PARTNERS FOR CHANGE

Labour Market Information for Vocational Education
What is a Labour Market Information System (LMIS)?

An LMIS is a network where LMI producers and users interact.
What is a Labour Market Information System?

An LMIS is defined as

“a set of institutional arrangements, procedures and mechanisms that are designed to co-ordinate the collection, processing, storage, retrieval and dissemination of Labour market Information.”

(Mangozho, ILO)
What is the purpose of LMI and national occupational standards in Vocational Education
Uses of LMI and Skills Demand Data

- **Policymakers**: identify high demand skills, inform planning & resource allocation

- **Training Institutions**: schedule training programs, review/update course content & trainer skills, provide guidance to trainees

- **Employers**: understand changing business environments, respond to future skills shortages and gaps, identify enterprise and sector wide training priorities

- **Workers**: identify priority types and levels of skills upgrading for workers, inform employment and wage trends

- **Community, civil society groups**: improve advice and targeted training for vulnerable groups to access labor markets

- **New entrants and returnees to the Labour Market**: career guidance
General linkages to Vocational Education

- Sectors
- Employment
- Skills need
- Qualifications
- Learning process
- Resources
Uses for Sectors

- Job roles
- Job requirements
- Numbers required
- Skills requirement
  - Specific
  - General
  - Key skills
- Skill levels
- Progression
Uses for Qualification development

• Content
• Teachers
• Teaching
• Learning
  o Knowledge
  o Skills
  o Competences
• Assessment
Common Approaches to LMI

- Econometric modelling
- Signalling
- Job opportunity index
- Use of administrative data
- Enterprise surveys
- Special studies (eg: cost-benefit, tracer)
- Sector studies
- Stakeholder driven forums

Drivers of change for Skills Demand

- Business strategy, Competition (e.g. growth of high/low Skills jobs)
- Migration
- Environmental change
- Markets
- Technology change
- Demographic change
- Policy/regulation Change e.g. Change in Priority sectors
Labour Market Intelligence for Vocational Education
Research methods
General Methods

Desk research for existing information

- Analysis of existing surveys
- Sector occupations and business breakdown
- Identification of industry-specific research
- Identification of geographic-specific research
- Identification of sector research undertaken by higher education
- Analysis of competitive strategies adopted by businesses in the sector
General Methods

Analysis of Employer Needs

- Employer telephone survey
- National and regional employer working groups
- Owner operator telephone survey
- One-to-one large employer interviews
- One-to-one small employer interviews
General Methods

Analysis of Current Provision

• Analysis of current learning provision
• Learning provider working groups
• Teacher online survey
• Student questionnaires
• Student working groups
Expert workshops

- Experts from across the industry are invited to attend planned workshops to discuss and examine existing and proposed new occupational and skills standards.

- The experts are given both the national occupational standards and the proposed qualification routes to look through in small groups, and written feedback is obtained.
Industry Advisory Panels

- Industry experts meet on a regular basis to discuss trends in industry and their impact on qualifications and training

- During a NOS review, these will be structured to start to gain feedback on key changes that NOS need to reflect

- Panel members include relevant key employers, representatives from trade bodies, and from training providers who deliver the qualifications
One-to-one interviews

- Identify people with particularly strong knowledge and experience of the industry for one-to-one interviews

- Able to go into real detail on particular areas of the NOS that may be of concern
Online consultation

- For consultation with industry to obtain a broader spectrum of feedback than through organised meetings

- Feedback will be sought on qualification structures and on the individual NOS themselves

- This consultation may look for feedback on the existing national occupational standards; and then receive feedback on ‘new’ re-drafted standards
Methodological Considerations

- Clarify exact information needs and priorities
- Balance short term responsiveness with long term planning needs
- Balance statistical accuracy with available resources and capacity
- Combination of quantitative and qualitative methods
- Consider institutional arrangements
- Use standard classifications of occupations to enable comparable evaluations across industries, regions and countries
- Use standard classifications of qualifications – one benefit of National Qualifications Frameworks.
Observations

• Labour Market Information and Analysis is complex

• There are a wide range of approaches, each with their own strengths and weaknesses

• Looking at institutional arrangements equally important

• Capacity and data develop longitudinally but has to start somewhere
Challenges to an LMIS

Inadequate financial and human resources (Limits funding for technological developments, inadequate staffing)

Poor response rate for surveys conducted
- Respondents do not recognize the importance of LMI
- Survey Fatigue
Challenges to an LMIS

Users are unaware of all the LMI available

Inadequate co-operation and collaboration between producers
  • The application of various classification systems
  • Varying schedules for the release of LMI from various producers.
Recommendations

Institutional Strengthening of LMI producers
  • Should involve detailed organisational analysis

Increased use of available technologies e.g. An LMIS Website
  • online statistical database

Promotion and Training
Recommendations

To develop a Labour Market Information (Advisory) Committee

• Must have a clear continuous mandate
• Will support the implementation of recommendations
• Should identify LMI gaps
• Should support the development and implementation of labour market driven education policies
Questions / Discussion
Thank you!

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A Sector Employment and Training Forecasting Model
Overview

• Aims of the Model
• Model review
  Things that can change -
    – Output Forecasts
    – Productivity Growth
    – Inflows/Outflows
• Employment Forecasts
Aims of the Model

• Provide forecasts of Employment Needs in industry by occupations and by regions

• Incorporate regional and national assumptions from experts.

• Give scenario analyses. e.g. What if…?
Quick view of the Model

A Supply and Demand stock and flow Labour Model where demand and supply are looked at separately

• By demand we mean the anticipated output of an industry and what this would mean in employment terms
• By supply we mean the current size of the available workforce and how this is likely to change over time

The gap between supply and demand = ‘Employment Requirement’
Things that change

- The macroeconomic environment changes
- New data is released
- New projects are announced……and old ones are completed
- New research into supply side issues better informs the model

A dynamic Network must take change into account and be prepared to regularly revisit the assumptions that inform the model
Things we can change

• Accurately forecast employment levels and flows

• The majority of inputs into the model are determined by robust data and, as a result, cannot be changed

• However, some inputs are determined by assumption and these can be influenced by industry experts
The Model

- Employment
  - Change in Skilled Labour
    - Flows out of Industry
    - Entrants to Industry
  - Skilled Labour Supply
    - Employment Requirement
  - Labour Coefficients
    - Skilled Labour Demand
      - Productivity Growth
      - Sector Output
Output forecasts – what if……?

• What other projects might emerge?
• What would the consequences be for the industry if there is economic change?
• How will public investment nationally affect education projects?
Inflows and outflows

- From other countries
- To other countries
- From other industries
- To other industries
- From other regions
- To other regions
Model relies on

- Industry codes
- Occupational codes
- Labour force data
- Data on training for individuals
- Macro economic growth data
- Sector economic change data
Approaches to LMI collection
Quantitative Approaches to Labour Market Information

<table>
<thead>
<tr>
<th>Approach</th>
<th>Benefit</th>
<th>Limitation</th>
<th>Output</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Econometric Modeling</td>
<td>Consistent overview and forecast</td>
<td>Data dependent, Costly, Time consuming</td>
<td>Projections of demand &amp;supply by occupation/industry</td>
<td>Expertise in econometrics,LFS data</td>
</tr>
<tr>
<td>Enterprise Survey</td>
<td>More specific, enterprise level data</td>
<td>Limited to sectors, costly</td>
<td>Specific skills needs of enterprises</td>
<td>Expertise in specialized methods</td>
</tr>
<tr>
<td>Signalling</td>
<td>Simple, Easy to do and update</td>
<td>Data dependent Difficult to interpret</td>
<td>General trends in skills demand and supply</td>
<td>Statistical knowledge Time series</td>
</tr>
</tbody>
</table>

Source: Sparreboom and Powell, Labor Market information and analysis for skills development, ILO Employment Trends Unit
Quantitative Approaches to Labour Market Information

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<td>Job Opportunity Index</td>
<td>Gives insight into changing demand</td>
<td>Limited coverage, resource intensive</td>
<td>List of skills demand based on vacancies</td>
<td>Newspaper accounts</td>
</tr>
<tr>
<td>Use of Administrative Data</td>
<td>Little cost, readily available data</td>
<td>Limited to available data</td>
<td>#of enterprises, employed, unemployed</td>
<td>Man hours for collation, admin data</td>
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## Qualitative Approaches to Labour Market Information

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<td>Special Studies (Tracer/Rate of Return)</td>
<td>More specific information vis D&amp;S factors</td>
<td>Partial view, costly</td>
<td>Subject specific/qualitative D&amp;S factors</td>
<td>Expertise in specialized studies</td>
</tr>
<tr>
<td>Sector Studies</td>
<td>Comprehensive vis sector D&amp;S factors</td>
<td>Limited scope, partial view, costly if for all sectors</td>
<td>Sector specific data on demand and supply</td>
<td>Expertise in quantitative/qualitative analysis</td>
</tr>
<tr>
<td>Stakeholder Driven Forums</td>
<td>Participatory Forum for discussion</td>
<td>Individuals might dominate</td>
<td>D&amp;S data with context/qualitative factors</td>
<td>Regular forum discussion</td>
</tr>
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