Australian Industry-Governed University Colleges

Where are we now?

Tertiary Education Pathways for Australia's, and WA's, two main wealth-creating industries....the drivers of regional economies.

The time for the regions has come....



The time for <u>improved education</u> in the regions has come....



The Problem

- Mining and Agriculture are the wealth-creating industries in <u>all</u> regions, especially in WA.
 These primary industries are the two largest contributors to national economic well-being.
- Despite being economic powerhouses in the economy, their influence within tertiary
 education institutional governance (particularly University's) is minimal. The hegemony of
 larger University's swamps these disciplines, in both staff and student numbers. This is
 exacerbated by the high costs or running regional campuses (traditionally the 'home' of
 industry graduates).
- Both industries continue to suffer graduate shortfalls. The problem is national in scope and long-term impact.

The Proposal

A University (or another arrangement) shall sponsor the creation of two Industry-Governed University Colleges, similar to partly-owned subsidiary companies: a new type of university designed to enhance Australia's long-term industry competitiveness and regional development

- Agribusiness University College
- Mining University College







Muresk 🎩



Established 1926

Genesis of an <u>Australian Agribusiness</u>

<u>University College</u>, then add:

- Dookie
- Gatton
- Longerenong
- Orange
- Roseworthy
- ...etc.





Key Facts About Muresk

- WA Last State to Establish an Agricultural College (1926)
- Muresk 'vested' in Curtin University (1969), becomes tertiary
- First in Australia to accept female students (1970)
- First in Australia to introduce Equine Stud Management (1977)
- First in Australia to introduce an Agribusiness Degree (1979)
- First in Australia to introduce Rural Journalism (1981)
- First Muresk-TAFE efforts in agricultural extension (1986)
- Recognised as the <u>best</u> agribusiness degree (1990)
- 23 PhD, 9 Masters research programs (2001)

---then something went awry---

- Curtin University announced leaving Muresk (2009)
- Awaiting Cowan Report on Muresk future (2010)



WA School of Mines



Established 1902

Genesis of an <u>Australian</u>

Mining University College,

then add...

2 others?





Key Facts About School of Mines

- Opened in 1902 following a Government Committee of Inquiry and was initially set up at Coolgardie in one of the buildings erected for the International Mining and Industrial Exhibition of 1899 However, at about the same time, the State Government funded the building of new premises. The WASM moved to Kalgoorlie in 1903.
- WASM was administered by the Department of Mines until 1969
- WASM was 'vested' in Curtin University in 1969, and became a tertiary institution.
- Its Associateship courses were renamed as Degree courses, additional undergraduate courses were introduced, and a range of course and research postgraduate programs have been developed.

Education & the Regions

What is the situation after 42 years of tertiary education in rural Australia?

...after 40 years of traditional methods...should we try something else?

of people farming or servicing agriculture have a degree



Compares with

330/0

Across other industries



声彩

Muresk & WASM graduates contribute 100% to regional development since:



- About 50% of their graduates return to live in the regions with high-level industry-relevant skills
- About 45% return to the city to specialise in delivering industry-relevant services to the regions (includes FIFO)
- Even if the remaining 5% end up working in other industries, their training sees them retain empathy with regional Australia and they remain ambassadors to the 'regional cause'

Problem Statement

- State owned & legislated, but mostly federally funded
- High costs of operations in regional Australia
 - Regional Loadings always insufficient (true costs not covered)
 - "Out of sight, out of mind" city-centric paradigms
 - Urban political hegemony <u>always</u> beats low regional population
- Specific Australian Industry Issues
 - Industry competes internationally, state differences ↑ compliance costs
 - Overcoming Fragmentation compliance costs
 - Move to value-creation chain specialisation lacktriangledown costs comparable to competitors
 - Remote from most urban services logistics costs
 - International, national, or state city-based decisions, but regional delivery & impact

Nowadays there are three types of Higher Education Institutions

Type of Tertiary Institution Eligible for Higher Education Registration in Australia	Example	Key Feature
University	UWA, Curtin, Murdoch, ECU, Notre Dame	Self-Accrediting
University College	?	Self-Accrediting
Other Tertiary Education Institution	TAFE (CY O'Connor, VTEC)	Non Self-Accrediting

Educational –v– Industry Paradigms

- University staff reward systems (scholarly effort before industry linkages)
- University reductionist scientific model –v– industry-based holistic systems model
- Dependence –v– Interdependence –v– Independent

 Industry Trains their own (internal staff training) Industry governs education & training priorities for students, their own staff, & future employees



 Industry buys or influences University determined priorities for students and future employees

Solution: Australian Industry-Governed University Colleges

- Agribusiness University College
 - Food & Fibre Chain (based on Muresk initially)
- Mining University College
 - Minerals & Energy Chain (based on WASM initially)

Our industries compete internationally: they need national, not state, solutions

- 1. Devise National Industry Strategic Plans (Instigate)
 - Genuine derivation of fact-based competitive strategy (not countless one-day workshops)
 - Substantial issues: e.g. Foreign Affairs & Trade briefings (security clearances compulsory)
- 2. Education, Training, Extension, & Research consistent with National Standards & Protocols
 - Consolidate Industry Strengths
 - Investigate Specialist Foci (e.g. tropical agriculture, nano-materials)
 - Attract International Students (i.e. large populations in sub-tropical regions)
 - ...but, remain focused on domestic industry succession needs
- Campuses: State (initially) → National → International (goal)

Key Concept: Education Pathways

How educational pathways should articulate...in a myriad of agreed, coordinated variations at national, state, regional & institutional levels

Secondary
Schools
(Agricultural
Schools)

Regional TAFEs

Industry University Colleges

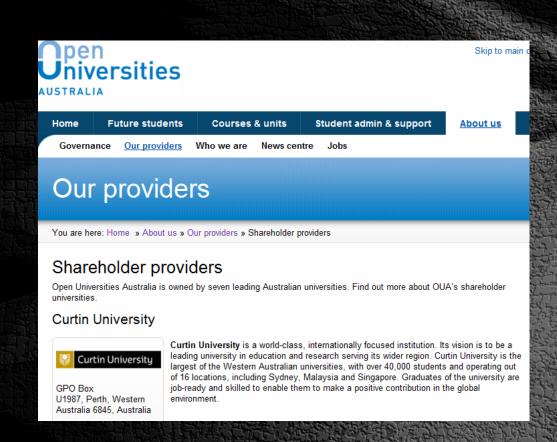
Universities

Industry & Working Life

The idea of TAFE institutions 'taking over' nationally successful industry-based tertiary campuses is a retrograde step.

Key Concept: Open Learning Australia

Open Learning Australia
 (OLA) is a key to the concept
 since it provides the new
 University Colleges the means
 to offer accredited courses
 nationally (in external and
 mixed-mode course delivery).



Detail of proposal

- 1. A University shall sponsor the establishment of two (2) Industry-Governed University Colleges as independent subsidiaries:
 - Industry controls UC Governing Senates
 - Shareholding in Open Learning Australia (to facilitate multi-mode regional delivery)
 - Industry Pathway Agreements (School → TAFE → University College → University → Industry)
- 2. University colleges will be national (state initially)
 - Staff Performance Appraisal: Highest Priority will be Industry Liaison Skills
- Transfer industry relevant assets to new entity
 - Existing campuses & Industry relevant courses (i.e. their intellectual property)
 - Upgrade costs (maintenance backlog, archives, replacement student admin. systems, etc.)
- 4. The sponsoring organisation aas Sponsor/Mentor for Registration of Each University College (1 to 2 years)
 - Fund new entities (seed and loan capital)
- 5. Industry Raises Additional Funds
 - Each Industry raises \$100M capital /foundation trust over 10 years (\$1b each nationally)
 - Shared University-State-Commonwealth \$-for-\$ funding for 10 years (then industry self-sufficiency)
 - Inflation capital protected fund: income only funds operating costs after 10 years
- Facilitates Relevant Industry Pathways in all Areas (Regional, State & National)

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Industry Support

If the notion of Industry-Governed University Colleges is to proceed, then industry needs to say so... ... emphatically.

And then it needs to support it in all possible ways.

A heritage of industry support...

- In 1927 the WA Merchants
 Agricultural Research Fund raised
 £10,000.
- 1. This is current day equivalent of \$670,000 (in less than 6 months).
- 1. In 1927 rural merchants raised more than \$110,000 per month...surely industry can match this again now?



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A heritage of industry support...



- 1. Industry support currently exists in a fragmented way (from insignificant to substantial)
- 2. The cultural notion of 'academic freedom' has mitigated against optimal industry funding
 - (e.g. history of Wesfarmers sponsored Professorial Chair in Agribusiness at Muresk)
- Industry governance atop a dedicated institution will overcome internal cost-shifting fears (which arise when small campuses are part of a much larger institution)
- 4. Current 'industry consultation' mostly consists of a failure of endless powerless industry advisory boards (the members of which are often poorly chosen)

Industry Funding (Tied & Untied)

Ten (10) Year Targets	WA	Australia
Via Muresk Foundation (Agribusiness Industry Contribution)	\$100m (\$34m)	\$1,000m (\$340)
Via WASM Foundation (Mining Industry Contribution)	\$100m (\$34m)	\$1,000m (\$340)
Portion that is State & Commonwealth Government Matching	\$66m	\$1, 320m

Industry Governance: Senate Membership (A Seat at the Table)



- CHANCELLOR: Elected amongst Senate's industry representatives annually
- ELEVEN (11) INDUSTRY REPRESENTATIVES
 - TEN (10) FROM AGRIBUSINESS or MINING PEAK COUNCILS (STATE & NATIONAL)
 - INDUSTRY ALUMNI (BY NOMINATION)
- JOINT NOMINEE OF FEDERAL MINISTERS FOR AGRICULTURE OR MINING
- JOINT NOMINEE OF WA STATE MINISTERS FOR AGRICULTURE OR MINING
- EX-OFFICIO
 - CHIAR OF TRUSTEE (INDUSTRY TRUST FUND)
 - VICE-CHANCELLOR OF UNIVERSITY COLLEGE
 - VICE-CHANCELLOR OF OTHER UNIVERSITY COLLEGE
- OBSERVERS
 - UC ACADEMIC STAFF ASSOCIATION (BY NOMINATION)
 - UC NON-ACDEMIC STAFF ASSOCIATION (BY NOMINATION)
 - UC STUDENT GUILD (BY NOMINATION)

FINANCE, FUNDING, & GRANTS

- Universities
 - Transfer Relevant Regional Campus Assets
 - Sponsorship via Open Learning Australia
- State Government (1/3)
- Commonwealth Government (1/3)
- Industry, for each of:
 - Farming and Agribusiness
 - Minerals and Energy

(1/3) (1/3)

...and then there's industry-based research & development organisations as well.

Crucial things to protect/enhance:

1. Staff reward systems

Traditional University Model Staff Performance Criteria

- 1st Research & Development (Reductionist Scientific Models)
- 2nd Teaching & Learning
- 3rd Industry Liaison (no extension)

Industry University College Model Staff Performance Criteria

- 1st Industry Liaison & Extension
- 2nd Teaching & Learning
- 3rd Technological/Applied Research (Systems Approaches)
- Genuine engagement with alumni (since alumni = industry)
 - One-on-one mentoring (plausible)
 - Integrated Course Work & Industry Experience
 - Graduate Employment Services
 - Continuing Industry-Related Professional Development (Alumni)
- 3. Protection of Industry Educational Heritage & Historical Assets



Stakeholder Analyses





Benefits

- ✓ Becomes 1st Truly National Agribusiness University
- ✓ Can build partnerships with industry research funding bodies (GRDC, RIRDC, etc.) and private companies.
- ✓ Influences/Drives National Industry Strategic Plan Development
- ✓ Profit share (long term)

- Transition Pain (Re-staffing)
- Pathway Management Costs
- Marketing Costs?(more effective niche marketing rather than mass marketing)
 - Prospective Students
 - Alumni Engagement
 - Perpetual Philanthropy
- Consequential national restructuring/coordination





WASM & Kindred Campuses

Benefits

- ✓ Becomes 1st Truly National Mining Industry University
- ✓ Can build partnerships with industry research funding bodies and private companies
- ✓ Influences/Drives National Industry Strategic Plan Development
- ✓ Profit share (long term)

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TAFE Sector (e.g. CYOC, VTEC)

Benefits

- ✓ Integrates with National-State-Regional Industry Strategy
- ✓ Pathways Defined
- ✓ Mentor University College provides self-accreditation services
- ✓ Sympathetic industry skilling synergies (joint use of facilities, etc.)
- ✓ Devise new IP for courses

- New UC Pathway facilitation costs
- Consequential strategic direction alignment with key industry in region (Part of national, state, regional planning hierarchy)
- Adjusted marketing costs

Universities (become pathway choice)

Benefits

- ✓ Free marketing via national industry pathways (i.e. spread tentacles nationally to all regions in Australia, from TAFE through UC to Curtin)
- ✓ Universities can exploit dual mode model (source via TAFE or UCs)
- Retains strong bonds with biggest national industries
- Low cost entry strategy, clear exit strategy
- Levers international students in different way
- ✓ Government Underwriting Reduces Risk

- UC Start-up and Establishment Costs
- Transition Costs
- Seed & Loan Funding
- Consequential restructuring
- Possibly transfer small equity in OLA (or leverage off existing equity and services by written agreement with subsidiaries)



Australia Agribusiness Industry

Benefits

- ✓ Education of Industry Managers (for Succession)
- ✓ Governs education, training, extension, & research priorities to match industry needs
- ✓ Genuine, Systematic Industry Strategic Planning
- ✓ Re-invests Profits (longterm)

- Raising Foundation Trust
 Funds (\$1b over 10years)
- Some Governance Costs (e.g. nominating or electing Senate members)
- Tertiary Education
 Pathway Engagement
- Further Philanthropy





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 Pathway Engagement
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Western Australian Government

Benefits

- ✓ Genuinely addresses key drivers to regional and industry development
- ✓ Overcomes frequent High-Cost 'Rescues' of Regional Campuses
- ✓ Retains role in largest state & national industries
- ✓ Receives direct input from industry strategic plans (State and Regional)

- Assists with UC Start-up and Establishment Costs
- Some Initial Capital Repair Bills (\$20m)
- Some Transition Costs
- Some Seed funding
- s for s Loan Funding
- Consequential legislation

Commonwealth Government

Benefits

- ✓ Genuinely addresses key drivers to regional and industry development
- ✓ May reduce need to fund 'regional loading'
- ✓ Retains role in largest state & national industries
- ✓ Receives direct input from industry strategic plans (National & Regional)

- Assists with UC Start-up and Establishment Costs
- Some Transition Costs
- Some Seed funding
- \$ for \$ Loan Funding
- Consequential legislation (Facilitate state-by-state complementary legislation)

General Public, Taxpayer

Benefits

- Establishes new kind of National Industry-relevant University
- ✓ Regional delivery ensured
- Can exploit dual model (greater pathways choice)
- ✓ National Industries:
 - ✓ Self-Sufficient in Education
 - ✓ Train own Mgt Succession
- ✓ Nil Public Purse Drawdown (long term)
- ✓ Sustainable (perpetually successful in existence) thereafter

- UC Start-up and Establishment Costs
- Transition Costs (\$1.3b over 10 years)
- Seed & Loan Funding
- Consequential restructuring

Future Directions (Where to from here?)

This presentation could have dealt with much more detail than space allows. Other key issues are:

- Consistency with the Gardiner and Cowan Reports.
- 2. How will this result in increasing the "7%" figure?.
- Show direct linkages between this education pathway and industry employment outcomes.
- Clear national marketing plan (targeted, not mass market at TISCtime).
- 5. The extent of industry support (past, current & future).

WHERE TO FROM HERE?

- Gaining industry agreement about:
 - Industry governed models
 - New fully-evaluated models
 - Rejection of failed models.
 - Nature of future industry
- Putting the proposal to:
 - Government: State & Federal
 - Likely educational pathway pa
 - Curtin University
- Agreeing upon a spokesperson of spokespersons for this issue

Where to now...?

