Inter-regional Technical Forum on
Skills for Trade, Employability and Inclusive Growth

Do skills matter for trade + inclusive growth?

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Introduction

• Thanks for invitation, honour to contribute

• My role:
  • Reflect on key skill challenges + the drivers of change relevant to ILO’s STED + G20 Training Strategy
  • Friendly ‘outside’ critic

• My central concern
  • reports of ‘skills shortages’ persist while skill levels rise
    • OECD (eg USA, UK, Australia....)
    • Asian Developmental States (eg Singapore, Korea)
    • Rapidly developing countries (eg China, India)

⇒Do skills really matter?
Yes, skills matter, but ...

(a) Skills for what?

(b) Skills in what?

(c) How do we get to a better place?
Do skills matter for trade + inclusive growth?

- High education levels don’t guarantee economic success:
  - Eg Scotland + Cuba

- This does not mean skills are worthless
  - Eg South Africa – a country with huge potential, but poor quality basic education is seriously retarding growth

⇒ While skills are not the answer, there can be no answer without skills

- So what sort of skills matter for economic + social development?
Skills for what?

• **Motivating examples:** hospital cleaner, aircraft maintenance, secondary vocational education

• Implications for policy + practice:
  (a) Australia: TVET + children’s services
  (b) Developing countries: take informal sector as a given primarily train for self-employment + boost its productivity vs support economic renewal

**Getting the question right:** are we primarily interested in having a better developed and organised reserve army of labour **OR** do we want to deepen adaptive capacity in support of social + economic renewal?
Skills in what?

• Common framing of the issue:
  • long standing debate about ‘general education’ vs ‘training for immediate workplace requirements’

• Emerging debate on adaptative capacity + ‘vocational streams’
  • Compare National Qualifications Framework categories for thinking of jobs + qualifications with the reality of flows of learning + labour.

⇒ Insights from current Australian debate
Skills in what? (continued)

- How are jobs + pathways commonly defined in qualifications frameworks?

<table>
<thead>
<tr>
<th>General Clerk</th>
<th>Loan Officer</th>
<th>Financial Dealer</th>
<th>Investment Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Care Worker</td>
<td>Enrolled Nurse</td>
<td>Registered Nurse</td>
<td>Health Administrator</td>
</tr>
<tr>
<td>Farm Worker</td>
<td>Farm Operator</td>
<td>Agricultural Technician</td>
<td>Farm Manager</td>
</tr>
<tr>
<td>Trades Assistant</td>
<td>Trades worker</td>
<td>Engineering Technician</td>
<td>Engineer</td>
</tr>
</tbody>
</table>

- What are the commonalities in the trajectories of workers in the labour market?
Skills in what?

• How do people actually flow in the labour market? The reality of segmentation (example from agriculture)

Farmers  Farm labourers  Key

- [1] Studying Secondary
- [2] Studying VET
- [3] Studying Higher Ed
- [4] Manager
- [5] Professional
- [6] Technician/Trades
- [7] Community Services
- [8] Clerical
- [9] Sales
- [10] Machinery Operator
- [11] Labourer
- [12] Unemployed
- [13] Not in the labour force
Skills in what? (continued)

Key results – Healthcare and Community Services

Registered Nurses

Personal Carers

Key

[1] Studying VET
[3] Manager
[4] Health/Other Professional
[5] Nurse
[7] Carer
[8] Other non-manual
[9] Other manual
[10] Unemployed
Skills in what? (continued)

Why does the current situation persist?

• Occupational segmentation the overarching result
  • Limited flows to higher skilled occupations or further study

• High skill trajectories = access to high skill work
• Low skill trajectories = entrenchment in low skill work
• Marginal attachment
  • Long episodes out of the labour force, often women and older workers

⇒ How do we make sense of these facts?
How are we to make sense of these key facts

The labour market is not like a lake, it’s more like a river

• Fact 1: limited vertical movements could be conceived as something like Warragamba Dam: overwhelming stasis with occasional leakage out + in, but this misses the dynamism
How are we to make sense of these key facts

Even with the river analogy, segmentation does not entail ‘rivers + billabongs’

• Fact 2: flows often involve horizontal churn, not static segmentation
How are we to make sense of these key facts

New Zealand’s braided rivers offer better visual analogy (Part 1)

• Fact 3: – flows within the labour market are structured, but not neatly
How are we to make sense of these key facts

New Zealand braided rivers offer better visual analogy (part 2)

• Flows go into and out of the braided river, as well within (analogous to work ↔ education transitions)
New categories for these findings

• We define vocational stream as:
  ‘a set of occupations linked by common knowledge, skills and capabilities within a broader field of practice’

• For example, care work, financial advice, logistics, engineering, rural operations, customer service

• Why might these links be important?
  • Support development of adaptable, autonomous individuals
    • requires practical ability informed by coherent underpinning knowledge
  • Facilitate improved pathways within and between tertiary education and the labour market
  • Provide basis for workplaces with adaptive + innovative capabilities

=> How can vocational streams be improved?
Implications: beyond ‘general education’ vs ‘narrow training’

• Two enabling conditions characterise vocational stream potential

• Commonalities in capabilities: identifiable linkages and overlaps between the skills and knowledge underpinning broad scope of practice.

• Social partner readiness: the potential (realised or not) for stakeholder commitment and collaboration around workforce issues. Requires communities of trust
Implication – different domains have different challenges + opportunities

- Vocational stream potential in the four case studies
Example: agriculture

» Strong potential for regional vocational streams (Rural Operations)
   » Narrabri model being rolled out to Warren Blackwood (WA), Eyre Peninsula (SA), Lodden Mallee (Vic) and Western Downs (Qld)

» Pivotal drivers of success:
   » Great sensitivity to the skills ecosystem of the region
     » Especially nature of local production and skills formation
   » Engagement of local experts and champions
   » Ongoing funding
Summary: Skills in what?

- Currently too little attention is devoted thinking beyond the tired old dichotomies: ‘General education’ vs ‘specific skills’
- Australian system is just as problematic as those in NZ, South Africa on this matter
- Recent research highlights the need for more sensitivity in this area

- There are two key issues:
  - Conceptually – how do we define vocational streams?
  - Practically – how are credible communities of trust nurtured to support them?

Getting the question right: how adequate is our framework(s) for defining and supporting adaptive capacity in individuals + organisations?
How do we get to a better place?

• The importance of anchor institutions
  • Formal frameworks like National Qualifications Frameworks are not enough

• Employers need help in becoming collectively self-reliant when it comes to skills development + use
  • Better skill supply alone is inadequate
Getting to a better place:

(i) Anchor Institutions

• In recent decades too much attention has been paid to formal frameworks (like NQFs) and too little to institutional anchors needed for quality in TVET

• Anchors are needed to provide clear reference points + sites for actively defining, delivering + enforcing standards

• Such anchors (like public TVET colleges) need to be accountable to broad constituencies (especially employers, + union)

• These institutions need to be focal point for communities of trust supporting broadly defined vocational streams
Getting to a better place: (ii) Employers + skill use

- Skills are a classic ‘common property’ problem
- Governments + public money can’t solve this alone
- Employers need help to become collectively self-reliant - not just in developing but also using skills.

Example from Australian Dairy industry
- Research the problem
- Formed specialised taskforce (run for over 17 years)
- Devised collective plan
- Supported by self-imposed levy
- Have deepened farmers’ labour management capacity (including work health and safety)
- Now looking taking broader lead in Aust agricultural sector
Where has this analysis come from?

1. Adaptive capacity and human capability
   - Sen and Nussbaum work on human capability

2. Vocational streams and communities of trust
   - Leesa Wheelahan et al on the Vocations project

3. Building on the best of current practice: Metis vs ‘Seeing like a state’
   - Scott on ‘Seeing like a state’ and the importance of ‘metis’

4. Narratives and numbers approach to analysis
   - Williams et al on Financialisation and the Foundation Economy
   - Kilkullen on Islamic state and war on terror.

5. Collaborative and deliberative approaches to applied research
   - Making social science matter
   - OECD and ILO on analysing changing skill requirements
   - Skills Australia/Australian Productivity and Workforce Agency Workforce Development plans.
Summary

Four key questions:

• **Skills for what**: are we primarily interested in having a better developed and organised reserve army of labour **OR** do we want to deepen adaptive capacity to support social + economic renewal?

• **Skills in what**: how adequately are we supporting the development of that adaptive capacity in individuals + workplaces?

• **What, if any, anchor institutions** have we nurtured for vocational education?

• **How can we best help employers become collectively more self-reliant** in developing and using skills?
Conclusion

The current situation is dynamic +rich with possibilities

• skills are not the answer but there is no answer without them

• We must reflect on paradoxes (eg ‘skill shortages’ co-existing with ‘underutilised skills’) ..... by breaking with unhelpful habits of thought (eg General education vs TVET).

• The key challenge is about deepening human capability – at work and beyond

• When framed in this way questions of skills become integral – not incidental - to economic + social renewal.
Current policy in Agriculture: too many qualifications?

<table>
<thead>
<tr>
<th>Qualification level</th>
<th>No. Available</th>
</tr>
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<tbody>
<tr>
<td>Certificate I</td>
<td>13</td>
</tr>
<tr>
<td>Certificate II</td>
<td>36</td>
</tr>
<tr>
<td>Certificate III</td>
<td>70</td>
</tr>
<tr>
<td>Certificate IV</td>
<td>38</td>
</tr>
<tr>
<td>Diploma</td>
<td>33</td>
</tr>
<tr>
<td>Advanced Diploma</td>
<td>5</td>
</tr>
<tr>
<td>Vocational Graduate Certificate</td>
<td>1</td>
</tr>
<tr>
<td>Vocational Graduate Diploma</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>197</strong></td>
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</tbody>
</table>
Vocations and the capabilities approach in Agriculture

<table>
<thead>
<tr>
<th>Elements of capability/ domains of expertise</th>
<th>Qualifications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Common Core</td>
</tr>
<tr>
<td>Foundations knowledge + skills at intermediate level</td>
<td>General Agriculture</td>
</tr>
<tr>
<td><strong>Agribusiness</strong> (eg financing, marketing, economics)</td>
<td>Structure of ag sector + basic clerical + HR skills</td>
</tr>
<tr>
<td><strong>Sustainability practices</strong> (eg water, land, carbon management)</td>
<td>Basic principles + standard operating procedures</td>
</tr>
</tbody>
</table>
| **Operations of machinery + technology** | Advanced operational + routine maintenance principles | Common core | - Operation, transport + maintenance of mobile plant + specialiste machinery  
- operation + recovery of 4 wheel drives  
- cleaning machinery of plant, animal + soils  
- welding using manual + gas metal arc welding  
- traffic controls | Common core | Common core |
| **Production systems** (eg irrigation + fertiliser use) | Understanding farm production systems | Common + specialism relevant to chosen area | Common + specialist knowledge re chemical application, transport + storage | More advanced | More advanced |
| **Animal science + husbandry** | Animal performance nutrition + breeding | Common + specialism of either:  
- intensive animal production  
- extensive animal production | Basic/common – ie working knowledge to help with how deploy equipment | More advanced (to articulate into a Ag Science degree) | More advanced – but not necessarily to articulation level with HE |
| **Land, plant + crop science** | Land, plant + crop production/ management | Common + specialism of either:  
- intensive production of horticulture for food  
- amenity horticulture  
- conservation land management | Basic/common – ie working knowledge to help with how deploy equipment. | More advanced (to articulate into an Ag Science degree) | More advanced – but not necessarily to articulation level with HE |
Vocations and the capabilities approach in agriculture

<table>
<thead>
<tr>
<th>Qualification Levels</th>
<th>Individual, social, economic, cultural &amp; environmental resources</th>
<th>Capabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate I &amp; II</td>
<td>Vocations: Rural and Allied work</td>
<td></td>
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<tr>
<td></td>
<td>Vocation Streams (Possible)</td>
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<tr>
<td></td>
<td>General Agriculture</td>
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<td></td>
<td>Entry Level</td>
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<tr>
<td></td>
<td>Intermediate</td>
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<tr>
<td></td>
<td>Advanced Technical Specialist (e.g. Agronomist)</td>
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<tr>
<td>Certificate III &amp; IV</td>
<td>Vocation: Transport &amp; Logistics Work</td>
<td></td>
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<tr>
<td></td>
<td>Vocation Streams (Possible)</td>
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<td></td>
<td>Mobile Plant Operations</td>
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<td></td>
<td>Entry Level</td>
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<tr>
<td></td>
<td>Intermediate</td>
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<tr>
<td></td>
<td>Advanced Technical Specialist (e.g. Farm Manager)</td>
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<tr>
<td>Advanced Diploma</td>
<td>Vocation: Transport &amp; Logistics Work</td>
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<tr>
<td>or Degree</td>
<td>Vocation Streams (Possible)</td>
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<td></td>
<td>Logistics Stream (ii)</td>
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<td></td>
<td>Entry Level</td>
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<td></td>
<td>Intermediate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Advanced Technical Specialist (e.g. Team Leader)</td>
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</tbody>
</table>

Diagram showing the relationship between capabilities, vocations, vocational streams, and qualification levels with potential examples from Rural and Logistical Work.
New categories – a summary

How a capabilities approach enriches notions of labour supply and labour demand and how they interact

Labour demand: The capabilities approach highlights how the structure of jobs (a) allows (or prevents) people to use their potential and (b) assist in developing (or compromises) individuals’ capacity to adapt to changing circumstances.

Labour supply: The capabilities approach highlights a broader range of factors shape the nature of the productive potential that individual bring to the labour market than are commonly considered in most labour market analyses.

Labour market dynamic: The capabilities approach also highlights what while labour supply and labour demand are identifiably distinct elements of the labour market they are mutually constitutive. This is especially the case concerning how vocational expertise is defined, developed and used.
References


Other relevant references

- **Adaptive capacity and human capability**
  

- **Vocational streams and communities of trust**
  


- **Building on the best of current practice: Metis vs ‘Seeing like a state’**
  

- **Narratives and numbers approach to analysis**
  

  David Kilkullen (2016) Blood Year: Islamic State and the Failures of the War on Terror, Black Inc Melbourne

- **Collaborative and deliberative approaches to applied research**
  
  (a) **Making social science matter**


  (b) **OECD and ILO on analysing changing skill requirements**


  (c) **Australian Productivity and Workforce Agency Workforce Development plans.**