



Tackling Foundation Skills in the Workforce

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Overview of Presentation

Foundation Skills in the Workforce

- ❖ The Importance of Foundation Skills
- ❖ Current Situation
- ❖ What Employers are Saying
- ❖ Link to Productivity
- ❖ Importance of Employer Commitment
- ❖ Return on Investment Project
- ❖ Recent Initiative
- ❖ What needs to be Done

The Changing Economy



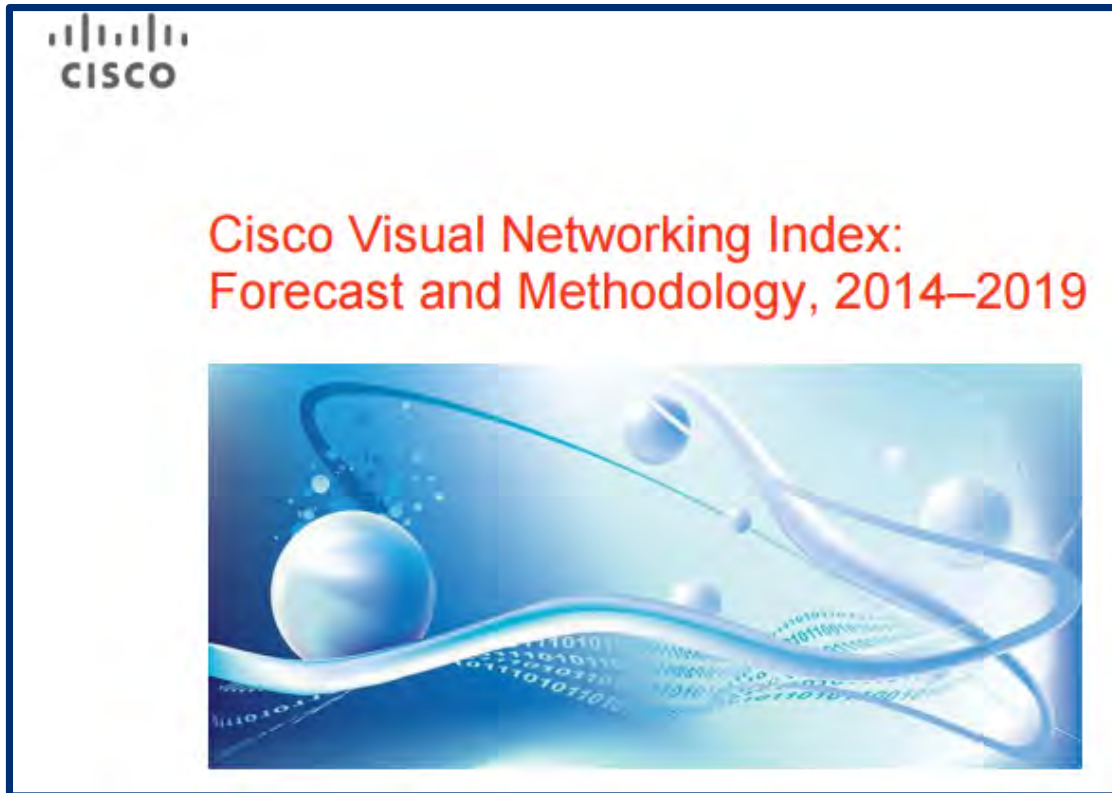
- ❖ 44% of jobs at risk of digital disruption
- ❖ 79% of CEOs concerned by impact of changes in core technology

Changing Economy

❖ **40% of jobs disappear in 10 – 15 years due to technological advancement**



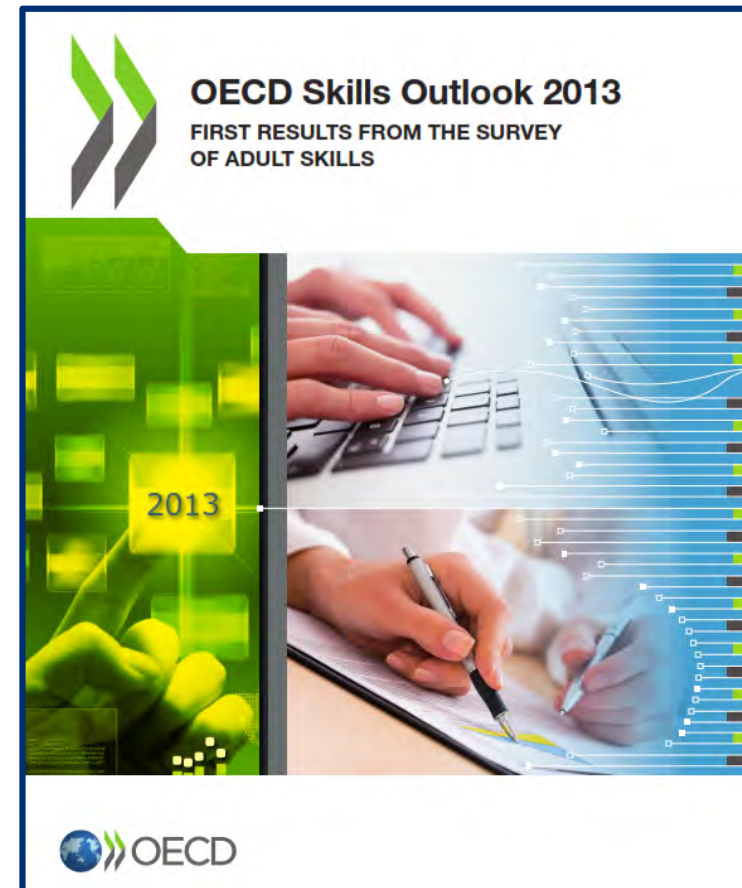
Changing Economy



**Exponential
growth in
internet use for
business**

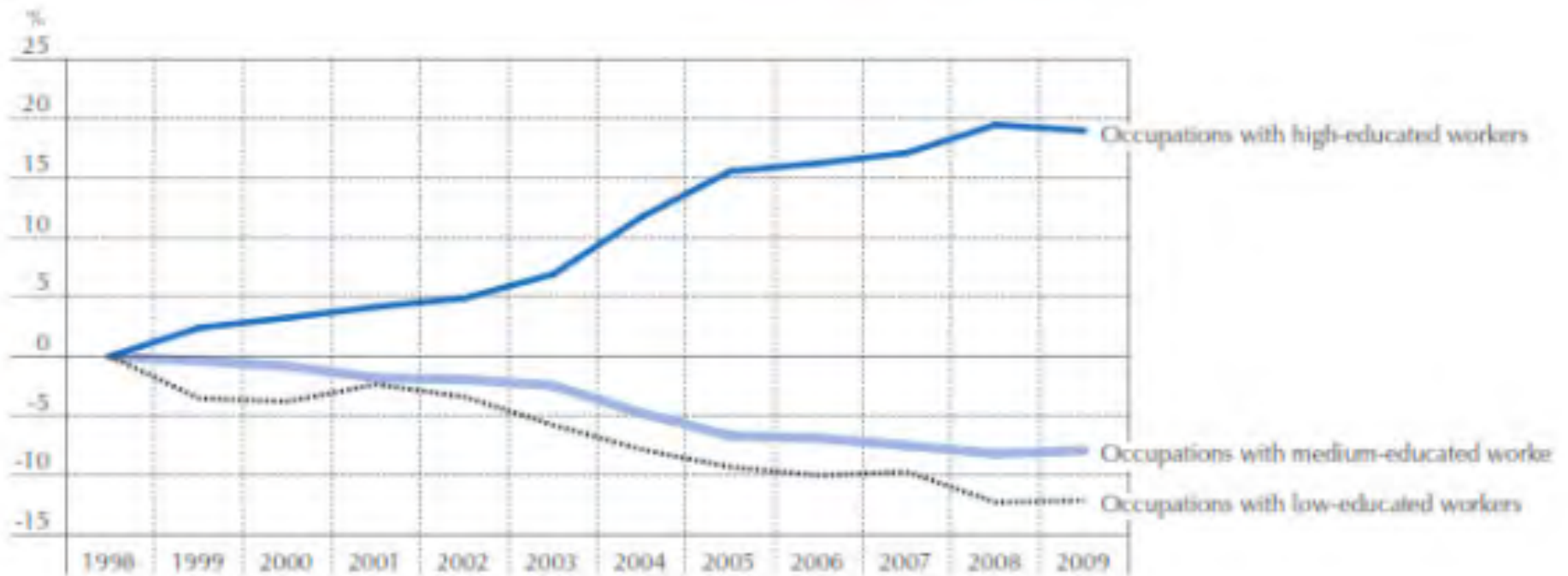
The Changing Economy

- ❖ decline in routine skills and growth in ICT and high level cognitive and interpersonal skills
- ❖ shift in occupational structure to professionals, associated professionals and skill technicians



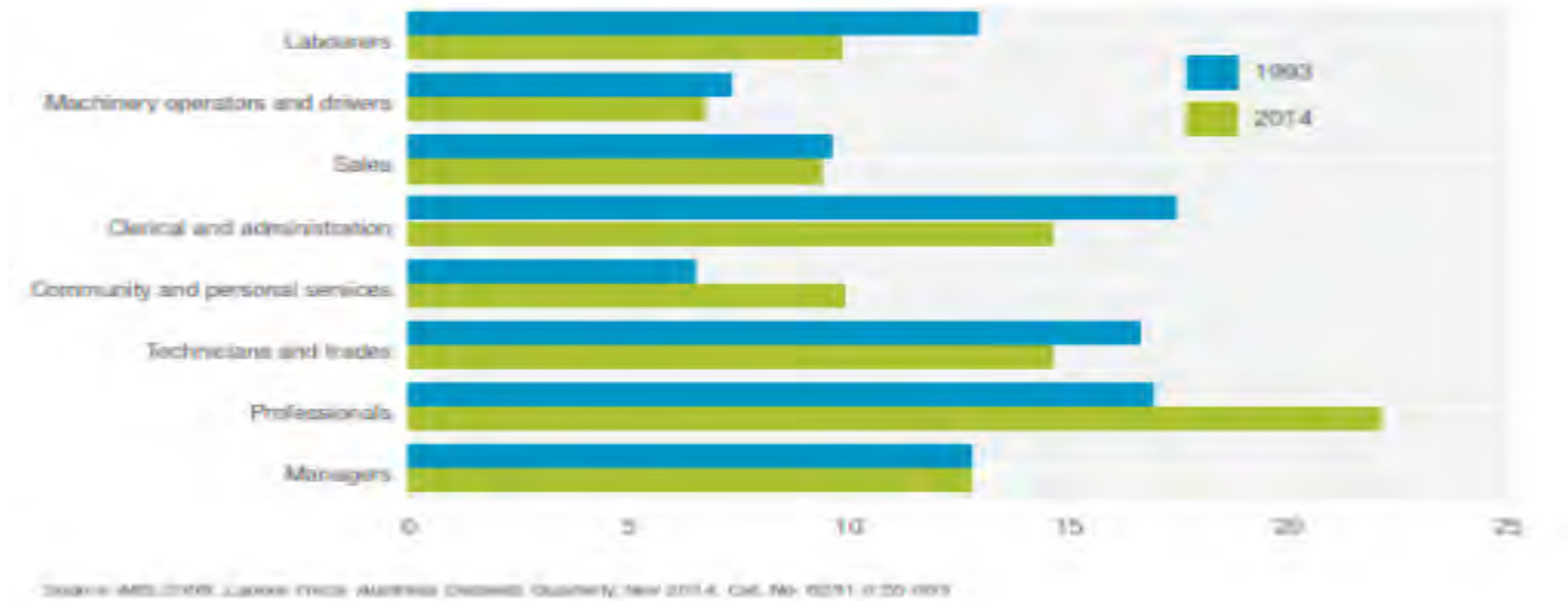
The Importance of Foundation Skills

Employment in Occupational Groups by Education Level



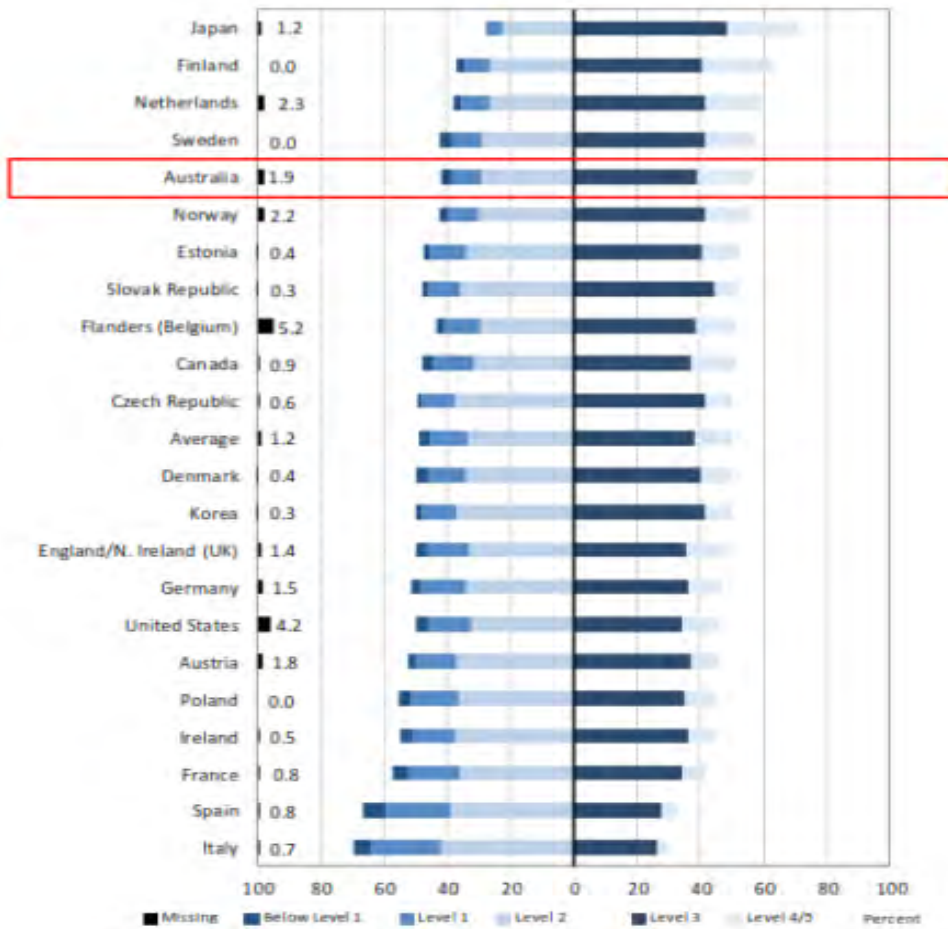
The Importance of Foundation Skills

Occupation by Employment: 1993 and 2014



Current Situation

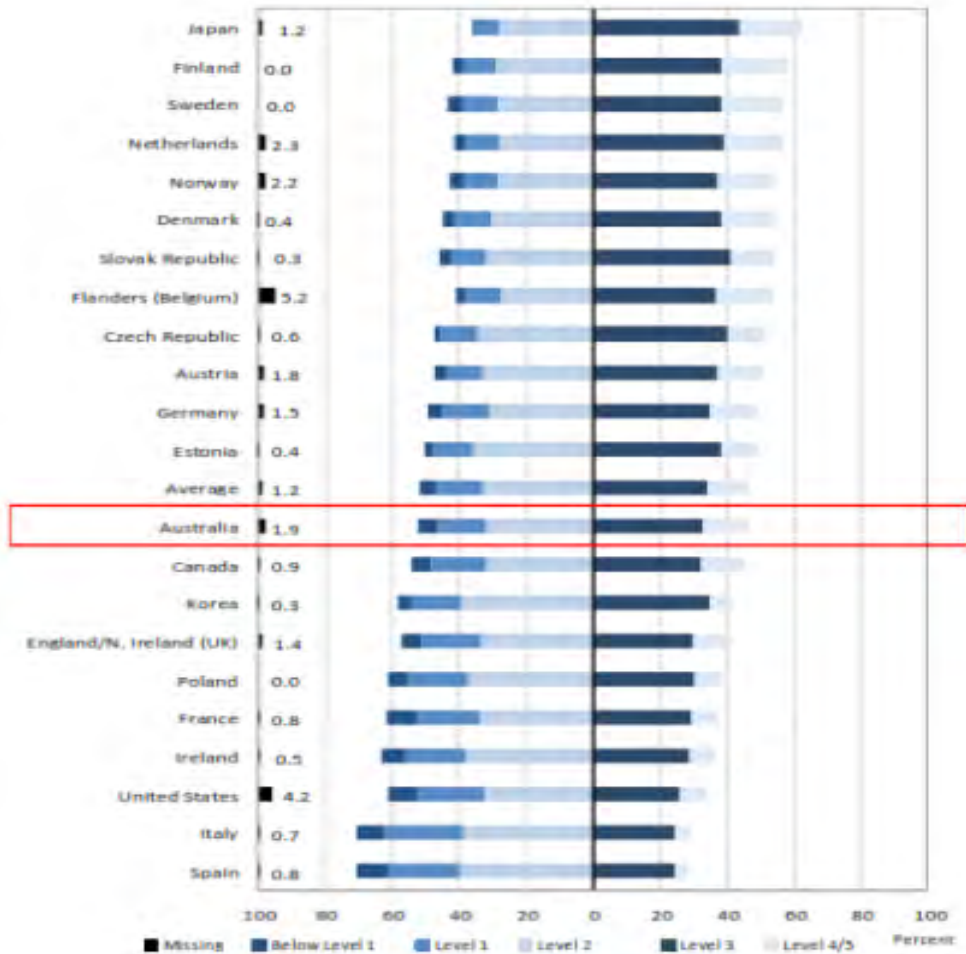
Literacy Proficiency among Adults



In regards to Literacy proficiency, 44% of Australians had skills below level 3, considered to be the minimum requirement to operate effectively in workplaces and society.

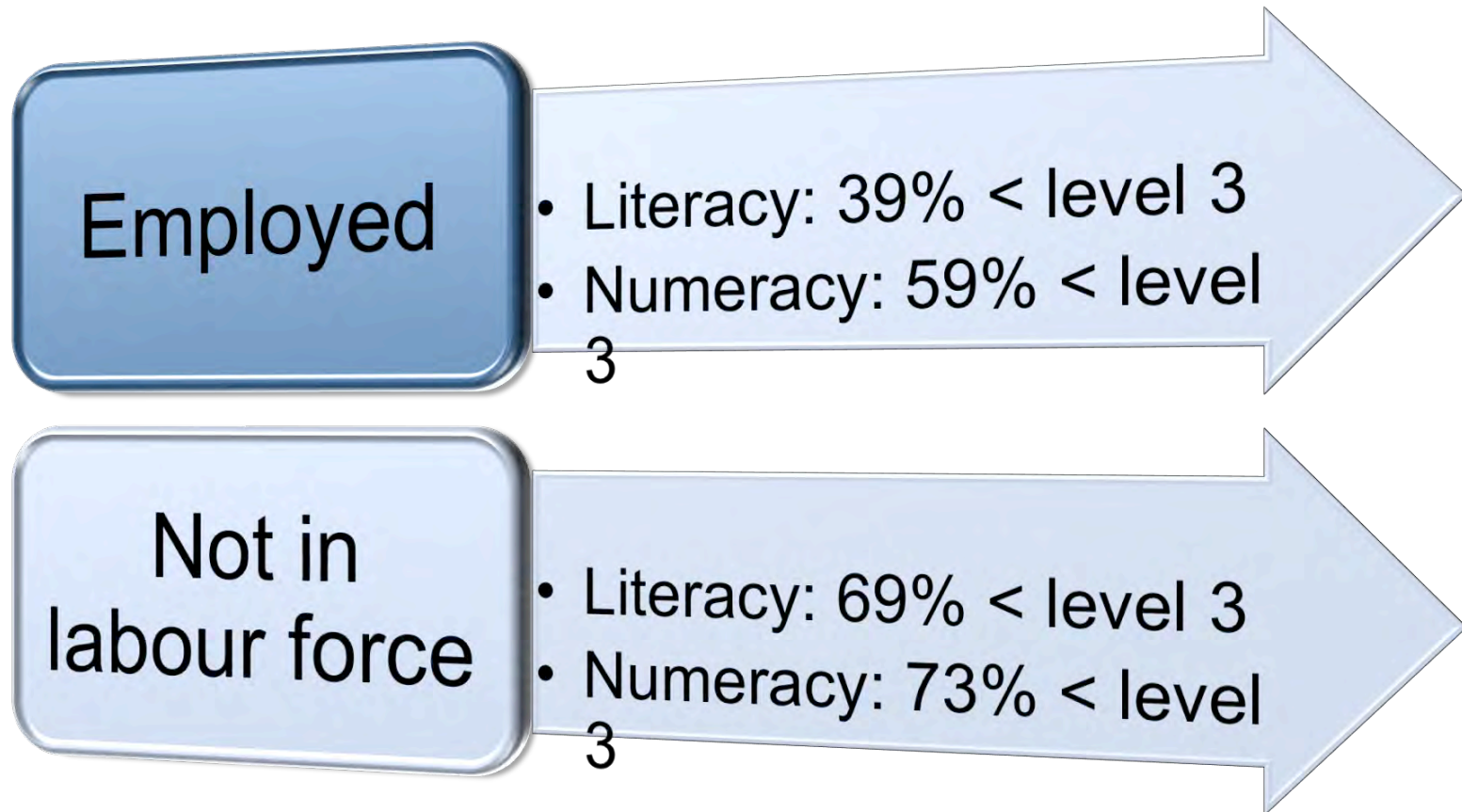
Current Situation

Numeracy Proficiency among Adults

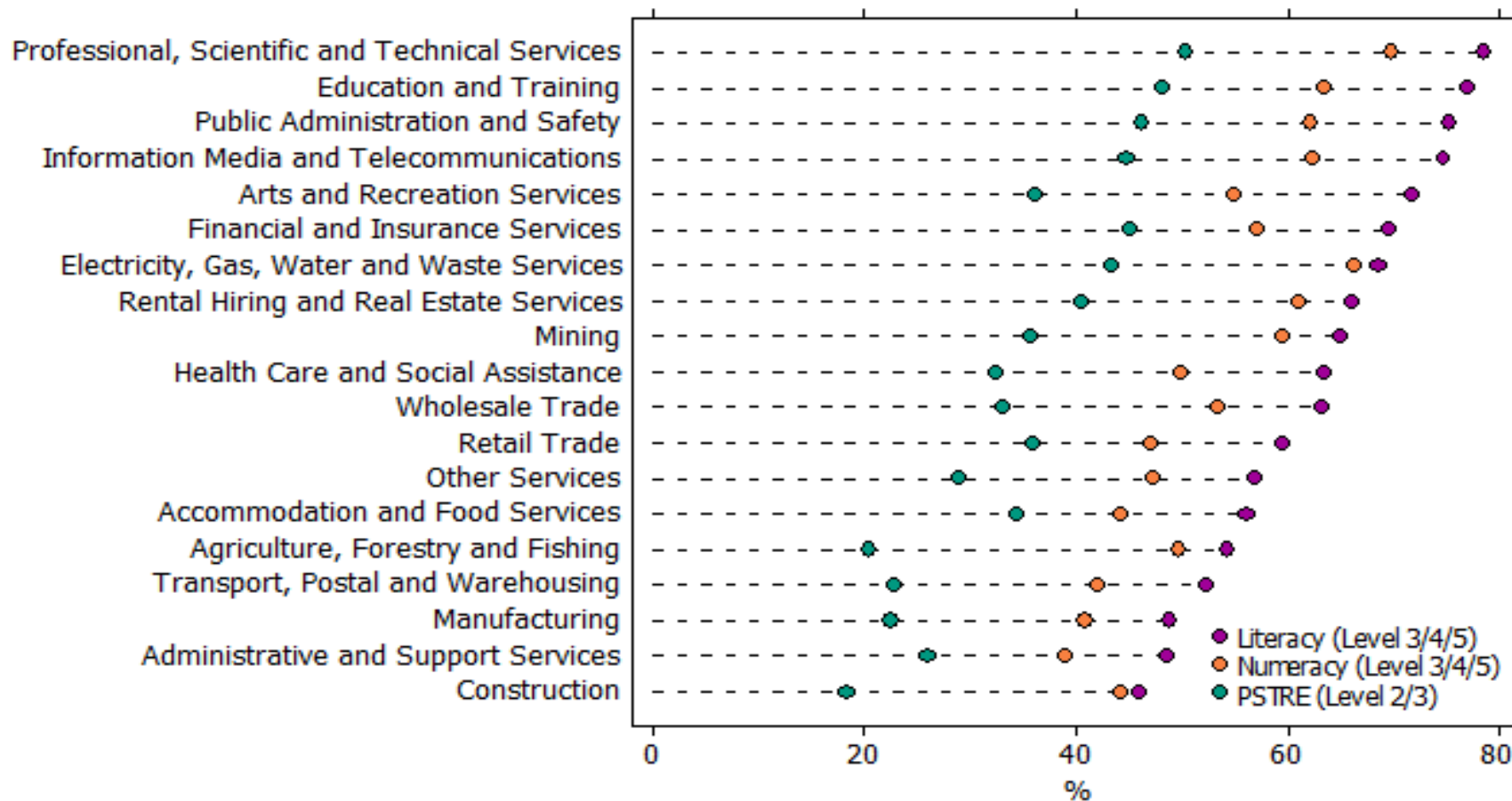


In regards to Numeracy proficiency, the situation is even worse - with 55% of Australians had skills below level 3.

PIAAC and the Workforce



Foundation Skills by Industry



Foundation Skills by Occupation

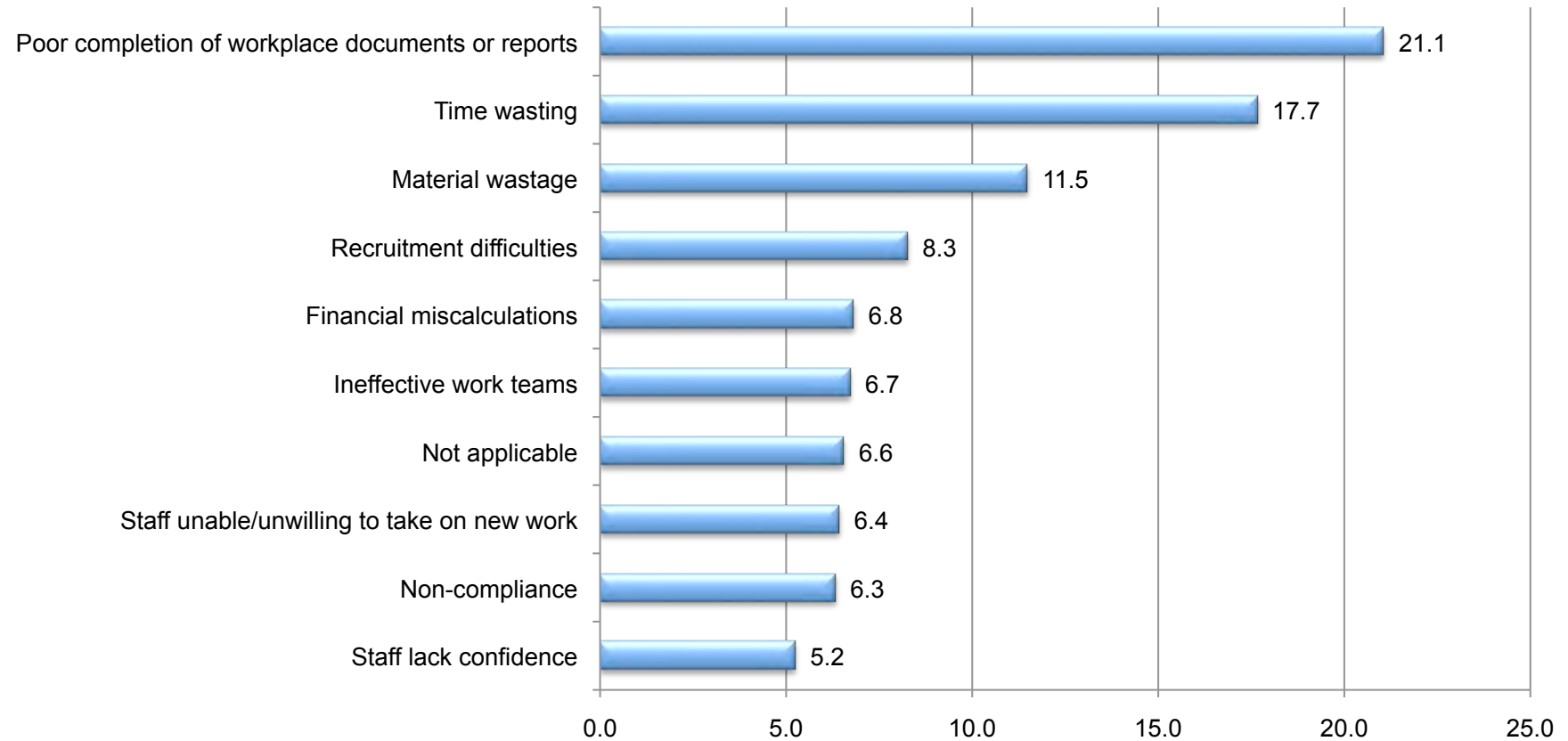


What the Employers are Saying

Impact of Low Literacy and Numeracy on Business



Employer Concerns



Example of Impact

STANDARD OPERATING PROCESS - showing terms and concepts that employees with low levels of literacy are likely to need training or support to understand

Title: Bulk Chemical Loading and Receipt
Effective Date: February 1, 2011
Review Period: 12 months

1. PURPOSE

The aim of this process is to ensure that bulk products delivered or loaded from a processing plant are done in a safe and efficient manner in line with Legislation, Australian Standards and Industry guidelines.

2. SCOPE

The process is designed to cover the loading and receipt process but is limited to bulk requirements as defined.

Bulk Receipt: Any liquid material designated to be pumped from an intermediate bulk container or tank vehicle to a static storage tank on any work premises.

Bulk Loading: Any liquid material designed to be pumped from a static storage tank into an appropriate road, rail or sea bound tanker at any work premises.

Static Storage tank: Any tank capable of holding in excess of 1000L that is not designed to be lifted or moved as part of a process. An anchored mixing vessel may be considered a static storage tank.

3. RESPONSIBILITIES

Operations Manager: Responsible for providing and maintaining plant or systems of work that are safe to receive, hold and load bulk chemicals. Ensures the process is carried out in accordance with work and safety instructions. Responsible for ensuring drivers are conversant with company processes and safety directions. Responsible for ensuring that any company operator nominated as a Loading Supervisor is trained and competent in that task.

Unloading Supervisor: An employee trained and assessed as competent may be nominated as a Unloading Supervisor. The responsibility of the Unloading Supervisor is to ensure that the delivery is received and processed in accordance with relevant work instructions and forms.

Regulatory Manager: It is the responsibility of the Regulatory Manager to provide accurate and timely information concerning relevant legislation, Australian Standards and Industry Guidelines. It is the responsibility of the Regulatory Manager to monitor and report compliance with relevant legislation, Australian Standards, Industry Guidelines and company processes.

Title: Bulk Chemical Loading and Receipt
Effective Date: February 1, 2011
Review Period: 12 months

1. PURPOSE

The [redacted] of this [redacted] is to [redacted] delivered or loaded from a processing plant are done in a safe and [redacted] in line with [redacted]

2. SCOPE

The process is [redacted] the loading and [redacted] but is [redacted]

[redacted] Any [redacted] to be pumped from an [redacted] or tank vehicle to a [redacted] tank on any work [redacted]
[redacted] Any [redacted] to be [redacted] tank into an [redacted]
[redacted] road; rail or sea [redacted] at any work [redacted]
[redacted] tank: Any tank [redacted] that is not [redacted] to be lifted or moved as [redacted] a [redacted] tank.

3. RESPONSIBILITIES

Operations Manager: [redacted] and [redacted] that are safe to receive, hold and load [redacted] for [redacted] drivers are [redacted] with work and safety instructions. [redacted] Responsible for [redacted] that any [redacted] is trained and [redacted] in that task.

Unloading [redacted]: An employee trained and [redacted] may be [redacted] as a Unloading [redacted] of the Unloading [redacted] is to [redacted] that the [redacted] work [redacted] instructions and forms.

[redacted] **Manager:** It is the [redacted] and [redacted]

What the Employers are Saying

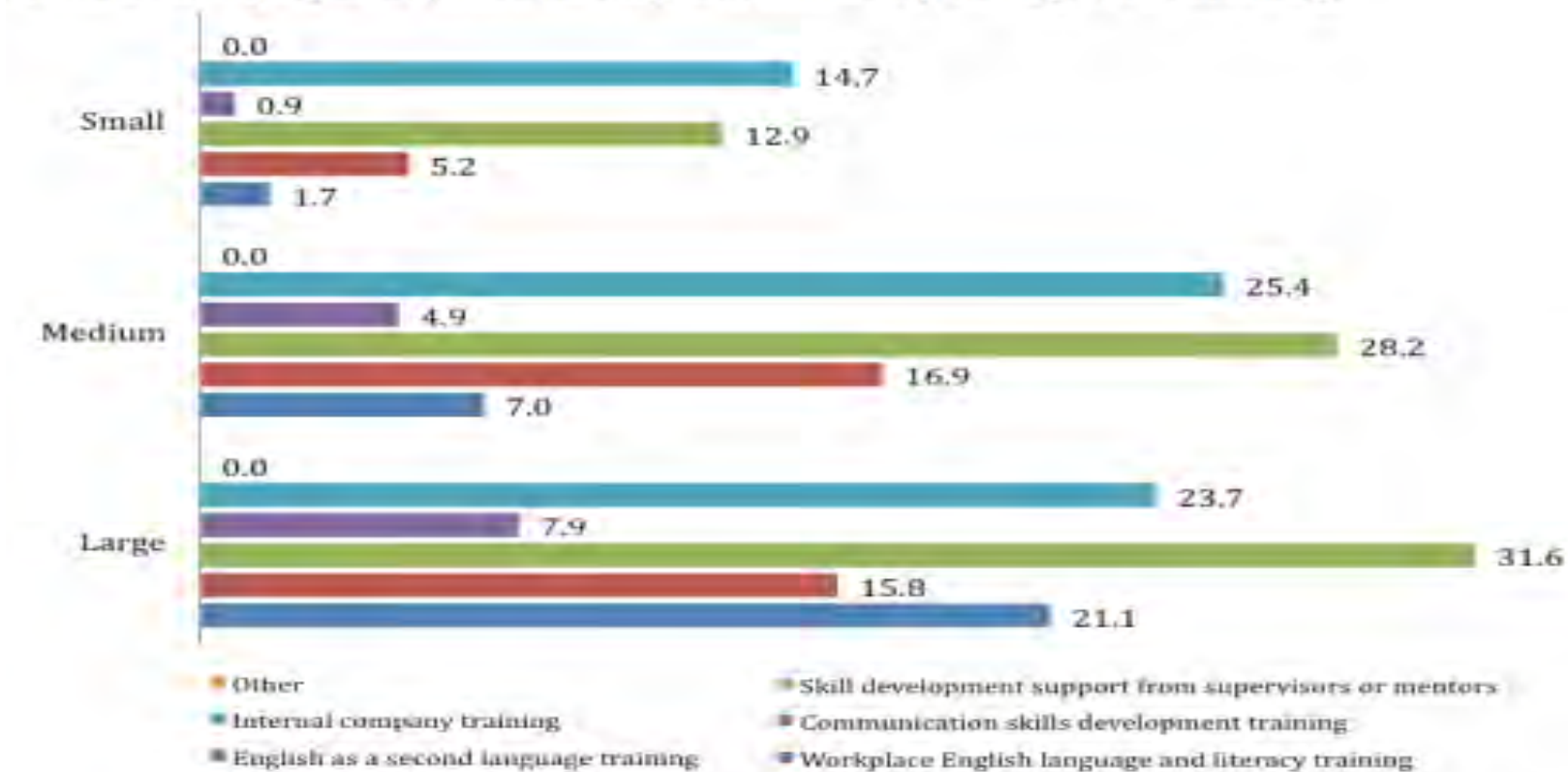
Business strategies to improve Literacy and Numeracy



What Employers are Saying

Strategies to improve Literacy and Numeracy by Company Size

Businesses trying to improve literacy and numeracy through the following



Productivity Agenda

Connection between higher LLN skills and productivity?

Evidence of benefits to employers?



PRODUCTIVITY

“Part of the reason for low firm investments is the lack of a credible business case providing clear evidence of a positive return on investment”.

UPSKILL, Centre for Literacy, Quebec.

Canada

Participation and Income



Literacy skill levels are positively associated with income for full-time male and female employees.
NCVER

Improvement in LLN skills from Level 1 to Level 3 would increase labour force participation and hourly wage rates by 25% for women and 30% for men.

The Productivity Commission

AiGROUP



Importance of Employer Commitment

“Learning programs initiated by and within workplaces are the ones that survive long-term.”

“Skills for Life” UK study

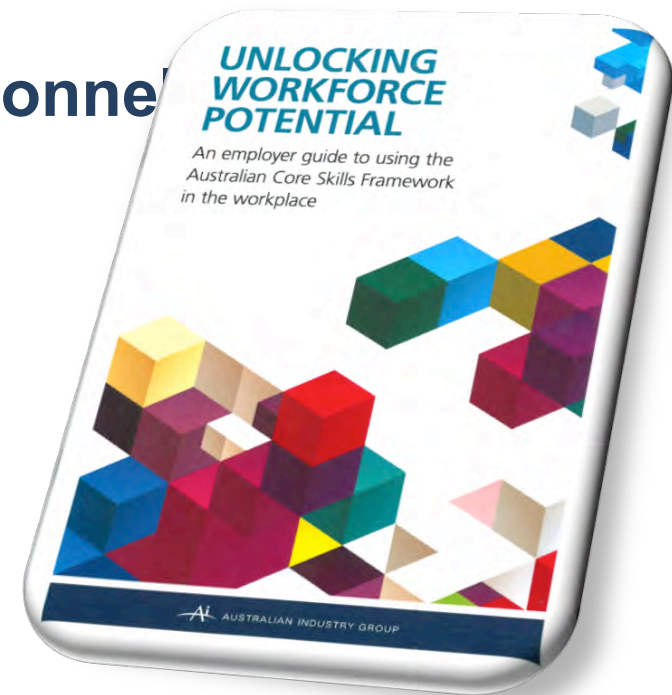
“Employer commitment is essential to stability and sustainability of workplace literacy and essential skills training efforts.”

Alison Wolf: Adult Basic Skills and Workplace Learning Project



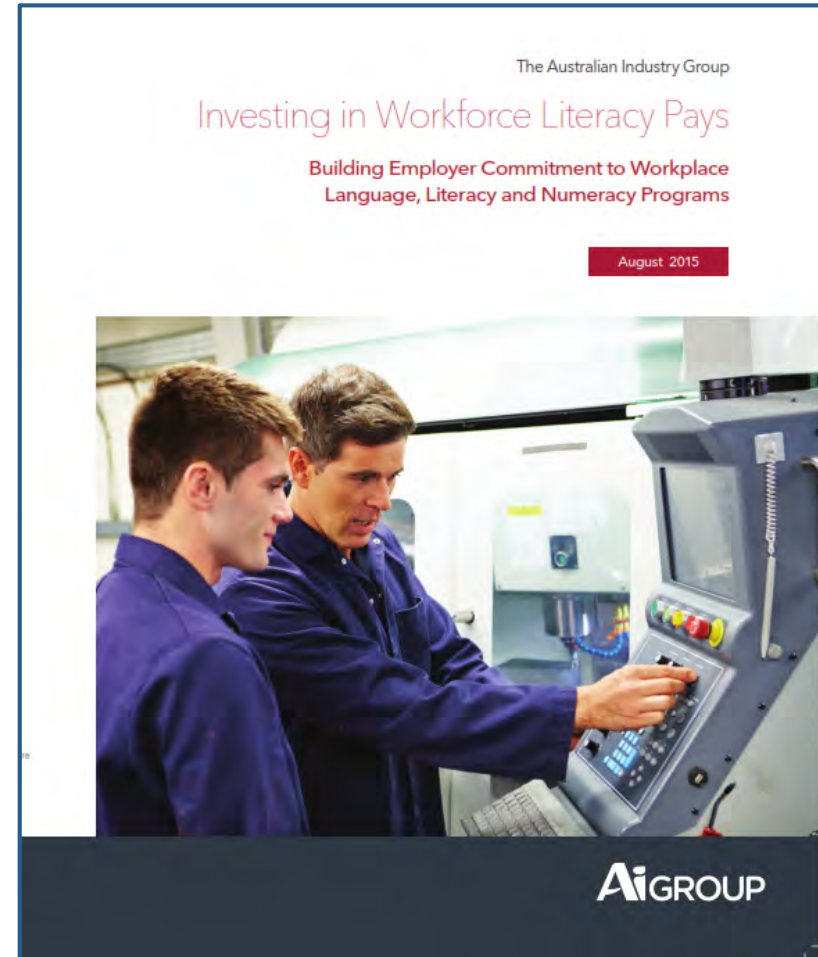
Barriers to Employer Involvement

- Lack of awareness of literacy – productivity link
- Cost
- Limited time, resources & personnel
- Management attitudes
- Absence of champions
- Complex training landscape
- Lack benefits to business data
- Confidentiality concerns
- Achieving employee buy-in



The Return on Investment Project

- ❖ Purpose was to develop a model of data collection and reporting which can assist with measuring returns to workplace foundation skills training
- ❖ Work with a sample of employers and RTOs to consider new types of data collection, interpretation & analysis and presentation of results via case studies
- ❖ Build on, and make a contribution to, the existing knowledge base (e.g. NZ, Canada, Australia)



Return on Investment



- ❖ Research literature differs on how the 'ROI' to workplace training is measured and the types of metrics used
- ❖ ROI indicates the extent by which the benefits (outputs) of training exceed the costs (inputs)

$$ROI (\%) = \frac{(Benefit - Cost)}{Cost} * 100$$

- ❖ A result >100% indicates a net benefit (after accounting for the costs of provision)

Return on Investment – methodological concerns

- ❖ the lack of practical, standardised approaches for evaluating ROI
- ❖ difficulties in isolating the benefits of training and quantifying all costs and benefits
- ❖ difficulties in designing experimental studies involving control groups
- ❖ differences in expectations about what can be measured across multiple stakeholders
- ❖ problems of timing and resources, including the prospect of benefits accruing after the evaluation period
- ❖ data access and collection issues, including sample selection, access to data (e.g. confidential records, costs of collecting data, taking staff “off the line”)

Return on Investment – lessons from WELL evaluations

- Evaluation of WELL found “challenges arose due to an absence of certain data, and also a common view of certain concepts such as “needs being met”, “employability”, or “productivity” and how these should be measured.”
- “Employee productivity was measured by looking at how **employers and RTOs perceived** employees had improved in the following areas:
 - increased productivity;
 - improved work quality;
 - increased autonomy;
 - reduced absenteeism; and
 - improved communication skills.”

ROI Instruments

- ❖ Section A – Program description and budget (identifying the total cost of WELL program, including in-kind costs)
- ❖ Section B – Quantitative benefits of training e.g:
 - Changes in productivity (e.g. staff supervision, completion of key tasks)
 - Changes in operational costs (e.g. OH&S, waste)
 - Changes in HR costs (e.g. turnover, replacement)
- ❖ Section C – Qualitative benefits of training
 - Commentary from enterprises on financial gains from intangible benefits (e.g. self-confidence, worker morale, team work, decision-making, autonomy).

Data collection period	Prevalence	1		2		3	
		Before (or baseline)	During training	Directly after	Indirectly after	6 month start of training	12 month start of training
PERSONNEL COSTS							
WELL training costs							
Supervisor wage based on full on costs	Hours/average						
Supervisor wage based on reduced supervision of WELL workers	Hours/average						
Minimum wage based on full on costs	Hours/average						
Minimum wage based on reduced supervision	Hours/average						
PRODUCTIVITY GAINS							
Hours spent on tasks that were not done	Average estimate per week						
Hours spent on tasks that were not done	Average estimate per week						
OPERATIONAL COSTS							
Supervisor wage based on full on costs	Hours/average						
Supervisor wage based on reduced supervision	Hours/average						
Other operational costs related to your organisation/industry							
HUMAN RESOURCES COSTS							
Turnover costs (WELL, non-WELL, training costs)	Hours/average						
Turnover costs (WELL, non-WELL)	Hours/average						
Turnover costs (WELL, non-WELL)	Hours/average						
Other operational costs related to your organisation/industry							
OTHER FINANCIAL BENEFITS							

Example 1: Aged Care

	Total Project Costs		\$35,576
C1	Commonwealth funding		\$27,676
	Employer contribution		\$7,900
	Additional costs to employer, including in-kind		
	Cost of additional staff to support training (e.g. Operations manager)		\$1000
	Expenditure on training materials (e.g. computers, printing)		\$80
	Expenditure on program development/customisation		\$1000
	Other, please identify: Photocopying		\$25
	Total employer contribution		\$10,005
	Labour Cost Savings Benefit	Before (or near) start of training	Change 6 months after
	Hours supervisors work with trainees		
	Number of supervisors 1 x \$50.60 per hour	9.3 hours	6.5 hours
	Labour costs (supervisor)	\$471	\$329
	Labour costs (supervisor) x 4 groups	\$1,882	\$1,316
	Carer hours to complete documentation	17.5	10.5
	Costs x 30 carers x \$33.10 ph	\$15,640	\$10,440
	Annual cost savings		\$11,756
	Annualised Return on Investment (ROI %)		117.5%

Example 2: Utility

	Item	Amount
C1	Program Cost	\$6,000
	Program Benefit	
B1	<p>100 Service Orders processed prior to training = 5.8 hours x \$47.50 per hour = \$275.50</p> <p>100 Service Orders processed after training = 1.5 hours x \$47.50 = \$71.25</p> <p>Total Improvement = \$275.50 - \$71.25 = \$204.25 per 100 Service Orders</p>	
	Expected lifecycle for new process 3 years or 3,000 service orders = 30 x \$204.25	\$6,127.50
	Return on Investment = \$6,127.50 / \$6,000 x 100	102.13%

Example 3: Construction

	Item Description	\$ Amount
1	Employer cost of WorkCover assessments 892 x \$200	\$178,400
2	Employer average “lost time” from job for WorkCover training and assessment \$500 x 3 days = \$1,500 per person for 892 employees	\$1,338,000
3	Actual employer cost for re-testing is \$100 for actual test, plus \$500 for a day of lost time - so \$600 per retest for 89 employees	\$53,400
4	State average of WorkCover re-test statistics of 46% if applied to this employer 410 people @ \$600 per person	\$246,000
5	WorkCover re-test saving for employer \$246,000 - \$53,400	\$192,600

Example 4: Manufacturing

		Amount
	Program Costs	Amount
C1	Employer contribution to LLN Program	\$10,000
	Staff Labour Costs for employer [staff paid to attend training]	\$73,000
C2	Lean Manufacturing Program [\$85,000 - \$64,800 Government Rebate]	\$20,200
	Total Cost	\$103,200
	Program Benefits	Amount
B1	Injury Rates [WorkCover premium saving \$1,300 per week]	\$67,860
B2	Energy Savings	\$42,000
B3	Labour Saving [saved 316 hours pa @ cost of \$26 ph per employee]	\$8,216
B4	Recycling Waste [less waste saving of \$1,500 per month]	\$18,000
	Total Benefits	\$136,076
	Return on Investment	
	Program Benefits/Program Costs x 100 = \$136,077/\$103,200 x 100	131.8%

ROI Summary

- ❖ **All worksites that were able to produce a ROI were positive**
- ❖ **All sites draw on different measures and methodologies to make a compelling case**
- ❖ **The range was from 102 - 162%**
- ❖ **This applied across a range of industries: food and metals manufacturing, aged care and utilities**

Wrapping up: What does this mean?

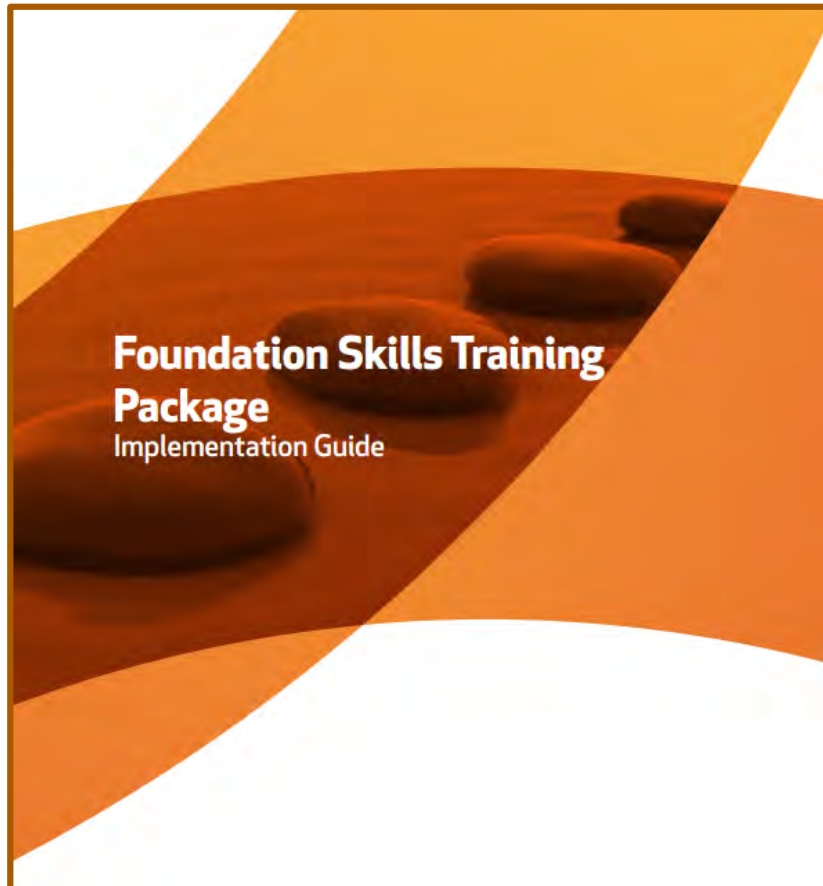
- ❖ **There are a range of reasons why employers participate in foundation skills programs – these findings provide a compelling case for financial returns.**
- ❖ **strengthens the business case for why employers should invest in workplace literacy and numeracy.**
- ❖ **There is no ‘right’ way of calculating an ROI but there are degrees of soundness which must be considered when interpreting results.**

National Foundation Skills Strategy Project

2014-15 Workplace Champions Pilot

- ▶ **The pilot aims to identify effective approaches for Workplace Champions to share information on foundation skills with other employers.**
- ▶ **Seven Workplace Champions have been appointed in an honorary role as public ambassadors to:**
 - ▶ **Raise employer awareness of the benefits of addressing foundation skills**
 - ▶ **Share information on the positive outcomes that have been achieved in their own organisations**
 - ▶ **Encourage other employers to take action to address foundation skills.**

Ai Group Foundation Skills Skill Set Pilot



- ❖ **3 manufacturing sites in Victoria, NSW and SA**
- ❖ **3 units from FS Training Package (45 hours)**
- ❖ **7 – 10 employees**
- ❖ **customised & delivered on-site**
- ❖ **use of experienced LLN practitioners**

What Needs to be Done

- ❖ National Foundation Skills Strategy to address the existing workforce
- ❖ Develop and support employer networks to enable employers to advocate for foundation skills
- ❖ Increase awareness of the Return on Investment benefits for employers
- ❖ Develop a new national program to address workforce foundation skills
- ❖ Build education and training workforce capability



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