Identifying Skills needed to respond to government strategies: A Conceptual Framework

Labour Market Intelligence
research programme

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1   Introduction

The National Development Plan (NDP) (National Planning Commission, 2011) identifies skills planning as crucial to reaching the goals of higher levels of economic growth and single digit unemployment rate in 2030. Skills development processes envisage   supporting both the implementation of existing economic strategies, as well as planning for the many changes that will occur due to anticipated technological change arising from the so-called 'Fourth Industrial Revolution' (Maynard, 2015; Schwab, 2016). Economic strategies developed in government similarly seek inclusive growth, which seeks employment growth as a core objective. Very often the economic strategies provide guidance on the types of skills needed to implement their programmes and on the types of skills needed in the economy. However, economic strategies often provide high level information on skills requirements, often at a level which does not assist in skills planning. This proposal research seeks to identify skills needed to implement these economic development strategies, and to raise a set of strategic questions facing government and social partners on the relationship between economic policies and skills planning.

The research is important given the low levels of economic growth and high levels of unemployment. Data from Statistics South Africa for instance shows that the NDP targets are unlikely to be met (Stats SA, 2017). Research further shows that unemployment has not only remained stubbornly high but there has been an increase in long-term unemployment since 2008 (Kerr, Wittenberg, & Arrow, 2013; Stats SA, 2019), economic growth is projected to remain under 3% over the medium term (National Treasury, 2019) and building resilient assets is difficult even for the middle classes (Zizzamia, Schotte, Leibbrandt, & Ranchhod, 2016). These empirical results occur in the context of excessive levels of inequality in income and assets (Leibbrandt, Finn, & Woolard, 2012; Philip, 2016), as well as high levels of economic concentration (Bhorat, Asmal, Lilenstein, & van der Zee, 2018).

In this context, skills development processes have sought to improve developmental outcomes. The Sector Skills Plans (SSP) Skills development plans provide a roadmap of how different sectors will approach human resource development, but implementation has been ineffective across a variety of sectors and for a range of reasons (Allais, 2012). The equally important challenge of linking public sector capacities to the implementation of economic policies however remains

poorly coordinated, and in some cases no alignment exists. Further newer initiatives are underway to improve economic growth and employment creation, most notably through the Presidential Investment Commission, the Job Summit and a broader process of restructuring government. Even here, the linkages between skills planning and economic policies are not abundantly clear.

This paper contributes to an improved understanding of the skills planning through an analysis of core public policies across the spheres of government and in state-owned enterprises. The specific aim is to contribute to a to a literature review for the work on Occupations in High Demand (OIHD). More broadly, it a lens to assess the contributions and possibilities for skills planning to economic growth and employment creation.

To this end, this proposal is structured as follows:

- Project scope and rationale
- Methods

2   Project Scope and Rationale

This section sets out the background to the project, identifies the purpose and scope of the project, and identifies the target group. The section concludes with a definition of key terms and concepts.

2.1   Background

The sections outlines approaches to linking skills planning to governments economic strategies. Once these are outlined, the gaps between skills planning and economic strategies are explored.

Government programmes aimed at economic development are cognisant of the importance of skills to realising these plans. Across core documents references are made to skills planning as a crucial component to realising these plans. For example, the Industrial Policy Action Plan (IPAP) (2017) has several direct linkages between skills and implementation of policies. Examples include:

- Creation of a skills pipeline of 1800 students over 4 years through the National Tooling Initiative, and linking these students to Trade Test Centres and Centres of Excellence.

- Through the Monyetla Work Readiness Programme, providing work readiness programmes, that allow students to be eligible for the business processing incentives.

These examples are illustrative of attempts to directly link skills planning and programmes to industrial policy. Across government programmes, similar attempts to solve skills development challenges as part of implementation are noted.

The Sector Skills Plans (SSP) are another example of an attempt to link skills planning to economic development policies of government. Each SSP has a section which provides the SETAs with an understanding of the linkages between its work and a range of policies being undertaken by government. The information provided in each of the SSP are uneven, with some providing a simple listing of policies and others providing details on the impacts of policies on skills planning. The attempt to align and inform the skills planning with economic planning thus occurs to an extent at the level of SETAs.

Despite these important steps to aligning economic and skills planning activities, an overall gap is observable. First, the SSP provide useful information on skills shortages, which should (but often do not) inform industrial and wider economic policies. Second, the major infrastructure programmes require both (a) availability of skills to build plants, dams and other infrastructure and (b) skilled workforce able to reap opportunities from these initiatives. Third, there is a tension in economic policy and skills planning, whether to focus on employment creation or building competitive industries. Several attempts to link employment creation with increasingly competitive industries are underway and offer interesting experiences, that will be outlined in the report.

2.2   Rationale for the report

The rationale for the research is thus three-fold.

First, stakeholders have identified a gap between skills planning on the one hand, and major government interventions aimed at economic growth and employment on the other hand.

Second, the research process will support a process of discovery, through conducting review of a multitude of policy documents. Such a process will highlight initiatives at various institutions that have the potential for scaling and contributing to economic growth and employment creation.

Third, the research supports a process of identifying occupations that are in high demand. In so doing, it contributes to the overall skills planning to improve service delivery.

2.3   Scope of the project

The project has an extensive scope covering policies and interventions at national, provincial and local government levels, as well as initiatives at state owned enterprises. The identifications of policies for review are outlined in the methods sections.

2.4   Target group for the report

The primary audience for this research are: government officials, industry associations, trade unions and other relevant stakeholders involved in skills planning.

3   Methods

The section on methods starts with research questions, followed by a discussion on the proposed methodology. The process of analysing data and developing indicators are than discussed.

3.1   Key research questions

The key research questions are:

1. What are the key interventions and strategies that government has identified to support economic growth and employment creation? Which government departments and/or entities are likely to have significant interventions and strategies to support economic growth and employment creation?
2. What financial allocations (using the 2019/20 Budget documentation) is government making towards the strategies and interventions identified in the previous question? Are these allocations for the strategies/interventions as a whole? Does it include allocations as broken down into different components that can maybe be used to link to different skills planning implications?
3. What are the priority sectors of government?
4. What skills are required to support economic growth?
5. What methodology and criteria must be used to identify priority skills?
6. For which economic sectors has government committed funding?

7. What occupations are growing/likely to grow as a result of government's interventions and strategies to support economic growth and employment creation?

8. Where possible, what skills gaps can be identified as a result of government's interventions and strategies to support economic growth and employment creation?

9. What are the implications for skills development and post-school education and training (PSET) planning that arise from the skills needs identified as a result of key interventions and strategies that government will use to promote economic growth and employment creation?

10. How can the PSET and skills planning systems respond to these government interventions?
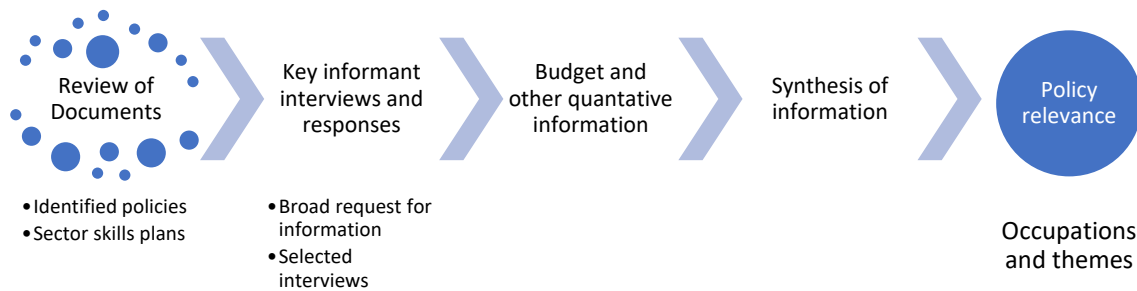
3.2   Methodology

This section starts with an explanation of the research design, followed by data sources, and finally a discussion on the envisaged starting points for analysis.

3.2.1   Design

A mixed methods approach is proposed to the study that will seek to integrate quantitative and qualitative data (Creswell & Plano Clark, 2017). This study is exploratory in that it conducts a transversal analysis of government policies, supported by key informant interviews and budget analysis. The study is both exploratory and emergent. It is exploratory in that the process of research is inductive (Bowen, 2006; Clarke, 2005), and emergent in that the process of engaging with data will provide and enrich policy data (Yeung, 1997). Importantly, the proposed research seeks to inform policy at a broad level, and identify occupations that may be deemed to be in high demand.

The proposed design is a sequential exploratory design (ref). This means that the qualitative phase occurs before quantitative phase.

In this case the design process occurs as follows:

The methodology draws extensively from coding techniques used in qualitative research (Miles, Huberman, & Saldaña, 2013; Saldaña, 2012). The reason for undertaking this approach is that the study is exploratory in nature, seeking to understand and open up discussions on skills in the public service and local government. The method is cognisant that the outputs must have policy relevance. To this end, the data will be analysed using both within-case and across-case approaches to analysis (Ayres, Kavanaugh, & Knafl, 2003). The data will also be analysed against:

- Performance indicators of the programme themselves
- The broader rationale of creating jobs and/or growing the economy
- Contributions to existing and future skills planning programmes

The process of comparison between cases will be applied to both the qualitative and quantitative data for the project.

3.2.2   Data Sources

The papers developed have three major data components:

1. Review of policy and planning documents
2. Budget information
3. Key informant perspectives

These are discussed in turn.

3.2.2.1 Review of policy documents

The review of policy documents will run from 2010 onwards, with an emphasis on the most recent policy positions. The review will include, but is not limited to, the following policies:

- National Development Plan
- Provincial growth and development plans
- Local government growth and development plans, which are included in the Integrated Development Plans
- Industrial Policy Action Plan
- Medium-Term Strategic Framework
- National Skills Development Strategy
- New Growth Path
- South African Tourism Strategic Plan
- Youth Enterprise Development Strategy
- Infrastructure policy and plans
- Plans and other documents pertaining to SEZs
- IDC Plans
- Plans of SOEs /SoCs
- PIC planned investments
- Sector skills plans

The review of provincial and local government plans and core economic policies will be undertaken, and will include all provincial development plans, and all metropolitan government strategic plans. In addition, a sample of district municipalities as large as possible will be covered. Government's new approach to District Planning will be taken into account – and where available, Coordinated District Development Plans will be examined. It should be noted that Coordinated District Plans may not be available across the country.

3.2.2.2 Budget information

An analysis of budget data will be undertaken, seeking to identify budgets for key programmes that require interventions in terms of skills planning. The data from the Medium-Term Expenditure Framework presented in 2019/20. The budget data provides information on

domestic currency denominated financial allocations per programme, and this will be analysed to assess trends in nominal and real terms.

3.2.2.3 Key informants

In addition to available documents, the research process will involve an extensive outreach to key informants to add their perspective. The process of contacting informants will be primarily via email. The request will be open ended, and will seek to grow the repository of documents under review and tap into expertise in various sectors. The informants will be from government, industry associations and trade unions.

Interviews will include those working on Special Economic Zones (SEZ) and Strategic Integrated Strategic Infrastructure Projects (SIP). In other instances, interviews will be held with officials where an important policy intervention is identified or the documents provided are unclear.

3.2.3 Analysis

The analysis of data will proceed through two coding phases for both qualitative and quantitative data. The process of identifying and listing these allocations will consist of a two step process:

1. Open coding of data, which involves a line by line reading. In this case, the *Estimates of Expenditure* will be used for national data.
2. Thematic coding will be undertaken once a full list of codes have been identified.

The process of analysis will draw on thematic analysis Bruan and Clarke (2006) and more specifically applied thematic analysis Guest, MacQueen and Namey (2014). The overall process of open coding followed by thematic coding, is now provided with greater specificity given the data sources in the box below:

Data Source	Analysis Process	Outcome
Review of documents	Reading of documents and open coding	Map of policies with summary tables on skills and occupations.
Interviews and request for information	Coding of responses and interview data	Mapping of data to improve the map from the review of policies. Linking map to economic sectors
Budget and other quantitative data	Standard budget analysis, and where possible statistical analysis	Potential indicator on available budgets, and estimations of future analysis.

3.3   Indicators

The reports will develop indicators throughout the process of analysis, where applicable. The data will however lend itself to a categorisation of programmes based on alignments between budgets and plans, as well as other areas. The report will provide indicators to operationalise monitoring.

4   Outputs

4.1.1   Outputs

The project will have two research reports as outputs. These are:

1. Report on skills needed to respond to *national* key government strategies, major plans, programmes and interventions. Use as part of literature review for Occupations in High Demand (OIHD) and will inform the development of the Priority Skills Plan.
2. Report on skills needed to respond to key *provincial and local government* strategies, major plans, programmes and interventions. Use as part of literature review for OIHD.

The details of the report are included overleaf.

4.1.2   Links to other LMI project

These reports will serve as an input into work being conducted on Occupations in High Demand (OIHD). The reports will also serve as an input to the Skills Supply and Demand Report to the extent that these reports provide detailed insights on the current and future skills needs of the public sector in particular.

In addition, given the scope of the paper other researchers may find relevance in the reports.

Box 1

Introduction	Methods and conceptual framework	Review of Policies	Findings / Themes	Recommendations	Appendices

• **Context statement:** NDP goals for employment and economic growth. Narrow to skills and the link to these objectives. Outline previous work.
• **Set out purpose**: to assess governments economic policies as a driver of demand for future skills.
• **Key concept:** OIHD - occupations in high demand refer to those occupations that have shown
  o relatively strong employment growth
  o and/or are experiencing shortages in the labour market or
  o expected demand in the future.
	• **Conceptual framework:** Three categories of OIHD
	  o occupational growth (past and future),
	  o occupational shortages, and
	  o new or emerging occupations
	• **Method**
	  o Copy and improve from project inception note (aka conceptual framework).
	  o Clearly specify the steps taken.
		• **List on next page**
		• Organised into two sections:
		  o Planning and budget
		  o Sector / industrial policies
		• **Each policy**
		  o Name
		  o Summary
		  o What skills / occupations are identified
		  o Estimates of skills needs
		  o Budgets
			• Linking Sector Skills Plans as an input into economic policies
			• Importance of low-skilled jobs as OIHD.
			• Absence of estimating skills needs in economic policies.
			• SOEs focussed on supplier development (the firm not individuals).
			• Map of sectors and OIHD alignments.
				• Summary of occupations and skills by
				  o Strong employment growth
				  o Shortages in skills
				  o Future jobs
				• Broader recommendations
				  o Closing loop between SSP and economic policies.
				  o Relationship between economic growth and employment.
					• Sector skills plans alignment with economic policies
					• Summary tables on skills and policies (as per previous report)
					• Budget information (where line item is available).

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