Costs of training apprentices

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Purpose of the research

- Not many Australian studies about costs, studies have tended to focus on return on investment (ROI).
- Quantify total costs of training apprentices to certificate III in the plumbing and electrical industries.
- Total costs refers to the costs of the employer, apprentice, user pays and opportunity costs to apprentice.
Context of report

- Apprenticeship system is the foundation of training for trades in Australia.
- Recent skills shortages have focused on the numbers of apprentices being trained.
- Employers and individuals choose to undertake training based on the perceived costs and benefits.
- There must be a perceived net benefit in economic terms for apprenticeships to go ahead.
- Influence of factors effecting the uptake of apprenticeships.
Data sourced from employers

<table>
<thead>
<tr>
<th>Employer costs</th>
<th>Employer benefits</th>
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<tbody>
<tr>
<td><strong>Direct costs</strong></td>
<td>Government incentives</td>
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<tr>
<td>Apprentice wages (including superannuation, workers compensation, payroll tax, allowances and other costs)</td>
<td>Other incentives such as Construction Industry Training Board (CITB)</td>
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<td>Training fees</td>
<td>Productive contribution of apprentice</td>
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<td>Group training fee</td>
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<td><strong>Indirect costs</strong></td>
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<td>Apprentice supervision costs</td>
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<td>Administration costs</td>
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<td>Extra maintenance and materials wastage</td>
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# Data sourced from Apprentices

<table>
<thead>
<tr>
<th>Apprentice costs</th>
<th>Apprentice benefits</th>
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<tbody>
<tr>
<td>Training costs for of the job training</td>
<td>Incentives paid to apprentice (from CITB)</td>
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<tr>
<td>Costs such as tools, text books etc.</td>
<td>Allowances / tax rebates (Tools for your trade)</td>
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<td>Travel to and from training</td>
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<td>Opportunity cost</td>
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</table>
What we found: electrical

- Differences between methods of hiring electrical apprentices
  - Direct hire companies – lower than GT company
    - most for wages and supervision
    - smaller amounts for administration and material wastage
  - GT company – higher cost than direct hire
    - Most group training fee
    - supervision
Employer total costs - electrical direct hire case study two

- Year 1: $0
- Year 2: $0
- Year 3: $0
- Year 4: $0

- Materials wastage
- Administration costs
- Supervision costs
- Apprentice wages and training fees
Employer total costs - electrical direct hire case study

- Materials wastage
- Administration costs
- Supervision costs
- Apprentice wages and training fees

Year 1
Year 2
Year 3
Year 4
Employer costs - electrical G/T apprentice

- Materials wastage
- Admin costs
- Supervision costs
- Group Training fee (minus incentive)

Year 1: $40,000
Year 2: $50,000
Year 3: $60,000
Year 4: $70,000

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Electrical apprentice costs

Year 1 Year 2 Year 3 Year 4
Electrical direct Refrigeration Electrical direct Group training

Apprentice also incurred costs mainly on tools required for the job and text books for TAFE.

For direct hire apprentice case studies the costs associated with their training are substantially higher than the costs of the group training apprentice. Case study one spent $4372.50 overall to complete the training, the employer supplied this apprentice with basic tool kit and then the apprentice was responsible for purchasing any extra tools required. Case study two spent $5740 overall with most of the money for tools (total $4,600 on tools). Case study three incurred $3150 overall with more of their costs on travel to and from their workplace and TAFE ($1900 on travel, $1250 on tools and text books for trade school). The pattern of costs is similar to the group training apprentice in that directly employed apprentices tend to spend most of their money on tools and these are during the first one to two years of the apprenticeship.

The group training company supplied the apprentice with the appropriate safety equipment at no cost. Basic tool kits were supplied by the group training company for a cost of $800 for which the apprentice paid; there was also a charge of $200 a year for tool upkeep. The apprentice also incurred costs for buying extra tools they required for the on the job component of their apprenticeship, these were not supplied by the group training company. In total the case study four apprentice spent $1800 overall to complete the training.
What we found: plumbing

- Differences between methods of hiring plumbing apprentices
  - Direct hire companies – higher than GT company
    - most for wages and supervision
    - smaller amounts for administration and material wastage
  - GT company – lower cost than direct hire
    - Most group training fee
    - supervision
  - More expensive than electrical apprentices
Employer costs - plumbing group training

Year 1  | Year 2  | Year 3  | Year 4  |
---      | ---    | ---     | ---     |
Supervision costs | $0       | $10,000  | $20,000  |
Group training fee | $50,000  | $40,000  | $30,000  |
Other training | $30,000  | $20,000  | $10,000  |
Administration costs | $20,000  | $10,000  | $0       |

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Total employer costs - plumbing direct hire

- Other costs (travel)
- Materials wastage
- Administration costs
- Apprentice wages and training fees minus incentives
- Supervision costs

Year 1 Year 2 Year 3 Year 4

Total employer costs:
- Year 1: $0
- Year 2: $10,000
- Year 3: $20,000
- Year 4: $30,000

Other costs (travel): $5,000
Materials wastage: $5,000
Administration costs: $10,000
Apprentice wages and training fees minus incentives: $15,000
Supervision costs: $20,000

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Apprentice costs - plumbing

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- **Direct hire**
- **Group training**

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Perceived productivity

- Electrical
- Plumbing

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Summary of findings

- Employers incur most of the costs of training an apprentice to certificate III in the plumbing and electrical industries.
- Apprentices are almost as productive as a fully qualified worker in their final years.
- There is some difference in between hiring apprentices directly or hosting apprentices.
- Employers weigh the costs and benefits of training apprentices.
- There are other ‘intangible’ benefits for employers.
Summary of findings

- Apprentices also incur costs for training.
- Most of the costs relate to tools and training fees.
- Apprentices are almost as productive as a fully qualified worker in their final years.
- Apprentices are willing to accept lower wages to attain a qualification which is an investment in their future.
Report

- Undertaken by Lisa Nechvoglod and John Saunders from NCVER
- Report available soon from NCVER website:

  http://www.ncver.edu.au/