The role of research in skills planning

Introduction

South Africa has embarked on a skills development revolution in an attempt to address skills development as a skilled workforce is critical for economic growth and development. Of great importance to this endeavour is the role of research in continuously providing the solutions throughout the process and generate knowledge to enhance innovation and creativity in skills development delivery. Core to this research is the importance of planning, design of support interventions, measuring performance and impact assessment of various interventions and lastly assess and evaluate progress, successes and failures in the skills development process. This task requires cooperation, partnerships and collaboration by both the public and private sector as key role players with agencies such as Sector Education and Training Authorities (SETAs) facilitating linkages and acting as conduits between industry and government as well as beneficiaries of skills development broadly.

Furthermore the SETAs are tasked to develop and annually update the Sector Skills Plan (SSP) according to Skills Development Act (1998). These SSPs require an investment by SETAs on research. The purposes of the SSP among others include but are not limited to the following:

1. Inform supply and demand side for skills planning
2. Enable skills forecasting to determine future needs per economic sector
3. Determine funding priorities via the SETA levy grant system
4. Analyse Workplace Skills Plans and Annual Training Reports for companies to determine priority focus areas
5. Guide the SETA's strategy planning and execution
6. Inform the curricula development processes on industry needs

It is against this background that the paper seeks to highlight the role of research in skills planning and further on presents a 6-step action plan adapted to the South African context in taking charge of the skills gap and expands this by indicating how research could facilitate the process at organisation; industry and government levels. The six step model is adapted from (American Society for Training & Development (ASTD): 2006).

Definitions

Research

Patrick and Willis (1998: 2) provide definitions of research as an intellectually controlled investigation which leads to advances in knowledge through discovery and codification of new information or the development of further understanding about existing information and practice.

Skills Gap

The ASTD Public Policy Council, 2006 defines a skills gap as a significant gap between an organisation's skill needs and the current capabilities of its workforce. It further on alludes that, it is the point at which an organisation can no longer grow and /or remain competitive in its industry because its employees do not have the right skills to help drive business results and support the organisation's strategies and goals.

Research Approach

The research approach in this article is desk-top literature review on various source documents including but not limited to the following strategy and policy documents: Skills Development Act as amended (1998), National Skills Development Strategy (NSDSIII) and the White Paper for Post – School Education and Training.

Research Questions

The following are the guiding questions in this paper:

- ✓ Why skills planning?
- ✓ What is the role of research in skills planning?
- ✓ How skills gap can be bridged?
- ✓ What are the reasons for research?

The Purpose and Objectives of the paper

The purpose of the paper is to highlight the role of research in skills planning and make recommendations on mechanism towards enhancing implementation of skills planning research in identifying and bridging skills gap across economic sectors of the South African economy.

The objectives include but are not limited to the following:

- ✓ Identify research areas and research questions in addressing skills gap to inform skills planning processes
- ✓ Identify the role and value of research in skills planning
- ✓ Formulate recommendations for possible solutions towards improving and advancing skills planning research
- ✓ Identify strategic actions and choices regarding implementation of skills planning research

A model to bridge skills gap

The six step model is adapted from (American Society for Training & Development (ASTD): 2006). The model is presented as one of the models for consideration in bridging the skills gap and most importantly the research questions that seek to provide solutions towards addressing skills gap. The questions in each step of the 6 step model aim to guide skills planning research at enterprise and industry level.

The following is the 6 steps Action Plan as identified by ASTD (2006: 11 -13):

1. Understand the organisation's key strategies and performance metrics
2. Identify competencies that map out these strategies
3. Assess the skills gap
4. Set goals and prioritise the path to filling the gap
5. Implement learning solutions
6. Measure results and communicate impact

An action plan to take charge of the skills Gap based on the 6 steps:

Step 1	Step 2	Step 3
Understand the organisation's key strategies and performance metrics	Identify competencies that map out these strategies and performance metrics	Assess the skills gap
Key questions: ✓ What are your organisation's key strategies, goals and objectives? ✓ Who are your customers? ✓ What is your position in the industry or market? ✓ What is business recent SWOT analysis? ✓ How is organisation's performance and success measured? ✓ Where is organisation and industry headed in the immediate, short and long term?	Key questions: ✓ What skills and competencies are needed in the organisation? ✓ What is organisation's future state to meet business goals? ✓ What is the skills and competency mapping of the organisation? ✓ What are the priority skills and competencies to grow the business? ✓ What is the reflection on skills and competency mapping in terms of job function, specialisation area, departmentally & geography etc.	Key questions: ✓ What are the demographics of the organisation's workforce? ✓ What are the results of the workforce review? ✓ What are the results of skills audit? ✓ What are the results of skills forecast? ✓ Are the gaps in specific lines of business? ✓ Are the gaps more pronounced in specific employee groups? ✓ Are the gaps geographically based?
Step 4	**Step 5**	**Step 6**
Set goals and prioritize the path to filling the gap	Implement learning solutions	Measure results and communicate impact
Key questions: ✓ What are the set targets between current skill sets and those needed to support the future goals of the organisation? ✓ What are the baseline measures? ✓ What are the change management plans? ✓ What is the communication strategy of the organisation with regard to comprehensive action plan to address organisation's skills gap? ✓ What processes & methods exist for identifying internal talent, recruiting new talent, retaining employees with key skill sets that organisation needs?	Key questions: ✓ What are the created learning plans and learning paths for employees? ✓ What are the best delivery modes? ✓ What systems exist to measure employee competencies and skills before, during and after learning takes place? ✓ Who are the role models in business and industry? ✓ What improvements can be done to improve the situation? ✓ What are the results from international bench marks?	Key Questions: ✓ What are the results of employee measurement re: progress on the learning plans against individual and organisational goals? ✓ What is progress comparing before and after learning takes place? ✓ What is the progress in building needed skills? ✓ What is the return on investment? ✓ What is the impact of learning interventions to the employee, organisation, industry and the economy?

Source: (ASTD Report bridging the skills Gap 2006)

The above questions are applicable at organisational, industry and economic sector level in an attempt to address the skills gap. The answers to these questions may be gained through ongoing skills planning research.

In addition to the above the following questions are relevant for consideration in light of various learning solutions implemented to address skills gap in the South Africa economy:

1. Are the learning solutions and implementation plans having a measurable effect on narrowing skills gap in organisations, economic sectors and government?
2. Is South Africa's workforce better equipped with skills now?
3. What business results can be identified based on the learning solutions implemented?
4. How research can assist in providing answers to the above questions?

Reasons for Research

According to various authors there is consensus that research is an essential component of academic endeavour (Mason). Shattock (1996) stresses that research and teaching should form a seamless effort to create the advancement of knowledge, while Utley (1999b) maintains that such integration is required to keep the best brains.

The following are some of the generic reasons for research:

1. To gain new insights through gathering of evidence i.e. seeking to understand our world
2. To provide explanations to questions that are of interest in a particular area
3. To test whether a set of explanations/theory applicable in a particular context/environment will also be applicable in other context/environment
4. To provide solution to problems
5. To increase our knowledge base especially for decision -making
6. To avert disaster, promote human safety and security as well as make life easier
7. We do research to measure the effectiveness, successes and failures of human actions

Value of Research in the context of SETA Skills Planning exercise

Arguably, research in the Skills Planning exercise may provide the following information for decision-making purpose:

- ✓ Research-based Skills Planning environment will help SETAs determine the trends in Skills Development
- ✓ It will help indicate skills glut areas/over-supplied skills in time (if any)
- ✓ It will provide insight into skills location
- ✓ It will help with information with respect to racial, gender and generational context of skills available in our sectors
- ✓ It might point us in the direction of cost and benefits with respect to a set of skills
- ✓ With research and planning going together, it becomes easier to link skills gaps, skills flow and migration as well as skill destination
- ✓ It is through research that you discover skills that may become extinct and why, as well as mechanisms to redress.

Challenges experienced in skills undertaking planning research:

The following are some of the challenges experienced in undertaking skills planning research and some of these are also articulated in the White Paper for Post–School Education and training as an emphasis on promoting quality and credible research for skills planning.

- ✓ Labour market information is lacking
- ✓ Lack of data accuracy
- ✓ WSP and ATR data inaccuracy and quality not up to standard
- ✓ Minimal investment into research
- ✓ Minimal collaboration and partnership
- ✓ Minimal leadership by key role players i.e. business, labour, government as well as public institutions of learning
- ✓ Lack of centralised, integrated skills planning research and coordination

Skills as a constraint to investment

Lack of skills may have detrimental negative impact on economic growth and development hence the National Development Plan (NDP vision 2030), also outlines the need to focus on skills development as one of its goals. The following are some of the constraints experienced:

- ✓ Lack of a demand-driven responsive approach to skills planning and fragmented delivery
- ✓ Lack of a skills pipeline for the future: short-term planning horizon ("jobs for today: jobs for the future")

- ✓ Imbalance in skills pool: local vs regional vs national
- ✓ Funding mechanisms: inflexible, short-term etc.
- ✓ Skills delivery capacity constraints

Building Blocks for Skills Planning

Undertaking the following analysis is a critical component of skills planning research:

- ✓ Investment analysis
- ✓ Skills demand analysis
- ✓ Skills supply analysis
- ✓ Training provision analysis
- ✓ Skills gap analysis
- ✓ Identification, co-location and pooling of training infrastructure & partnerships
- ✓ Implementation plan (skills plan)
- ✓ Implementation platform (skills hub)

The following are also some of the basic critical questions to continuously ask and provide answers through research:

1. What skills are needed?
2. Who needs these skills? - " Demand side"
3. When are skills needed? - Short; medium and long term
4. Where is the provision of these? - "Supply side"
5. How these can be best developed?

Conclusion and Recommendations

In conclusion, despite all the interventions made so far in the area of skills development, there are still opportunities for more to be done with greatest innovation and continuous quest for knowledge through research. The following are still some of the focus areas in the work of skills planning:

- ✓ There is still mismatch between the skills the organisation needs both current and future; the capabilities of the workforce and potential workforce.
- ✓ Participation by small and medium companies still needs to be improved
- ✓ Youth unemployment requires attention
- ✓ Entrepreneurship skills development also remains critical
- ✓ A review of Work Place Skills Plans (WSP) information required from companies.

From the discussions above it is clear that, skills planning research serves as a temperature gauge for the economy in terms of determining what is going to happen now and tomorrow.

Recommendations are broadly presented as following:

The 6 step model can best be implemented guided by ongoing and continuous skills planning research.

Increased investment in research and skills planning research in particular is critical since the socio-economic developments of our country as a developing nation operating in a global space requires innovation and integrated efforts guided by ongoing research leading empirical evidence towards solutions.

Interactive and engaging platforms source more inputs hence the need for qualitative research methods in approaching research.

In addition to the above the following actions are also recommended for consideration in an attempt to enhance skills planning research by all key parties involved i.e. Department of Higher Education and training (DHET), Sector Education and Training Authorities (SETAs), Industry Bodies, Companies, and Research institutes.

- ✓ Centralised skills planning and coordination
- ✓ Leadership by Business and Labour, institutions of learning and government
- ✓ Investment in research
- ✓ Review the current Workplace Skills Plan (WSP) information required from companies
- ✓ Implement the 6-step model driven by research
- ✓ C-suite support – support by chief executives with organisations remain critical
- ✓ SETA cluster model on skills planning research
- ✓ Monitor, Measure and Evaluate the impact

References

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