresses the need for specific skills in order to drive growth and advancement within the province (Fissuh et al., 2022; Donovan et al., 2022). To achieve skills sustainability, a municipality needs to identify the current skills gaps in its workforce and anticipate the future skills that will be in demand. This requires a proactive approach to workforce planning and development, focusing on both attracting and training

individuals with the necessary skills.

The purpose of this research is to identify the skill gaps and determine the future skills or competencies necessary to growing and advancing sustainable municipalities in the KwaZulu-Natal (KZN) province. In addition, this paper examines different other factors essential to growing and advancing the KZN province. According to [Meta \(2022\)](#), sustainable municipal performance and quality service delivery will require current workforce skills development and anticipation of essential future skills development. Furthermore, bridging skill gaps and developing necessary future skills are contingent on a municipality's economic sustainability. Economic sustainability in a municipality involves supporting local businesses, promoting job creation, and encouraging a diverse and resilient economy ([Meta, 2022](#)). This can be achieved by attracting and supporting sustainable industries, encouraging entrepreneurship, and promoting the development of green technologies and innovation. According to [Maervoet \(2023\)](#), a sustainable municipality strives to create a livable, resilient, and harmonious community that balances environmental, social, and economic aspects for the well-being of its residents and the long-term viability of the province.

## **2. Background of Skills Gaps in the Kwazulu-Natal Municipalities**

The KZN province in South Africa is known for its numerous municipalities (54 municipalities), each responsible for providing essential services to their respective communities ([Dirks, 2020](#)). However, these municipalities often face significant skills gaps, hindering their ability to adequately deliver on their mandates. One of the key factors contributing to these skills gaps is the legacy of apartheid, which systematically marginalized certain population groups, limited access to quality education, and perpetuated inequalities ([Mohamed, 2020](#)). As a result, many individuals in KZN, especially those from previously disadvantaged backgrounds, have not had the same opportunities to develop essential skills as their counterparts. This has created a significant skills deficit across various sectors, including administration, finance, engineering, and health. In particular, there is a shortage of technical and specialized skills required for effective service delivery and development in KZN municipalities. This includes professions such as town planning, civil engineering, electrical engineering, water and sanitation management, project management, etc. The lack of these skills undermines the ability of municipalities to plan and implement infrastructure projects, resulting in inadequate service delivery and development ([Kalonda & Govender, 2021](#)). Additionally, studies found that there is a lack of skills in financial management and administration within many KZN municipalities. According to [Kalonda and Govender \(2021\)](#), poor financial management, including mismanagement of budgets and lack of accountability, has been a recurring issue in the province. This situation not only hampers the effective delivery of services but also exposes municipalities to corruption and financial mismanagement.

Another contributing factor to the skills gaps in KZN municipalities is the high rate of turnover and migration of skilled professionals (Chetty & Moodley, 2022). Many qualified individuals, especially in rural areas, are attracted to opportunities in urban centers or abroad, leaving behind a void in skills and expertise. The limited opportunities for career growth and low remuneration in the public sector further exacerbate this issue. To address these skills gaps, the KZN government has implemented various initiatives. As indicated earlier, the KZN COGTA Department implemented the Skills Audits in response to the pronouncement in the State of the Province Address by the Premier (February 2020). The rationale is that municipal performance and service delivery have not been consistent. In other words, poor performance affecting municipalities is facilitated by factors including skills deficit, ineffective human resources management, inadequate financial management systems, poor leadership, poor governance, and poor legal framework implementation (Kalonda & Govender, 2021). The KZN Department of Cooperative Governance and Traditional Affairs (COGTA) performed a skills audit study in May 2020. The implementation of the skills audits therefore aimed to determine the existing level of skills within municipalities. The Department engaged all 54 municipalities (from May 2020 to January 2021) intending to undertake the audit of all municipal officials using internal resources despite budget constraints (Dirks, 2020). Its goal was to examine the state of skills and knowledge in KwaZulu-Natal municipalities and to identify any skill shortages in all municipalities so that appropriate training and development programmes could be created following the assessments. As a result, the assessment showed skill deficits and the need to establish a centralized repository of skills for all municipalities in KwaZulu-Natal province. As a result, this paper analyzed and examined the findings of the COGTA research to establish whether there was progress and execution in addressing skill gaps and insufficient capacity to appropriately fill important roles in most municipalities. Unfortunately, several other studies and skills audits that examined and analyzed issues of skills gaps in KZN municipalities revealed that skills gaps remain prevalent in several municipalities, and most importantly, rural municipalities are the most affected by issues of skills gaps and insufficient capacities to fill key positions accurately (Meta, 2022; David et al., 2023; Mayombe, 2023). This paper intends to increase awareness about the repercussions of current and future skill gaps, as well as the skills required to improve the KZN province's long-term sustainability, economic growth, and citizens' quality of life. The paper proposes a proactive strategy for workforce planning and development, focusing on attracting and training individuals with the necessary skills.

### 3. Materials and Methods

#### 3.1. Methods

Conducting skills audits is a crucial procedure for any organisation seeking to clarify its existing competencies and make progress. Understanding the appro-

priate approach or method implemented by the KZN government via the COGTA Department is critical for the extenuation of skills gaps. According to the [South African News Agency \(2022\)](#), the skills audits are undertaken to assess skills gaps within the KZN municipalities. Most skills audits have revealed the need for training in several areas, including financial management, risk management, change management, policy creation, strategic capability and leadership, monitoring, and evaluation ([South African News Agency, 2022](#)). This paper examined the municipal skills audits (assessments) conducted by the KZN government during the COVID-19 pandemic from May 2020 to January 2021. Whilst this posed major challenges to the traditional methodology of skills audits, the skills audits continued, and activities were adapted to accommodate the Disaster Regulations. The target population for the municipal skills audit included all municipal officials. The size of the target population and COVID-19 regulations influenced the methodology in all steps undertaken, namely: Data Collection and Desktop Research; the conduct of Skills Audits; Data Analysis; and Report Writing. The tool used by municipalities was the GAPSKILL Skills Audits Questionnaire and data was captured on the GAPSKILL web-based system managed by National COGTA (COGTA is a government department responsible for promoting effective governance, ensuring coordination between different spheres of government, and supporting traditional leaders and institutions. The department's mission is to build resilient, integrated, and empowered communities through effective cooperative governance, decentralization, and the optimization of traditional leadership. However, the HR files were also used to extract information due to the COVID-19 regulations. In supporting municipalities in undertaking the skills audits, the Department coordinated training on the GAPSKILL system for both data capturing data analysis and report writing. A total of 107 municipal officials were trained in the use of the GAPSKILL system and the subsequent processes of data analysis and skills audit reports in September and November 2020. The data analysis and report writing phases commenced after data capturing to identify the trends and patterns of the data and to present these findings in the standard skills audits report specification provided by the National COGTA. Various technical challenges were experienced with the GAPSKILL System. These have been documented and escalated to the National COGTA. The Department provided further hands-on support to districts and municipalities who experienced various challenges with data analysis and report writing.

## **3.2. Materials**

### **3.2.1. Theories and Debates Discussing Skills Gaps and Future Skills Indispensable to Growing and Advancing Sustainable Municipalities**

Skills gaps and skills for the future are important and widely debated topics among experts and scholars ([Maervoet, 2023](#); [Fissuh et al., 2022](#); [Donovan et al., 2022](#); [Meta, 2022](#)). The skills gaps and future skills are necessary discussions to consider growing and advancing sustainable municipalities. Perspectives from

the discussions and debates surrounding these issues are critical to situate the current and future skills needed and promote sustainable development of local government. Therefore, due to technological advancements, many experts believe that significant technological advancements, such as automation and robotics, cloud technology, artificial intelligence, renewable energy sources, and digital transformation, are leading to new sets of skills required in the future (Maervoet, 2023). The focus is shifting towards skill sets like programming, data analysis, digital literacy, and adaptability to technological changes (Li, 2022, Carlisle et al., 2021; Bakhshi et al., 2017). Theories and debates discussing skills gaps and required future skills also emphasized Lifelong Learning and the development of Soft Skills and Human Abilities (Li, 2022). Table 1 illustrates the types of recently emerging skills focusing on technology-related competencies and skills, cognitive reasoning capability, and leadership, which are required by all sectors of the economy, including municipalities.

**Table 1.** Emerging skills focusing on technology-related competencies, skills, cognitive reasoning capability, and leadership.

<i>Current and emerging skills required to grow and advance municipalities in the KZN</i>	<i>Relevant skills vital for the sustainability of municipalities in KZN</i>
<i>Analytical thinking and innovation</i>	Creativity
<i>Active learning and learning strategies.</i>	People management
<i>Complex problem-solving</i>	Coordinating with others
<i>Critical thinking and analysis</i>	Emotional intelligence
<i>Creativity, originality, and initiative</i>	Judgment and decision-making
<i>Leadership and social influence</i>	Service orientation.
<i>Technology use, monitoring, and control</i>	Negotiation
<i>Technology design and programming</i>	Cognitive flexibility
<i>Resilience, stress tolerance, and flexibility</i>	Active listening
<i>Reasoning, problem-solving</i>	Quality control

Source: Adapted from Li (2022).

As shown in Table 1, while analytical thinking, innovation, and technical and creative skills are essential to grow and advance municipalities in the KZN, there is also a growing recognition of the importance of soft skills or human abilities for the sustainability of municipalities in KZN. Scholars argue that skills like critical thinking, creativity, problem-solving, communication, collaboration, emotional intelligence, and cultural awareness, are crucial for success in the current and future job market within municipalities (Li, 2022). According to (Bakhshi et al., 2017), other skills that communities from each municipality will have to develop include for example automated warehouse operations, digitized seaport shipping information interchange, online purchasing, and e-commerce. Disruptive innovations are creating new opportunities for society by offering cutting-edge materials, processes, and uses for technology that were previously unthinkable, as well as products and services. People in the municipalities, including manufacturing and service industries, will therefore require new skills. Artificial intelligence, cloud computing, and mobile internet are al-

ready changing the way people work. Even though 6G and quantum computing are still in their infancy, change will come quickly (Li, 2022). Encouraging officials within municipalities (Local government) for continuous learning, reskilling, and upskilling has become vital to bridge the skills gaps.

Many scholars advocate for fostering a culture of lifelong learning (New skills and technologies have been introduced much faster than a decade ago), encouraging individuals to adapt to changing skill requirements, and promoting flexible and accessible education and training programmes (Maervoet, 2023; Li, 2022). Furthermore, municipalities in the KZN are also required to adapt quickly to emerging disruptive technology in Industry 4.0 (Industry 4.0 is a significant transformation to the digitization of manufacturing and the creation of a cyber-physical system) in order to anticipate possible skills gaps or to bridge them through the adoption of technologies such as Artificial Intelligence (AI), Quantum information technology, 5G & 6G, IoT, IIoT, Data Sciences & Business Intelligence, Cybersecurity, and Green Energy (Li, 2022). **Table 2** provides a description and understanding of these types of technologies.

**Table 2.** Technology disruptors in industry 4.0.

<i>Disruptive technology</i>	<i>Description Technology Disruptors in Industry 4.0</i>
<i>AI &amp; ML</i>	Artificial intelligence is the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings.
<i>Quantum Computing</i>	Quantum information technology is a new paradigm that can process more than digital data consisting of 0 and 1. Quantum physics incorporates the digital revolution into the physical world and provides new directions in artificial intelligence and nanotechnology.
<i>5G &amp; 6G</i>	5G is a generation of cellular networks designed to enhance the efficiency of data transmission. 6G will connect everything, provide full dimensional wireless coverage, and integrate all functions, including sensing, communication, computing, caching, control, positioning, radar, navigation, and imaging, to support full-vertical applications.
<i>IoT, IIoT</i>	IoT and IIoT connect the network of physical objects. In a supply chain, IoT links fabrication and material handling equipment, remote sensors for freight transport, and tracking systems for vehicles and other assets.
<i>Data Sciences &amp; Business Intelligence</i>	Data Science requires coding, data mining, analytical skills, and modeling to extract value and meaning from the data. In addition, human-machine interaction, quantitative skills, and understanding of information technology are regarded as essential skills in data sciences and business intelligence.
<i>Cybersecurity</i>	Cybersecurity is a measure to protect a computer or computer system against unauthorized access or attack. A critical step in preventing cyber threats is finding adequate and feasible ways to encourage employees and end-users of various technologies to protect their individual and organisational information assets.
<i>Green Energy</i>	Green energy comes from renewable sources. Green energy is considered clean, sustainable, or renewable energy. A clean energy plan is an essential integral part of Industry 4.0, underscored by global leaders, energy sector administrators, and prominent corporate executives.

Source: Adapted from Maervoet (2023), Fissuh et al. (2022) , and Li (2022).

To address skills gaps, municipalities are required to consider, adapt, and adopt these current and future technologies (see **Table 2**), as well as inclusive



skills development, which are a key requirement. Discussions also emphasize the need for inclusive skills development, ensuring that marginalized or underrepresented groups have access to relevant education, training, and job opportunities (Levesque et al., 2017). This includes addressing gender gaps and disparities in accessing quality education, particularly in STEM fields. Therefore, the future of work within local government or municipalities is a central theme in conversations about skills for the future. Experts consider various factors like remote work, the gig economy, and the rise of non-traditional work arrangements in shaping skills requirements (Kavese et al., 2022). There is a need to anticipate changes in work dynamics and equip individuals with the necessary skills to thrive in these evolving work environments. Thus, local governments and employers have a significant role to play. Scholars and experts often discuss the role of governments and employers in addressing skills gaps. They debate the need for policies that support reskilling and upskilling programmes, collaboration between educational institutions and industry, and the creation of apprenticeship opportunities to bridge the divide between education and employment (Li, 2022). These discussions and debates aim to identify and strategize the most effective ways to prepare individuals for the skills needed in the future workforce, address current skills gaps, and ensure a smooth transition in the face of rapid technological advancements and changing work dynamics. The key theories and debates discussing skills gaps and future skills are presented in **Table 3**.

As shown in **Table 3**, Donovan et al. (2022), Meta (2022), and Li (2022) argue that it is critical to recognize that theories and debates discussing skills gaps and future skills essential for municipalities' growth and development provide diverse perspectives on the skill gaps and future capabilities required for ongoing sustainable municipalities. Ultimately, building and maintaining flourishing, environmentally conscious communities will most certainly require a holistic approach that includes technical expertise, behavioral skills, adaptability, and a focus on particular requirements.

### 3.2.2. Perspectives on Bridging the Skills Gaps and Acquiring Future Competencies

According to Loughlin (2023) and Smith (2022), there are different perspectives on closing the skills gaps and developing future skills necessary for advancing sustainable municipalities. Some key perspectives include the environmental perspective, urban planning perspective, technology perspective, social perspective, economic perspective, and governance perspective. **Table 4** explains the motive of each perspective in attempting to close the skills gaps and promote future skills development necessary for advancing sustainable municipalities in KwaZulu Natal province.

As illustrated in **Table 4**, advancing sustainable municipalities requires a multidisciplinary approach that encompasses environmental, urban planning, technology, social, economic, and governance perspectives. A combination of these skills is necessary to tackle the complex and interconnected challenges of



**Table 3.** Theories and debates discussing skills gaps and future skills essential for municipalities' growth and development.

<i>Theories discussing skills gaps and future skills</i>	
<i>Technological Skills Gap</i>	One of the prominent debates revolves around the need for technological skills in creating sustainable municipalities. Some argue that there is a significant skills gap in the workforce, especially in fields like data analytics, artificial intelligence, and digital literacy. They suggest that these skills are necessary to effectively manage and optimize resources in municipalities. However, others argue that the focus should be on developing a broader range of skills, including social and environmental competencies, as technology alone cannot address all sustainability challenges.
<i>Green Job Skills Gap</i>	The expanding field of green jobs, which are centered around sustainable development and renewable energy, has led to discussions about the skills necessary to fill these positions. Some argue that there is a significant gap in specialized skills required for green jobs, such as knowledge of renewable energy systems or sustainable construction practices. Others emphasize the need for a broader understanding of sustainability principles and cross-cutting skills like problem-solving, project management, and collaboration.
<i>Behavioral and Soft Skills</i>	Another theory posits that the skills gaps in sustainable municipalities are not only technical but also behavioral and soft skills oriented. This theory suggests that creating sustainable communities requires a workforce capable of change management, stakeholder engagement, leadership, and effective communication. Hence, the focus should be on developing a holistic set of skills that encompass both technical and non-technical competencies.
<i>Lifelong Learning and Adaptability</i>	Some theorists argue that the skills necessary for growing sustainable municipalities are constantly evolving due to rapid technological advancements, changing ecological considerations, and societal needs. They propose that a focus on lifelong learning and adaptability is crucial, as individuals need to continuously update their skills to keep pace with the changing demands of sustainable development.
<i>Localized Skills Assessment</i>	Another debated aspect revolves around the level of customization required in skills development programmes for sustainable municipalities. Some argue that skills development should be tailored to the unique challenges and needs of each municipality. This approach emphasizes conducting localized skills assessments and implementing specific training programmes accordingly. However, others advocate for a more standardized approach to skills development, suggesting that certain core competencies should be universal across municipalities.

Source: Adapted from [Donovan et al. \(2022\)](#), [Meta \(2022\)](#), and [Li \(2022\)](#).

**Table 4.** Perspectives on bridging the skills gap and acquiring the future competencies required to advance sustainable municipalities.

- **Environmental Perspective:** From an environmental perspective, there is a need for skills related to ecological planning, environmental management, climate change mitigation and adaptation, renewable energy technologies, waste management, and sustainable transportation systems. These skills help in developing and implementing environmental policies and practices to create sustainable and eco-friendly municipalities.
- **Urban Planning Perspective:** Urban planners emphasize the need for skills in urban design, land use planning, transportation planning, and smart city planning. This perspective emphasizes the integration of sustainable practices into city planning, such as creating walkable and bike-friendly neighborhoods, preserving green spaces, and promoting mixed-use development.
- **Technology Perspective:** As municipalities become increasingly connected and digitized, there is a demand for skills in data analytics, digital technologies, and the Internet of Things (IoT). These skills enable the development of smart infrastructure, efficient energy management systems, intelligent transportation networks, and effective data-driven decision-making for sustainable municipalities.
- **Social Perspective:** The social perspective emphasizes the importance of skills in community engagement, social justice, and equitable development. Skills like community organising, participatory planning, public consultation, and collaboration are vital for engaging citizens in sustainable initiatives and ensuring that the benefits of sustainable development are accessible to all segments of society.

---

## Continued

- **Economic Perspective:** From an economic perspective, skills in sustainable business and entrepreneurship, green finance, and economic modeling are important. This perspective focuses on developing and attracting businesses that promote sustainable practices, creating sustainable job opportunities, and assessing the economic impacts of sustainable initiatives.
  - **Governance Perspective:** The governance perspective highlights the need for skills in policy development, governance frameworks, and stakeholder management. These skills help in establishing effective governance structures, aligning policies with sustainability goals, and fostering collaboration between different stakeholders, including government, businesses, civil society, and citizens.
- 

Source: Adapted from [Loughlin \(2023\)](#) and [Smith \(2022\)](#).

creating sustainable and resilient municipalities. However, according to [Burton et al. \(2021\)](#) and [Fischer et al. \(2021\)](#), an approach that can better combine technical expertise, behavioral skills, adaptability, and a focus on localized needs is the Human-Centered Design (HCD) approach. The HCD is a problem-solving approach that puts the needs and experiences of the end-users at the center of the design process ([Babich, 2020](#)). It involves observing and understanding the context and the people who will use the product or service. In addition, Human-centered design is a method of thinking that centers the design and implementation process around associated stakeholders as well as the people that programmes serve. This approach, which places a strong emphasis on research, ideation, iteration, and prototyping, aims to provide fresh answers to challenging issues ([USAID, 2020](#)). According to [Burton et al. \(2021\)](#) and [Fischer et al. \(2021\)](#), HCD incorporates the following elements:

- **Technical Expertise:** HCD requires a deep understanding of the technical aspects related to the problem being addressed. This could include expertise in engineering, technology, or other relevant fields to ensure that solutions are viable and effective.
- **Behavioral Skills:** HCD acknowledges that human behavior, emotions, and motivations influence the acceptance and success of a solution. It emphasizes empathizing with users, conducting user research, and employing techniques such as interviews, surveys, and observations to gain insights into user needs and preferences.
- **Adaptability:** HCD recognizes that problems and context vary across different regions and communities. It encourages designers to be adaptable and flexible in their approach, continuously learning and iterating on their solutions based on feedback and evolving needs.
- **Focus on Localized Needs:** HCD places a strong emphasis on understanding the specific needs, challenges, and cultural context of the local community or audience. It involves engaging with end-users directly, listening to their insights, and involving them in the design process to create solutions that are tailored to their specific requirements.

Through combining these elements, the HCD approach aims to create solutions that are not only technically sound but also relevant, user-friendly, and impactful in addressing localized needs and challenges.

### 3.2.3. Bridging the Skills Gap and Acquiring Future Competencies Required to Advance Sustainable Municipalities in the KZN Province

According to Meta (2022), a large discrepancy between municipalities' existing capabilities and the skills they need to meet community demand and accomplish their objectives is known as a skills gap. It is the point at which a municipality may not be able to expand or maintain its competitiveness due to a lack of qualified candidates for important positions. A skills gap occurs when staff members are qualified but do not fulfill sector objectives, or when current workers lack the necessary abilities to satisfy people's aspirations. This is known as an institutional skill gap (Mayombe, 2023). In addition, skills gaps in any organization or institution may refer to a misalignment between the skills required for a job or task and the skills possessed by the individuals available to perform that job or task (Carlisle et al., 2021). It occurs when the demand for certain skills in the labour market exceeds the supply of individuals with those skills. Skills gaps can result in various negative consequences, such as difficulties in finding qualified job candidates, reduced productivity, and hindered economic growth. It can occur at both the individual and societal levels, highlighting the need for effective training and educational systems to bridge these gaps. Therefore, skills audits are necessary for various reasons or motives. Depending on institutional impulse, a municipal skills audit is conducted to identify strengths and weaknesses, career development and progression, performance management, workforce planning and development, training and development, and succession planning (Van der Waldt et al., 2018). Table 5 suggests the types of skills examined under the skills audit arrangement.

**Table 5.** Types of skills examined under skills audits arrangements.

<i><b>Skills Category</b></i>	<i><b>Associated Skills</b></i>
<i>Fundamental skills</i>	Literacy, Numeracy, Information and Communication Technology skills
<i>People Skills</i>	Communication Skills, Emotional Intelligence, Negotiation Skills, Teamworking Skills, Customer Service Skills
<i>Conceptualisation Skills</i>	Managing Information, Analysis, and problem-solving skills, Decision-making skills, Creativity, and Innovation skills, Planning and Organisation skills
<i>Personal Skills</i>	Enthusiasm, Time Management, Responsibility, Reliability, Honesty, Loyalty, Coping with Pressure, Resilience,
<i>Business World Skills</i>	Entrepreneurial Skills, Decision-Making Skills, Strategic Analysis Skills, Leadership Skills, Business Acumen
<i>Societal Skills</i>	Community/ Citizenship Skills, Sustainability Skills

Source: Adapted from David et al. (2023).

A skills audit is a critical process for growing municipalities as it helps ensure that they have the right skills and expertise within their workforce to meet the

demands of a changing environment. By identifying skills categories and associated skills (see [Table 5](#)), skills gaps, promoting professional development, and improving performance and efficiency, municipalities can better position themselves for success in the future. According to [David et al. \(2023\)](#), skills audits are critical to assessing competency standards of employees to be appointed with the necessary knowledge, abilities, and credentials; the experience, education, and technical background, as well as the functional, technical, managerial, leadership, and general competence needed for the various positions identified; gaps in technical skills and absence of pertinent competencies; professionalism and government and professional body regulation; and the ability needed of appointed officials (to improve the sector's qualifications profile and competence). According to ([Mayombe, 2023](#)), in the KwaZulu-Natal (KZN) province, skills audits are often implemented by the COGTA Department in various municipalities in response to skills gaps. The objective is to ensure that the government has the required corps of skilled and professional public servants of the highest moral standards and who are dedicated to the public good.

### 1) Skills audits in the KwaZulu-Natal municipalities

According to [David et al. \(2023\)](#), skills audits are a valuable tool for analyzing and tracking the coverage of skills across municipalities and organizations, as well as for spotting any gaps or mismatches in skill sets. By doing this, municipalities assist in establishing investment objectives and offer useful information on how they position themselves in the marketplace. According to [Bonifacio \(2023\)](#) and [David et al. \(2023\)](#), different methods are used to evaluate skills gaps and determine future skills required by an organization. [Table 6](#) describes methods

**Table 6.** Skills audits, skills analysis, skills inventory, and skills mapping

<b>Skills audits</b>	<p><i>A skills audit is a process used by individuals or organizations to assess and evaluate their current skills and abilities. The purpose of a skills audit is to identify gaps in skills and knowledge, determine areas for improvement, and make informed decisions about professional development or recruitment. It is an important tool for individuals and organizations to ensure they have the necessary skills and capabilities to achieve their objectives. Skills audits include the following steps:</i></p> <ol style="list-style-type: none"> <li><i>1. Identify the skills required: Determine the specific skills and competencies needed for a particular role or objective. This can be done by reviewing job descriptions, performance criteria, or business objectives.</i></li> <li><i>2. Evaluate existing skills: Assess the skills and capabilities of individuals or employees. This can be done through self-assessment, interviews, questionnaires, or observations. It is important to gather objective data and feedback to ensure accuracy.</i></li> <li><i>3. Identify skill gaps: Compare the required skills with the existing skills and identify any gaps or deficiencies. This can help determine areas for improvement or further development.</i></li> <li><i>4. Prioritize skill gaps: Rank the skill gaps based on their importance and impact on the individual or organization. This will help focus efforts on the most critical areas for development.</i></li> <li><i>5. Develop action plans: Create individual or organizational development plans to address the identified skill gaps. This may involve training programmes, mentoring, job rotations, or other forms of learning and development initiatives.</i></li> <li><i>6. Monitor and review progress: Regularly review and assess the progress made towards closing the skill gaps. This can involve setting milestones, monitoring performance, and providing feedback and support.</i></li> </ol>
----------------------	---

**Continued**

---

***Skills analysis***

Skills analysis is the process of evaluating and assessing an individual's skills or abilities in order to identify their strengths and areas for improvement. It involves breaking down the different components of a skill set and objectively measuring and evaluating the level of proficiency in each area. By conducting a skills analysis, individuals can gain a better understanding of their skill set, identify areas for improvement, and take steps to enhance their abilities. This can help them improve their performance in their current role, prepare for future career opportunities, and achieve their goals. Skills analysis typically involves steps that include:

1. Identify the relevant skills: Determine the specific skills that are relevant to the individual's role or field of interest. This could include technical skills, soft skills, or specific knowledge areas.
2. Assess current skill levels: Evaluate the individual's current level of proficiency in each skill. This can be done through self-assessment, performance reviews, or feedback from supervisors or mentors.
3. Identify strengths and weaknesses: Identify the individual's strengths and areas for improvement within each skill. This can be done through comparing their self-assessment with the assessment of others, or by using objective measures such as performance metrics.
4. Develop an improvement plan: Based on the analysis, develop a plan for improving the individual's skills. This may involve setting specific goals, seeking training or development opportunities, or seeking guidance from mentors or coaches.

***Skills inventory***

A skills inventory is a list or database of skills that an individual or organization possesses. It is used to assess and manage the skills of individuals or employees within an organization. By having a skills inventory, organizations can better utilize their workforce, identify areas for improvement or investment, and make informed decisions regarding talent management and development. It also helps individuals to assess their skills and identify areas for growth or further training. Overall, a skills inventory is a valuable tool for both individuals and organizations to leverage their skills and achieve their goals. In a skills inventory, each skill is typically categorized and described in detail.

Some common categories of skills in a skills inventory might include technical skills, such as programming languages or software proficiency, soft skills, such as communication or leadership abilities, and industry-specific knowledge or certifications.

The purpose of a skills inventory is to provide a comprehensive overview of the skills and capabilities of individuals or employees within an organization. It can be used for various purposes, such as identifying skill gaps, matching individuals to suitable roles or projects, and determining training or development needs. It is also useful for succession planning, workforce planning, and performance evaluations.

Creating a skills inventory involves gathering information from individuals or employees through self-assessment surveys or interviews. This information is then recorded and organized in a central database. Regular updates and maintenance of the skills inventory are necessary to ensure accuracy and relevance.

***Skills mapping***

Skills mapping is the process of identifying and categorizing the skills and abilities possessed by individuals or teams within an organization. It involves creating a visual representation or inventory of the various skills and competencies that people possess, which can then be used for various purposes such as talent management, project staffing, training and development, and succession planning. Skills mapping is a valuable tool for organizations to effectively manage their workforce and ensure that individuals possess the necessary skills and competencies to meet organizational goals and objectives. It helps in identifying skills gaps, facilitating resource allocation, and aligning individual and team capabilities with organizational needs. The process of skills mapping typically involves the following steps:

1. Identify the key skills required: Determine the key skills and competencies that are essential for success in a particular role or project.
2. Assess current skills: Evaluate the skills and abilities of individuals or teams through assessments, interviews, performance reviews, or self-assessments. This helps in identifying the existing skills gaps and areas of strength.

## Continued

3. Categorize skills: Group the identified skills into relevant categories such as technical skills, soft skills, leadership skills, etc. This helps in organizing and understanding the skills inventory.
4. Create a skills matrix: Develop a visual representation of skills and competencies using a matrix or diagram. This matrix can include the names or roles of individuals or teams along one axis and the identified skills along the other axis, with skill levels indicated in each cell.
5. Analyse skills gaps: Analyse the skills matrix to identify skills gaps or areas where additional training or development is needed. This helps in determining the overall skill level and capacity of the organization.
6. Develop a skills development plan: Based on the skills gaps identified, develop a plan to address these gaps through training, mentoring, coaching, or hiring. This plan should outline the specific steps and resources required to develop the desired skills.
7. Update and utilize the skills map: Regularly update the skills map to reflect changes in skills and competencies. Use the skills map for various organizational purposes such as talent management, employee development, project staffing, and succession planning.

Source: Adapted from David et al. (2023), Bonifacio (2023), and Meta (2022).

similar to skills audits used to assess and evaluate the skills, knowledge, abilities, and qualifications of individuals or a group of people within an organization or institution.

As illustrated in **Table 6**, the concepts of skills audits, analysis, inventory, and mapping are similar to one another. They are utilized as a method to systematically assess and evaluate the skills, knowledge, abilities, and qualifications of individuals or a group of people within an organization or institution (David et al., 2023; Bonifacio, 2023). These methods are applied to identify the existing skills gap and to determine the skill requirements for current or future roles within municipalities. According to Fissuh et al. (2022), the concern is that skills gaps within KZN municipalities could adversely impact capacity to be socio-economically viable, as well as reduce performance and effectiveness. The economy worldwide is currently experiencing a fundamental shift in the demand for skills due to advancements in technology, such as automation. Some professions require higher skills than before due to technological advancement, while others become obsolete. The skills audits in the KZN municipalities could be profitable in terms of aligning employees with appropriate skills for communities' well-being and can lead to the development of talent pools and succession planning. **Table 7** Illustrates the benefits of skills audits.

As shown in **Table 7**, skills audits, analysis, inventory, and mapping are essential tools in promoting the growth of municipalities. By measuring the skills and competencies of employees within the municipality, leaders can identify gaps and areas for improvement, allowing for targeted training and development initiatives to enhance workforce capabilities. According to David et al. (2023), skills audits, analysis, inventory, and mapping present the following benefits:

- Skills audits provide a comprehensive overview of the skills and knowledge of employees, helping leaders understand the strengths and weaknesses of their workforce, and can inform decision-making around recruitment, succession planning, and talent development strategies.



**Table 7.** Benefits of skills audits.

<i>Individual</i>	<i>Municipality</i>	<i>Labour Market</i>
<ul style="list-style-type: none"> <li>• <i>Skills audits embrace a strength-based approach and help individuals plan their development journey.</i></li> <li>• <i>They help identify skill deficiencies allowing action planning.</i></li> <li>• <i>They improve an individual's level of self-awareness and increase self-efficacy.</i></li> <li>• <i>They help to certify the skill attainment of individuals.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Helps municipalities align employees with appropriate skills for communities' wellbeing.</li> <li>• Improving employee skillsets can improve competitiveness.</li> <li>• Skills audits can lead to the development of talent pools and succession planning.</li> <li>• They can become an important tool in attracting foreign direct investment.</li> </ul>	<ul style="list-style-type: none"> <li>• Skills audits offer a means of discourse on emerging and future skills needs.</li> <li>• They help determine labor market priorities.</li> <li>• Skills audits help to identify the regional distribution of skills and determine the level of skill mismatches that occur.</li> <li>• They help to improve and enhance educational skill provision.</li> </ul>

Source: Adapted from David et al. (2023).

- Skills audits can help identify trends and patterns within the workforce, highlighting areas where specific skills are lacking or in high demand. It can be used to inform strategic planning and resource allocation, ensuring that the municipality has the right people with the right skills to support its growth and development.
- Skills audits can allow leaders to track and manage the skills and qualifications of employees, ensuring that they are matched with the right roles and responsibilities within the municipality. It can help optimize workforce productivity and effectiveness, leading to better service delivery and outcomes for the community.
- Mapping skills across the municipality can help identify areas of expertise and specialisation, facilitating collaboration and knowledge sharing among employees. By creating a visual representation of skills distribution within the organization, leaders can better leverage existing talent and resources to address key challenges and opportunities.

In addition, skills audits encourage greater discourse between individuals, employers, professional bodies, HEIs, and the government on future skills strategies and how to boost human capital across society as a whole. It involves gathering information and analyzing the skills and competencies of employees through various methods such as surveys, interviews, self-assessments, and performance evaluations (van der Walddt, 2020). The purpose is to ascertain the condition of present and future skill requirements (municipalities should identify the present and future skill requirements for specific occupational groups in order to determine the necessary competencies) have a clear understanding of the skills possessed by individuals and identify areas where training or development may be required. The results of a skills audit can be used for HR planning, workforce development, succession planning, performance management, training and development programmes, and recruitment strategies (van der Walddt, 2020). Skills audits, analysis, inventory, and mapping play a crucial role in promoting the growth of municipalities by ensuring that they have the right people



with the right skills in place to drive innovation, efficiency, and success. By investing in the development and management of the workforce, municipalities can create a culture of continuous learning and improvement, positioning themselves for long-term sustainability and prosperity.

In the KZN province, the Skills Audit was implemented by the COGTA Department to assess skills gaps within municipalities in response to skills gaps. The objectives of the Municipal Skills Audits were to identify the current skills and knowledge that exist in municipalities in KwaZulu-Natal; determine the skills gaps in all municipalities allowing appropriate training and development programmes to be identified following the assessments; to make informed decisions regarding the allocation of resources, identification of training needs, building a competent workforce, and develop a central repository of skills for all municipalities within KwaZulu-Natal (KZN COGTA, 2021). Municipalities that were audited included Ethekwini, Ugu, Umgungundlovu, Uthukela, Umzinyathi, Amajuba, Zululand, Umkhanyakude, King Cetshwayo, Ilembe District, and Harry Gwala. The total number of municipal officials audited was 48,896, and more than half of the municipal officials audited were from Ethekwini Metropolitan Municipality (KZN COGTA, 2021).

## 2) Challenges experienced during the Municipal Skills Audit (Project roll-out)

According to the KZN COGTA Report (2021), challenges experienced during the municipal skills audits are addressed in Table 8.

**Table 8.** Challenges experienced during the municipal skills audits.

<i>Challenges</i>	<i>Mitigating Activities</i>
<i>Non-performance by certain Municipalities</i>	<ol style="list-style-type: none"> <li>1. Skills Audits Item included as a standard item on the Technical DCC agenda.</li> <li>2. Monthly Project Management Team Meetings to discuss progress on skills audits.</li> <li>3. Verbal and written communication indicating time frames.</li> <li>4. Daily support provided to municipalities.</li> <li>5. The guide on the drawing of competencies circulated to municipalities.</li> <li>6. Weekly Municipal Skills Audits “War Room” was established to engage with municipalities that have not achieved.</li> </ol>
<i>Challenges with the web-based GAPSKILL system developed by the National COGTA. The limitations of the system may hamper progress, by causing delays.</i>	<ol style="list-style-type: none"> <li>1. Meetings were held with the National COGTA to engage in upgrading the system. National COGTA has provided user guides on archiving records of employees no longer at the municipality and capturing competencies.</li> <li>2. Not all challenges can be addressed until the system is upgraded. National COGTA is in the process of upgrading/enhancing the system.</li> <li>3. Formal correspondence has been sent to the DDG and DG, National COGTA highlighting the challenges of the GAPSKILL system and proposed solutions.</li> </ol>
<i>The impact of COVID-19 Regulations on the implementation of the skills audits.</i>	<ol style="list-style-type: none"> <li>1. Provision of tools of trade to Skills Development Facilitators.</li> <li>2. Reviewing of the existing skills audit systems.</li> </ol>

Source: Adapted from KZN COGTA Report (2021).

As seen in **Table 8**, the challenges experienced during the municipal skills audits are many. These challenges were categorised following the non-performance by certain municipalities, challenges with the web-based GAPSKILL system developed by the National COGTA, the limitations of the system, which hampered progress by causing delays, and the impact of COVID-19 regulations on the implementation of the skills audits. According to **Van der Waldt (2020)** and **Govender (2019)**, other challenges that need to be considered when conducting the skills audits within the KZN municipalities include the following:

- **Lack of participation:** Encouraging all employees to actively participate in the skills audits can be a challenge. Some employees may be hesitant or resistant to providing information about their skills and knowledge.
- **Time constraints:** Conducting a skills audit requires a significant amount of time and effort. Municipalities may face challenges in finding enough time to complete the audit while also addressing other daily tasks and responsibilities.
- **Outdated or inaccurate information:** Skill sets and knowledge requirements can change over time, especially in rapidly evolving fields. Municipalities may struggle with outdated or inaccurate information about employee skills, making it difficult to accurately assess the skills and knowledge gaps that exist.
- **Lack of standardized framework:** The absence of a standardized framework for conducting skills audits may pose a challenge. Municipalities may find it difficult to compare skills and knowledge across departments or municipalities, making it harder to identify areas for improvement and collaboration.
- **Lack of resources:** Conducting a comprehensive skills audit often requires dedicated resources, including personnel, technology, and software. Municipalities with limited resources may face challenges in allocating the necessary resources to complete thorough skills audits.
- **Resistance to change:** Identifying skills gaps and areas for improvement can lead to potential changes in job roles and responsibilities. Some employees may resist these changes, causing additional challenges in implementing the findings of the skills audits.
- **Communication issues:** Clear and effective communication is crucial during the skills audit process. Municipalities may face challenges in effectively communicating the purpose, process, and outcomes of the skills audits to employees, which can impact participation and buy-in.
- **Data privacy concerns:** Skills audits involve collecting and analyzing personal employee information. Municipalities must appropriately handle and protect this data to ensure privacy and compliance with data protection regulations.

Addressing these challenges requires careful planning, effective communication, and the allocation of appropriate resources to ensure a successful municipal skills audit. The findings of the Municipal Skills Audits conducted to determine the Competence Scoring Per Municipality Per Competence Category are discussed next.

#### 4. Findings of the KZN Municipal Skills Audits per Functional Unit

According to David et al. (2023), skill audits serve as a tool for improving municipal performance, a way to handle the problems of the modern labor market, and a means of helping individuals enhance their skills. In the KZN municipalities, the municipal skills audits were conducted per Functional Unit. It involved competence Scoring Per Municipality Per Competence Category. Therefore, in each municipality audited, the following units were assessed (KZN COGTA, 2021):

- **Office of the Municipal Manager:** This Functional Unit typically drives the implementation of the Integrated Development Plan and typical functions of this unit are: Municipal Transformation, Basic Service Delivery, Local Economic Development, Municipal Financial Viability and Management, Good Governance, and Public Participation. The analysis includes the Strategic Planning and Governance Units.
- **The Finance Unit:** The unit typically drives the planning and implementation of all duties on municipal finances, (focusing both internal and external to the municipal institution). Typical functions of this unit are Income, Expenditure, Accounting, Valuations, etc.
- **Technical Services Functional Unit:** The Unit typically drives the planning and implementation of all technical duties that should benefit the municipal area. Typical functions of this unit are Electricity, Engineering, Housing, Solid Waste & cleaning, Water & Sanitation, Transport Planning, etc. The analysis includes the following Functional Units: Technical Services; Engineering; Human Settlements; Transport Authority; and Energy / Electricity.
- **The Development and Planning Functional Unit:** This unit typically drives functions such as LED and urban and Regional Town planning.
- **The Corporate Services unit:** The unit typically drives the planning and implementation of all duties that should enable the municipality to function effectively as an institution. Typical functions of this unit are Human Resource Management; Organisational Development; Human Resource Development; Occupational Health & Safety; and Information Technology.
- **The Community Services unit:** The unit typically drives the planning and implementation of all duties that should benefit the municipal area in terms of health and safety. Some of the Sub-units indicated within municipalities are Agroecology; Disaster management; Fire and Emergency; Health; Metro Police; Moses Mabhida Stadium; Parks Recreation & Culture; Safer Cities; and Security Management. Typical functions of this unit are Parks and Recreation; Disaster Management; Community Participation; Health; and Metro Police.

Two variables were audited in order to assess the skills gaps in the KZN municipalities, including the level of experience and qualifications. Table 9 illustrates the units and the variables audited.

**Table 9.** Units and the variables audited (level of experience and qualifications)

<i>Units audited</i>	<b>Variables audited: Level of experience and Qualifications.</b>	
<i>Office of the Municipal Manager Unit</i>	<p><b>Level of experience:</b> A total of 50 municipalities were analysed in terms of the level of experience in the current post at the time of the audit. The majority of the municipal officials audited, 29%, indicated less than one year of experience in their current post; 20% between 5 - 10 years, and 18% reported between 1 - 3 years.</p>	<p><b>Qualifications:</b> The findings were based on the 46 municipalities that responded to Educational Information; 1430 records were analyzed. The majority of the municipal officials obtained Degrees, 30%, and National Diplomas, 23%, as their highest qualifications followed by 18% that obtained a National Certificate. The findings further reveal that 9% of municipal officials had a matric as their highest qualification. A smaller percentage, 5%, indicated a Further Education qualification and 1% indicated General Education. The percentage of municipal officials with an Honours Degree at 9% and master's at 5%. The findings revealed that 3 municipal officials obtained a PhD as their highest qualification.</p>
<i>The Finance Unit</i>	<p><b>Level of experience:</b> A total of 49 municipalities were analyzed in terms of the level of experience in the current post. The majority of the municipal officials audited, 1385 (33%), indicated more than ten years' experience in their current post.</p>	<p><b>Qualifications:</b> The findings were based on the 47 municipalities that responded to Educational Information and 3 467 records were analyzed. The majority of the municipal officials obtained a National Diploma, 32%, and National Certificates, 23%, as their highest qualifications followed by 20% who obtained a degree. The findings further reveal that 16% of municipal officials had a matric as their highest qualification. A smaller percentage, 3%, indicated a Further Education qualification and 1% indicated General Education. The percentage of municipal officials with an Honours Degree at 3% and Masters at 1%. The findings revealed that 1 municipal official obtained a PhD as their highest qualification.</p>
<i>Technical Services Functional Unit.</i>	<p><b>Level of experience:</b> A total of 46 municipalities were analyzed in terms of the level of experience in the current post. The majority of the municipal officials audited, 6 973, 39%, indicated more than ten years' experience in their current post.</p>	<p><b>Qualifications:</b> The findings were based on the 45 municipalities that responded to Educational Information and 10 520 records were analysed. The majority of municipal officials obtained a General Education, with 24% (2552) as their highest qualification, followed by 20% of municipal officials that obtained a Matric. A further 19% recorded a National Certificate and 18% obtained Further Education as their highest qualification. A smaller percentage, 9%, indicated a National Diploma; and 7% indicated a degree. The percentage of municipal officials with an Honours Degree at 1% and 1% a Masters qualification. The findings revealed that 4 municipal officials obtained a Ph.D. as their highest qualification.</p>
<i>The Development and Planning Functional Unit</i>	<p><b>Level of experience:</b> A total of 29 municipalities were analyzed in terms of the level of experience in the current post. The majority of the municipal officials audited, 487, 31%, indicated more than ten years of experience in their current post.</p>	<p><b>Qualifications:</b> The findings were based on the 25 municipalities that responded to Educational Information and 1174 records were analyzed. The majority of the municipal officials obtained a National Diploma, 27%, and a degree, 26%, as their highest qualifications followed by 16% that obtained a National Certificate. The findings further reveal that 11% of municipal officials had a matric as their highest qualification. A smaller percentage, 5%, indicated a Further Education qualification and 1% indicated General Education. The percentage of municipal officials with an Honours Degree at 6% and master's at 8%. The findings revealed that 4 municipal officials obtained a Ph.D. as their highest qualification.</p>

## Continued

<i>The Corporate Services unit</i>	<p><b>Level of experience:</b> A total of 49 municipalities were analyzed in terms of the level of experience in the current post. The majority of the municipal officials audited, 854, 31%, indicated more than ten years of experience in their current post.</p>	<p><b>Qualifications:</b> The findings were based on the 45 municipalities that responded to Educational Information and 2512 records were analyzed. The majority of the municipal officials obtained National Diplomas, 24%, as their highest qualifications followed by 19% with National Certificates and 18% that obtained a degree. The findings further reveal that 17% of municipal officials had a matric as their highest qualification. A smaller percentage, 7%, indicated a Further Education qualification and 6% indicated General Education. The percentage of municipal officials with an Honours Degree at 5% and Masters at 3%. The findings revealed that 5 municipal officials obtained a Ph.D. as their highest qualification.</p>
<i>The Community Services unit</i>	<p><b>Level of experience:</b> A total of 49 municipalities were analyzed in terms of the level of experience in the current post. The majority of the municipal officials audited, 6567, 38%, indicated more than ten years of experience in their current post.</p>	<p><b>Qualifications:</b> The findings were based on the 45 municipalities that responded to Educational Information and 9968 records were analyzed. The majority of the municipal officials obtained National Certificates, with 28% Matric, and 22%, as their highest qualifications followed by 18% that obtained a National Diploma. The findings further reveal that 10% of municipal officials had a Further Education and 10% of municipal officials indicated a General Education as their highest qualification. A smaller percentage, 10%, indicated a degree as their highest qualification. The percentage of municipal officials with an Honours Degree is at 2% and master's at 1%. The findings revealed that 7 municipal officials obtained a PhD as their highest qualification.</p>

Source: Adapted from KZN COGTA Report (2021).

The percentage related to the qualification and experience of the municipal officials audited can be seen in **Table 9**. It illustrates the level of experience and qualifications resulting from the skills audits within KZN municipalities. It reveals that most of the municipal officials audited have had more than ten years of experience in their current posts. In addition, it indicates that the majority of the municipal officials obtained Degrees, National Diplomas, National Certificate and matric as their highest qualification. A smaller percentage of municipal officials audited indicated having a Further Education qualification and General Education.

### Findings of the Municipal Skills Audits: Competence Scoring Per Municipality per Competence Category

According to van der Walddt et al. (2021), Competence Scoring Per Municipality Per Competence Category refers to the assessment and evaluation of the level of competence or skills within different categories (such as education, healthcare, infrastructure, etc.) for each municipality or local government area. It involves measuring and scoring the performance or proficiency of a municipality in specific competence areas. This scoring system allows for comparison and ranking of different municipalities based on their competence in various categories. It

helps identify strengths and weaknesses in each area, enabling policymakers and stakeholders to allocate resources and plan interventions accordingly (van der Waldt et al., 2021). For example, in the competence area of education, municipalities may be assessed on parameters such as literacy rates, access to quality schools, student-teacher ratios, and educational outcomes. Similarly, in health-care, parameters like healthcare facilities, doctor-patient ratios, infant mortality rates, and healthcare accessibility may be considered. By scoring and comparing the performance of municipalities in different competence categories, the local government (authorities) can identify areas that require improvement and develop targeted strategies to enhance competence levels. It promotes accountability and transparency in local governance and fosters effective decision-making for overall development and progress. Therefore, the findings of the KZN Municipal Skills Audits, including Competence Scoring Per Municipality Per Competence Category are presented as follows (KZN COGTA Report, 2021):

**1) The Scoring of Competence for Ethekwini; Ugu District and family of Local Municipalities; Umgungundlovu District and family of Local Municipalities Uthukela District and family of local municipalities:**

- The findings reveal that the majority of municipalities scored competencies above the required level and met the required level compared to competencies below the required level.
- The audit revealed that 72% of the overall competencies were scored above the required level for Msunduzi Municipality; 52% for Umzumbe; 51% for Mpofana and 50% for Mkhambathini Municipality.
- 47% of competencies were scored below the required level for Inkosi Langalibalele and 38% for Okhahlamba Municipality.
- Competence reports were not recorded for Ethekwini Municipality within this grouping of municipalities.

**2) The scoring of competencies for Umzinyathi; Amajuba; Zululand and Umkhanyakude District and Family of Local Municipalities:**

- More than half of the competencies were scored above the required level for Amajuba, Emadlangeni; Ulundi; Msinga. And Umkhanyakude.
- The findings reveal that the majority of municipalities scored competencies above the required level and met the required level compared to competencies below the required level for this grouping of municipalities.
- Ulundi Municipality scored 73% of their competencies above the required level followed by Msinga Municipality at 66%.
- The audit revealed that Umhlabuyalinga Municipality scored 50% of its competencies below the required level.
- Competence reports were not recorded for Umzinyathi; Umvoti and Edumbe municipalities.

**3) The scoring of competencies for King Cetshwayo; Ilembe and Harry Gwala District and Family of Local Municipalities:**

- The majority of the municipalities scored competencies above the required level and met the required level.



- Mthonjaneni and Mandeni Municipalities scored 38% of their competencies below the required level.
- Competence reports were not recorded for Nkandla for this grouping of municipalities.

Considering the aforementioned results, the findings of the competencies should be viewed as subjective, and it may be advisable to conduct a training need analysis to address the development of gaps identified and ensure that exact needs are addressed. Further analysis revealed that municipalities have not scored all competencies and Municipalities to complete competencies and submit amended reports. Accordingly, the findings of the Municipal Skills Audits aligned to Competence Scoring Per Municipality Per Competence Category reveal that the majority of municipalities scored competencies above the required level and met the required level compared to competencies below the required level. However, findings indicate also that 47% of competencies were scored below the required level for Inkosi Langalibalele and 38% for Okhahlamba Municipality; 50% of competencies were scored below the required level for Umhlabuyalinga Municipality; and Mthonjaneni and Mandeni Municipalities scored 38% of their competences below the required level. The tables below illustrate findings of the Municipal Skills Audits per Competences per OFO Category (One Fact One Category), which is a category system used in strategic planning and decision-making (KZN COGTA Report, 2021). In addition, it includes the main finding, competencies scored below the required level (skills gaps), and the list of competencies below the required level (See **Table 10**: skills gaps). This categorization helps to organize different elements, facts, or

**Table 10.** The main findings of the OFO category related to competencies scored below the required level (skills gaps) such as Technicians, Trade workers, community and personal Services workers, and clerical and administrative workers.

OFO CATEGORY	MAIN FINDING	COMPETENCES SCORED BELOW THE REQUIRED LEVEL (SKILLS GAPS)	LIST OF COMPETENCIES BELOW THE REQUIRED LEVEL (SKILLS GAPS)
Technicians and Trade Workers	<p>Analysis is reported for 38 municipalities that reported on competencies per OFO Category.</p> <p>Competences scored:</p> <ul style="list-style-type: none"> <li>• 50% above the required level</li> <li>• 28% meet the required level:</li> <li>• 22% below the required level:</li> </ul> <p>Majority of the competencies were scored above the required level for all 3 categories:</p> <p>Managerial: 59%; Functional: 45%; Generic: 57%</p>	<ul style="list-style-type: none"> <li>• 22% of overall competencies scored below the required level.</li> <li>• Scoring of competencies per competence category:</li> <li>• Managerial: 16%</li> <li>• Functional: 28%</li> <li>• Generic: 15%</li> </ul>	<p>Installation of water sanitation and supply systems; Water and Sanitation Management; Leading and supervising Personnel; Design of water sanitation and supply systems; Problem-solving and decision making; Technical drawing comprehension; Integrity, values, and ethics; Resource Management; Repair and Maintenance; Ability to craft strategy within the immediate business environment as well as on a macro level, Ability to use information to craft new concepts and strategies; Safety Practices; Planning Skills; Organising. Communication; Working with people/Teamwork; Access and Rights Over Land</p> <p>Reading Building Plans; Board Drafting; and Time Management.</p>



**Continued**

Community and Personal Services Workers	<p>Analysis is reported for 38 municipalities that reported on</p> <p>Competences per OFO Category.</p> <ul style="list-style-type: none"> <li>• Competences scored:</li> <li>• 64% above the required level</li> <li>• 24% meet the required level:</li> <li>• 12% below the required level:</li> </ul> <p>Majority of the competencies were scored above the required level for all 3 categories: Managerial: 67%; Functional: 56%; Generic: 71%</p>	<ul style="list-style-type: none"> <li>• 12% Overall competencies scored below the required level.</li> <li>• Scoring of competencies per competence category:</li> <li>• Managerial: 8%</li> <li>• Functional: 18%</li> <li>• Generic: 8%</li> </ul>	<p>Emergency Patient Care; Planning and Organising; Service Orientation; Medical Rescue; Record Management; Problem Solving and Decision Making; South African Legislation and Municipal Bylaws; Inspection.</p> <p>Communication; Corroborating and Regulating Traffic Flow; Performing Operational or Administrative Duties</p> <p>Legal Assistance; Relating and Networking; Persuading and Influencing; Rescue Operations Time Management; Enforcing Regulations Achieving Personal Work Goals and Objectives; Adapting and Responding to Change; Support Role; Firefighting; Planning and Organising; Fire safety; Project management; Working With People / Teamwork; Planning and organizing; Integrity, values and ethics; Community facilitation; Community social support; Formulating Strategies and Concepts; Licensing and Registration; Client Focus; National Traffic Information Systems; Health and Safety; Team Work; Municipal policing; Written and Verbal Communication; Traffic management; Administrative excellence.</p> <p>Calculation; Computer Skills; Financial Skills; Expenditure Control; Clerical Skills; Compliance Management; Budget Information Sharing; Resource Management; Customer Orientation; Financial Management; Planning Skills; Report Writing, Creativity; Service Delivery Innovation; Technology Expertise; Telephone usage; Administrative excellence; Ability to retrieve, confirm and update data in storage and keep records of data input. Ability to maintain and record financial and information systems; Planning and Organising; Diversity Awareness; Time Management Skills; Customer Services; Written Communication; Maintenance of records; Client communication Computer Applications</p>
Clerical and Administrative Workers			

components into separate categories based on their similarities, purposes, or attributes. By categorizing information or factors into distinct categories, it becomes easier to analyze, compare, and prioritize them.

The main findings of the OFO category related to competencies scored below the required level (skills gaps) such as Technicians, Trade workers, community and personal Services workers, and clerical and administrative workers in the above **Table 10** are linked to the main findings of OFO category related to competencies scored below the required level such as machine operators and drivers, and elementary workers in the following **Table 11**.

**Table 11.** The main findings of the OFO category related to competencies scored below the required level (skills gaps) such as Machine operators and drivers, and elementary workers.

OFO CATEGORY	MAIN FINDING	COMPETENCES SCORED BELOW THE REQUIRED LEVEL (SKILLS GAPS)	LIST OF COMPETENCIES BELOW THE REQUIRED LEVEL (SKILLS GAPS)
Machine Operators and Drivers	<p>Analysis is reported for 38 municipalities that reported on competencies per OFO Category.</p> <p>Competences scored:</p> <ul style="list-style-type: none"> <li>• 35% above the required level</li> <li>• 34% meet the required level:</li> <li>• 31% below the required level:</li> </ul> <p>Competences scored above the required level for all 3 categories: Managerial: 31%; Functional: 28%; Generic: 40%</p>	<p>31% of Overall competencies scored below the required level.</p> <p>Scoring of competencies per competence category:</p> <ul style="list-style-type: none"> <li>• Managerial: 15%</li> <li>• Functional: 35%</li> <li>• Generic: 29%</li> </ul>	<p>Safety Practices; Occupational Health and Safety; Maintenance Information Management; Time Management; Written and Verbal Communication; Plant Traffic Control; Transport Communication Equipment; Vehicle Inspection; Plant Equipment Management; Risk Management; Mobile and Stationary Equipment Knowledge; Inspection; Customer Orientation; Planning and organizing; Compliance; Health and Safety; Minor Equipment Operation; Quality assurance; Oral Communication; Thinking Skills; Interpersonal Relations; Solid Waste Operations; Truck Operation; Written Communication; Administration; Resource Management; Driving and operating; Grader Operation; Listening Skills; Maintenance responsibility; Operating heavy equipment and machine</p>
Elementary Workers	<p>Analysis is reported for 38 municipalities that reported on competencies per OFO Category.</p> <p>Competences scored:</p> <p>45% above the required level 36% meet the required level: 18% below the required level:</p> <p>Competences scored above the required level for all 3 categories: Managerial: 44%; Functional: 41%; Generic: 49%</p>	<p>18% of overall competencies scored below the required level.</p> <p>Scoring of competencies per competence category:</p> <p>Managerial: 16% Functional: 23% Generic: 14%</p>	<p>Water and Sanitation Management; Maintenance management; Using Equipment and Tools; Clerical Skills; Waste and Water Treatment; Time Management; Customer Orientation; Occupational Health and Safety; Technical Skills; Choosing appropriate tools and/or technology for the task.; Support Maintenance; Equipment maintenance</p>

Source: KZN COGTA Report (2021).

As seen from the tables above, the main findings reveal the OFO category and the list of competencies that scored below the required level (Skills gaps) within the KZN municipalities. It is observed that in each category, there are critical and significant skills gaps that require quick and strong intervention from the KZN government. Accordingly, the socio-economic consequences of skills gaps in KwaZulu-Natal (KZN) province in South Africa can be significant and wide-ranging. For example, the consequences may include the following (Fissuh et al., 2022; Donovan et al., 2022; Meta, 2022):

- **Unemployment and Poverty:** Skills gaps result in a mismatch between the skills possessed by job seekers and the skills demanded by employers. This

mismatch leads to higher unemployment rates as individuals are unable to find jobs that align with their skills. This, in turn, contributes to increased poverty levels in the province.

- **Inequality:** Skills gaps tend to widen the gap between the skilled and unskilled workforce, exacerbating existing socio-economic inequalities. Those with the required skills have better chances of securing employment and higher-paying jobs, while those without the necessary skills face limited opportunities and lower wages.
- **Economic Growth and Development:** A lack of skilled workers hampers economic growth and development in KZN. Without a skilled workforce, businesses struggle to expand, innovate, and compete in the global market. This can lead to reduced investment, lower productivity, and slower economic growth for the province.
- **Brain Drain:** If skilled individuals cannot find suitable employment opportunities in KZN, they may choose to migrate to other regions or countries where their skills are in demand. This brain drain weakens the local economy and deprives the province of valuable human capital.
- **Increased Dependence on Foreign Workers:** In some cases, skills gaps may be filled by foreign workers, particularly in specialized industries. While this can address immediate skill shortages, it can also result in a dependency on foreign workers and hinder the development of local skills and expertise.
- **Reduced Innovation and Competitiveness:** Skills gaps limit the ability of businesses and industries to innovate and remain competitive. Without employees possessing the necessary skills, businesses may struggle to adapt to changing technologies and market demands, limiting their potential for growth and success.

Addressing skills gaps and investing in education and training programmes is crucial to mitigate these socio-economic consequences. By equipping individuals with relevant skills, KZN can promote sustainable growth and advancement of municipalities, improve employment rates, reduce poverty, and foster sustainable economic growth.

#### **a) Approach implemented by the KZN government to address the skills gaps within the KZN municipalities: Training and Development**

Whilst the analysis above revealed that the majority of competencies were scored above the required level, it was also revealed that significant competencies scored below the required level per competence category. Competencies that are scored below the required level require further training and development to move to the next level of competence. An analysis of the competencies illustrated below in **Table 12** was undertaken and the proposed training and development approach was implemented to tackle the skills gaps within the KZN municipalities.

The approach implemented to address skills gaps in the KZN municipalities was to develop targeted training and development programmes that focus on the specific skills needed for the job roles within the municipality (See **Table 12**).

**Table 12.** The approach implemented to address the skills gaps in the KZN municipalities: training and development.

COMPETENCES BELOW THE REQUIRED LEVEL (SKILLS GAPS)	PROPOSED TRAINING AND DEVELOPMENT
Managerial	
1. Verbal and written communication skills 2. Knowledge and understanding of the role of internal audit 3. Planning and Organisational Skills 4. Problem-solving and decision-making; Innovative Thinking 5. Change Leadership and innovation/Define roles and responsibilities for team members; Change Management; Interpersonal Relations 6. Financial Management and Accounting Principles and Practices	1. Mentorship and coaching programme to support succession planning 2. Leadership for the Fourth Industrial Revolution 3. Citizen Centred Service Delivery 4. Financial Management for non-financial Managers 5. Emotional Intelligence 6. Change Management / Theory of Change 7. Problem Solving and Decision-making
Functional	
1. Water and Sanitation Management 2. Financial Management and reporting 3. Computer Skills – Astute understanding of concepts/terminology and operations that relate to general computer use within the Municipality 3. Service delivery efficiency 5. Values and Ethics 6. Planning and Organising skills 7. Usage of Equipment and Tools	1. Financial management 2. Project and programme management 3. Ethics Training 4. Service Delivery Innovation 5. Planning and Organising 6. Computer Literacy (Basic and Advanced) 7. Targeted Functional skills training programmes as per the needs identified in individual municipalities
Generic	
1. Computer Literacy (ICT) - Using technology in the workplace to optimize the functioning of the municipality 2. Written and verbal communication 3. Time Management Skills 4. Customer and people skills 5. Administrative and Clerical Skills	1. Fraud and corruption 2. Excel Training 3. Data Analytics 4. Digital Transformation 5. Communication Skills; Customer Care: Batho Pele 6. Administrative Skills Training.

Source: [KZN COGTA Report \(2021\)](#).

This could involve partnerships with local educational institutions or training providers to offer courses or workshops that enhance employees' skills. However, despite the implementation of the training and development approach, many scholars have indicated that KZN municipalities are still struggling with quality service delivery despite the training and development of skills of official workers. In addition, some municipalities are still experiencing low socio-economic growth and development ([Davids, 2022](#); [Meta, 2022](#)). It is also observed that some municipalities in KZN may not have sufficient funds or resources to effectively implement the training and development programmes. This can limit the impact of the training on the workers' performance and ability to deliver quality services. However, municipalities that have sufficient resources are exposed to

financial maladministration, corruption, and diverse unethical behavior. According to [Meta \(2022\)](#), inadequate follow-up and support regarding training and development programmes need to be complemented with regular monitoring, feedback, and support systems to ensure that the learned skills are effectively applied in the workplace. If such follow-up mechanisms are lacking, the impact of training may be diminished.

Furthermore, [Meta \(2022\)](#) attested that weak accountability and governance structures in some municipalities may contribute to poor governance structures, with weak accountability systems and limited consequences for non-performance. This can undermine the effectiveness of training efforts as officials may not feel motivated or compelled to apply the skills they have learned. High staff turnover is an additional challenge facing municipalities in KZN. If municipalities experience a high turnover of trained staff, it becomes challenging to maintain the knowledge and skills gained through training programmes. Constantly hiring and training new employees can create a cycle of instability and hinder the delivery of high-quality services. Municipalities are therefore advised of many systemic issues that are affecting quality service delivery in the province. Training and development programmes can only address individual skills and knowledge gaps. If there are unaddressed systemic issues within the municipality, such as corruption, ineffective policies, or lack of coordination between departments, even well-trained officials may struggle to deliver quality services. Addressing these challenges requires a multifaceted approach that includes not only training and development but also adequate resource allocation, improved governance, regular support mechanisms, and addressing systemic issues within the municipality. According to [\(Li, 2022; Meta, 2022\)](#), a successful training and development approach within the KZN municipalities was expected to result in several positive consequences such as:

- **Improved job performance:** Training and development programmes can enhance the knowledge, skills, and competencies of employees, leading to improved job performance. This can result in better service delivery to citizens and increased productivity within the municipality.
- **Enhanced service delivery:** Through training and development, employees can acquire the necessary skills and knowledge to carry out their duties effectively. This can lead to improved service delivery to the public, including faster response times, accurate information provision, and professional conduct.
- **Increased employee satisfaction:** Investing in training and development demonstrates a commitment to employees' growth and development, leading to increased job satisfaction. Satisfied employees are likely to be more engaged, motivated, and committed to their work, resulting in higher productivity and lower turnover rates.
- **Improved leadership and decision-making:** Training and development programmes can nurture future leaders within the municipality and enhance the decision-making capabilities of existing leaders. This can promote effective

tive management, strategic planning, and governance practices, leading to better outcomes for the community.

- **Efficient utilization of resources:** Well-trained employees are better equipped to handle their responsibilities, resulting in more efficient utilization of resources within the municipality. This can lead to cost savings, reduced wastage, and improved financial management.
- **Reduced risks and errors:** Through training and development, employees can develop a better understanding of legal and regulatory requirements, ethical standards, and operational protocols. This can minimize risks, errors, and malpractices, ensuring compliance and maintaining the reputation of the municipality.
- **Capacity building:** Training and development initiatives can contribute to building a strong and capable workforce within the KZN municipalities. This can address any existing skills gaps, attract, and retain talented individuals, and develop a competent pool of employees who can adapt to changing demands and challenges.
- **Improved interdepartmental collaboration:** Training and development programmes can promote interaction and collaboration among employees from different departments, fostering a culture of teamwork and coordination. This can result in better communication, information sharing, and integrated efforts to address the municipality's goals and objectives.

Unfortunately, weak leadership and governance, including inadequate follow-up and support regarding training and development programmes or the lack of constant training and development of officials' workers within the KZN municipalities may continually cause a significant challenge that will repetitively hinder the effective governance and service delivery. This issue will recurrently engender several consequences and impacts on the overall operations and productivity of the municipalities. For example, weak leadership and governance, including inadequate follow-up and support regarding training and development programmes can cause the following (Loughlin, 2023; Li, 2022):

- **Incompetence and inefficiency:** Without proper training and development opportunities, officials' workers may lack the necessary skills, knowledge, and expertise required to perform their duties efficiently. This can lead to mistakes, delays in service delivery, and overall inefficiency, negatively impacting the quality of services provided by the municipalities.
- **Lack of innovation and adaptation:** Effective training and development programmes help officials' workers stay updated with the latest trends, technologies, and best practices in their respective fields. Without access to these learning opportunities, employees may struggle to innovate, adapt to new challenges, and improve processes within the municipalities.
- **High employee turnover:** The absence of training and development can lead to low employee morale and job satisfaction, resulting in high turnover rates among officials' workers. This constant turnover not only leads to a loss of

institutional knowledge but also increases recruitment and training costs, further straining the municipal budgets.

- Limited career growth opportunities: Continuous learning and development are essential for career growth and progression. However, without proper training and development initiatives, officials' workers may feel stagnated and devoid of opportunities for professional advancement. This can lead to demotivation and a lack of dedication to their roles.
- Compliance issues: Municipalities operate within a complex legal and regulatory framework. Without adequate training and development, officials' workers may struggle to keep up with the changing laws and regulations. This can result in non-compliance, legal challenges, and reputational damage for the municipalities.

Therefore, to address this issue, municipalities need to prioritize training and development programmes for officials' workers. This includes establishing sustainable and continuous learning initiatives, creating partnerships with educational institutions and industry experts, and allocating sufficient resources for training. By investing in the development of their workforce, municipalities can enhance service delivery, promote innovation, and improve overall governance and performance. A successful training and development approach within the KZN municipalities can lead to improved institutional performance and a better quality of life for the residents. Although training and development can be considered as an appropriate method to solve the issue of skills gaps, various other approaches may also be useful.

## **5. Potential Proactive Approaches to Tackle and Close the Skills Gaps within the KZN Municipalities**

Several approaches can be utilized to develop the required future skills with the KZN municipalities. These approaches may be previously used, but they need to be improved. According to Loughlin (2023), it is undeniable that sustainability skilling may benefit from current developments to improve the road map for green employment, skills, training, and career pathways. On the other hand, a wide spectrum of stakeholders must work together. Municipalities can also move swiftly to upskill their staff members by implementing learning programmes and projects that emphasize sustainability and green capabilities. They will need assistance from a variety of learning partners, such as educational institutions, on-line training providers, apprenticeship programmes, and providers of vocational education. The first step in this approach should be to create new educational resources that can be used both in-person and virtually. Extending learning programmes to encompass employees within municipalities and a greater segment of the workforce is necessary to support it. There is an excellent opportunity for government policy and financing to help scale up and expedite these outstanding efforts.

The next generation of workers must also be planned for and prepared for the



green jobs of the future. Loughlin (2023) emphasized that municipalities must design educational initiatives that center on the knowledge and abilities in sustainability that they wish their staff to gain. In order to fulfill the demands of sustainability in the future, it will be essential to upskill the staff and ensure that everyone is informed of the latest sustainability rules and technologies. It is evident that when trying to fill the many sustainable roles that are opening up within municipalities, training, and upskilling are necessary. Municipalities must take responsibility for their destiny by focusing on improving their ability to effectively capitalize on the opportunities presented by the green shift. The most significant aspect is that approaches can be improved, adapted, adopted, and implemented to promote skills development through capacity building within KZN municipalities. Table 13 presents some of these approaches.

In light of Table 13, municipalities need to take a proactive approach to address skills gaps within their workforce, as investing in skills development can

**Table 13.** Potential approaches to tackle skills gaps within the KZN municipalities.

<b>Additional approaches to tackle skills gaps within the KZN municipalities</b>	<b>Description of each approach</b>
Workshops and training	Conducting training programmes and workshops to upskill employees and provide them with the necessary knowledge and skills. This can include technical training, leadership development, communication skills, project management, etc.
Competency-based assessments:	Instead of traditional skills audits that focus on qualifications and experience, adopting a competency-based assessment approach can provide a more comprehensive understanding of an individual's skills and abilities. This approach involves assessing individuals' knowledge, skills, and abilities against predefined competencies relevant to their roles within the municipality. This can help identify skill gaps and develop targeted capacity-building programmes.
Collaborative learning platforms	Creating collaborative learning platforms, such as online communities of practice or knowledge-sharing networks, can facilitate skills development within KZN municipalities. These platforms can enable employees to share experiences, lessons learned, and best practices, promoting peer-to-peer learning and fostering a culture of continuous improvement.
Collaboration with academic institutions	Partnering with universities and colleges to develop specialized courses and programmes that align with the future skills requirements of KZN municipalities. This collaboration can also involve offering internships, apprenticeships, and work-study programmes to provide practical experience to students.
Multi-stakeholder collaboration:	Engaging multiple stakeholders in the skills auditing process can provide a more holistic perspective on the skills needed within the municipality. In addition to internal assessments, involving external stakeholders such as community members, civil society organizations, and industry experts can help identify additional skills requirements and potential partnership opportunities for capacity-building initiatives.
Data-driven approach	Utilizing data analytics and technology can enhance the effectiveness of skills audits. By analyzing data on employee performance, training needs, and emerging trends, municipalities can gain valuable insights into skill gaps and prioritize capacity-building interventions. This approach can also help monitor the impact of capacity-building programmes and adjust strategies accordingly.

**Continued**

Mentoring and coaching programmes	Establishing mentoring and coaching programmes where experienced professionals within the municipalities can guide and support individuals in developing the required future skills. This allows for personalized guidance and creates a culture of continuous learning. Implementing mentoring and coaching programmes within municipalities can aid in skills development. Pairing experienced employees with those who possess potential but lack certain skills can provide valuable guidance and support. Mentoring and coaching can help transfer knowledge, develop specific skills, and build confidence among employees, thereby enhancing their overall capacity.
Job rotation and cross-functional assignments(secondments)	Enabling employees to gain exposure to different roles and departments within the municipalities through job rotation and secondment programmes. This helps employees develop a broader skill set and a more holistic understanding of the organization. Enabling employees to take on different roles and responsibilities through job rotation and cross-functional assignments can broaden their skill sets. This approach allows employees to gain exposure to various municipal functions and departments, enhancing their understanding of the broader organization and developing a diverse range of skills.
Digital skill development	Providing training and resources to enhance digital literacy and technology skills. This can include training on digital tools, data analysis, cybersecurity, and other emerging technologies relevant to the operations of the municipalities.
Performance management and feedback	Implementing performance management systems that clearly define the required future skills and provide ongoing feedback and coaching to employees to help align their development with organizational goals.
Continuous learning culture and professional development	Promoting a culture of continuous learning and encouraging employees to pursue professional development opportunities, such as attending conferences, webinars, or obtaining certifications in relevant fields. Adopting a continuous learning culture within KZN municipalities can promote skills development on an ongoing basis. Encouraging employees to engage in regular professional development activities, such as attending workshops, conferences, or online courses, can help build their skills and keep them updated with the latest industry trends. This can be facilitated through providing learning opportunities, allocating time for learning, and recognizing and rewarding employees for their continuous learning efforts.
Talent acquisition and retention strategies	Developing strategies to attract and retain talent with the required future skills. This can involve revising recruitment processes, offering competitive compensation and benefits packages, and providing opportunities for career advancement and growth.

Source: Adapted from [Li \(2022\)](#) and [Meta \(2022\)](#).

ultimately lead to improved service delivery, employee satisfaction, and overall organizational success. Through adopting these approaches, KZN municipalities can effectively identify skill gaps, develop targeted capacity-building programmes, and promote skills development among their employees, ultimately enhancing their overall performance and service delivery to the community. KZN municipalities need to adopt a comprehensive and multi-faceted approach to ensure the development of the existing and required future skills among their employees. This can help in building a competent and skilled workforce capable of meeting the challenges of the future. Furthermore, the following suggestions were recommended to ensure the growth and sustainability of the KZN muni-

palties (KZN COGTA Report, 2021):

- Education, training, and development interventions aimed at preparing employees for more managerial and technical positions should also identify female employees as potential candidates.
- Implementation of a succession planning programme to ensure that the aging personnel imparts knowledge to lower levels of staff who have the potential of taking leadership positions. Possible training and development could include mentorship.
- There are opportunities to engage with municipal officials who have scored above the required level on competencies to possibly mentor that official who scored below the required level on competencies.
- The training and development programmes must address the competencies that were scored below the required level (skills gaps) and where possible, training must be practical and undertaken on-site. Identified programmes must be prioritized in the municipalities workplace skills plan.
- Recruitment processes must specify the minimum competencies to ensure that the potential candidates meet the required level of competence.
- Municipalities to adopt a more deliberate process to recruit people with disabilities and females in municipalities. The findings indicate that within KwaZulu-Natal the 2% benchmark on disability has not been achieved. The Province is currently at 1%. A provincial approach to addressing this finding must be developed and implemented.
- Development and/or enhancement of an appropriate web-based skills audit system to sustain the municipal skills audits and a central repository of skills in local government.
- The findings of the reports be shared with Sector Departments to ensure alignment of capacity-building programmes to the findings of the municipal skills audits.
- Reporting on municipal skills audits to be a standard item on the Provincial Capacity Co-ordinating and Monitoring Committee.
- Engagement with strategic local government partners to enhance skills in audit processes.
- The findings of the competencies should be viewed as subjective and it may be advisable to conduct a training need analysis to address the development gaps identified and ensure that exact needs are addressed. Municipalities that have not completed competencies are encouraged to complete them.
- The profile of the Municipal Skills Development Facilitator is to be reviewed.
- Engagements with the National School of Government and the KZN Provincial Public Service Training Academy to be undertaken to identify programmes and support towards the implementation of findings.

In light of the above the implementation plan was necessary for the submission of the Provincial Municipal Skills Audit Report to Technical PCF-Technical MuniMEC Joint Sitting; the submission of the Provincial Municipal Skills Audits Report at MuniMEC; Submission of the Provincial Municipal Skills Audits Re-

port to GSCID Cluster; the submission of Provincial Municipal Skills Audit Report to Provincial Executive Council for approval; the Development of Action Plans; the Tabling of reports at 54 Municipal Councils; the Implementation of Action plans; the Monitoring of Action Plans: implementation of recommendations; and the Quarterly and Annual Reports on implementation of recommendations.

### **1) Lessons learned from Municipal Skills Audits within the KZN municipalities**

The literature revealed that public service delivery in the majority of municipalities in developing countries is inefficient, expensive, red-taped, laborious, overly procedural, and opaque (Loughlin, 2023; Meta, 2022). For the majority of local governments, lack of professionalism in public service delivery or inadequate service delivery and governance continue to be grave challenges. Furthermore, inadequate service delivery can be attributed to many factors, including officials' corruption, institutional capacity constraints regarding the shortage of personnel and skills needed, lack of transparency, poorly functioning ward committees, lack of accountability on the part of council members, lack of public consultation on governance matters, noncompliance with local and national laws, failure to prioritize community needs, misaligned budgeting processes, and conflicts between political and administrative branches of government (Meta, 2022). Moreover, local authority, which consists of building capacity policies and a legislative and governance framework for overseeing the local administration is ineffective. Historically, in most developing countries, public servants working in local municipalities usually do not act as servants to the public, but rather as masters lacking any transparency or accountability. To better serve the public, local authority personnel typically lack appropriate skills in local governance. Thus, poor service delivery in the municipalities is a result of several factors, including a shortage of skilled and trained staff.

Regarding the KZN municipalities, it was indicated that the Municipal Skills Audits within KZN municipalities were important for several reasons. According to Maervoet (2023); Fissuh et al. (2022); Donovan et al. (2022); and (Meta, 2022), the Municipal Skills Audits within KZN municipalities were important for 1) the identification of skills gaps as well as the existing skills and competencies within the municipal workforce. This allowed for an assessment of the skills gaps and areas where additional training or recruitment could be required. The Municipal Skills Audit within KZN municipalities was important 2) for effective resource allocation, where the skills audit could assist in making informed decisions about the allocation of resources within the municipality. It could help identify the areas where there is a surplus or shortage of specific skills, enabling the appropriate allocation of human resources and budgetary resources; 3) for planning for succession and career development: through the skills audits, municipalities can identify potential leaders and ensure a smooth succession planning process. It could help to identify employees who have the potential to take

on higher-level roles, enabling the municipality to invest in their development and career progression; 4) for enhancing service delivery: by identifying the skills and competencies needed for efficient service delivery, the skills audits could help municipalities to improve the quality and effectiveness of their services. It could also allow for targeted training and development programmes, ensuring that staff has the necessary skills to effectively carry out their roles; 5) for promoting efficiency and productivity: the skills audits can identify areas where there is a need for upskilling or streamlining processes. This helps to enhance efficiency and productivity within the municipality, ultimately leading to improved service delivery and cost-effectiveness; 6) for compliance with legislative requirements: some legislative frameworks require municipalities to conduct skills audits. By conducting the audit, municipalities can ensure compliance with these requirements and avoid potential legal or regulatory issues. Thus, the Municipal Skills Audits within KZN municipalities will remain imperative for effective resource allocation, identifying skills gaps, planning for succession and career development, enhancing service delivery, promoting efficiency and productivity, and ensuring compliance with legislative requirements. However, the examination of the skills audits has shown that in most municipalities in the KZN, the job descriptions differ between municipalities and the skills audit tool is to be reviewed to accommodate the differences. This study observed that there was a lack of capacity to undertake accurate skills audits in KZN municipalities. Therefore, municipalities are encouraged to improve the system and mechanism of skills audits and to maintain good practices when conducting skills audits within municipalities. Skills audits must be integrated into the Municipal Human Resource Strategy and Workplace Skills Plans processes.

## **2) Recommendations**

Various strategies and approaches could be devised to bridge skill gaps and support the development of future skills for the growth and well-being of municipalities in the KZN province. As a result, local governments in the KwaZulu-Natal province must consider crucial recommendations linked to skills audits within KZN municipalities. Sustainable municipalities must adhere to strong political will and leadership from local government officials to prioritize sustainability initiatives and implement policies that promote sustainable practices; involve and engage residents and businesses in decision-making processes and sustainability efforts to ensure that their needs and concerns are taken into account (Chetty & Moodley, 2022). In addition, sustainable municipalities need to have integrated planning processes that consider the social, economic, and environmental aspects of sustainability. This involves coordination between different departments and stakeholders to ensure that policies and initiatives are aligned. Davids (2022) suggested that municipalities' sustainability should consider the improvement of financial resources, human resources, skilled administrative leadership, financial management capacity, municipal service delivery, institutional environment, infrastructure and work tools, community engage-

ment, and the capacity and skills of municipal officials. Overall, sustainable municipalities strive to create a resilient and livable environment for current and future generations by embracing environmentally friendly practices and fostering a sense of community responsibility. Local governments need to prioritize sustainability in order to address pressing issues such as climate change, resource depletion, and urbanization.

**a) Recommendations aligned to skills audits within the KZN municipalities**

Local government undertaking skills audits within KZN municipalities must consider the following:

- Standardize the skills audits process: Ensure that there is a standardized process for conducting skills audits across all municipalities in KZN. This will help ensure consistency and accuracy in the assessment of skills across different municipalities.
- Use a combination of methods: Instead of relying solely on self-assessment, incorporate a combination of methods such as interviews, job shadowing, and skills assessments to get a more comprehensive picture of employees' skills and capabilities.
- Involve employees in the process: Engage employees in the skills audit process by providing them with the opportunity to self-assess their skills and provide input on their training and development needs. This will help ensure that the skills audit is relevant and useful to employees.
- Develop a skills database: Create a centralized skills database that contains information on employees' skills, qualifications, and training needs. This database can be used to identify skills gaps, track progress on skills development, and inform decision-making on training and development programmes.
- Provide training and development opportunities: Use the findings from the skills audits to identify training and development opportunities for employees. Invest in training programmes that will help employees develop the skills they need to perform their roles effectively and contribute to the success of the municipality.
- Monitor and evaluate progress: Regularly monitor and evaluate the effectiveness of the skills audit process and the impact of training and development programmes. Use feedback from employees and managers to make any necessary adjustments and improvements to the skills audit process.

**b) Recommendations for growing and advancing sustainable municipalities in the KwaZulu-Natal province**

Sustainable municipalities can have a significant positive impact on the local economy by creating jobs, saving costs, attracting investment, increasing property values, and building resilience to climate change. Therefore, recommendations for growing and advancing sustainable municipalities in the KwaZulu-Natal province may consist of the following:

- Municipalities have to work closely with businesses and organizations in advanced and growth municipalities within the KZN province to identify the

specific skills needed and develop training programmes that align with industry needs. By collaborating with industry partners, municipalities can ensure that individuals are equipped with the skills needed to succeed in their chosen fields.

- Municipalities should constantly collaborate with local educational institutions, businesses, and government agencies to create training programmes that focus on developing the specific skills needed for advanced and growth municipalities within the KZN province. These programmes should provide hands-on experience and practical knowledge to help individuals gain the necessary skills.
- It is essential that municipalities, mostly in rural areas, should pair individuals with mentors who have experience in advanced and growth municipalities to help guide them in developing the necessary skills. Mentors can provide valuable advice, support, and knowledge to help individuals succeed in their chosen fields.
- Municipalities should provide opportunities for individuals to gain practical experience through internships and apprenticeships with advanced and growth municipalities within the KZN province. This hands-on experience can help individuals develop the necessary skills and knowledge needed to succeed in their chosen profession.
- Municipalities should promote a culture of lifelong learning and skill development within the KZN province by offering educational opportunities, workshops, and seminars that focus on advancing and growing municipalities. Encouraging individuals to continuously improve their skills will help bridge skills gaps and promote the development of future skills.
- Municipalities must create opportunities and provide access to technology and resources. Ensure that individuals have access to the necessary technology and resources to develop their skills in advanced and growth municipalities within the KZN province. This may include providing access to online learning platforms, software tools, and other resources that can help individuals enhance their skills.
- Invest in employee training and upskilling by offering training and development opportunities to current employees to enhance their digital skills and knowledge. In addition, leverage technology for training by utilizing online learning platforms, virtual training programmes, and digital tools to deliver training and upskilling opportunities to employees conveniently and cost-effectively.
- Collaborate with technology companies. Municipalities should partner with technology companies and industry experts to gain insights into emerging trends and technologies and to co-create training programmes that are tailored to the specific needs of the municipality. Also, municipalities should encourage innovation and creativity by creating a supportive environment that fosters creativity, experimentation, and innovation, and provides opportunities for employees to apply their digital skills in real-world projects



and initiatives.

By implementing these strategies and approaches, municipalities in the KZN province can bridge skills gaps and promote the development of future skills related to advanced and growing municipalities, thereby positioning themselves for growth and success in the digital age, ultimately leading to a more prosperous and sustainable community.

## 6. Conclusion

This paper examined the executive summary of the KZN provincial report on the municipal skills audits conducted from May 2020 to January 2021. The analysis and examination of the KZN provincial report on the municipal skills audits were centered on skills gaps and future skills development in KZN municipalities. The report recommended that there should be Skills Audits to identify the current skills and knowledge that exist in municipalities in KwaZulu-Natal; determine the skills gaps in all municipalities allowing appropriate training and development programmes to be identified following the assessments; assess the skills that exist in municipalities, that may result in the identification of skills gaps, and to develop a central repository of skills for all municipalities within KwaZulu-Natal. The rationale was that municipal performance and service delivery have not been consistent. Various causes were documented for poor performance, including skills deficits or skills gaps. The implementation of the skills audits therefore aimed to determine the level of skills within municipalities. It was indicated that critical skills gaps within the municipalities could lead to various challenges and inefficiencies within the KZN municipalities' operations, hindering their ability to effectively deliver services to the community. However, the current study on the KZN provincial report concerning municipal skills audits identified specific areas where the skills gaps are most pronounced, such as technological skills, project management, financial management, or leadership. In addition, the analysis of the KZN provincial report on the municipal skills audits allowed to development of an approach targeting required interventions (training programmes) to bridge those gaps. The lesson learned from previous and current studies is the importance of prioritising constant skills development within municipalities. This paper intends to increase awareness about the repercussions of current and future skill gaps, as well as the skills required to improve the KZN province's long-term sustainability, economic growth, and citizens' quality of life. By investing in education and training, providing incentives for businesses to invest in employee development, promoting access to higher education, encouraging lifelong learning, and collaborating with industry stakeholders, the KZN local government can effectively improve the professional skills of its citizens and strengthen the overall economy. Consequently, a proactive strategy and measures to address and tackle skills gaps will be essential in ensuring that municipal employees have the necessary competencies to perform their roles effectively. As a result, the primary goal of performing skills audits in

KZN municipalities should be to build a comprehensive set of skills that includes both technical and non-technical competencies. Critically, skills developed within KZN municipalities should enhance professionalism in service delivery and increase consciousness about the culture of accountability among municipalities' officials.

Furthermore, the necessity for periodic skill audits, as well as ongoing training and professional development programmes to keep the staff members up to date with changing technology and industry trends, should remain critical for KZN municipalities' long-term sustainable growth. Continuous learning, reskilling, and upskilling of municipal personnel will help municipalities grow and develop, allowing them to better serve their populations. Ultimately, this study highlights the KZN government's vital responsibility in encouraging and sponsoring skill development in order to sustain efficient and successful municipal services. Everyone should understand that creating a sustainable municipality is and always will be a challenging task. Thousands of incremental actions and procedures must be taken rather than a single approach/solution. Accordingly, addressing skill gaps through investment in education and training is an important measure and step toward a more sustainable municipality. Municipalities can improve service delivery and contribute to KZN's general socioeconomic development by boosting the skills of municipal staff. Collaborating and partnering with higher learning institutions could play an important role in proactively solving the existing skills mismatch (skills gaps) issue and generating competent municipal staff capable of providing professional service delivery to communities. A well-educated, fit-for-purpose staff within municipalities could boost innovation, productivity, and economic development. Therefore, work-integrated learning programmes and local government-led curriculum development in partnership with higher learning institutions could allow municipal workers to develop practical skills and remain relevant in this evolving era of disruptive technologies.

## Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

## References

- Babich, N. (2020). *Human-Centered Design: An Introduction, Practices, and Principles*. <https://www.shopify.com/za/partners/blog/human-centered-design>
- Bakhshi, H., Downing, J. M., Osborne, M. A., & Schneider, P. (2017). *The Future of Skills Employment in 2030*. Pearson and Nesta.
- Beukes, E., & de Visser, J. (2021). *A Framework for Coalitions in Local Government*. <https://dullahomarinstitute.org.za/multilevel-govt/publications/04112021-a-framework-for-coalitions-in-local-government-1.pdf>
- Bick, N., & Keele, D. (2022). Sustainability and Climate Change: Understanding the Political Use of Environmental Terms in Municipal Governments. *Current Research in*

- Environmental Sustainability*, 4, Article ID: 100145.  
<https://doi.org/10.1016/j.crsust.2022.100145>
- Bonifacio, R. (2023). *Conducting a Skills Audit for Competitive Edge*.  
<https://www.shiftbase.com/glossary/skills-audit>
- Burton, J., Patel, D., Landry, G., Anderson, S. M., & Rary, M. (2021). Failure of the “Gold Standard”: The Role of a Mixed Methods Research Toolkit and Human-Centered Design in Transformative WASH. *Environmental Health Insights*, 15, 1-4.  
<https://doi.org/10.1177/11786302211018391>
- Carlisle, S., Zaki, K., Ahmed, M., Dixey, L., & McLoughlin, E. (2021). The Imperative to Address Sustainability Skills Gaps in Tourism in Wales. *Sustainability*, 13, Article No. 1161. <https://doi.org/10.3390/su13031161>
- Chetty, R., & Moodley, S. M. (2022). Building a Capable State: Unpacking Critical Skills Development Challenges in the Public Sector. *African Journal of Inter/Multidisciplinary Studies*, 4, 1-14. <https://doi.org/10.51415/ajims.v4i1.936>
- David, M. C. G., Orla, M. C. V., & Habiba, T. U. E. (2023). Skills Audits: An Integrative Literature Review. *Industrial and Commercial Training*, 55, 34-46.  
<https://doi.org/10.1108/ICT-06-2021-0042>
- Davids, Y. D. (2022). *Municipal Skills and Capacity Assessment Study*.  
<https://repository.hsrb.ac.za/bitstream/handle/20.500.11910/19271/12231%281%29.pdf?sequence=1&isAllowed=y>
- Dirks, M. (2020). *Consequence Management against Implicated Municipalities: Interaction with KZN COGTA MEC*. <https://pmg.org.za/committee-meeting/31158/>
- Donovan, S. A., Bradley, D. H., & Collins, B. (2022). *Skills Gaps: A Review of Underlying Concepts and Evidence*. <https://eric.ed.gov/?id=ED622537>
- Fischer, M., Safaeinili, N., Haverfield, M. C., Johnson, C. G. B., Zionts, D., & Zulman, D. M. (2021). Approach to Human-Centered, Evidence-Driven Adaptive Design (AHEAD) for Health Care Interventions: A Proposed Framework. *Journal of General Internal Medicine*, 36, 1041-1048. <https://doi.org/10.1007/s11606-020-06451-4>
- Fissuh, E., Gbenyo, K. K., & Ogilvie, A. (2022). *Determinants of Skill Gaps in the Workplace and Recruitment Difficulties in Canada*.  
[https://www150.statcan.gc.ca/n1/en/pub/18-001-x/18-001-x2022002-eng.pdf?st=\\_1pm1sic](https://www150.statcan.gc.ca/n1/en/pub/18-001-x/18-001-x2022002-eng.pdf?st=_1pm1sic)
- Govender, D. (2019). *The Public Service Skills Audit Methodology Framework*.  
[https://pseta.org.za/wp-content/uploads/2019/12/DRAFT\\_02122019\\_Skills-Audit-Framework-Methodology-1.pdf](https://pseta.org.za/wp-content/uploads/2019/12/DRAFT_02122019_Skills-Audit-Framework-Methodology-1.pdf)
- Kalonda, J. K., & Govender, K. (2021). Factors Affecting Municipal Service Delivery. *African Journal of Public Affairs*, 12, 1-26.
- Kavese, K., Mbali, A., & Anyikwa, I. (2022). *The Gig Economy, Digital Labour Platforms, and Independent Employment in the Eastern Cape*.  
[https://ecsecc.org/datarepository/documents/gig-econ-final-draft\\_FBfxN.pdf](https://ecsecc.org/datarepository/documents/gig-econ-final-draft_FBfxN.pdf)
- KZN COGTA (2021). *Annual Performance Plan for 2020/2021*.  
<https://www.kzntreasury.gov.za/ResourceCenter/Documents%20%20Administration/KZN%20Treasury%20Annual%20Performance%20Plan%20%202020-21%20%20Revised.pdf>
- Levesque, V. R., Bell, K. P., & Calhoun, A. J. K. (2017). Planning for Sustainability in Small Municipalities: The Influence of Interest Groups, Growth Patterns, and Institutional Characteristics. *Journal of Planning Education and Research*, 37, 322-333.  
<https://doi.org/10.1177/0739456X16655601>

- Li, L. (2022). Reskilling and Upskilling the Future-Ready Workforce for Industry 4.0 and Beyond. *Information Systems Frontiers*.  
<https://link.springer.com/article/10.1007/s10796-022-10308-y>  
<https://doi.org/10.1007/s10796-022-10308-y>
- Loughlin, B. (2023). *Sustainability Skills Gap and the Way Forward*.  
<https://instituteofsustainabilitystudies.com/insights/guides/sustainability-skills-gap-and-the-way-forward/>
- Maervoet, S. (2023). *Identifying and Closing Skills Gaps in Your Organisation*.  
<https://www.randstad.com/workforce-insights/talent-acquisition/identifying-closing-skills-gaps-your-organisation/#>
- Mashamaite, K., & Lethoko, M. (2018). Role of the South African Local Government in Local Economic Development. *International Journal of eBusiness and eGovernment Studies*, 10, 114-128.
- Mayombe, C. (2021). Needs Assessment for Vocational Skills Training for Unemployed Youth in eThekweni Municipality, South Africa. *Higher Education, Skills and Work-Based Learning*, 11, 18-33.
- Mensah, J. (2019). Sustainable Development: Meaning, History, Principles, Pillars, and Implications for Human Action: Literature Review. *Cogent Social Sciences*, 5, Article ID: 1653531. <https://doi.org/10.1080/23311886.2019.1653531>
- Meta, S. M. (2022). Critical Literature Review on Bridging Skills Gap through Development of Professional Courses: A Remedy for Unemployment Crisis in Kenya. *Advances in Applied Sociology*, 12, 415-422. <https://doi.org/10.4236/aasoci.2022.129033>
- Mohamed, S. (2020). *South Africa: Broken and Unequal Education Perpetuating Poverty and Inequality*.  
<https://www.amnesty.org/en/latest/news/2020/02/south-africa-broken-and-unequal-education-perpetuating-poverty-and-inequality/>
- Petrarca, R. (2023). *Local Government/Definition, Responsibilities & Examples*.  
<https://study.com/academy/lesson/what-is-local-government-definition-responsibilities-challenges.html>
- Smith, B. (2022). *Closing the Sustainability Skills Gap: Helping Businesses Move from Pledges to Progress*.  
<https://blogs.microsoft.com/on-the-issues/2022/11/02/closing-sustainability-skills-gap/>
- South African News Agency (2022). *Skills Audits for Public Servants in the KZN Administration*.  
<https://www.sanews.gov.za/south-africa/skills-audits-public-servants-kzn-administration>
- USAID (2020). *Leveraging Human-Centered Design for Family Planning: Lessons and Considerations*.  
<https://breakthroughactionandresearch.org/wp-content/uploads/2021/02/Leveraging-HCD-for-FP.pdf>
- Van der Waldt, G. (2020). Conducting Skills Audits in Local Government. *Administratio Publica*, 28, 42-60.
- Van der Waldt, G., Fourie, D. J., & Van Dijk, G. (2021). Senior Manager Competency Profiling: The Case of Local Government Sector in the Emerging Country. *Journal of Governance & Regulation*, 10, 15-26. <https://doi.org/10.22495/jgrv10i4art2>
- Van der Waldt, G., Fourie, D., Jordaan, J., & Chitiga-Mabugu, M. (2018). Skills Profile of Technical Staff in the South African Local Government Sector: An Empirical Survey. *Problems and Perspectives in Management*, 16, 173-185.  
[https://doi.org/10.21511/ppm.16\(1\).2018.17](https://doi.org/10.21511/ppm.16(1).2018.17)