



# Aligning Post-School Education and Training and the NQF: Potential and Challenges in the Age of the 4IR

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# Positioning quality within the 4IR

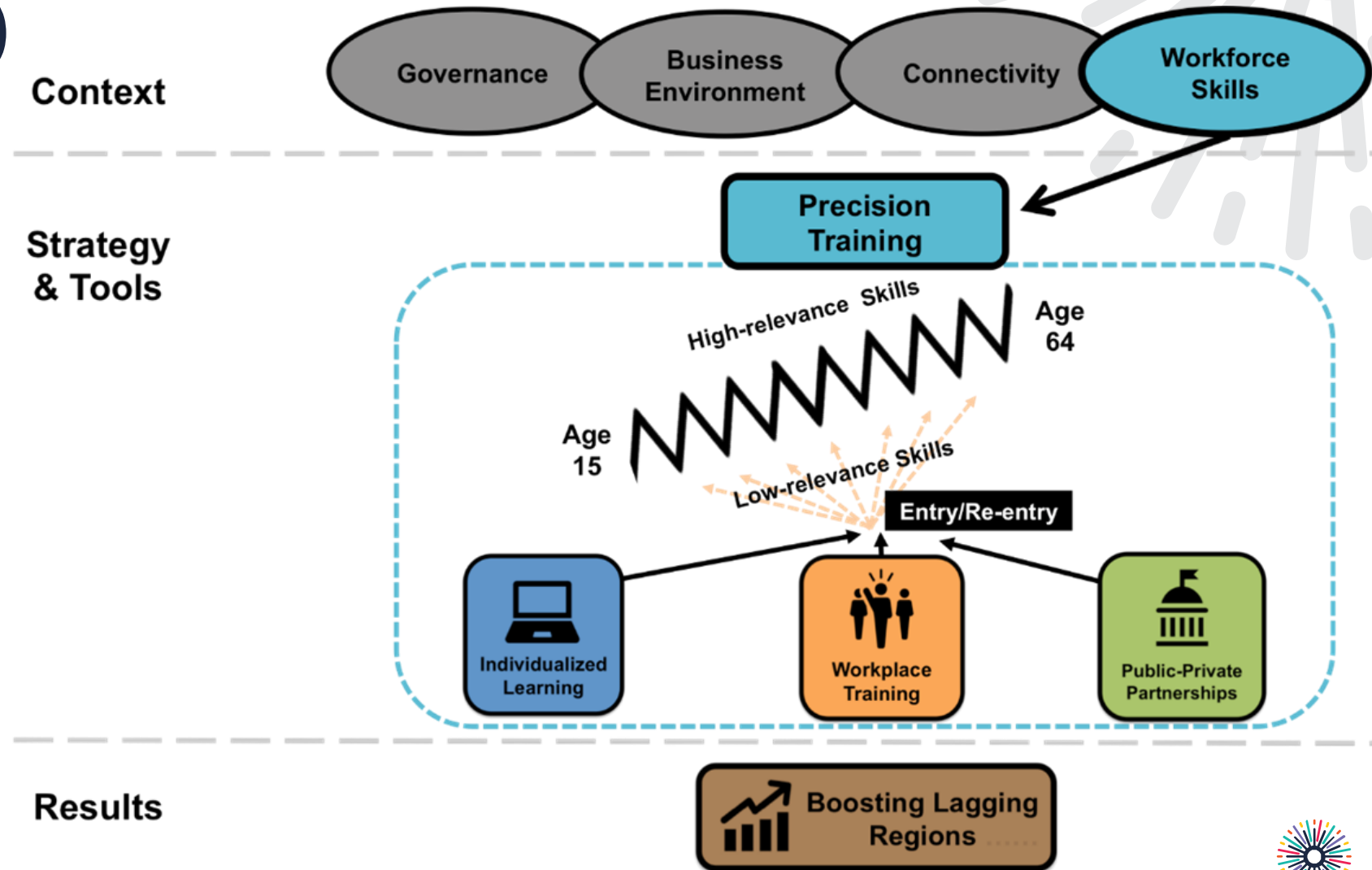
- The 4IR changes how we think about knowledge, skill, and competency demands
- In response to accelerating economic and labour market change, countries need to:
  - Build stronger connections between education, training and labour market sectors to benefit from these changes
  - Create fluidity in systems to recognise qualifications, knowledge, skills, or competencies obtained through various experiences, as well as through formal, informal and non-formal learning.
- **Focus of the presentation:** How are other countries tackling the link between PSET sectors, quality frameworks and the 4IR and what can we learn from them to strengthen alignment in the South African context?

# Workforce Skills Development

- An increased need for ongoing skill alignment (upskilling and reskilling) requires more structured approaches to invest in lifelong learning options for employees.
- The Precision Training Framework was developed to support frontier economies to further advance competitive skills development.

# Workforce Skills Development: Precision Training Framework (World Bank, 2019)

The Precision Training Framework brings together three key avenues of skills development among employees – individualised learning, workplace training, and Public-Private Partnerships



# Investing in the quality of TVET systems: Teacher training through Continuing Professional Development (CPD)

## Kazakhstan

**Cascading model:** Vast size of the country and large distances between cities. TVET teachers are trained at a Vocational Education Centre. Once qualified, external trainers can conduct professional development courses in other regions to share advanced teaching experiences within the TVET system.

## Finland

**Innovative legislation** guides reskilling and upskilling by setting qualification requirements. TVET educators are given relative autonomy in deciding on their CPD pathways, with inputs from trade unions and employers. Most continuing training is free, and educators' employers are responsible for funding

## Singapore

Institute of Technical Education: lecturers re-train or upskill themselves through work-integrated learning or postgraduate courses. **In-service courses** are provided by professional learning designers from T&L centres, which ensures that lecturers are up to date with the most current pedagogical practices, including the use of EdTech.

# Recognition for non-formal education

- A flexible education and training system implies a wider variety of means through which knowledge, skills and competencies can be acquired and recognised
- Accreditation systems need to adapt accordingly
- Examples of how flexible accreditation systems are developing:
  - Recognition of micro-credentials,
  - Upskilling of unemployed,
  - Recognising supplementary skills development, and
  - Recognition of acquired skills (Recognition of Prior Learning - RPL)

# Recognition for non-formal education

- Micro-credentials are typically earned through short, low-cost online courses that individuals complete to improve selected skills
- These courses provide learners with digital certification or a 'digital badge' on completion
- This offers flexibility through shorter learning pathways, overcoming time and resource constraints, enabling RPL, and recognition of skills and qualifications required by employers
- Micro-credentialing can also be used to recognise skills acquisition through other, innovative forms of skill development (e.g. work-integrated learning)

# Recognition for non-formal education: What is happening internationally?

Lumina Foundation in the US: **Eight-level Framework for credential evaluation**, differentiating between knowledge and skills. A **Credential Engine** creates a **centralised Credential Registry** to house information about all credentials (e.g. degrees, licenses, badges and apprenticeships).

The Educational Research Institute in Poland produced a **seven-country report on approaches to include non-formal education qualifications in NQFs**, including availing opportunities for the unemployed to develop in-demand skills, recognising supplementary skills development, and recognition for collections of acquired skills, among others.

**Hungary:** citizens can 'top-up' a vocational qualification by completing a course that will enable them to enter an additional scope of work.

**France:** Unemployed people receive 25 hours 'training allowance' annually. Incentives are included to guide training towards a scarce skills inventory.

The **Scottish Credit and Qualifications Framework (SCQF)** includes over 11,500 programmes, of which over 800 are considered to be non-formal.



# Regional benchmarking

- NQFs should be living documents that evolve on an ongoing basis with technological, social, and economic changes; this requires much greater simplicity and agility in process and structure than most current NQFs demonstrate
- The need to benchmark internationally has increased, particularly in relation to the emergence of digital credentials and the need to develop methods and tools to recognise the skills of many different kinds of people, including migrants and refugees
- Forming regional alliances in quality benchmarking and increased mobility has worked for the European Union (EU) and South-East Asian countries in the Association of Southeast Asian Nations (ASEAN) network
- Both regions have established regional qualification frameworks that guide NQF alignment; might be worth reviewing for deployment in SADC

# Frameworks for digital skills development

- Without investing in different levels of digital skills development, a country's prospects of taking full advantage of the 4IR seem dim
- An example of a comprehensive, outcomes-based framework is the EU's DigComp 2.1 framework:
  - 5 broad competence areas
  - 21 individual competencies
  - proficiency levels - foundation, intermediate, advanced, and highly specialised
- Several international efforts to map digital skills needs (e.g. World Bank DE4A Initiative), and several frameworks and initiatives implemented to develop digital skills in post-school contexts



# What would be necessary to accelerate South Africa's initiatives towards more flexible and inclusive education and training?

1. Making learning more flexible and relevant will require **collaboration** between government, SAQA, the Quality Councils, SETAs, professional bodies, etc. to **review the current NQF-related legislation, the NQF and its three articulated NQF Sub-Frameworks, as well as their implementation.**
2. **Quality assurance mechanisms need to be adapted** for flexible and open learning approaches
3. **Improve relationships between public and private entities and the SETAs** as an intermediary.
4. Innovative interventions cannot be possible if **smothered by bureaucratic processes**; there is an urgent need for greater decentralization, simplicity, flexibility, and empowerment of players at the margins

# What would be necessary to accelerate South Africa's initiatives towards more flexible and inclusive education and training?

5. The pace of demand for different skills is accelerating in parallel with the development of new technologies; **Recognition and quality processes should be simplified and shortened**
6. Ongoing **capacity-building of staff in the Quality Councils** to align their skills with the changing landscape
7. A renewed vision for the education and training system to align with the 4IR demands will only be successful if implemented in parallel with **strategies to address digital and socio-economic inequalities, infrastructure challenges, root out corruption, and increase accountability measures**



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