

Plugging into core skills

language, literacy and numeracy
in the workplace

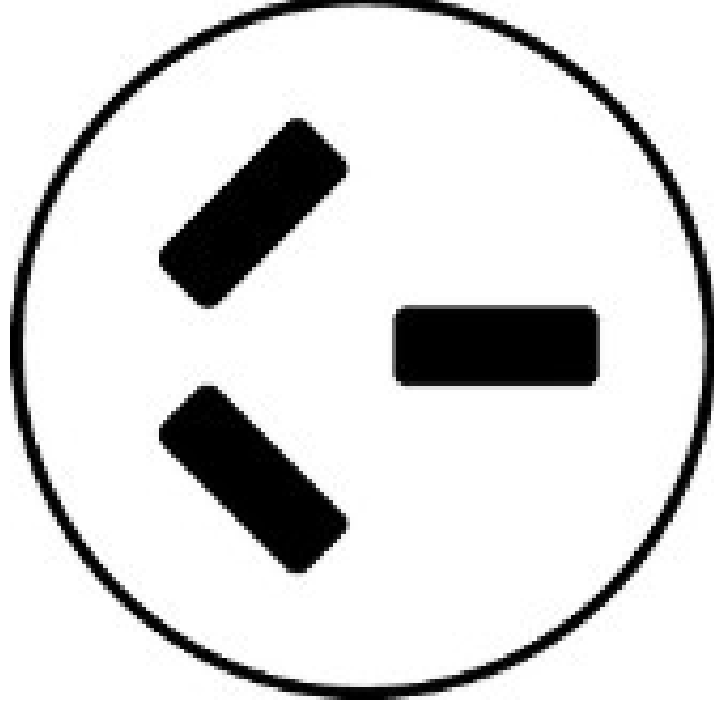
2008

**NSW U&E ITAB Annual
Conference**

Monday 21 July 08

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models of literacy



- A cognitive, individual based model: 'quantifiable' levels of ability, notions of 'illiteracy'
- An economics model: 'functional' literacy for work, notions of human capital
- A socio - cultural model: 'multiple' literacies for life, notions of literacy in context

Lonsdale and McCurry, NCVET

elements of literacy

*The ability to **read** and use written information as well as to **write** appropriately, in a range of contexts. Literacy also includes **numeracy**, such as recognition and use of numbers and basic mathematical signs and symbols within text. Literacy involves the integration of **speaking, listening and critical thinking with reading and writing.***

Source: Workplace English Language and Literacy Programme,
2001 Guidelines and Application Kit. p 13.

built in not bolted on

“ ...to develop the literacy skills further

through job-related training. To do this, the workplace literacy tasks must be **recognised as core workplace competencies** so that they will be **incorporated into industry-based training packages**” .



McLennan, ABS, 1997

seeing is believing

- **Explicit LLN content units**

e.g. 'UEENEE050B Undertake **computations** in an electrotechnology environment



AND/OR

- **LLN content integrated into performance criteria and other parts of unit**

e.g. 'UEENEEA003B Set up and check electronic component placement machines'

3.3 Work report forms/data sheets on components **are completed** accurately

Australian Core Skills Framework

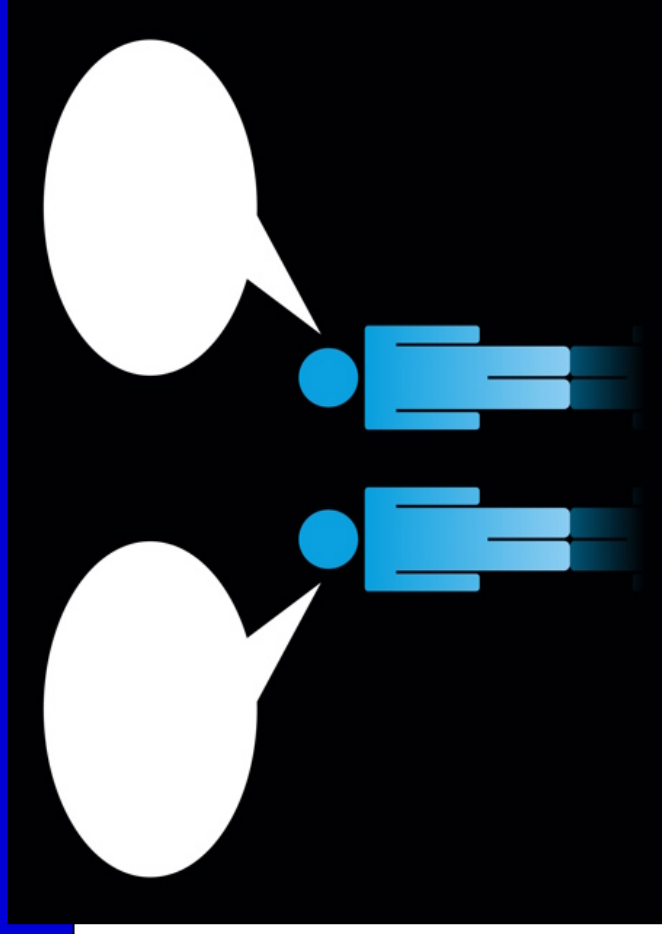


- Reading
- Writing
- Oral Communication
- Numeracy
- Learning Strategies

Core skills are not 'low level skills' - they are about increasing levels of complexity and flexible repertoires in each of the macro-skills

Employability Skills

- Communication
- Team work
- Problem Solving
- Initiative and enterprise
- Planning and organising
- Self management
- Learning
- Technology



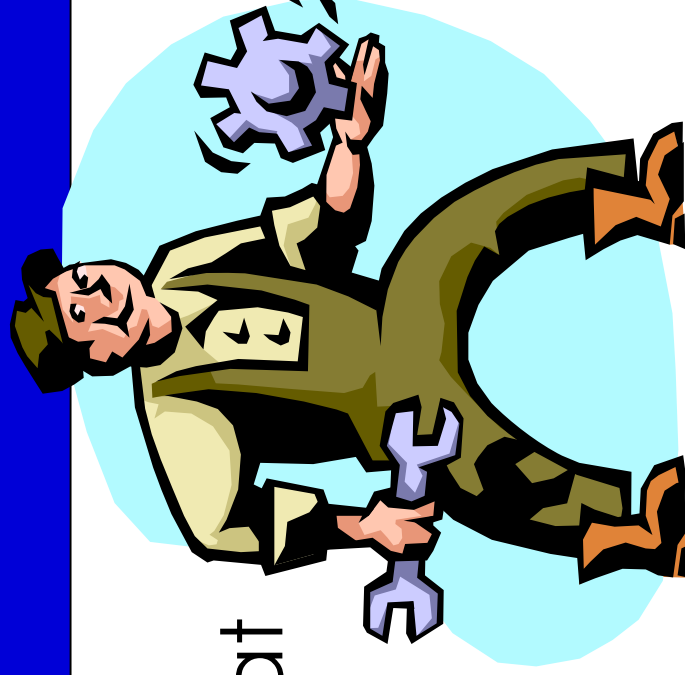
Core skills embedded throughout

communication

- a process by which information is exchanged between individuals through a **common system of symbols, signs, or behavior**



core skills underpin all employability skills



Inputs
through what
is

- read,
- seen or
- heard

Outputs
through what is

- done
(actions)
- said, or
- written

Numeracy, learning strategies are processing tools

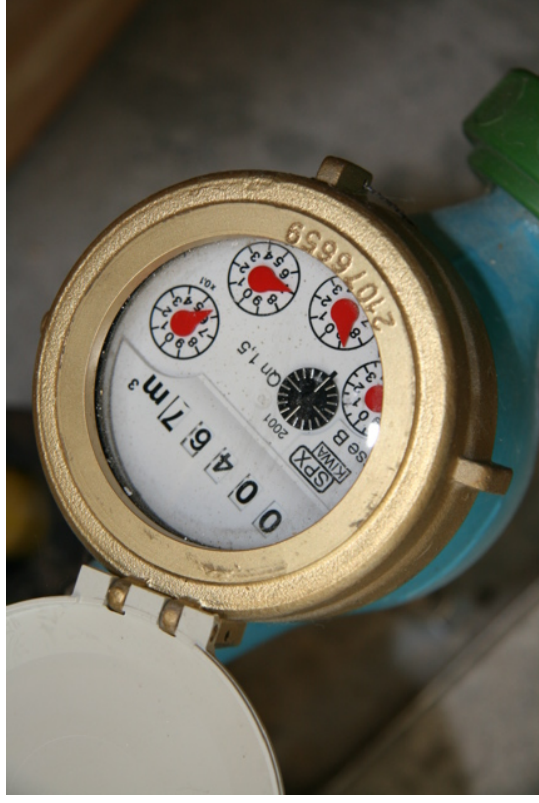
workplace numeracy is not the same as school based maths

- Numeracy is a language
- Language is always understood in context

$$\sqrt{144 \cdot 7} = 12\sqrt{7}, \quad \text{f) } \sqrt{49 \cdot 11} = 7\sqrt{11}.$$
$$2\sqrt{11}, \quad \text{b) } 3\sqrt{7}, \quad \text{c) } 6\sqrt{3}, \quad \text{d) } 13\sqrt{2}, \quad \text{e) } 1$$
$$7\sqrt{2}, \quad \text{b) } 7\sqrt{3}, \quad \text{c) } 5\sqrt{6}, \quad \text{d) } 6\sqrt{7}, \quad \text{e) } 11$$
$$2 \cdot 5\sqrt{3} + 3 \cdot 2\sqrt{3} - 3\sqrt{3} = 10\sqrt{3} + 6\sqrt{3} - 3\sqrt{3}$$
$$3 \cdot 5\sqrt{2} - 2 \cdot 7\sqrt{2} - 4\sqrt{2} = 15\sqrt{2} - 14\sqrt{2} - 4$$
$$2 \cdot 3\sqrt{7} - 5\sqrt{7} + 4 \cdot 2\sqrt{7} = 6\sqrt{7} - 5\sqrt{7} + 8\sqrt{7}$$
$$3 \cdot 2\sqrt{5} - 7\sqrt{5} - \frac{1}{2} \cdot 4\sqrt{5} + 5\sqrt{5} = 6\sqrt{5} - 7\sqrt{5}$$
$$2 \cdot 5\sqrt{3} - 4 \cdot 4\sqrt{3} - 3 \cdot 15\sqrt{3} = -51\sqrt{3}, \quad \text{b) } 4$$
$$-39\sqrt{7}, \quad \text{b) } 14\sqrt{5}, \quad \text{c) } -19\sqrt{3}, \quad \text{d) } 13\sqrt{2}.$$
$$\text{) } 5, \quad \text{b) } 126, \quad \text{c) } 12, \quad \text{d) } 25ab, \quad \text{e) } x+3, \quad \text{f) } 1$$

numeracy in the workplace

“in accordance with principles and technology of measurement”



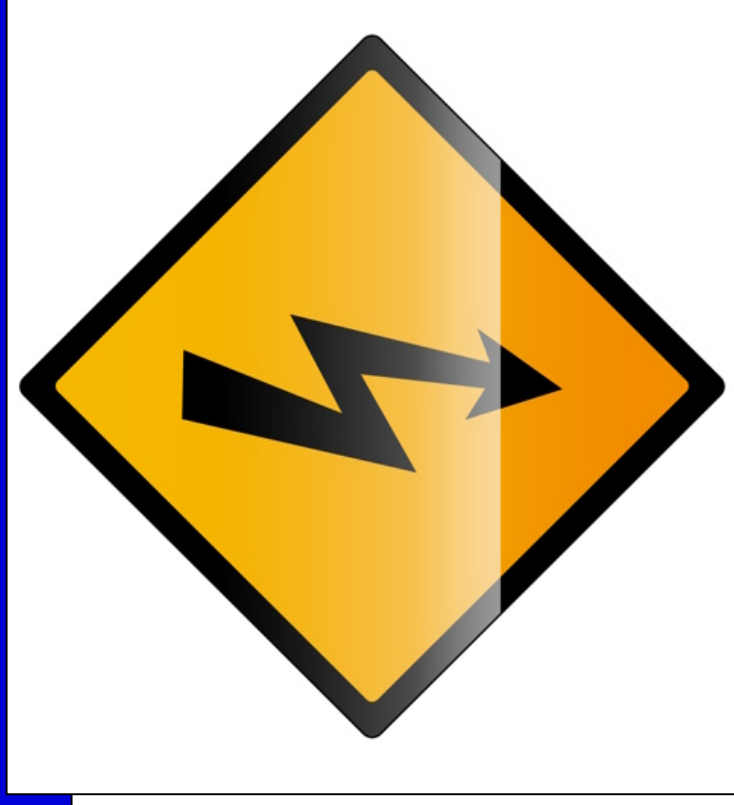
Kilowatt hours

Metres cubed



reading complexity

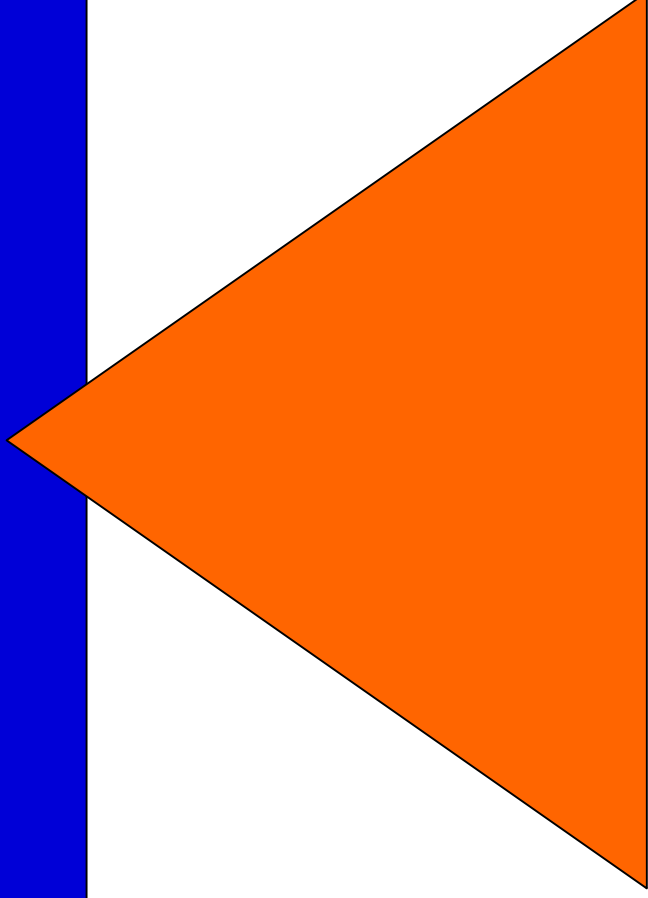
- To scan for specific information/To locate information



- To skim for overall meaning, to get the 'gist'
- To read the full text to understand or to learn
- To read the full text to critique or to evaluate

the crux of the matter

What are the LLN skills of the learner?



What LLN skills are required to participate successfully in training and assessment?

What LLN skills are required in the workplace and/or the training specification?

teaching and learning cycle



“You can’t fatten a cow by weighing it...”

use the right tools

- Integrated 'core skill' content in Training Package units
- Employability Skill summary statements
- Advice on LLN in TP volumes
- The ACSF

