Preparing young people for the future of work

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The plan

- Who we are
- The report
- Changing context
- Implications for the education system
- Possible ‘solutions’
Mitchell Institute – focus on policy & impact

**THE PROBLEM**
- 22% not prepared for school
- 28% don’t have foundational literacy & numeracy skills
- 26% don’t attain Year 12 or equivalent by 19
- 26% 24 year olds not full time learning or earning

**WHAT WE’RE DOING**
- Delivering policy solutions for quality early education
- Developing great teachers and transforming schools
- Designing a better and fairer vocational and higher education model

**IMPACT**
- All kids ready for learning
- Curious, creative & resilient learners
- Entrepreneurial and skilled workers
The report

- Where we started
  - Vocational learning

- Methodology
  - Audit of current policies & policy history
  - Overseas models
  - Labour market analysis

- Roundtable

- Where we landed
  - Call to action for schools to prioritise ‘capabilities’
Defining the problem

Professor Yong Zhao, Mitchell Institute

Watch video at: https://youtu.be/2huXwAMwOAg
Shifts already underway: Industry growth

Shifts already underway: Skill type

Source: Reserve Bank of Australia, Heath (2016)
Shifts already underway: Employment type

Youth unemployment across Australia

Source: Australian Bureau of Statistics (2016)
Globalisation, automation & predictions about future jobs

“40 per cent of jobs in Australia have a high probability of being susceptible to computerisation and automation in the next 10 to 15 years” (Durrant-Whyte et al., 2015)

However, not every job that can be automated will be

Expectation that some jobs will be lost to automation, but new jobs will also be invented

10 jobs that didn’t exist 10 years ago:

- App developer, social media manager, Uber driver, driverless car engineer, cloud computing specialist, big data analyst, sustainability manager, YouTube content creator, millennial generational expert, Drone operator (Source: WEF)

There are no safe jobs, automation will impact what we do in every job (FYA, 2017)
Changing world of work

- Mind the generation gap, Foundation for Young Australians

Watch video at: https://www.youtube.com/watch?v=hlCP1p-Vxu4&t=4s
The race between education and technology

Are young people prepared for work?

Respondents who agree that graduates/new hires are adequately prepared for work:

Source: OECD Education Policy Outlook 2015
How are we tracking against our national education objectives?

**Goal 1:** Australian schooling promotes equity and excellence

**Goal 2:** All young Australians become successful learners, confident and creative individuals, active and informed citizens
Australia has made good ground in increasing education participation and attainment.
Disengagement from education

1 in 8 early school leavers will never complete Year 12

1 in 8 disengaged 24 year olds will remain disengaged

Annual cost per cohort  | Lifetime cost per cohort
---|---
Fiscal | $315.3m | $12.6bn
Social | $580.7m | $23.2bn

Annual cost per cohort  | Lifetime cost per cohort
---|---
Fiscal | $470.7m | $18.8bn
Social | $1,261.3m | $50.5bn

“If Australians imagine all young people ‘eventually find their way’, as if by magic, our research shows that is not true for many”

Source: Counting the costs of lost opportunity in Australian education, Mitchell Institute
Declining academic performance

Australian achievement trends

Source: PISA 2015 Key findings https://www.acer.org/ozpisa/key-findings
Low levels of student engagement in learning

Percentage of students with high levels of interest and effort, NSW government schools

Source: Student engagement and wellbeing in NSW, NSW Centre for Education Statistics and Evaluation (2015)
Low levels of student confidence in learning

Proportion of students who have a positive perception of their ability as a student, Victorian government schools, 2015

Source: The State Of Victoria’s Children Report 2015, DET
Finding 1: after controlling for all other factors, student mindsets are twice as predictive of students’ PISA scores than even their home environment.

Employment outcomes

Undergraduate full-time employment rates, selected study areas, 2006–2016 (%):

- Science and mathematics
- Engineering
- Agriculture and environmental studies
- Health services and support
- Medicine
- Teacher education
- Business and management
- Tourism, hospitality, personal services, sport and recreation
- All study areas

Source: QILT (2016)
Solutions...
Overhaul of the senior secondary school model in Australia?

Some observations:
- Current sen. sec. model lacks real world relevance
- Academic-vocational divide
- Perception of VET as less prestigious
- VET in Schools – issues with use of training packages

Potential solutions:
- Greater focus on building broader capabilities
- Lift the capacity of the VET workforce
- Improve career exploration and opportunities
- Reforms to VET in schools

→ Radical system overhaul or emergent incremental changes?
Strengthening capabilities as a way forward

Capabilities agenda

- Relevant to all students, irrespective of learning setting
- Not new
  - Australian curriculum & Victorian curriculum
  - Core Skills for Work Developmental Framework
  - At the core of VCAL - WRS and PDS
- Growing momentum, shifting to ‘how’

Critical thinking, problem solving, creativity, curiosity, interpersonal and communication skills, self-regulation, grit, entrepreneurial skills, teamwork and craftsmanship
Implications for teaching and assessment

Observations from VCAA F-10 Capabilities trial:

- **Shift in pedagogy**
  - Inquiry-led teaching, problem-based learning, role play, authentic tasks, coaching, collaborative teaching in teams

- **Shifts in assessment** – importance of having suite of tools for assessment
  - Portfolios/Digital portfolios, students self-reporting, using performance tasks and simulations, real world expert reviews, exhibitions, gallery critique, capstone projects

What about in VCAL – how do teachers help students to recognise, build and demonstrate their capabilities?
Finding 2: Students who receive a blend of teacher-directed and inquiry-based instruction achieve the best outcomes.
Mitchell Institute: The Paradigm Shifters

The Learning Hub digital portfolio

- Allows students to upload evidence of the development of their capabilities, enables teachers to endorse and track progress over time

Source: https://www.youtube.com/watch?v=hrc8LtlLGuw
Future challenges

- Continuing to make the case for change
- System barriers e.g. ATAR
- Building teacher capability
- Developing system-wide metrics for capabilities