



Public Service Sector Education and Training Authority (PSETA)

Understanding the Skills Gaps in the Public Service Sector

Research Report

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Understanding the Skills Gaps in the Public Service Sector

Research conducted by the Public Service Sector Education and Training Authority (PSETA)

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Executive Summary

There are plenty of explanations to warrant the understanding of skills gaps in the public service sector. The size of the public service boasts over 1.1 million employees (PERSAL, 2017) and the dynamic nature of the sector means that the employees frequently leave their occupations through retirement, change of occupational positions, successions, technological changes, implementation of new projects, change of strategic objectives and policy changes for organisations. All these changes regularly lead to the changes in the employee's duties, and this will undoubtedly require the employee to have new skills, which may lead to the presence of skills gaps. Therefore, time after time there are skills gaps in the sector, thus the PSETA has deemed it necessary to embark on a study that will identify sectoral training needs linked to the strategic objectives of the organisations in the sector.

The study aimed at analysing, and understanding the skills gaps in the public service at a sectoral level. It focuses on identifying the required skills at the major occupational level in the sector and compare them to the employee's actual skills set. The study further aimed at indicating whether the present workforce of the public service sector have the required skills and competencies for their respective jobs and, if not, which skills need further development. The study was guided by the following objectives:

- Identification of skills that are lacking in meeting the strategic objectives of the various government provincial and national departments.
- Measure the gaps between the skills required by the public service and the skills of the workforce.
- Noting the possible training and development needs of the current workforce in the public service sector.
- Provide a baseline in recruiting efforts when current employees do not possess the required skills.

The face to face interviews were held with the key informants in the sector. The findings shows that there are various deficient skills for various public service sector organisations to meet their strategic objectives. This has shed some light on the possible training and development needs of the current workforce in the public service sector. Noted below are some of the conclusions and recommendations derived from the research:

- Demand for skills varies across occupations and size of the organisation, this study determined that whilst some skills gaps are cutting across the various departments, some are unique to particular departments depending on the mandate and objectives of the specific department.
- The public service moratorium by the National Treasury has led to an increase number of acting arrangements when some occupations become vacant in certain organisations. This at times gives rise to the emergence of skills gaps as the workforce has to take on new responsibilities without the necessary attributes or capabilities to become effective in their new roles.
- The line managers are critical agents in determining the skills gaps in organisations, the line managers are the ones who are likely to have a clear understanding of performance expectations of the individual subordinates for their respective sub-directorates/units. For this reason, this study recommends that future studies on organisational or sectoral skills gaps need to start analysing skills gaps from a sub-directorates/unit level per organisation. This will be time consuming, but will be worth doing.
- The line managers need to provide added effort in the compilation of PDPs for the individual employees in their sub-directorates/units. If this process is comprehensively done, it will assist the line managers in understanding the skills gaps of their subordinates.
- Talent-spotting and succession planning in the public service may assist in closing the future skills gaps, this requires identifying suitable candidates and providing them with formal training and on-the-job training in the identified area.
- For the organisations to decide upon the appropriate approach to closing their skills gaps, they need to establish the wideness of the identified skills gaps per employee and then decide whether to hire new talent or up-skill the existing workforce through learning programmes or on-the job training.

Acronyms and Abbreviations

ACT	American College Testing
AMDP	Advance Management Development Programme
CAs	Chartered Accountants
COGTA	Cooperative Governance and Traditional Affairs
DIRCO	Department of International Relations and Cooperation
DPSA	Department of Public Service and Administration
EDP	Executive Development Programme
ETDP SETA	Education, Training and Development Practices SETA
HRD	Human Resource Development
IT	Information Technology
KZN	KwaZulu-Natal
MIS	Management Information System
NSDS	National Skills Development Strategy
NSG	National School of Government
Organisation for Economic Co-operation and Development	OECD
OTP	Office of the Premier
PDP	Personal Development Plan
PERSAL	Personnel and Salary Information System of Government
PFMA	Public Finance Management Act
PSETA	Public Service Sector Education and Training Authority
SAICA	South African Institute of Chartered Accountants

SCM	Supply Chain Management
SETA	Sector Education and Training Authority
SIC	Standard Industrial Classification
SMS	Senior Management Service
WSP	Workplace Skills Plan

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Chapter 1: Background and Introduction

This chapter is aimed at introducing the research and reinforcing the argument for the need of a study on the skills gaps in the public service sector. This will be done by discussing the research problem with its related implications, the motivation and need for conducting the study, as well as the aims and objectives of the study.

The primary objective of any organisation is to realise its predetermined current and future strategic objectives (Delbridge, Edwards, Forth, Miskell, & Payne, 2006) (Morris & Reed, 2008). The skills arsenal of organisations forms an integral variable towards the achievement of those strategic objectives. The thinking goes, the skills base of the existing workforce in an organisation (correctly utilised) is directly proportional to the performance outcomes of the organisation (Delbridge, Edwards, Forth, Miskell, & Payne, 2006). This is not to overlook the significance of other dynamics such as the external factors which at times might determine the performance outcomes of the organisations, but this is to stress the fundamental role that the skills base of the existing workforce holds towards the achievement of strategic objectives for organisations.

Lack of skills in some occupational areas within the organisation have adverse effects in the performance of the organisation (Morris & Reed, 2008) (McIntyre , 2013). Therefore, this paper concedes that the exercise of conducting an analysis of skills base within the workforce becomes a vital exercise for understanding skills related factors affecting organisational productivity and growth. This process of analysing the existing skills within the organisation will assist the organisation in comparing the skills that are needed for the achievement of the strategic objectives of the organisation against the current skills base of the workforce, that exercise thoroughly done will alert the organisation of the skills gaps within their workforce.

Skills gaps exist when organisations identify that their workforce has a lower level of skills than is necessary to meet the objectives of the organisation (UK Skills Dialogue, 2004) cited in (Morris & Reed, 2008) (American Society for Training & Development (ASTD, 2006) cited in (Sipengane, 2014). Skills gaps therefore refer to a lack of proficiency of existing staff or ability to perform their jobs to the ideal level (Morris &

Reed, 2008) (OECD, 2015). Skills gaps purely refer to the significant difference between the skills that the organisation demands from its workforce and the skills that the workforce offers (American College Testing (ACT, 2017) (OECD, 2015). In understanding the skills gaps, Morris and Reed (2008) guards against confusing the skills gaps with the skills shortages, the distinction between skills gaps and skills shortages is that skills gaps compromise the inability of people in the existing workforce to perform to the level required by the organisation, and skills shortages arise from insufficient numbers of recruits in the industry labour pool (Morris & Reed, 2008). In conducting a skills gaps analysis, keeping in mind this distinction will be important. Closing the skills gaps has numerous benefits for both the employer and the employees. Well skilled workforce work at a higher level of productivity; which can be translated into the work being completed faster with fewer mistakes leading to a more profitable efficient organisation (McIntyre , 2013). This is further acknowledged by Sipengane (2014) by stating that a skilled workforce plays a vital role in economic growth and development.

The current debate about the challenges of performance in the South African public service identifies an interesting knowledge gap on the existing skills gaps within the public service. The skills gaps within the public service has been minimally studied, given the recognition of the importance of both the role of the public service in the socio-economic welfare of the citizenry and the importance of conducting a skills gaps analysis, the Public Service Sector Education and Training Authority (PSETA) thus has identified the necessity to examine the skills gaps within the public service sector.

1.1. Motivation for the Study

There are plenty of explanations to warrant the understanding of skills gaps in the public service sector. The size of the sector, the public service sector boasts over 1.1 million employees (PERSAL, 2017) and the dynamic nature of the sector means that the employees frequently leave their occupations through retirement, change of occupational positions, successions, technological changes, implementation of new projects, change of strategic objectives and policy changes for organisations. All these changes regularly lead to the changes in the employee's duties, and this will

undoubtedly require the employee to have new skills, which may lead to the presence of skills gaps.

Therefore, time after time there are skills gaps in the sector, thus the PSETA has deemed it necessary to embark on a study that will identify sectoral training needs linked to the strategic objectives of the organisations in the sector. The information gathered will help identify the skills gaps for the sector and will assist in the update of the PSETA Sector Skills Plan. What holds relevance to this study is the assertion by Morris and Reed (2008) that skills gaps in some domains and occupations impacts negatively on the efficiency and productivity of the organisation and are of devastating and immediate concern. Accordingly, the analysis and understanding of such skills gaps will assist the sector to understand the skills needed to achieve their strategic objectives whilst giving a direction in terms of training priorities. Important to be reminded that the success of organisations is directly dependent upon having talented and flexible workforce (American College Testing (ACT, 2017), therefore the bridging of skills gaps become central. A research of this nature should assist towards the understanding of attainable interventions to address skills gaps that may exist for organisations.

1.2. Aims and Objectives

This study is aimed at analysing, and understanding the skills gaps in the public service at a sectoral level. It focuses on identifying the required skills at the major occupational level in the sector and compare them to the employee's actual skills set. The study is further aimed at indicating whether the present workforce of the public service sector have the required skills and competencies for their respective jobs and, if not, which skills need further development. This study will be guided by the following objectives:

- Identification of skills that are lacking in meeting the strategic objectives of the various government provincial and national departments.
- Measure the gaps between the skills required by the public service and the skills of the workforce.

- Noting the possible training and development needs of the current workforce in the public service sector.
- Provide a baseline in recruiting efforts when current employees do not possess the required skills.

1.3. Sectoral Profile and Scope of the Study

The scope of the PSETA is informed by the Standard Industrial Classification of all Economic Activities (SIC) codes that informs the sectoral classification or categorization. PSETA is mandated in terms of the Skills Development Act, No.97 of 1998, to facilitate skills development for the public service sector. According to Section (10) of the Act, a Sector Education and Training Authority (SETA) must develop, annually update and implement a Sector Skills Plan in accordance with the National Skills Development Strategy (NSDS). In accordance with this mandate, PSETA is primarily responsible for the provision of transversal skills (i.e. the business of government) to all national departments, provincial departments, PSETA registered public entities, national parliament and provincial legislatures as outlined in figure 1. These are categorized as four (4) different sub-sectors. Transversal skills and functions include administration, management, planning, legislation and policy development, which form the focus to drive the development of skills and competencies in areas that will make the delivery of the business of government more effective and efficient.

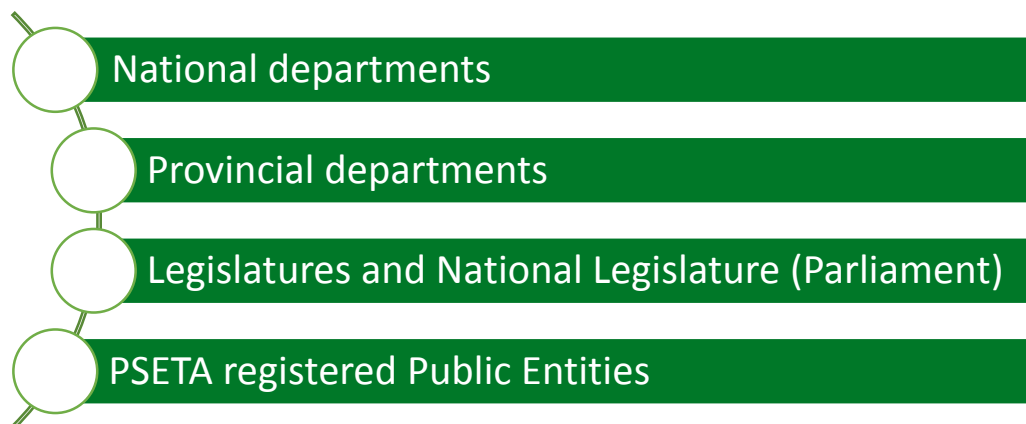


Figure 1: PSETA sub-sectors

The national and provincial departments (which fall within the PSETA scope) covers all employees employed in terms of the Public Service Act of 1994 (which excludes medical practitioners, nurses, teachers, police and the military). Many departments, such as education and health have 'dual reporting', i.e. reporting to PSETA and a line-function SETA, such as Health and Welfare SETA in the case of health and medical practitioners. National departments are responsible for implementing laws and policies decided on by Parliament or Cabinet. The scope of the this study covered 15 sampled national departments of out of the total of 38 national departments that are registered with PSETA with the focus being on transversal skills in department that solely submit to PSETA including National School of Government (NSG). There are nine (9) provincial governments with 10, 11 or 12 departments (Office of the Premier inclusive) in each province outlined in Table 1 which follows.

Table 1: List of Departments within the Provincial sub-sector

Free State	Gauteng	Limpopo	North West	KwaZulu-Natal	Mpumalanga	Eastern Cape	Western Cape	Northern Cape
Agriculture and Rural Development	Agriculture and Rural development	Agriculture	Community Safety and Transport Management	Agriculture and Rural Development	Agriculture and Rural Development, Land and Environmental affairs	Cooperative Governance and Traditional Affairs	Agriculture	Agriculture and Rural Development
Cooperative Governance and Traditional Affairs	Community Safety	Co-operative Governance; Human Settlement and Traditional Affairs (COGHSTA)	Culture, Arts and Traditional Affairs	Cooperative Governance and Traditional Affairs	Cooperative Governance and Traditional Affairs	Economic Affairs, Environmental Affairs and Tourism	Community Safety	Cooperative Governance and Traditional Affairs
Economic, Small Business Development, Tourism and Environmental Affairs	Infrastructure and Development	Economic, Development, Environment and Tourism (LEDET)	Education and Sports Development	Economic Development, Tourism and Environmental Affairs	Economic, Development and Tourism	Provincial Treasury	Cultural Affairs and Sport	Economic, Small Business Development, Tourism and Environmental Affairs
Education	Housing and Local government	Education	Health	Education	Education	Roads and Public works	Economic development and Tourism	Education
Health	Sports, Arts, Culture and Recreation	Health		Health	Health	Rural Development and Agrarian Reform	Environmental Affairs and Development Planning	Health

Human Settlements	Health	Transport	Local Government and Human Settlements	Human Settlements	Human Settlements	Education	Health	Human Settlements
Police, Roads and Transport		Safety, Security and Liaison (LDSSL)	Public works and Roads	Community Safety and Liaison	Community Safety, Security and Liaison	Health	Human Settlement	Police, Roads and Transport
Provincial Treasury	Finance	Provincial Treasury	Finance, Economy and Enterprise Development	Provincial Treasury	Provincial Treasury	Human Settlement	Local Government	Provincial Treasury
Public Works and Infrastructure	Economic Development	Public Works, Roads and Infrastructure	Rural, Environment and Agricultural Development (Read)	Public Works	Public works, roads and Transport	Safety and Liaison	Provincial Treasury	Public Works and Infrastructure
Social Development	Social Development	Social Development	Social Development	Social Development	Social Development	Social Development	Social Development	Social Development
Sports, Arts , Culture and Recreation	Roads and Transport	Sport, Arts and Culture (LDSAC)	Tourism	Sports and Recreation	Culture, Sports and Recreation	Transport	Transport	Sports, Arts , Culture and Recreation
				Transport				
OTP	OTP	OTP	OTP	OTP	OTP	OTP	OTP	OTP

Provincial Departments are included in the study through coordination with the Offices of the Premier across the nine (9) provinces.

The Legislative sub-sector is limited to the administrative component, with the members of parliament function falling with the scope of the ETDP SETA. PSETA only focuses on administrative personnel in all nine (9) Legislatures and parliament. All nine (9) legislatures and national parliament were sampled for the study. One legislature responded via the online tool.

Public entities registered with PSETA have different mandates but the common skills cutting across these entities are transversal skills. Currently there are 24 Public entities registered on the PSETA Management Information System (MIS). Only one Public entity responded to the online survey.

Chapter 2: Literature Review

Any piece of research will not be the first of its kind, there is always history of work that has gone before it (Williman, 2011). As a result, this chapter analyse literature which has been written on the subject of skills gaps by various authors over the years. The literature reviewed varies from the international literature to the national literature with the South African context.

2.1. The Need to Conduct Skills Gaps?

There appears to be an agreement in literature on the need and importance of conducting a skills gap analysis. ACT (2011) noted that a skills gap analysis is central to minimizing time spent in training and enabling workers to focus on specific skills that they lack. This is to recognise that at times employees may require top-up skills aimed at the specific skills the employee need as opposed to enrolling for the full course of training. A thorough skills gaps analysis will therefore assist the employers in deciding upon the more appropriate training action for their individual employees. This is further acknowledged by the argument from ACT (2011) that the ability to create cost effectiveness in organisational training systems has increased skills gap research.

The assessment of skills gaps in the labour market further assists policy makers in the development of informed responses for improving the quality of skills supplied, resulting in an improved business environment (OECD, 2015). Research conducted by the Organisation for Economic Co-operation and Development (OECD) (2015) on the employers in the agri-business and renewable energy sectors revealed that employers perceive skills gaps as a large barrier to their business performance. In terms of impact, skills gaps seem to predominantly affect organisations' competitiveness, with companies reporting direct impact on their efficiency, quality in service and running costs, as well as a loss of sales (OECD, 2015). This is to sustain the argument on the need to conduct skills gaps in the workforce, as this impacts upon the performance of the organisations. However, it is important to note that skills can only make a substantive contribution to productivity performance if they are effectively deployed in the firm (Delbridge, Edwards, Forth, Miskell, & Payne, 2006).

The literature has shown that for organisations knowing what skills the workforce has, where they are lacking, and how to bridge any gaps is key to remaining competitive in their space. A skills gap analysis cannot only assist an organisation to hire the right employee for the right positions but can further assist the organisation to plan for the future in terms of addressing their future skills needs.

2.2. How to respond to Skills Gaps?

Bika (2017) purported that there are two ways for organizations to fill skills gaps: training (up-skilling) and hiring. It is on the organization to decide on which approach (or combination) works best for each skill gap. Bika (2017) guides that if the skills gaps for organizations are too wide to minimize with training, the organisation may then consider hiring to bring new knowledge and skills into the organisation. This tells one that the analysis of the depth and width of the gaps in skills becomes important when one conducts skills gaps research, as this may assist organizations in deciding on the appropriate action in responding to skills gaps.

Morris and Reed (2008) further note that future skills gaps are avoided by complementing recruitment and promotion processes with appropriate and timeous training. With this suggestion, succession planning and mentoring becomes vital for organisations. The study conducted by Morris and Reed (2008) found that more advanced organisations regard outside recruitment as a failure on the organisation's capacity to up-skill their workforce. These organisations are driven by the ideology of talent-spotting, through ensuring that the potential and aspirations of the existing workforce is fully utilised by identifying suitable candidates and providing them with formal training in the required area (Morris & Reed, 2008). The majority of the sampled organisations on the study conducted by Morris and Reed (2008) displayed a preference for improving in-house skills, rather than accessing external expertise. Sometimes, a skills gap can result from limited experience, particularly in the case of new recruits into the position and/or organisation, in such a case Morris and Reed (2008) recommends that the employers need to consider on-the-job training as a way to close a skills gap, instead of formal training.

It is important for this study to take note of the associated challenges in addressing the skills gaps for organizations, one obstacle to closing the skills gap noted by ACT (2017) is that both the needs of employers and the skills possessed by workers are continually fluctuating due to changing market demands and individual career choices. The structural changes in the economy are exacerbating the skills shortages (Rasool & Botha, 2011). In cases where the organisation resorts to hiring externally to bridge the gaps, the organisation must be prepared that they may find difficulties in finding individuals in the external market who have the specialized skills that the organisation is looking for (Human Capital Institute, 2016). For the organisation to attract skills from the external labour market to bridge their skills gaps, they need to have the ability to identify, attract and secure the best talent within the external labour market (Human Capital Institute, 2016). Where the organisation takes the route of developing talent within the organization to close their skills gaps, they need to have strong internal talent development system to increase skills and capabilities of the workforce (Human Capital Institute, 2016).

2.3. A review of Literature on the Methodology

Various professionals use a number of approaches in measuring and determining skills gaps among the workforce, the literature recognises a number of methods in conducting skills gaps analysis.

A more costly but aggregate measure of “skill” is usually gathered by surveying employers about the types of skills gaps that they encounter in their workforce (ACT, A Better Measure of Skills Gaps, 2011). ACT (2017) recognise that a balanced approach is needed for “skills gap” research, the one that integrates quantitative methods, with a direct measure of skills, and has practical application for workforce policy. The current challenge with the research on skills gaps is the lack of a formal methodology for quantifying a “skills gap” or in some cases the methods are too complex (ACT, 2011).

Numerous workforce policy papers on the problem of “skills gaps” can be separated into two categories: (1) those that utilise employer surveys to collect data about employer perceptions of skills gaps and (2) those that attribute skills gaps from aggregate labour supply and demand data using level of education as a substitution

for skill level (ACT, A Better Measure of Skills Gaps, 2011). One of the main approaches in the literature is the employer-based survey, whereby employer perceptions on skills gaps in the workforce are collected.

Research by McClain cited in ACT (2011) simply defined a skills gap as “*any difference between supervisors’ perceptions of the importance of a skill against their perception of actual skills possessed by the workforce*”. A critique of this approach in defining skills gap is the assumption that perception of skill importance by supervisors can be used as a substitution for actual skills possessed by the workforce. Similar problems may exist in studies that utilize self-reported skill level actual assessed level of skills (ACT, 2011).

ACT (2011) guards against the skewed nature of this approach, for the reasons that skills gaps from employer-based surveys is problematic in that the data collected are based on employer perceptions of workforce skills gaps, commonly without any benchmarking of actual workforce skill sets. Often, the individual filling out the survey may not have direct knowledge of the skill sets needed for on-the-job success and may be even more removed from knowing the skill sets for the workforce (ACT, 2011). ACT (2011) further guarded against using level of education as a proxy for skill level when conducting a skills gaps analysis. The suggestion is to use the method of establishing the organisational skills demand minus the organisational skills supply (ACT, 2011).

It is important for one when conducting and interpreting the research on skills deficiencies of the workforce to take into cognisance the approaches and its related shortfalls noted by the skills gaps literature.

Chapter 3: Methodology

This section will detail the research tools, research design and techniques employed by the study to achieve its objectives of skills gaps identification and analysis in the public service sector. This chapter answers the questions of how the data was collected and how the results were analyzed to allow the study to arrive at the reliable findings and recommendations.

3.1. Research Design

Methods of data collection employed by this study were both primary as well as secondary methods. Primary methods utilised were the researcher-administered semi-structured face-to-face survey method with key informants from the sample. To increase its credibility the study augmented the primary method with the secondary method of data collection, which comprised of documents analysis (desktop literature review). Desktop literature review data included but was not limited to review of: government online statements, research papers/reports, and policies which relates to skills planning/development. The secondary method of data collection was employed to further allow the researchers access to the information the participants were unwilling or unable to provide.

The process to find answers to this research study was a qualitative. The qualitative method allowed the study to explore the reasons for the participants' responses, as noted by Nieuwenhuis and Smit (2012) "the qualitative method is best when one is exploring the processes that are best obtained through interacting with those who are involved". The adoption of this method of inquiry was based on its ability to provide the study with validity, as it allowed the study to investigate different aspects of the skills gaps in the public service sector in more detail, as the participants were allowed to share their deep insights on the research questions.

3.2. Sampling Methods and Study Population

The skills gap analysis for this study was conducted from the public service sector-wide angle, this as per the PSETA mandate includes the national government departments, the public entities that are submitting their Workplace Skills Plans

(WSPs) to PSETA, the ten provincial legislatures including the national parliament, and the provincial government departments (i.e. study population). With a scope this wide, and considering budgetary and time considerations, it was not possible for the study to gather information from each department/organisation of the study population. Thus, the study sampled the participants for the study as opposed to studying and collecting data from each member of the population.

For the reasons that the study did not randomly choose its sample, the type of sampling method employed by the study was non-probability sampling. The sample group members for the study was therefore selected on the basis of accessibility and availability. The specific type of the non-probability sampling that was utilised by the study is the purposive sampling. Purposive sampling was employed to allow the researchers to use their own personal judgement on choosing the sample that meets the predefined characteristics of the study, this was to ensure that the study gets the opinions of the specific target population as required by the objectives of the study.

Laher and Botha (2012) highlighted that with purposive sampling the researcher relies on their experience or ingenuity to identify and find the participants that are deemed to be representative of the population of interest. The study was specific in terms who among the population was needed to be the study participant, the study targeted only senior officials Human Resource Development (HRD) and/or recruitment (Human Resource Management) within their organisations (these were mainly the Chief Directors, Director or Deputy Directors). Accordingly, the study adopted the sub-category of purposive sampling known as expert sampling to choose its participants. The expert sampling was chosen by the researchers for the reasons that it allowed the study to sample and elicit the views of individuals with expertise and experience in recruitment and skills gaps for their respective organisations. So this means that the skills gaps for the study is analyzed through the lens of employers.

3.3. Research Instruments and Techniques

PSETA held a discretionary grant workshop with preferred/strategic partners in June 2017, all the participants of the workshop were sent the online survey tool via survey monkey. Since not all the PSETA stakeholders were part of the workshop, letters were issued requesting participation from 15 national government departments which were

sampled by the virtue of them having PSETA as their line function SETA. Face-to-face interviews were then held with all the national departments who responded positively to the invitation.

To invite the provincial departments, the invitation letters were sent to the HRD Directors in nine offices of the premier, the letters requested the OTPs to play a coordinating role in terms scheduling face-to-face interviews with HRD or recruitment directors from individual provincial government departments. Face-to-face interviews were then held with the individual departments that responded to the invite (see annexure A for the list of all the participants). To gather the data from the legislative sector, the invitation letter was sent to the senior manager: capacity building for the legislative sector in Parliament to coordinate and schedule interviews/focus group discussions with the sector. The face-to-face interviews were held with the legislatures who were available. To gather the data from the public entities, the invitation letters were sent to all the public entities who submitted their WSPs to PSETA for 2017.

The data collection tools for the research were face-to-face interview questionnaire guides for key informants, and an online survey questionnaire using survey monkey. The face to face and online survey questionnaire were semi-structured in that they consisted of both close-ended and open-ended questions. This was done to ensure that more in-depth information is gathered from the respondents, and to allow the researchers an opportunity to probe further where clarity was needed. The questionnaire was divided into three sections, section A spoke to the respondent profile, section B laid its focus on the hard to fill transversal vacancies in the organisation, and section C deliberated upon the transversal skills gaps in the organisation.

The survey instrument was designed to allow gathering information on skill gaps per major occupational level and to measure the employers' perception of the current level of skills of the workforce in the surveyed organisations or a perceived shortage of specific skills. The tool relied upon employers' satisfaction with job related skills. The survey instrument measured (on a scale where (1) = average, (2) = above average, and (3) = excellent) the participant's perception on the required level of competency for a particular skills (skill demand) deemed important for the particular occupational

level by the employer. This was to establish a skill threshold for each transversal skill deemed important by the employer. To show the ability of the skill supply to meet skill demand, the instrument further required the participants to measure on a scale the actual level of competency for particular skills (skill supply) offered by the workforce. This was done to allow the study to measure the gap between the skills supply against the skills demand.

3.4. Data Collection and Analysis

The feedback from the individual surveys were captured and organised by the researchers into separate rows and columns in Microsoft Excel. The data was then analysed using SPSS data analysis software and Microsoft Excel to investigate which skills gaps have higher frequency occurrence in the sector.

3.5. Limitations

The study had the following limitations:

- The adoption of the non-probability approach by the researchers; this limited the study to present every member of the population with an equal chance to be selected and be part of the study, as a result the study may have suffered biasness in the choice of organisations sampled.
- Employer perceptions to measure the skills gaps of the workforce; this limited the study to rely on supervisor's perception to define skills supply and demand for the organisations, therefore the study assumed that the supervisors knew the skills supply and demand for their respective organisations. This approach requires the supervisors to have a clear understanding of performance expectations per major group occupational level in their respective organisations.

Chapter 4: Data Display and Analysis

This chapter presents a summary of findings emanated from the respondents of the study, the raw data and the list of all the respondents who took part in the study is presented as annexure A.

4.1. Skills Gaps: Managerial Level

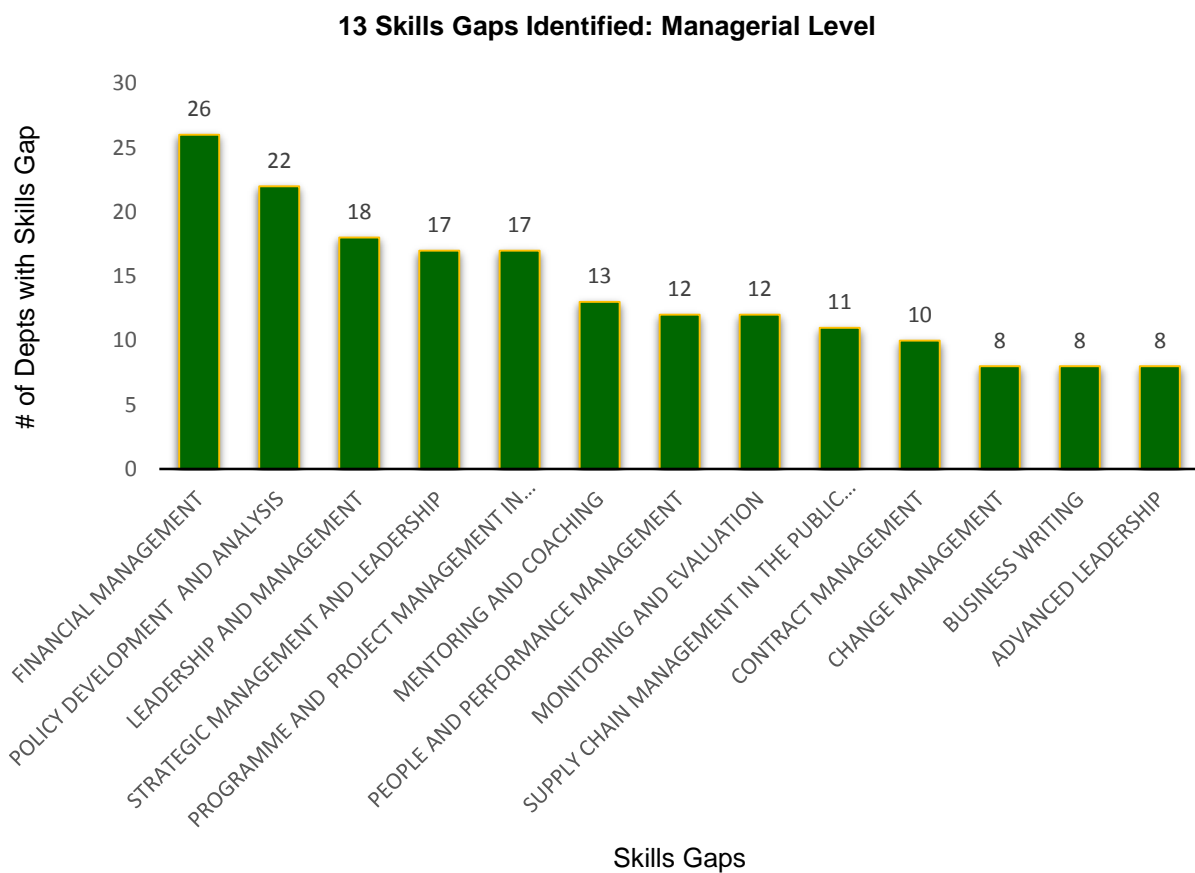


Figure 2: Top 13 Skills Gaps Identified Managerial Level

Important to note that the numbers on figure two above represents the number of participants that have identified the particular skill as having a gap in their respective organisation. For that reason the numbers on figure two do not represent the number of employees with the skills gaps identified. It may happen that each organisation's

skills gaps may be identified from a number of employees who are having a deficit in the identified skills.

Figure two above is a display of common skills gaps at a Senior Management Service (SMS) level that came out repeatedly from the research analysis. These skills gaps are in line with Department of Public Service and Administration's (DPSA) SMS Competency Framework and SMS Handbook which requires managers to be competent in the mentioned skills in the public service. Through running the frequency analysis, the data indicates that financial management is a skill gap which the majority of the research participants identified as being existent in their respective organisations/departments. This is in line with National Treasury's requirement of SMS to understand Public Finance Management Act (PFMA) which is critical in handling public finances.

As displayed in figure two, policy development and analysis, leadership and management, strategic management and leadership, as well as programme and project management in the public service were all identified by a numerous number of organisations as containing skills gaps. It is equally important for this study to take note of the other skills gaps identified by participants, as displayed in figure two above. These skills gaps were less frequent in terms of the data frequency analysis, and include contract management, change management, monitoring and evaluation, people and performance management, business writing, and supply chain management in the public service.

The skills that were identified by the few government departments that are displayed in figure two above and table two below are also significant to note, as they may be affecting numerous employees from the few organisations that have identified them. The skills gaps list that were identified by the few organisations (as displayed in table two below) may not be dominant across a number of government departments but are also vital skills for the efficiency of the public service. Furthermore, it is important to note that some organisations noted the organisational design, job description and job analysis (which is noted under human resource management and planning) related skills as having dire gaps. One respondent from the North West provincial department noted that there is only one provider who assists the provincial departments with

training aimed at addressing the skills gaps, and this leads to delays in organisations receiving training to close this skills gap.

Table 2: Various Skills Gaps Identified at Managerial Level

Skills Gaps Identified	# of Depts. with the Skills Gap
Research ¹	7
Human resource management and planning	7
Ethical conduct	6
PFMA	5
Information technology	5
Governance and public leadership	5
Communication	5
Knowledge management	4
Management development	3

Evaluating the identified skills gaps and the importance they largely play in the performance and efficiency of the managers in the public service sector and ultimately in the performance of the public service sector, it would be sensible to suggest that addressing and bridging these skills gaps is vital for the performance and competitiveness of the public service sector.

4.2. Skills Gaps: Professional Level

Table 3: List of Skills Gaps Identified at a Professional Level

Skills Gaps Identified at a Professional Level
Change management
Financial management and PFMA ²
Governance and public leadership
Management development

¹ This may vary in its nature as per the organisation's needs and structure

² Noted as budgeting and/or finance for non-financial managers in some organisations/departments

Mentoring and coaching
Monitoring and evaluation
Policy development and analysis
Project management in the public service
Records management and basic archives
Supply chain management in the public service
Foreign Service ³
Bid Evaluation
Mission administration ⁴

Table three above presents the analysis of the skills gaps at the professional major occupational group as identified by the respondents. Important to note that some of the skills gaps identified at the professional occupational major group level overlap with the ones identified at the managerial occupational major group level. This shows the extent and prevalence of some of the skills gaps in the public service sector at large. Supply Chain Management in the public service sector is an example, in the KwaZulu-Natal (KZN) Department of Health it was noted that the Supply Chain Management (SCM) skills gaps were so wide that SCM functions are now taken over by the National Treasury.

Some of the skills gaps identified by the organisations were noted as not being as a result of the deficiency of skills but as a lack of practice of those skills by the workforce. This is evident in the excerpt below from one of the respondents:

“The problem with mentoring and coaching is the commitment and will to do it as opposed to the lack of skills to do it, even the attitude towards trainees is bad in some cases”.

4.3. Skills Gaps: Administrative Level

Table 4: List of Skills Gaps Identified at Administrative Level

Skills Gaps Identified at the Administrative Level
Emotional Intelligence (EQ)
Business admin
Business ethics

³ May apply only to the DIRCO

⁴ This may apply only to the DIRCO

Essentials of budget formulation
Microsoft office suite of applications
Basic project management
Administration
Basic computer skills
Business writing
Records management

Table four presents the analysis of the skills gaps at the administrative level major occupational group category. The above mentioned skills gaps were generally mentioned as affecting most employees at administrative and elementary levels in the public service sector. The respondent from a North West government department emphasized that records management and basic computer skills as one of the key skill gaps that the department focuses on. The skills gaps mentioned are key at operational level and other levels within the government departments and organizations, therefore contributes to the overall performance of the organisations and government departments.

4.4. Efforts to close the Skills Gaps in the Public Service⁵

From the engagement with the respondents, it came out that a number of government departments are making an effort towards bridging their identified skills gaps. This is evident in the various ongoing and scheduled training for the workforce and/or for the unemployed.

- All Senior Management Service (SMS) in the public service are mandated by the DPSA to take the Executive Development Programme (EDP) provided by the National School of Government (NSG). This is done to equip the SMS in the public service with the necessary competencies outlined in the DPSA's competency framework to perform effectively.
- The Department of Community Safety and Transport Management in the North West noted that the department takes the managers through the Advanced

⁵ This highlights the exclusive training intervention that came out of the face to face interviews and does not in any way presents the vast comprehensive training taking place in the public service.

Management Development Programme (AMDP) offered by NSG with the aim of closing the skills gaps of policy development in the department.

- The KZN Provincial Treasury and the South African Institute of Chartered Accountants (SAICA) have a three year initiative aimed at closing the financial management skills gaps in the public service, this is done through the training of Chartered Accountants (CAs) in accounting and financial management in the public service sector.
- The KZN Treasury indicated that there are succession planning initiatives in the department, the department identify a position that may have challenges of being filled, like tax, provincial accounting posts, accounting general and start placing the identified employees through the training.
- At the Department of International Relations and Cooperation (DIRCO) there is Mission Administration training as well as the gender and disability sensitisation training taking place for the workforce.

4.5. Identified Challenges in closing the Skills Gaps

- The KZN Department of Roads and Transport purported that the directive that the departments need to only use the KZN Office of the Premier's Provincial Public Service Training Academy and NSG for some of their training interventions. The arrangement presents the department with challenges and limitations in terms of the available training to close their skills gaps and time delays in the implementation of training.
- The moratorium by National Treasury on the public service vacancies presents the departments with challenges in closing their identified skills gaps through recruitment. The Mpumalanga department of Cooperative Governance and Traditional Affairs (COGTA) noted that the moratorium means that the workforce currently employed stand the risk of not being retained come end of their contracts, this presents the department with dismal skills gaps. To deal with the backlog, the department relies on the interns.
- The department of Community Safety and Transport Management in the North West noted that the fact that some of the programmes are only provided by the NSG countrywide presents a challenge for the public service as it results in

delays for the departments to receive training aimed at closing their identified skills gaps. The NSG requirements (e.g. the minimum number of attendees required before the training may take place) presents a challenge to smaller departments. This is where the training academy in the provinces and OTP should play a co-ordinating role.

- One respondent noted that their department using the NSG as the training provider allows the department to avoid the tedious SCM internal processes. The respondent further noted that the quality of NSG training is questionable at times as the facilitators are outsourced by the NSG.
- During the interview with the National Department of Home Affairs it was noted that the skills gaps in Information Technology (IT) are prevalent in the department due to lack of modernisation in the system that the department is using. As a result, it is difficult for the department to attract the right talent that will allow the department to close the IT skills gaps.
- *“The poor quality and inaccuracy of the Personal Development Plans (PDPs) in the department is evident that performance management is a serious skills gap in the public service”* (noted one respondent). In relation to the skills gaps in performance management in the public service another respondent profoundly noted that the following; *“If the public service can perfect the performance management, it will do the public service a whole lot of good”*.

Chapter 5: Conclusions and Recommendations

This study has noted various deficient skills for various public service sector organisations to meet their strategic objectives. This has shed some light on the possible training and development needs of the current workforce in the public service sector. Noted below are some of the conclusions and recommendations derived from the research:

- Demand for skills varies across occupations and size of the organisation, this study determined that whilst some skills gaps are cutting across the various departments, some are unique to particular departments depending on the mandate and objectives of the specific department.
- The public service moratorium by the National Treasury has led to an increase number of acting arrangements when some occupations become vacant in certain organisations. This at times gives rise to the emergence of skills gaps as the workforce has to take on new responsibilities without the necessary attributes or capabilities to become effective in their new roles.
- The line managers are critical agents in determining the skills gaps in organisations, the line managers are the ones who are likely to have a clear understanding of performance expectations of the individual subordinates for their respective sub-directorates/units. For this reason, this study recommends that future studies on organisational or sectoral skills gaps need to start analysing skills gaps from a sub-directorates/unit level per organisation. This will be time consuming, but will be worth doing.
- The line managers need to provide added effort in the compilation of PDPs for the individual employees in their sub-directorates/units. If this process is comprehensively done, it will assist the line managers in understanding the skills gaps of their subordinates.
- Talent-spotting and succession planning in the public service may assist in closing the future skills gaps, this requires identifying suitable candidates and providing them with formal training and on-the-job training in the identified area.

- For the organisations to decide upon the appropriate approach to closing their skills gaps, they need to establish the wideness of the identified skills gaps per employee and then decide whether to hire new talent or up-skill the existing workforce through learning programmes or on-the job training.

References

- ACT. (2011). *A Better Measure of Skills Gaps*. Retrieved July 24, 2017, from <http://www.act.org/content/dam/act/unsecured/documents/abettermeasure.pdf>
- ACT. (2011). *A Better Measure of Skills Gaps*. Retrieved July 24, 2017, from <http://www.act.org/content/dam/act/unsecured/documents/abettermeasure.pdf>
- ACT. (2017). *Understanding and Solving the Skills Gaps*. Retrieved July 24, 2017, from <http://www.act.org/content/dam/act/unsecured/documents/understanding-and-solving-the-skills-gap.pdf>
- Delbridge, R., Edwards, P., Forth, J., Miskell, P., & Payne, J. (2006). *The Organisation of Productivity: Re-thinking Skills and Work Organisation*. London: Advanced Institute of Management Research. Retrieved August 15, 2017, from http://www.aimresearch.org/uploads/File/Publications/Academic%20Publications%202/Organisation_of_Productivity.pdf
- Human Capital Institute. (2016). 6 B's: build, buy, borrow, bounce, balance, bind, and OD. Retrieved August 11, 2017, from http://www.themanufacturinginstitute.org/Hidden/~/_media/F13B6B8B333E4B17A27281BADB776AEB.ashx
- McIntyre , G. (2013). *Skills Development: The key to South Africa's Economic Future*. Retrieved July 20, 2017, from <http://www.skillsportal.co.za/content/skills-development-key-south-africas-economic-future>
- Morris, M., & Reed, L. (2008). *A SECTORAL ANALYSIS OF SKILLS GAPS AND SHORTAGES IN THE CLOTHING AND TEXTILE INDUSTRY IN SOUTH AFRICA*. University of Cape Town, Policy Research in International Services and Manufacturing, School of Economics. Cape Town: PRISM. Retrieved July 10, 2017, from http://www.labour.gov.za/DOL/downloads/documents/research-documents/Clothing%20and%20textile%20industry_DoL_Report.pdf

- OECD. (2015). Identifying and Addressing Skills Gaps in Ukraine. Retrieved August 02, 2017, from https://www.oecd.org/globalrelations/Skills_Gap_Assessment_Ukraine_ENG.pdf
- Rasool, F., & Botha, C. J. (2011). The Nature, Extent and Effect of Skills Shortages on Skills Migration in South Africa. *SA Journal of Human Resource Management*, 9(1), 1-12. doi:10.4102/sajhrm.v9i1.287
- Sipengane, A. (2014). The role of research in skills planning. Department of Higher Education and Training. Retrieved August 03, 2017, from <http://www.lmip.org.za/sites/default/files/documentfiles//400.%20The%20role%20of%20research%20in%20skills%20planning%20revised%202014-....pdf>
- Trochim, W. M. (2006). Research Methods Knowledge Base. Retrieved August 16, 2017, from <https://www.socialresearchmethods.net/kb/sampron.php>
- Williman, N. (2011). *Research Methods: The basics*. New York: Routledge.

ANNEXURE A: SKILLS GAPS CONSOLIDATED RAW DATA

Mpumalanga

Dept.	Skills Gaps
Department: Economic Development and Tourism	Project management
	Corporate Governance (Professionalism, dress code, professional conduct)
	Policy development
	Advanced Leadership
	Governance and Public Leadership
	Mentoring
	Strategic Management
	Monitoring and Evaluation (non-existent)
	Project Management in the Public Service
	People and Performance Management
	Business Writing
Community Safety & Liaison	Policy development
	Advanced Leadership
	Governance and Public Leadership
	Monitoring and Evaluation
	Ethical conduct
	Contract Management
	Financial Management
	Project Management in the Public Service
	Business Writing
	Supply Chain Management in the Public Service
Cooperative Governance and Traditional Affairs	Policy analysis
	Monitoring and Evaluation
	Contract Management
	Financial Management
	People and Performance Management

KwaZulu-Natal

Dept.	Skills Gaps
Roads and Transport	Financial Management
	Supply Chain Management
	Contract Management

	Public Administration
	Human Resource Management
	Public Relations
	Leadership and management
	People management
Health	Project Management
	Contract Drafting and Contract Management
	Monitoring and Evaluation
	Business Writing skills
	Supply Chain Management
	Asset management
Provincial Treasury	IT
	Internal Audit
	Contract Management
	Policy development
	Risk management
	Norms and Standards

North West

Dept.	Skills Gaps
Community Safety and Transport Management	Job evaluation
	Organisational Design
	Policy Development
	Strategic Leadership
	Finance and Budgeting
	Evaluation
Office of the Premier	Financial Management
	People Management

Limpopo

Dept.	Skills Gaps
Department of Health	Policy Development
Department of Transport	Financial Management
Provincial Treasury	Coaching
	Records Management

Department of Safety, Security and Liaison	Business Writing
	Project Management
	Contract Management
	Leadership
	Supply Chain Management
	Monitoring and Evaluation
	Mentoring

Western Cape

Dept.	Skills Gaps
Office of the Premier	Supply Chain Management in the Public Service
Agriculture	Statistics
	Resource Economics
	Language Skills
Community Safety	Knowledge Management
	Learning and Researching
Cultural Affairs and Sport	Business Analysis and Development
	Knowledge Management
	Research Skills
	Statistical and Diagnostic Analysis
Environmental Affairs and Development Planning	Creative Thinking
	Green Economy
	Information Management
	Knowledge Management
	Networking and Building Bonds
	Policy Development, analysis, implementation, and evaluation
	Programme and Project Management
	Report writing/ Technical report writing
	Resource Economics
Human Settlements	Strategic Capabilities and Leadership
	Programme and Project Management
	Financial Management
	People Management and Empowerment (Mentoring & Coaching)
	Communication-Marketing

	Stakeholder Relations (Networking and Relating)
	Public Relations
Social Development	Strategic Capability and Leadership
	Financial Management
	Supply Chain Management
	Analysis skills
	Leading and Supervision

Eastern Cape

Dept.	Skills Gaps
Office of the Premier	Policy Research & Development Skills
	Financial Management
	Labour Relations
	Systems control (BAS, PERSAL, LOGIS)
Health	Policy Development & Implications
	Research
	Financial Management
	Strategic Planning
	Leadership
	Project Management
	Communication
	Diversity Management
	Coaching & Mentoring
Social Development	Project Management
	Policy Formulation and Implementation
	Research and demography and Population
	Financial Accounting
	Strategic Planning
	Leadership and Management
Roads and Public Works	Policy Development & Research
	Financial Management
	Strategic Planning
	Leadership
	Project Management
	Communication
	Diversity Management
	Coaching & Mentoring
	Supply Chain Management and Governance

Education	Financial Planning
	Leadership
	Human Resource Planning
	Policy Implementation & Monitoring
	Auditing
	Computer Skills
	Information Technology
	Reporting
	Leadership
Rural Development and Agrarian Reform	Development Economics
Transport	Financial management
	Human Resource Management
	Change Management
	Knowledge Management
	Knowledge of Legal Compliance
	Technical Report Writing
Human Settlements	Coordination & Administration
	Intergovernmental Relations
	Contracts Management
	Financial & Human Resource Planning
	Strategy Development
	Leadership & Vision Development
	Policy Formulation.
	Financial Management & Utilization
	Communication
Provincial Treasury	Public Sector Accounting
	Advanced Excel
	Economic Analysis and Research
	Supply Chain Management and Governance
	Financial Information Systems Management and Governance
	Internal Auditing
	Public and Municipal Finance Management and Governance
Sport Recreation Arts & Culture	Communication
	Information Technology
	Team Work
	Supervision
Safety and Liaison	Policy Development and Implementation

	Research
	Financial Management
	Human Resource Management
	Change Management
	Strategic planning
	Leadership and Development
	Project Management

Gauteng Province

Dept.	Skills Gaps
Department of Sport, Arts, Culture & Recreation ⁶	Supervisory skills (people management)
Gauteng Department of Roads and Transport	Mentoring
	Strategic Management
	Change Management
	Ethical Conduct
	Contract Management

Free State

Dept.	Skills Gaps
Economic Development, Tourism, Environmental Affairs & Small Business	Policy Development
	Advanced Leadership
	Governance and Public Leadership
	Mentoring
	Strategic Management
	Change Management
	Monitoring and Evaluation
	Leadership
	Ethical Conduct
	Management Development
	Contract Management
	Financial Management
	Project Management in the Public Service
	People and Performance Management
PFMA	
Business Writing	

⁶ The organisation is currently going through restructuring

	Service Delivery
	Supply Chain Management in the Public Service

Public Entities

Dept.	Skills Gaps
Gauteng Partnership Fund	Policy Development
	Advanced Leadership
	Governance and Public Leadership
	Mentoring
	Strategic Management
	Change Management
	Monitoring and Evaluation
	Leadership
	Ethical Conduct
	Management Development
	Contract Management
	Financial Management
	Project Management in the Public Service
	People and Performance Management
	PFMA
	Business Writing
Service Delivery	
Supply Chain Management in the Public Service	

Legislative sub-sector

Dept.	Skills Gaps
Gauteng Legislature	Policy Development
	Advanced Leadership
	Governance and Public Leadership
	Mentoring
	Strategic Management
	Change Management
	Monitoring and Evaluation
	Leadership
	Ethical Conduct
	Management Development
	Contract Management
	Financial Management
	Project Management in the Public Service

	People and Performance Management
	PFMA
	Business Writing
	Service Delivery
	Supply Chain Management in the Public Service

National Departments

Dept.	Skills Gaps
Home Affairs	IT Skills
	Forensic, cyber security
	Statistical analysis
	Economic skills
	Security skills (Intelligence)
Department of International Relations and Cooperation	Policy development
	Advanced Leadership
	Monitoring and Evaluation
	Leadership
	Financial Management
	Project Management in the Public Service
	People and Performance Management
	PFMA
	Business Writing
	Supply Chain Management in the Public Service
COGTA	Performance Management
	Policy development
National Treasury	Leadership and management development
	Financial management
	Policy Development
	PFMA
DHET	Policy Development
	Advanced Leadership
	Governance and Public Leadership
	Strategic Management

	Project Management in the Public Service
	Monitoring and Evaluation
	People Management
Correctional Services	Advanced Leadership
	Governance and Public Leadership
	Strategic Management
	Change Management
	Leadership
	Financial Management
National School of Government	Mentoring
	Strategic Management
	Leadership
	Financial Management
Telecommunication and Postal Services	Strategic Management
	Change Management
	Monitoring and Evaluation
	Project Management in the Public Service
	People and Performance Management