Right Skills. Right Time?
The $4 billion annual cost of over-qualification affecting one in four Australian workers

Silvia Munoz - Head of Research
Overview of session

1. Who we are
2. Project drivers
3. Methodology
4. Finding 1, 2, 3 & 4
5. Implications
6. Questions
SkillsIQ Limited

• We are a not-for-profit, independent Skills Service Organisation (SSO)

• As an SSO, SkillsIQ is funded by the Department of Education and Training to support 18 Industry Reference Committees (IRCs) in the people-facing industries

• Driven by the IRCs, we undertake training product development to ensure skills are relevant for industry’s jobs of today and the future

• Also undertake workforce development and research projects
Our Industry Reference Committees

- Aboriginal and Torres Strait Islander Health Worker
- Aged Services
- Ambulance and Paramedic
- Children’s Education and Care
- Client Services
- Community Sector and Development
- Complementary Health
- Dental
- Direct Client Care and Support
- Enrolled Nursing
- First Aid
- Local Government
- Personal Services
- Public Sector
- Sport and Recreation
- Technicians Support Services
- Tourism, Travel and Hospitality
- Wholesale and Retail Services
Project drivers

- Recruitment difficulties experienced by industries, particularly people-facing sectors – Hospitality, Retail, Tourism, Sport & Recreation

- Lack of ‘skills-ready’ workers – skills mismatch

- Objective of the education and training system is to equip workers with the skills and knowledge to meet the requirements of their jobs → qualifications.

- Qualification (i.e. skills) status:
  - = job requirements…Right
  - ≠ job requirements…Misaligned
  - < job requirements…Under-qualified
  - > job requirements…Over-qualified
Over-qualification

...occurs when a worker holds qualifications that are higher than needed to perform the tasks in a current role.

Some contributing factors:

• ‘Creeping credentialism’ - Degree established as an entry requirement for a job

• Qualification inflation – Employers continue to hire people with higher qualifications than needed

• HE is a ‘must-have’ on resume – 40% of 25-34 year old's have graduated with a bachelor’s or higher degree compared to 29% a decade earlier

• Government policies promoting HE to build Australia’s innovation and productivity

4 in 5 parents prefer their children attend university rather than VET

74% of young people did not / will not consider an apprenticeship or traineeship when they finish / finished school
What is the extent of the existing mismatch (i.e. over-qualification) in our industries?
Methodology

1. Measuring the extent of over-qualification

**Our approach**
- Estimate the extent of over-qualification by using ABS classification of skill level for ~400 occupations.
- Cross-check using US data on workers’ perception of qualification needed for work, matched to Australian occupations.

**Source of insight**
- ABS – actual qualification from Census; ‘right’ qualification level from ABS skill levels for each occupation
- O*NET – well-respected, large scale US labour market survey for the ‘right’ qualification level by occupation.

2. Measuring the cost of over-qualification

**Our approach**
- Estimate the cost of over-qualification as a function of wasted tuition costs and foregone income

**Source of insight**
- Publicly-available data on tuition costs and average earnings for each occupation

3. Implications for individuals and employers

**Our approach**
- Identify key implications for individuals seeking work and training
- Identify key implications for employers in hiring and training

SOURCE: ABS O*NET, AlphaBeta analysis
Methodology – in detail

A. Estimate the actual level of qualifications

- ABS 2011 Census Population and Housing data

- Occupation data
  - ANZSCO classification (4-digit)

- Qualification data

<table>
<thead>
<tr>
<th>ANZSCO</th>
<th>Skill Level(s)</th>
<th>ANZSCO Skill Level(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4511</td>
<td>4</td>
<td>Beauty Therapists</td>
</tr>
<tr>
<td>4512</td>
<td>3</td>
<td>Driving Instructors</td>
</tr>
<tr>
<td>4513</td>
<td>2, 3</td>
<td>Funeral Workers</td>
</tr>
<tr>
<td>4514</td>
<td>4</td>
<td>Gallery, Museum and Tour Guides</td>
</tr>
<tr>
<td>4515</td>
<td>4</td>
<td>Personal Care Consultants</td>
</tr>
<tr>
<td>4516</td>
<td>4</td>
<td>Tourism and Travel Advisers</td>
</tr>
<tr>
<td>4517</td>
<td>3</td>
<td>Travel Attendants</td>
</tr>
</tbody>
</table>


**Level of Highest Educational Attainment (HEAP)**
B. Estimate the right level of qualifications

- ABS skill levels defined in terms of formal education only.

**Skill Level 1:** Bachelor Degree or higher  
**Skill Level 2:** Associate Degree / Advanced Diploma / Diploma  
**Skill Level 3:** Certificate III or IV  
**Skill Level 4:** Certificate II or III – *Certificate II or Higher School Certificate*  
**Skill Level 5:** Certificate I or compulsory secondary education – *Certificate I or Year 10 and below*
C. Calculating the over-qualification rate
- Regroup HEAP into 5 adapted skills levels

<table>
<thead>
<tr>
<th>Occupation 1</th>
<th>Skill Level 1</th>
<th>Skill Level 2</th>
<th>Skill Level 3</th>
<th>Skill Level 4</th>
<th>Skill Level 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupation 1</td>
<td>N (1,1)</td>
<td>N (1,2)</td>
<td>N (1,3)</td>
<td>N (1,4)</td>
<td>N (1,5)</td>
</tr>
<tr>
<td>Occupation 2</td>
<td>N (2,1)</td>
<td>N (2,2)</td>
<td>N (2,3)</td>
<td>N (2,4)</td>
<td>N (2,5)</td>
</tr>
<tr>
<td>Occupation 3</td>
<td>N (3,1)</td>
<td>N (3,2)</td>
<td>N (3,3)</td>
<td>N (3,4)</td>
<td>N (3,5)</td>
</tr>
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<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>Occupation 358</td>
<td>N (358,1)</td>
<td>N (358,2)</td>
<td>N (358,3)</td>
<td>N (358,4)</td>
<td>N (358,5)</td>
</tr>
</tbody>
</table>

- Algorithm applied to determine number of ‘over-qualified’ by occupation
- Growth rate for each occupation applied to generate estimates for 2016
Methodology – in detail (continued)

D. Cross-checking result using US O*NET data (the Occupational Information Network)

- Is a comprehensive database of worker attributes and job characteristics
- Provides up-to-date information on skills, knowledge, tasks, and other information on nearly 1,000 occupations covering the entire U.S. economy
E. Determining foregone income and tuition costs

- Estimate length of course:
  o Volume of learning via Australian Qualifications Framework, AQF, qualifications*
  
- Estimate expected annual tuition costs (using government information):
  o Cert I-IV/Dip/Adv. Dip - NSW Smart and Skilled Prices and Fees
  o Degree – www.studyassist.gov.au

- Estimate foregone income:
  o ABS Employee Earnings

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\[
F(i,j) = N(i,j) \times (volume(j) - volume(A_i)) \times WE_i \times \frac{52}{40}
\]

\[
volume(1) = length(1); \quad volume(2) = length(1) + length(2);
\]

\[
C(i,j) = N(i,j) \times T(j) \times \text{length(j)} \times \frac{52}{40}
\]
Finding 1: Employer demand for higher qualifications is increasing

EXHIBIT 3 – DEMAND FOR BACHELOR’S DEGREES, 2015 VS 2017

Growth in number of online job advertisements requesting a bachelor’s degree, by sector, % growth from 2015 to 2017 (in bubble)

- Whole Economy: +41%
- Children’s Education & Care: +24%
- Community Sector & Development: +86%
- Technicians Support Services: +71%

SOURCE: CEB Talent Neuron
NOTE: For each sector, online job advertisements have been analysed for the top 3–5 occupations. Comparison occurs between the two time periods: first 6 months of 2015 and first 6 months of 2017. >3.5 million online job advertisements were searched for relevant keywords associated with bachelor’s degrees.
Finding 2: One in four workers are over-qualified

EXHIBIT 4 – OVER-QUALIFIED WORKERS IN AUSTRALIA, BY LEVEL

Over-qualified workers, as a proportion of total workers in Australia, %, 2016 estimate

1 in 4 workers in Australia are over-qualified, with workers possessing qualifications at every level that are not required for their current roles

1 in 13 workers in Australia (8%) possess a bachelor's degree that is not required for their current role

SOURCE: O*NET, ABS, AlphaBeta analysis
Finding 3: The potential for, and rate of, over-qualification is higher within people-facing sectors

EXHIBIT 6 – OVER-QUALIFICATION BY SKILLSIQ SECTORS

<table>
<thead>
<tr>
<th>Sector</th>
<th>Proportion of workers with higher qualification than necessary, % of workers in sector, 2016 estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholesale &amp; Retail</td>
<td>51%</td>
</tr>
<tr>
<td>Community Sector &amp; Development</td>
<td>39%</td>
</tr>
<tr>
<td>Sport &amp; Recreation</td>
<td>38%</td>
</tr>
<tr>
<td>Tourism</td>
<td>34%</td>
</tr>
<tr>
<td>Personal Services</td>
<td>32%</td>
</tr>
<tr>
<td>Ambulance &amp; Paramedic</td>
<td>31%</td>
</tr>
<tr>
<td>Technicians Support Services</td>
<td>30%</td>
</tr>
<tr>
<td>Direct Client Care &amp; Support</td>
<td>29%</td>
</tr>
<tr>
<td>Children’s Education &amp; Care</td>
<td>22%</td>
</tr>
<tr>
<td>Public Sector &amp; Local Government</td>
<td>21%</td>
</tr>
<tr>
<td>Dental</td>
<td>16%</td>
</tr>
<tr>
<td>Complementary Health</td>
<td>12%</td>
</tr>
<tr>
<td>Aboriginal and Torres Strait Islander Health Worker</td>
<td>11%</td>
</tr>
<tr>
<td>Enrolled Nursing</td>
<td>7%</td>
</tr>
<tr>
<td>Client Services</td>
<td>2%</td>
</tr>
</tbody>
</table>

The sectors with the highest share of over-qualified workers are in retail, sport, community services and tourism.

Higher rates of over-qualification in sectors where there are not well-established entry requirements e.g. retail, tourism, sport.

35% of workers in client-facing sectors are over-qualified.

SOURCE: ABS, analysis by AlphaBeta
The over-qualified bartender

Employer: Small-business - wine and cocktail bar

- Peter, the owner, can only afford one additional staff member for front house
- Advertises bartender role with requirement of a Diploma of Hospitality
- John, who holds a Diploma, is recruited
- It's clear early on that John does not possess practical skills to serve/advise on wine, make basic cocktails etc.
- Diploma trained him in budgeting, management and supervision
The over-qualified hotel receptionist

Employer: Hotel (national business with multiple venues)

- Hotel receptionist holds an Advanced Diploma of Travel and Tourism Management:
  - Develop tourism products
  - Develop and implement marketing strategies
  - Write complex documents
  - Manage finances within a budget

- Would a Certificate III in Tourism have been sufficient?
  - Provide service to customers
  - Show social and cultural sensitivity
  - Operate online information systems
Finding 4: The cost of over-qualification for individuals likely exceeds $4 billion per year

The cost of over-qualification to individuals is estimated at $4.1 billion per year.

EXHIBIT 7 – TOTAL COST OF OVER-QUALIFICATION

In a given year, individuals pay $555 million in superfluous tuition fees and forgo $3.6 billion in lost income as a result of over-qualification.

SOURCE: ABS, NSW Dept of Industry, university websites, analysis by AlphaBeta
So what?
## Implications of over-qualification

**EXHIBIT 9 — CHALLENGES OF OVER-QUALIFICATION FOR WORKERS AND EMPLOYERS**

### 1. Insufficient practical training
- **Consequences of not having practical, vocational skills which are required for job**
  - Workers don’t have practical skills to do job
  - Unsatisfied employers
  - Lost faith in qualification
  - Slower worker progression

### 2. Theoretical training that is not required
- **Consequences of having unnecessary theoretical skills or theoretical skills acquired too early**
  - Superfluous tuition fees
  - Foregone Income
  - Priced out of entry level jobs
  - Counter-productive work behaviours

**Challenges for individual workers or employers**
- Workers not qualified for actual job tasks/day-to-day work
- Employers expect workers to add value immediately
- Big gap in enterprise or transferrable skills
- Employers think there is no value in qualification
- Workers without practical skills don’t progress fast in their careers

**Over-qualification generates challenges for both individuals and employers**
- Tuition costs wasted on qualification that is not relevant to work duties
- Loss of income during study period
- Over-qualified workers may struggle to find employment if they cost more (due to Award requirements or higher expectations)
- Under-utilised workers have lower morale, take more breaks
A successful pathway

Employee: Bob, a veterinarian, is looking for a career change - would like to be a Counsellor

- Interested in enrolling in a Diploma of Counselling
- RTO recommends he enrols in Certificate III in Individual Support to obtain foundation in new industry
- Bob’s concerns – pitched too junior for him!!
- Certificate III offers work experience in various support services

Outcome: Obtained introduction to sector – identified specialism (drug and alcohol-related issues) – now enrolled in Diploma of Counselling
There is a need to find ways to better match worker skills with current job requirements and lower the prevalence and cost of over-qualification in Australia.
Efforts are required from all…

**Employers**
Reconsider which candidates have the most suitable practical skills i.e. who is ‘skills-ready’ not ‘advanced-qualified’

**Individuals**
Consider pursuing qualifications that best suit a particular career stage

**Education Providers**
Focus on aligning qualifications more closely with job roles and consider student expectation

**Policy makers**
A need to recalibrate policy settings, awareness and expectations regarding qualification attainment

‘the right qualification at the right time’
QUESTIONS?
Contact us

Silvia Munoz – Head of Research
P 02 9392 8100
A Level 1, 332 Kent Street, Sydney, NSW, 2000
W skillsiq.com.au
E silvia.munoz@skillsiq.com.au

SkillsIQ Limited
P 02 9392 8100
E enquiries@skillsiq.com.au