

ICT Certifications, Skill Standards and Their Role in Workforce Preparation

AACC / BiBB

Issues & Challenges

- Lack of standards/definitions for ICT job roles
- ICT present in virtually all industries, constantly changing the way we work and live
- Dynamic nature of ICT industry requires constant revisiting and updating of skills required to perform the work
- At the same time, nation-state economies demand mobility of workers across borders and transferable skills, standards
- Technology is changing the model of formal and informal learning – students are no longer bound to classrooms, semesters, text books



- ***Firms focusing on skill management to improve productivity, agility and growth***
 - ***Skill gap analysis and resulting skill development plans grow in importance***
 - ***Tightening talent definitions, aligning job descriptions with corporate missions, visions, and values.***
 - ***Firms moving to job role certification***

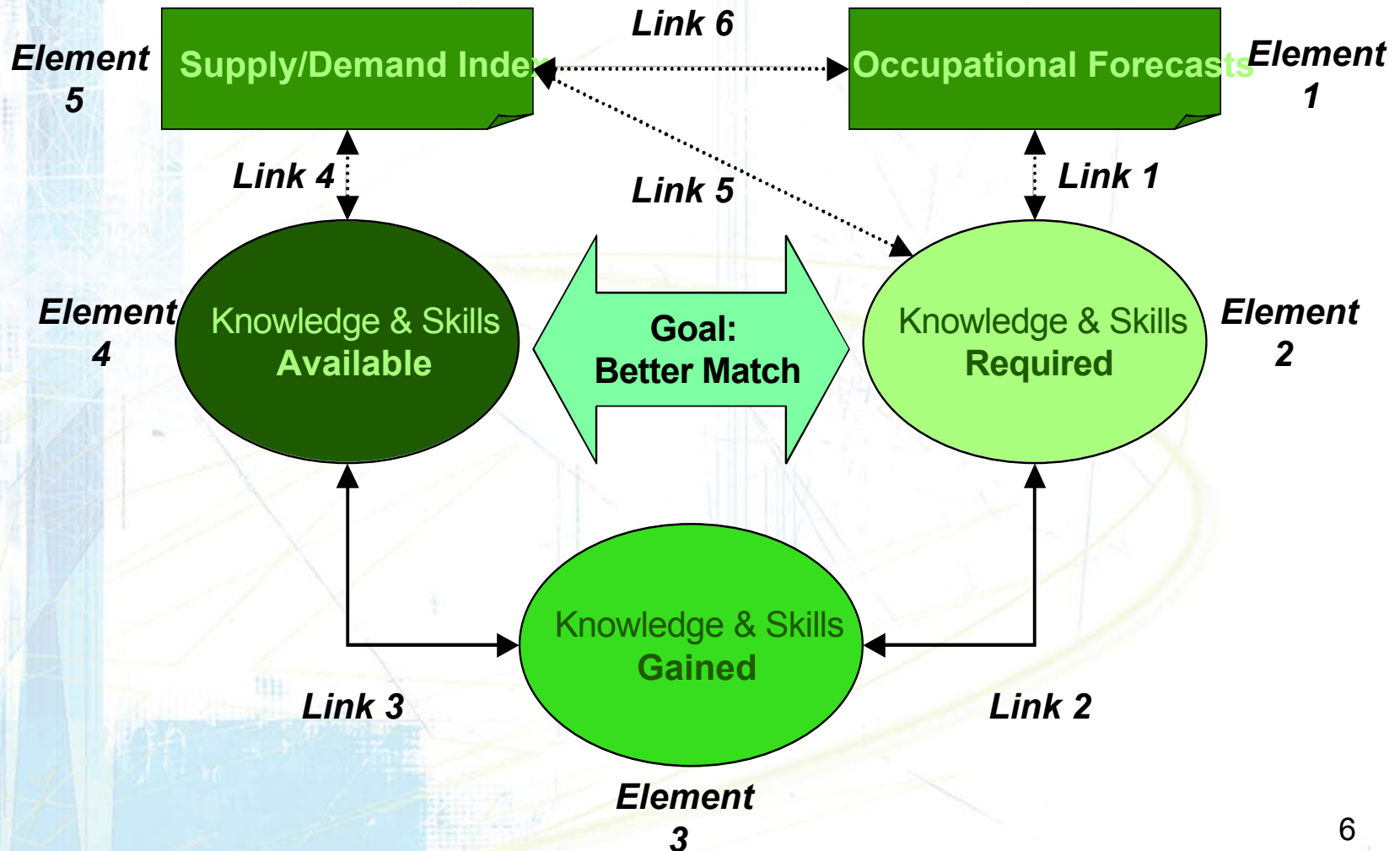
Top 5 hiring criteria of ICT firms

1. Recent related experience
2. Recent extensible experience
3. Applicable formal education
4. Vendor-specific certifications
5. Vendor-neutral certifications

The New Scenario

- Mobile Workforce
- Constant Skills Upgrading
- Multiple Credentials
- Multiple Jobs and Careers
- Telecommuting
- Knowledge Worker
- IT Savvy

Matching Supply with Demand



New Ways to Recognize Learning

- These needs result in a requirement for a flexible system for recognizing learning
- Such a system is needed in order to provide people, pursuing lifelong learning, with the ability to formally document their continuously evolving and changing stock of knowledge and skills.
- It needs to facilitate linkages between different types of qualifications – vocational and academic; it needs to articulate training standards and qualifications that link all three categories of learning (formal, non-formal, informal) and it needs to integrate the demands of labor market.

World Bank (2003).

About Skill Standards

A skill standard is a description of the work activities to be performed, how well the work must be performed and the level of knowledge and skill required to perform that work.



About Skill Standards

High-Performance Organizations

Work Component
(Describes the Work)

- * **Critical Work Functions**
- * **Key Activities**
- * **Performance Indicators**



Worker Component
(Describes the Worker)

- * **Academic**
- * **Employability**
- * **Occupational/Technical**

Skill Standards Role

- *Skill Standards provide taxonomy for gap analysis, hiring and development*
- *Certification provides validation that hiring managers increasingly demand*
- *Core Skills support agility within firm, industry*
- *Standards guide outsourced training*

IT Certification



**An international Guild outside
of governmental control**

IT Certification

IT certification emphasizes competency-based education and performance assessment

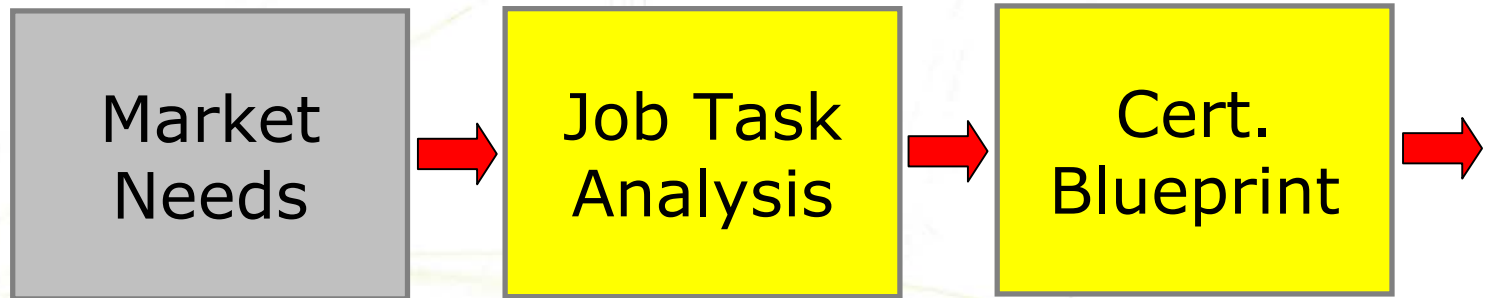
The Role of Certification

- Establishing industry-wide, globally recognized standards of basic core competency levels
- Maximizing efficiency in recruiting, hiring, training and promoting employees
- Certifying individual competencies with in-demand skills
- Providing job seekers identifiable career paths, transferable skills and industry recognized credentials
- Producing the standards necessary to better prepare individuals to meet today's job requirements

Why Certification is Attractive to Business

- Rapid Change in IT
- Emphasis on Training
- Documents competency
- Validates skills
- Provides assurance of readiness
- Certifies performance against known standard (3rd party)
- Distrust of Degree

Certification Life Cycle



Research
Membership
Driven
Skills (Gap)
Definition
Stakeholder
Consensus

Surveys
Focus
Groups
Industry
Data
Content
Mapping

Test Forms
Psychometrics
Beta Testing
Cornerstone
Approval
Legal
Defensibility

Certification Life Cycle (Cont.)



Global
Delivery
Localization
Proven
Delivery
Channels
Training
Support

Quality
Control
Security
Performance
Reviews
Item
Maintenance

Advisory
Committee
Driven
Market
Performance
Psychometrics
JTA Update



At the center of the system is the student, not the institution

Value to Student

- Distinguishes them from the pack
- Shows student commitment
- Builds resume
- Shows currency of skills
- Measure of real-world skills
- Professional credential
- Motivating



It is **NOT** Higher
Education

How Did They Prepare?

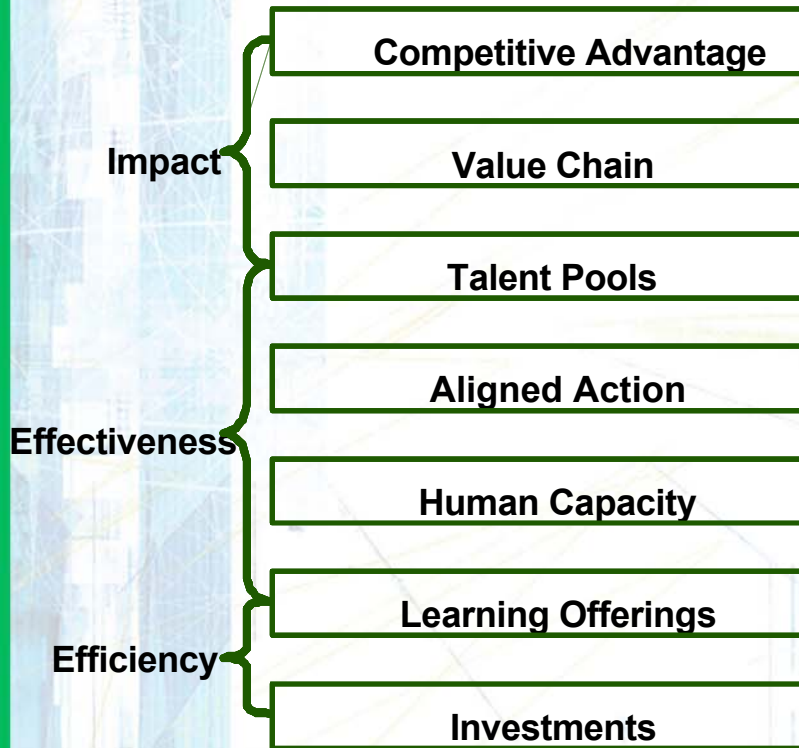
- HYBRID - multiple preparations
- Printed materials - 64%
- Instructor-led training - 50%
- Classroom Training Materials - 48%
- Computer based training - 22%
- Taking a college course - 6%!

Challenge to Education

- Anticipate the job market
- Identify in-demand credentials
- Develop and offer certification in rapid response mode
- Keep faculty and staff current
- Collaborate with industry
- Escape the semester silo

The Challenge

- Establishment of ICT skill standards that will be broadly adopted by industry, academia and government agencies across geo-political boundaries



Role of Industry: Focus on development of performance standards associated with pivotal talent pools.

Role of Educational Institutions: Focus on ensuring that learning offerings effect change in pivotal talent pools.

Role of Government: Focus on relationship between level and quality of learning offerings and resources spent in providing services.

Adapted with permission from John W. Boudreau & Peter M. Ramstad (1999)

Recommendations

- An industry-accepted qualifications “meta-framework” that would act as a reference guide for national / state occupational frameworks and encourage their convergence,
- An occupational matrix that would provide an integrated “map” of existing industry certifications, formal educational credits and informal learning measures to facilitate credit transfer and labour mobility,
- A lifelong Learning and experience model that records experience events as well as formal/non-formal learning (apprentice model).
- A practical online management system to facilitate credential recording, verification and maintenance,
- An online ICT Career Portal/Resource Centre that would be localized for each participating member country or state’s occupational system and incorporate career information, education and training offers, job banks, information on how to get work permits, etc. that will guide the career development “value chain”.