

Getting the questions right: Workforce planning vs planning for human capability development

Session 3, Research Colloquium on skills planning
How do we plan to meet South Africa's skills needs?

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THE UNIVERSITY OF
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› Thanks for the invitation

- a privilege to visit and contribute to your deliberations

› My background

- Training in history, law, economics and work + organisational studies
- Worked in public sector, unions and university sector
- ⇒ 25 years leader of (applied) research institute on work and working life
- ⇒ Now work in data science and business analytics

› My role

- Friendly critic

- › My understanding your context
- › Three key questions
- › Where have these come from
- › Conclusion: deepening human capabilities for and at work

- › Economic
 - International
 - National

- › Political
 - International
 - National

- › Institutional

› Economic

- International

: yet to recover from the GFC

- excess capacity
- excess liquidity

: looming challenges of carbon constrained future

- National

: decline of mining as export earner

: inequality as a break on growth

: labour market challenges – structural + immediate

Deep structural challenges in South Africa's labour market

Labour force status	% of the labour force
Employed	
- Formal	
: permanent	38.6
: non-permanent	13.0
- Informal	21.9
Not employed	
- Unemployed	26.6
- Discouraged workers	11.9

Source: Statistics S Africa, Quarterly Lab Force Survey, Q2 2016, 26-07-2016

Recent developments in South Africa's labour market: June 2016

Industry	%	No's (^{'000})	Change	
			Last quarter (^{'000})	Last year (^{'000})
Community + Social Services	22.8	3,544	-127	-4
Trade	20.2	3,136	-22	18
Finance + Business	14.3	2,220	-6	56
Manufacturing	11.0	1,712	67	-45
Mining	2.9	447	-24	1
Sub-total	71.2	11,068	-112	26
Total	100.0	15,545	-129	-112

Source: Statistics S Africa, Quarterly Lab Force Survey, Q2 2016, 26-07-2016

1. Context – political

- International
 - : neoliberalism ‘on the nose’
 - : ‘revolt against the governing elites’
 - : concern about inequality + interest in ‘inclusive growth’

- National
 - : establishment of a functioning democracy profound achievement
 - ... but crises of corruption + frustrated expectations serious.

1. Context - institutional

- South Africa has remarkable analytical + policy capacity
 - : Statistics South Africa is really good on the labour market
 - : Labour market intelligence partnership rare achievement
- => LMIP is at critical juncture – two tacit narratives:

(a) Workforce planning framing:

- Take demand as a given – key issue is education + lab supply
 - Assume occupations self-evident + qualification regime sound
- => where do we scale up education to fill ‘skills gaps’?

(b) Planning for workforce development framing:

- how do you create the capacity for responding to rapidly changing circumstances?

My role: how do you prioritise or reconcile these framings?

2. Getting the questions right - overview

- › Planning for what?
- › Planning about what?
- › Where next?

2. Getting the questions right – (a) Planning for what?

- › Motivating examples: hospital cleaner, aircraft maintenance, secondary vocational education
- Implications for policy + practice:
 - (a) Australia: VET + children's services
 - (b) South Africa: oral health

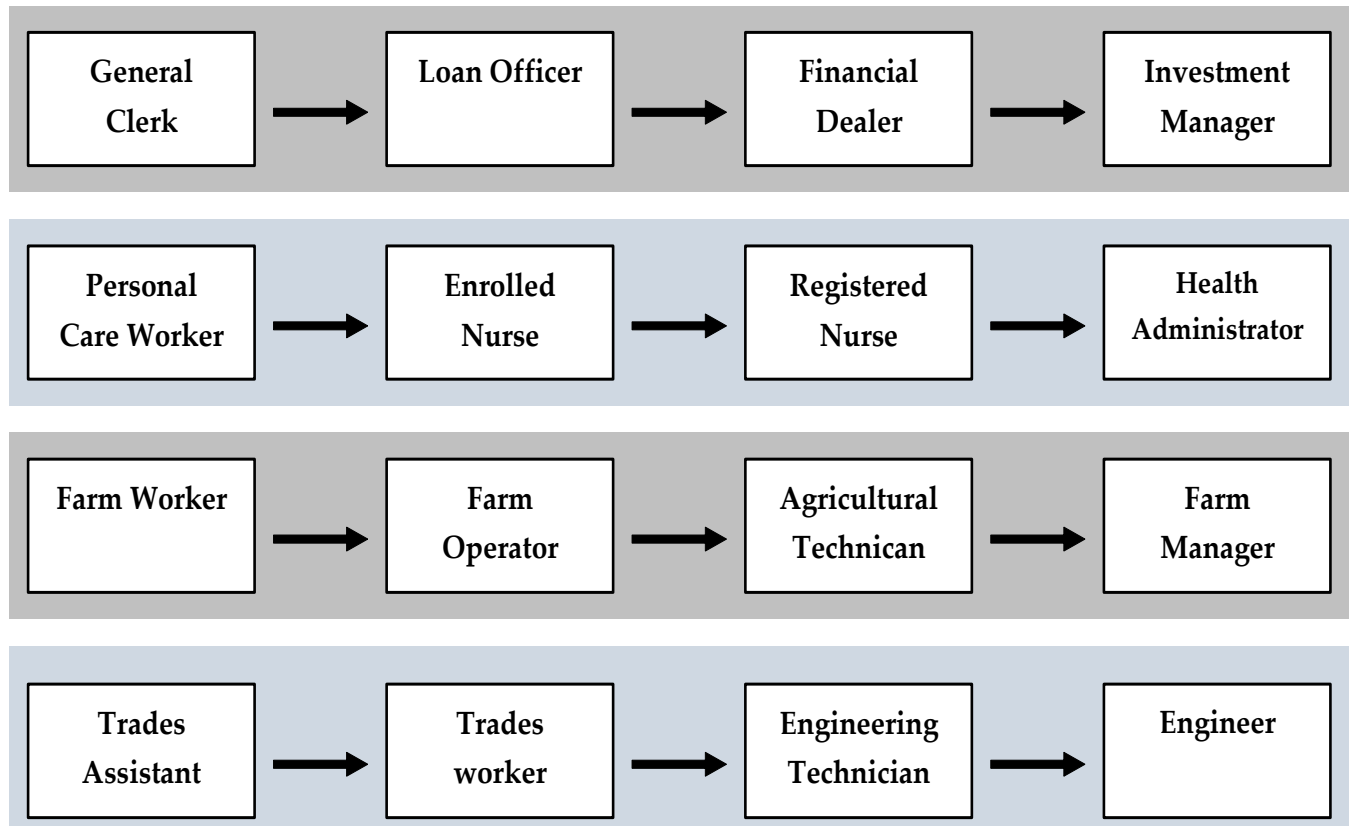
Getting the question right: are we primarily interested in having a better developed and organised reserve army of labour **OR** do we want to deepen adaptive capacity in support of social + economic renewal?

2. Getting the questions right – (b) Planning about what?

- › Motivating example: occupational classification systems
 - Implications for policy + practice:
 - (a) South Africa: at least four independent frameworks for classifying occupations: Organising Framework for Occupations (VET), Standard Classification of Occupations (Stats), Wage classifications (in wage setting instruments) and Qualifications Authority Codes.
 - (a) Australia: emerging debate on ‘vocational streams’
 - compare VET and wage categories for thinking of jobs + qualifications with the reality of flows of learning and labour.

2. Planning about what?

How are jobs and pathways are defined in VET

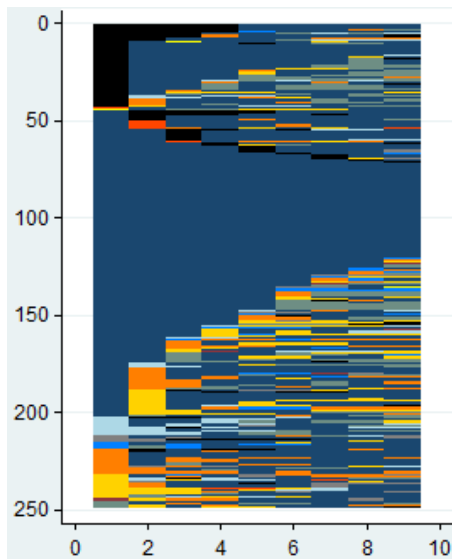


- › What are the commonalities in the trajectories of workers in the labour market?

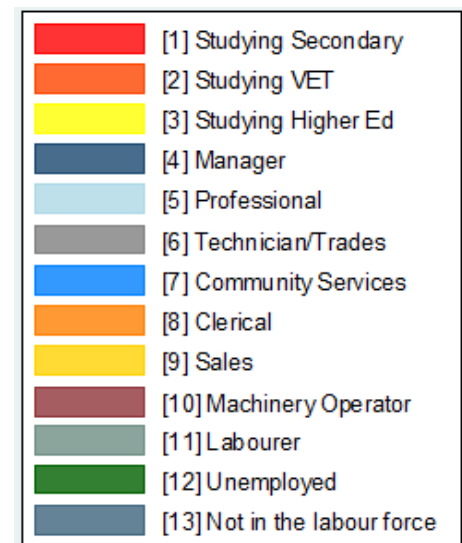
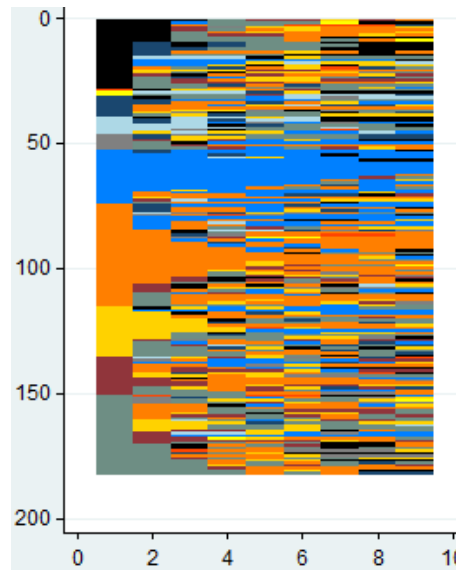
2. How do people actually flow in the labour market? The reality of segmentation (example from agriculture)

› Example:

Farm managers

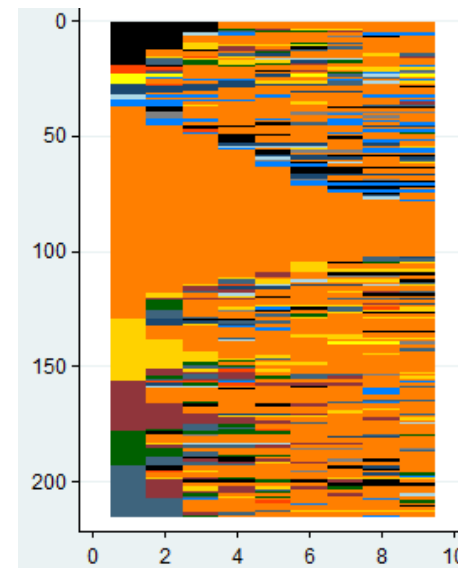
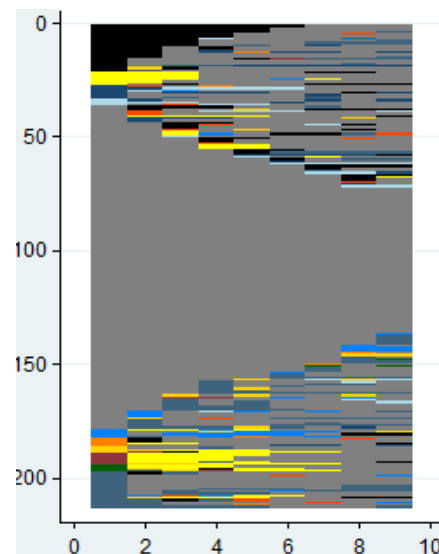


Manual workers in agriculture



Key results – Healthcare and Community Services

- › Resource constraints inhibit career development – lack of training opportunities and/or work intensification
- › Strongly vocational narrative of care apparent amongst care workers and nurses
- › Career growth tended not to be vertical into management, but sideways into other specialisations.



Why does 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 the 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, but this misses the dynamism





How are we to make sense of the 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 the 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 the 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)



What did we find? New categories

› 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, animal and land husbandry, 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?

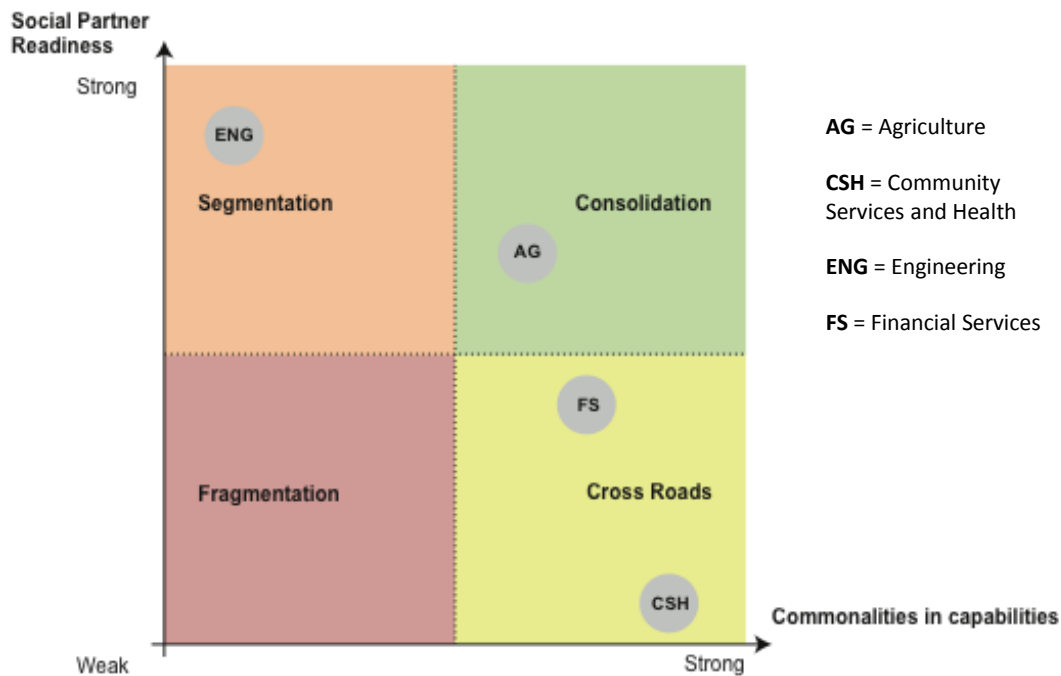
What did we find? The key policy challenge.

- › 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



Why? New categories.

› Vocational stream potential in the four case studies



Examples of new categories in action: Agriculture

- › Strong potential for regional vocational streams
 - › Narrabri model being rolled out to Warren Blackwood (WA), Eyre Peninsula (SA), Loddon 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

- › Currently too little attention is devoted to what we mean by ‘occupation’.
- › Australia is just as problematic as 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 the development of occupations?

Motivating examples: Deng Xai Ping's transformation of modern China + strategy against Islamic State

Implications for policy and practice

- › Australia example: Skills Australia's approach to workforce planning and planning for workforce development
- › South Africa's approach to handling complex transitions: the United Democratic Front, Scenario development and 'five week' lock up tradition

Getting the question right: how is inclusive leadership and deliberative decision making best organised over the next 10 years?

Where have these questions 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.

The current situation is dynamic, rich with possibilities as well as threats

- Internationally and nationally
- LMIP process set up South Africa extremely well for navigating a challenging future
- time to work through the tacit framing of the work on skills planning to date.

=> The three key questions:

- 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 of social + economic renewal?
- how adequate is our framework(s) for defining and supporting the development of occupations?
- how is inclusive leadership and deliberative decision making best organised over the next 10 years?

- › meeting skill needs is about a lot more than filling ‘skills gaps’
- › it is about deepening human capability at and for work
- › skills are not the answer to South Africa’s current political-economic challenges – but there can be not answer to them without becoming central to strategies for economic and social renewal.

Compare to current policy in Agriculture: too many qualifications?

› In agriculture for example:

Qualification level	No. Available
Certificate I	13
Certificate II	36
Certificate III	70
Certificate IV	38
Diploma	33
Advanced Diploma	5
Vocational Graduate Certificate	1
Vocational Graduate Diploma	1
<i>Total</i>	<i>197</i>

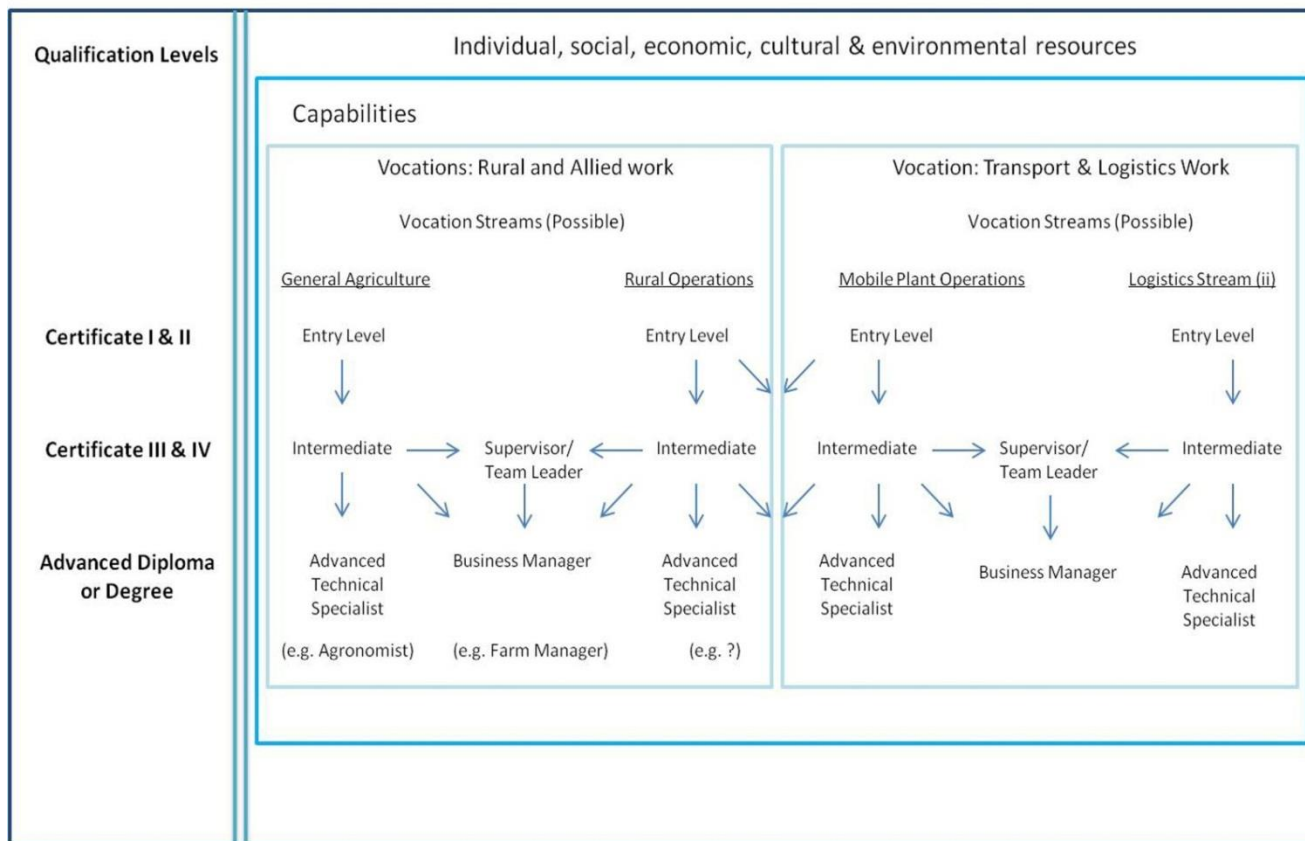
Rethinking the question: Vocations and the capabilities approach

Elements of capability/ domains of expertise	Qualifications				
	Common Core	Certificates II, III + IV		Diploma	
	Foundations knowledge + skills at intermediate level	General Agriculture	Rural Operations	Agriculture	Business Management(Agriculture)
Agribusiness (eg financing, marketing, economics)	Structure of ag sector + basic clerical + HR skills	Common core	Common core	Common core	More advanced (to articulate into Business/management degree)
Sustainability practices (eg water, land, carbon management)	Basic principles + standard operating procedures	Common core	Common core	More advanced core	More advanced
Operations of machinery + technology	Advanced operational + routine maintenance principles	Common core	<ul style="list-style-type: none"> - Operation, transport + maintenance of mobile plant + specialist 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: <ul style="list-style-type: none"> - 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: <ul style="list-style-type: none"> - 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



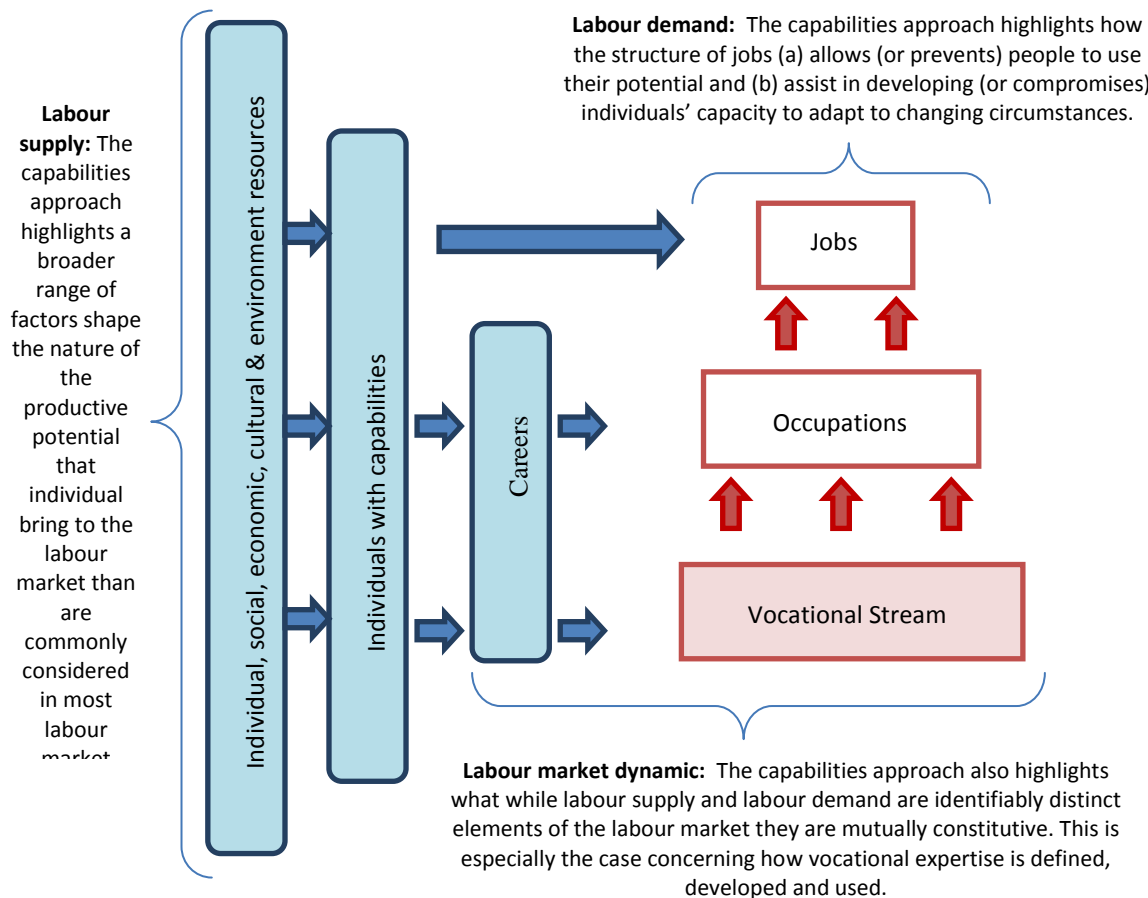
Rethinking the question: Vocations and the capabilities approach

Relationship between capabilities, vocations, vocational stream & qualification levels; 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



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- John Buchanan, Serena Yu, Leesa Wheelahan, Jack Keating and Simon Marginson, Impact Analysis of the proposed strengthened Australian Qualifications Framework, Australian Qualifications Framework council, Adelaide, July 2010 [www.aqf.edu.au/.../AQFC%20-%20impact%20analysis%20-20final%20Oct10%20\(3\).pdf](http://www.aqf.edu.au/.../AQFC%20-%20impact%20analysis%20-20final%20Oct10%20(3).pdf)
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- Justine Evesson, Bretherton, Tanya; Buchanan, John; Rafferty, Mike and Considine, Gillian (2009) *Understanding vocational education and training, productivity and workforce participation*, An issues paper, National Centre for Vocational Education Research (NCVER) Research Paper, Adelaide, June 24 (<http://www.ncver.edu.au/publications/2154.html>)
- Tanya Bretherton, (2010) *Developing the child care workforce: Understanding 'fight' or 'flight' amongst workers*, National Centre for Vocational Education Research (NCVER) Research Paper, Adelaide, 9 July (<http://www.ncver.edu.au/publications/2261.html>)
- Mike Rafferty and Norton, Kent (2010) *Work, skills and training in the Australian red meat processing sector*, National Centre for Vocational Education Research (NCVER) Research Paper, Adelaide, 11 November (<http://www.ncver.edu.au/publications/2301.html>)
- Tanya Bretherton (2011a) *Understanding the undertow: innovative responses to labour market disadvantage and VET*, National Centre for Vocational Education Research (NCVER) Research Paper, Adelaide, 12 July (<http://www.ncver.edu.au/publications/byauthor.html?sub=Tanya%20Bretherton>)
- Tanya Bretherton (2011b) *The role of VET in workforce development: a story of conflicting expectations*, National Centre for Vocational Education Research (NCVER) Research Paper, Adelaide, 4 October (<http://www.ncver.edu.au/publications/2406.html>)
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- Leesa Wheelan, John Buchanan and Serena Yu (2015) *Linking qualifications and the labour market through capabilities and vocational streams*, National Centre for Vocational Education Research (NCVER), Research Report, Adelaide, June 2015.

› **Adaptive capacity and human capability**

- › Bryson, Jane. 2015. "Putting skill in its place." *Journal of Education and Work*, 28(5): 551 – 570. DOI:10.1080/13639080.2013.835794
- › Crocker, David A and Ingrid Robeyns, 2000, 'Capability and Agency' in CW Morris (ed) *Amartya Sen*, Cambridge University Press, Cambridge page 60 – 90.

› **Vocational streams and communities of trust**

- › Leesa Wheelan, John Buchanan and Serena Yu (2015) *Linking qualifications and the labour market through capabilities and vocational streams*, National Centre for Vocational Education Research (NCVER), Research Report, Adelaide, June 2015.

› **Building on the best of current practice: Metis vs 'Seeing like a state'**

- › James C Scott, (1999) *Seeing like a state: How Certain Schemes to Improve the Human Condition have Failed*, Yale University Press, New Haven

› **Narratives and numbers approach to analysis**

- › Andrew Bowman et al (2014) *The end of the experiment? From competition to the foundational economy*, Manchester University Press, Manchester.
- › David Kilcullen (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**

- › Bent Flyvberg (2001) *Making social science matter: Why social inquiry fails and how it can succeed again*, Cambridge University Press, Cambridge

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

- › Fabio Manca and Guillermo and Montt (2016) *Getting Skills Right (2016). Assessing and Anticipating Changing Skills needs*, OECD, Paris
- › ILO (2011) *Formulating a national policy on skills development*, ILO Geneva.

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

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