

CONCEPT PAPER ON SETTING UP A SKILLS MEASUREMENT MECHANISM

by

(Prof Hoosen Rasool – FR Research Services)

1. INTRODUCTION

- 1.1. This concise paper represents the writer's conceptualisation of setting up a national skills measurement mechanism which is necessary to measure skills imbalances in the labour market.
- 1.2. A skill measurement mechanism is imperative to strengthen the diagnostic capacity of the state to identify skills imbalances (shortages and surpluses) and form assessments of current and emerging skill needs in the labour market.
- 1.3. The effectiveness of a skill measurement mechanism is dependent on the extent to which skills supplied by the education and training system match closely to skills demanded by industry, both immediately and over the long-term.
- 1.4. This paper responds to the client brief by addressing three fundamental questions. Firstly, what is a skill measurement mechanism? Secondly, what should a skill measurement mechanism measure? And thirdly, what is the envisaged "roadmap" for constructing a skill measurement mechanism?
- 1.5. The ensuing discourse addresses each of these questions.

2. MECHANISM FOR SKILLS PLANNING

- 2.1. There is no single, universally agreed design of a skill measurement mechanism. The design of the mechanism is informed by the particular needs of a country and the resources at its disposal.

- 2.2. In its most basic form, a skill measurement mechanism can best be described as “*an entire set of interlinked institutions, systems comprising policies, processes, procedures, frameworks, plans, collaborative partnerships, institutional arrangements, governing structures, methodologies, tools and human resource capacities to provide analytical information and insights into short-, medium- and long-term skills imbalances (shortages and surpluses) in the labour market for supporting skills planning in the sectoral, national, regional and local domains*- 2.3. It should be pointed out that a computerised system is a necessary medium by which information is transmitted to end users, but it is not a skill measurement mechanism.
- 2.4. Institutional policies, strategies, research methodologies, stakeholder relationships, decision-making structures and human resource capacities are critical to the effective and efficient functioning of a skill measurement mechanism.
- 2.5. Equally important are monitoring and evaluation processes to measure the performance of the mechanism and the extent to which it is “fit for purpose” and “fit of purpose”.

3. FRAMEWORK FOR MEASURING SKILLS IMBALANCES

- 3.1. The essence of any skill measurement mechanism, of necessity, involves identifying a valid, reliable and robust package of indicators to measure skills shortages and surpluses that may exist in the labour market.
- 3.2. Since no single indicator is sufficient to measure disequilibrium, it is necessary to identify, combine and synchronise an array of high impact indicators, using multiple research methodologies and processes, into a workable *Skills Measurement Framework*. Such a framework should be constructed to identify skills supply and demand mismatches at the detailed occupational level, according to standard occupation codes.

- 3.3. Broadly, measurement indicators on the *Skills Measurement Framework* should fall into the following categories:
- A. **State of the labour market** - information on the overall structure and performance of the labour market, including its demographic composition, employment conditions, employment and unemployment patterns, occupational trends, industry analysis, labour market projections, migration trends and labour force flows.
 - B. **Recruitment** – hard-to-fill vacancies, job openings, work seeker applications and industry recruitment. The level of difficulty experienced by employers in recruiting skilled workers is indicative of the degree of oversupply or undersupply of a particular skill or occupation.
 - C. **Administrative data** – post-school enrolments, graduate rates, financial assistance, courses and administrative information.
 - D. **Labour market entry** - labour market entry indicators are based on the extent and the speed at which the market absorbs graduates immediately after course completion, their level of pay, and the quality of the match between their qualifications and their job.
 - E. **Employer responses** – current skills gaps and occupational needs, emerging skills needs, training activities and spending, promotion, work process changes and industry growth prospects.
 - F. **Wage movements** – wage growth and decline, benefits, wage levels, hourly pay, overtime and non-wage changes.
 - G. **Migration** – inbound and outbound skilled migration, types of occupations and qualifications, migration densities and industries employing migrants.
- 3.4. A multiplicity of research strategies, approaches, methodologies, techniques, processes and tools should, of necessity, be employed to collect, compile and analyse skills needs information. It is neither advisable nor feasible for a single institution to attempt to conduct all the research to populate the framework.

- 3.5. Ideally the host institution should leverage a range of institutional actors such as post-school institutions, skills councils, research bodies, quality councils, professional bodies, NGOs and CBOs to realign their research activities and commitments to the framework.
- 3.6. Additionally collaborative partnerships with international agencies, other public departments at national, provincial and municipal levels, state agencies, employer associations, trade unions and employment services bodies are also vital to augment the *Skills Measurement Framework*. This broad constellation of institutions would, in varying degrees, provide information on skills shortages and surpluses.
- 3.7. Within this context, the hosting institution's primary functions are the following:
 - establishing a policy, legislative and regulatory environment;
 - co-ordinating a network of participating institutions;
 - leading, steering and managing framework development activities;
 - building institutional capacities; filtering data and information;
 - compiling datasets and information banks;
 - formulating labour market intelligence;
 - producing reports; disseminating information;
 - and monitoring and evaluating the performance of the skills measurement mechanism.

4. ROADMAP FOR SKILLS PLANNING MEASUREMENT ARCHITECTURE

- 4.1. This section captures the main elements of a “road map” for constructing a skill measurement mechanism which should ostensibly involve a multi-stakeholder and multi-level approach to system development and innovation.
- 4.2. A starting point should be to envision and plan a “complete” skill measurement mechanism with an envisaged “*Skills Measurement Framework*”, governance arrangements, intra- and inter-institutional structures, funding, staffing, and shared responsibilities. This should be encapsulated into a workable plan that is adaptive to changing labour market demands.

- 4.3. ***Institutional Arrangements:*** The different institutional actors mentioned in the preceding section should be delineated specific roles, functions and responsibilities. Consideration should be given to establishing sector, regional and local skills planning observatories. The latter is necessary to ensure that regional and local labour market sensitivities are captured.
- 4.4. ***Structures and Capacities:*** Arguably this endeavour requires the hosting institution to develop sustainable intra- and inter-institutional structures and human resources to maintain the skill measurement mechanism. Research managers, labour market analysts, statisticians, IT specialists, to list a few, constitute the “heart and soul” of the mechanism.
- System infrastructure requirements such as hardware, software, web-enabling and mobile technologies should be considered.
- 4.5. ***Delivery Systems and Information Dissemination:*** An optimal skill measurement mechanism should provide easily accessible intelligence, services and resources to the wide range of end-users. Whilst the internet is a necessary medium, other means to ensure accessibility should also be explored. This ensures inclusivity in the utilisation of the skill measurement mechanism.
- 4.6. ***Legislative and Policy Framework:*** Establishing a legislative and policy framework to govern the skill measurement mechanism; secure funding; put plans into statutes; create accountability frameworks, and garner a coalition of support are required. These are needed to ensure institutional actors reporting to the host institution meet statutory obligations to populate the “Skills Measurement Framework”. It would also ensure the sustainability of the “skills planning mechanism”.
- 4.7. ***Analytical function:*** A skill measurement mechanism embodies analytical capacity to identify and anticipate skills needs and relate these to national strategies, policies and programmes. At its core, the mechanism should track a set of leading indicators. A unit should be established for data compilation, database development, analysis, and production of reports.
- 4.8. ***Consultation:*** Stakeholder consultation constitutes the basis for the development of a “skills planning mechanism”. At the outset a consultative process should be initiated by an existing or new task team to determine what research is already being conducted and seek stakeholder commitment.

The task team should also prioritise: legislative changes; end-user needs; the *Skills Measurement Framework*; intra- and inter-institutional structures; staffing; data collection and analytical methods; IT and processing software; communication and public relations; funding and donor support; monitoring, evaluation and reporting. In a nutshell, the entire architecture of the skill measurement mechanism.

- 4.9. **Responsiveness:** Identification and measurement of skills imbalances should feed into the policy-making cycle to enable supply-side institutions to respond to the demand-side needs of the economy. This has directly implications for education policy, funding and programme mix at post-school level.

5. CONCLUDING REMARKS

- 5.1. In the context of limited experience, it is recommended that initially a core skill measurement mechanism should be devised with a limited set of leading indicators and research studies.
- 5.2. Over a period the mechanism should progressively be developed to meet the evolving demands of end users.

Contact:

Prof Hoosen Rasool
(South Africa)

Cell: +27 83 786 9329
Tel: +27 31 262 9329
Email: hoosen@frresearch.co.za



www.frresearch.co.za