Diggin' in!

Addressing language, literacy and numeracy issues in the resources and infrastructure industry

A guide for trainers

skillsDMC

national industry skills council

DRILLING • MINING • QUARRYING • CIVIL INFRASTRUCTURE

Acknowledgements

Contents

Introduction

This resource is a guide for teachers, trainers and assessors who deliver training from the RII09 Resources and Infrastructure Industry Training Package. It focuses on how to develop the language, literacy and numeracy (LLN) skills required for work in the five sectors within the resources and infrastructure industry: coal mining, metalliferous mining, drilling, quarrying and civil construction.

The resource provides practical advice and tools to assist trainers to develop core LLN skills that are integral to technical skill development in the resources and infrastructure industry. The guide has three main parts.

PART 1: What are core LLN skills?

This first section covers the concept of core LLN skills, the LLN benchmarking tool, how to go about assessing LLN, and how to find LLN in training documentation and the workplace.

PART 2: Developing core LLN skills

This section is organised around the five core skills and includes examples of activities that can be used to strengthen learners' core LLN skills. The activities incorporate examples from the resources and infrastructure industry, which could be contextualised for any sector.

PART 3: What will help?

This section lists useful support resources.

Part 1

What are core LLN skills?

Language, literacy and numeracy (LLN) refers to learning, reading, writing, oral communication and numeracy skills – core skills that people need to participate in social and work activities. Previously the term was used to describe those with low level core LLN skills, implying difficulties, but it is now recognised that people at all levels can undertake learning to improve their core LLN skills to adapt to new roles in life and work.

Using core LLN skills is not just about whether a person can read or write, but about how the skills can be used and applied in various situations, at various levels. Core LLN skills have become increasingly complex and include, for example, the ability to:

- 'read' a range of printed, electronic and visual texts
- master the new communication technologies via spoken and written language
- locate, manage, evaluate and use information or knowledge
- engage critically with media and other texts.

Adapted from: Lonsdale and McCurry 2004, *Literacy in the new millennium* at <www.ncver.edu.au/publications/1490.html>.

Many people need assistance to develop core LLN skills and to learn to use them in different contexts. This is especially the case when it comes to recognising specific vocational core LLN skills, for example how to read and input into a vehicle record management system, or understanding specific terms that relate to specific sectors like 'spudding' and 'nippling up'.

Who is responsible for developing LLN skills?

The Adult Literacy and Life Survey (ALLS) undertaken by the Australian Bureau of Statistics in 2006 identified that 46% of Australians did not have the literacy skills to meet the demands of everyday work and life. So the issues around LLN are too vast for LLN expert practitioners alone. Core LLN skill development needs to be addressed, at least in part, by vocational trainers.

This might mean assisting workers to read a particular document to get an important piece of information (such as a date on a calendar), explain an aspect of a document (such as a material safety data sheet) and work out calculations (such as ratios for mixing drilling mud). Some workers will require assistance to write notes and document processes followed (in a communications book or on a database).

Entry level learners may not be familiar with how to find key industry information or how to use mathematical concepts they know (from school maths) in practical applied ways. They may not have had experience in documenting procedural steps in writing (as the kind of writing they are used to in school is often based on writing longer opinion pieces or essays).

In other words, your learners may have difficulty with any reading, writing, oral communication or numeracy task they have not done before. They may need assistance in understanding the format of workplace documentation and might need to ask questions about the way that core skills tasks link together. They may need to be supported in transforming their school-based experience of literacy and numeracy to workplace forms of literacy and numeracy.

Concepts like skimming and scanning documents and charts for key information, understanding the importance of sequence and cause and effect in giving and following instructions, and the difference between accuracy and estimation of measurement are just some aspects that you may need to cover with your learners, allowing an opportunity to practise within a work context.

Core LLN skills in workplace training

There are three aspects of LLN in workplace training, regardless of the industry or the context. The three aspects are:

- the LNN skill levels of the worker or learner
- the LLN requirements of the training (this includes both the training benchmark or unit of competency, and the training strategies used by the trainer)
- the LLN requirements of the workplace.

This concept is important and forms the basis of this resource. But it is difficult to communicate about LLN skills, LLN requirements and levels of LLN without a benchmark to work from. The Australian Core Skills Framework (ACSF) provides that benchmark.

The Australian Core Skills Framework

The ACSF is a nationally endorsed framework that provides:

- a consistent national approach to the identification of the core LLN skills requirements in diverse work, training, personal and community contexts
- a common reference point for describing and discussing performance in the five core LLN skill areas.

The ACSF describes five levels of performance in five core skill areas:

- learning
- reading
- writing
- oral communication (speaking and listening)
- numeracy.

Each skill is described through a series of indicators.

The following core skill indicator summaries have been taken from the ACSF, 2008, pp 17, 41, 65, 98, 113.

Learning

Crucial to adapting to and participating in various situations (social, community, work, training) in a rapidly changing society is the skill of learning.

The ACSF describes the core skill of learning against two indicators:

- the active awareness of self as a learner, learning orientations and approaches to the management of learning
- the acquisition and application of practical strategies that facilitate learning.

The two indicators are described for each of the five levels of learning in the following table.

ACSF Level		Learning Indicator
1	1.01	Demonstrates some awareness of self as a learner
	1.02	Takes first steps towards developing explicit learning strategies
2	2.01	Demonstrates some awareness of learning strengths and areas of need and begins to plan and manage the learning process
	2.02	Applies a limited range of learning strategies in structured and familiar contexts
3	3.01	Plans, implements and adjusts processes as required to achieve learning outcomes and begins to seek new challenges
	3.02	Experiments with new learning strategies in familiar contexts and applies some strategies in less familiar contexts
4	4.01	Accepts new learning challenges, explicitly designing, reflecting on and redesigning approaches to learning as an integral part of the process
	4.02	Adapts a range of familiar strategies to new contexts and experiments with new approaches
5	5.01	Self directs learning, actively designing and managing learning processes appropriate to the context
	5.02	Draws on a broad and expanding repertoire of strategies to facilitate personal and professional learning

Reading

An individual's performance in reading takes into account deriving meaning from different types of texts. To actively engage with texts, readers need to develop and manage the conventions of reading.

The reading core skill describes an adult learner's performance against two indicators:

• audience, purpose and meaning-making strategies

• text structure and features, grammatical expression of ideas, word identification strategies and vocabulary.

These indicators are described at each of the five levels in the following table.

ACSF Level	Learning Indicator	
1	1.03	Identifies personally relevant information and ideas within highly familiar contexts
	1.04	Uses a limited range of decoding strategies to identify specific information in explicit and highly familiar texts
2	2.03	Identifies and interprets relevant information and ideas within familiar contexts
	2.04	Uses a number of reading strategies to identify and interpret relevant information within familiar text types
3	3.03	Evaluates and integrates facts and ideas to construct meaning from a range of text types
	3.04	Selects and applies a range of reading strategies as appropriate to purpose and text type
4	4.03	Interprets and critically analyses structurally complex texts containing some ambiguity
	4.04	Applies appropriate strategies to support understanding of a range of complex texts
5	5.03	Critically organises, evaluates and applies content from a range of structurally complex texts
	5.04	Draws on a repertoire of strategies to maintain understanding throughout complex texts

Writing

The writing core skill includes knowledge and strategies to be able to shape written language according to purpose, audience and context. It includes a range of writing skills, including traditional pen and paper, computer literacy (for example word processing and email), using a mobile phone and sending SMS messages.

The core skill of writing describes an adult learner's performance against two indicators:

- purpose and meaning-making strategies
- vocabulary, grammatical structure and the conventions of writing.

Refer to the following table for descriptions of each indicator at each of the five levels of the ACSF.

ACSF Level	Learning Indicator	
1	1.05	Conveys a simple idea, opinion, factual information or message in writing
	1.06	Displays limited vocabulary, grammatical accuracy and understanding of conventions of written text
2	2.05	Conveys intended meaning on familiar topics for a limited range of purposes and audiences
	2.06	Produces familiar text types using simple vocabulary, grammatical structures and conventions
3	3.05	Communicates relationships between ideas and information in a style appropriate to audience and purpose
	3.06	Selects vocabulary, grammatical structures and conventions appropriate to the text
4	4.05	Communicates complex relationships between ideas and information, matching style of writing to purpose and audience
	4.06	Displays knowledge of structure and layout employing broad vocabulary, grammatical structure and conventions accurate to text
5	5.05	Generates complex written texts, demonstrating control over a broad range of writing styles and purposes
	5.06	Demonstrates sophisticated writing skills by selecting appropriate conventions and stylistic devices to express precise meaning

Oral communication

Oral communication has been divided into two areas – speaking and listening. It involves both transactional and interpersonal exchanges. Transactional exchanges are primarily practical in purpose, designed to achieve a specific outcome such as providing or obtaining information, or purchasing goods and services.

The oral communication core skill describes an adult learner's performance against two indicators:

- speaking
- listening

The indicators are described for each level of the ACSF in the following table.

ACSF Level	Learning Indicator	
1	1.07	Gives or elicits basic information in a short, simple spoken context
	1.08	Listens for basic information in short, simple oral texts
2	2.07	Uses everyday language to provide information or maintain a conversation in familiar spoken contexts
	2.08	Listens for relevant information in oral texts across familiar contexts
3	3.07	Selects and uses appropriate strategies to establish and maintain spoken communication in familiar and some unfamiliar contexts
	3.08	Selects and uses appropriate strategies to establish and maintain spoken communication in familiar and some unfamiliar contexts
4	4.07	Demonstrates flexibility in spoken texts by choosing appropriate structures and strategies in a range of contexts
	4.08	Applies appropriate strategies to extract main ideas from oral texts across a range of contexts
5	5.07	Establishes and maintains complex and effective spoken communication in a broad range of contexts
	5.08	Displays depth of understanding of complex oral texts which include multiple and unstated meanings

Numeracy

Numeracy in the ACSF is about using and applying mathematical skills and knowledge in workplace, personal, training and community settings.

The numeracy core skill describes an adult learner's performance against three indicators:

- identification of the mathematical information and meaning in activities and texts
- the problem solving and mathematical processes
- the way informal and formal language, symbolic and diagrammatic representations and conventions of mathematics are used to communicate.

Each of the three indicators is described in the following table.

ACSF Level	Learning Indicator	
1	1.09	Locates and recognises key mathematical information in simple activities or texts
	1.10	Uses simple mathematical and personal problem solving strategies in highly familiar contexts
	1.11	Uses everyday informal oral language or highly familiar written representation to communicate simple mathematical information
2	2.09	Identifies and comprehends relevant mathematical information in familiar activities or texts
	2.10	Selects and uses appropriate familiar mathematical problem solving strategies to solve problems in familiar contexts
	2.11	Uses informal and some formal oral and written mathematical language and representation to communicate mathematically
3	3.09	Selects and interprets mathematical information that may be partly embedded in a range of familiar and some less familiar tasks and texts
	3.10	Selects from and uses a variety of developing mathematical and problem solving strategies in a range of familiar and some less familiar contexts
	3.11	Uses a combination of both informal and formal oral and written mathematical language and representation to communicate mathematically
4	4.09	Extracts and evaluates the mathematical information embedded in a range of tasks and texts
	4.10	Selects from and applies an expanding range of mathematical and problem solving strategies in a range of contexts
	4.11	Uses a range of informal and formal oral and written mathematical language and representation to communicate mathematically
5	5.09	Analyses and synthesises highly embedded mathematical information in a broad range of tasks and texts
	5.10	Selects from and flexibly applies a wide range of highly developed mathematical and problem solving strategies and techniques in a broad range of contexts
	5.11	Uses a wide range of mainly formal, and some informal, oral and written mathematical language and representation to communicate mathematically

Performance Features

The ACSF does not just include five skills at five levels of performance. At each level, within each skill, the ACSF describes Performance Features that give examples of what could be expected from candidates for each indicator.

For example, for indicator 1.05 (which describes writing to convey a simple idea, opinion, factual information or message in writing, with support), examples of Performance Features include:

- writes two short, simple texts – this could be completing a form with personal details, or writing one or two simple sentences
- shows some recognition that texts have different purposes
- demonstrates a limited understanding of sequence
- begins to check work by re-reading.

Aspects of Communication

The ACSF also provides examples of the different types of activities that are carried out at each skill, at each level. These are listed as Aspects of Communication, and different aspects, or contexts cover:

- personal communication (expressing identity)
- cooperative communication (interacting in groups)
- procedural communication (performing tasks)
- technical communication (using tools and technology)
- systems communication (interacting in groups)
- public communication (interacting with the wider community).

The examples under the Aspects of Communication are a good way for you to pin down what is carried out at different levels in different contexts. For example, at level 2 reading, the examples included under the procedural Aspect of Communication are:

- reads a brief message from a fellow worker
- matches and cross-references words, symbols, codes and signs included in work instructions, labels, tags related to own job
- reads and compares information included in two column tables, for example uses timetable to work out time of next bus.

Accessing the ACSF

Detailed information about the ACSF is available at <www.deewr.gov.au/skills/programs/litandnum/acsf/about/Pages/background.aspx>. At this site you can download a summary of the ACSF or the complete ACSF. Printed copies of both documents are available at no cost from the Department of Education, Employment and Workplace Relations (DEEWR).

The terms 'LLN' and 'Core skills'

Note that the ACSF document refers to 'core skills' rather than 'language, literacy and numeracy' or 'LLN' skills because of the addition of learning as a skill. Since the ACSF was developed in 2008, practitioners often use the terms 'core skills' and 'LLN' interchangeably.

This resource uses the term 'core LLN skills' to cover the five skills covered by the ACSF.

Why use the ACSF?

The ACSF provides a benchmark to assess:

• an individual's core LLN skills

• the core LLN skills required of the training

• the core LLN skills required of the workplace.

Assessment of skills against the ACSF allows you to identify an individual's skill levels, and to pinpoint particular aspects of need. This assessment can then be compared to the levels required of a training program (or unit or qualification), or workplace tasks. Identified gaps can be addressed in various ways, for example bridging courses, specialist practitioner support, or activities provided by a vocational trainer with knowledge of developing core LLN skills.

CASE STUDY

Case study: LLN within an organisation

Rosie was scheduled to work at a large organisation called Minx on Tuesday afternoons to conduct LLN assessments. Management at Minx decided to carry out LLN assessments for new trainees after they scheduled a number of training sessions that weren't very successful. On investigation, it was discovered that many of the trainees had low LLN levels so they found the training very difficult.

Minx now employs Rosie to offer LLN bridging sessions, covering the specific LLN requirements of the work that the trainees carry out – completing company forms, specific language used in the business, how to communicate effectively with customers, essential record-keeping – those types of skills.

Using the ACSF as a guide, Rosie carried out a thorough analysis of the work tasks that trainees need to carry out at Minx, including vocational training. She identified that the work requires a core LLN skills level similar to the following spiky profile, which shows reading, oral communication and numeracy at level 3, and learning and writing at level 2.
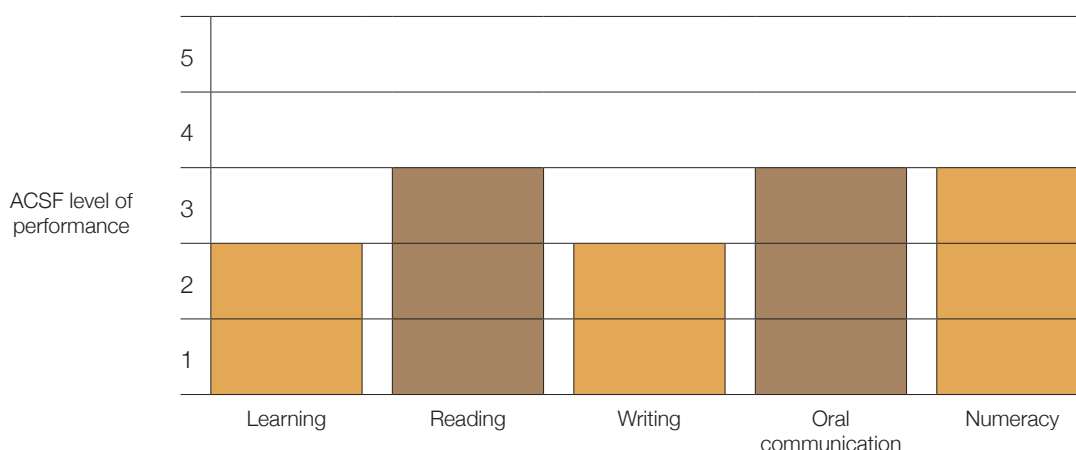
Rosie assesses the trainees' core LLN skill levels, and if she finds that trainees have skills lower than those in the profile, she recommends that they attend the bridging classes.

Minx has found that providing trainees with this support is 'well worth it'.

CASE STUDY

Aspects of writing to meet training requirements

Justin is a vocational trainer who often conducts contract training for a large TAFE institute. He delivered a range of units of competency from the Certificate III in Surface Extraction, from the RII09 Resources and Infrastructure Industry Training Package.

In the introductory session with a recent group, Justin noticed that four learners seemed to be struggling with the written work, though they seemed to be coping well in the other core skill areas. From his familiarity with the training package, Justin knew that to cope with the training, the learners would need to be able to demonstrate writing at ACSF level 3. To find out more about the learners' writing, Justin requested that they each undergo an ACSF assessment in the skill of writing. Justin also knew the types of writing that the learners needed to do in their training so he requested that the assessment be focussed on the systems, procedural and technical aspects of communication.

The diagram below shows the results of the assessment for one of the learners. It's clear that there is a gap in the level of writing required in both the systems and procedural aspects. Justin recommended that this learner have some support with his training, especially with tasks such as routine report writing, completing workplace records and writing work instructions.

NOTE:
The shaded area is ACSF level required of the training.
••• marks the learner's current level.
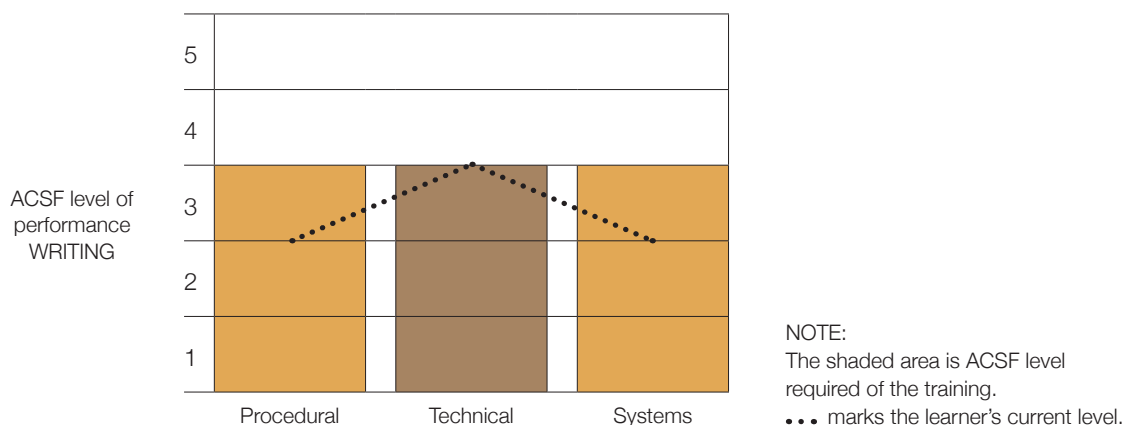
Funding

The ACSF is also used as a basis for reporting for various funding programs. For example, the DEEWR Language, Literacy and Numeracy Program (LLNP) funds training for eligible clients who are referred through agencies such as Centrelink and Job Network members. Organisations that receive LLNP funding are required to report against the ACSF.

DEEWR also funds the Workplace English Language and Literacy (WELL) program, which aims to assist organisations to train workers in LLN skills. Again, organisations are required to assess participants using the ACSF to determine training needs. The funding is available on a competitive grants basis to organisations for English language and literacy training linked to job-related workplace training and is designed to help workers meet their current and future employment and training needs. For further information, go to <www.deewr.gov.au/well>.

Individual assessment against the ACSF

Some assessment tools have been developed to assess an individual's performance against the ACSF. Go to <www.precisionconsultancy.com.au/acs_framework> to see some examples.

Assessing performance levels

When assessing performance levels against the ACSF, you should consider the following factors.

Degree and nature of support available

When people learn something new they normally require some level of support, such as demonstration, teacher advice, peer/colleague support, technical manual or help desk. At the lower levels of the ACSF, a high level of support is appropriate. The type and degree of support changes as individuals develop skills and confidence in becoming more independent learners.

Familiarity with context

The prior knowledge or experience a person brings to a situation, including familiarity with text, task and content, can make a significant difference to performance. This is reflected across the five levels of performance as an individual applies knowledge and skills with increasing confidence and competence within familiar contexts and learns how to transfer and adapt them to a broader range of less familiar or unfamiliar contexts.

The ACSF recognises that not all adult learners are familiar with the instructional or socio-cultural context of texts and tasks. Some may have little experience of formal learning or may have participated in contexts with varying orientations to learning. In these situations, adult learners can derive valuable contextual support for core skills development from their immediate learning, working and social environment.

Complexity of text and task

In the ACSF, 'text' includes written, diagrammatic, visual and oral texts and real life objects and materials. There are a number of variables that determine the level of difficulty of information processing tasks, including:

- the length and complexity of the text increases
- the type of process required to respond to a question about a text increases in complexity, for example straight location compared with integration
- the kind of information required to respond to a question about a text increases in complexity, for example concrete compared to abstract
- the lack of correspondence between the information in the text and in a question about that text increases
- the degree of inference the reader is required to make increases.

	Support	Context	Text	Task complexity
1	Full support Works alongside expert/mentor Prompting and modelling provided	Highly familiar contexts Concrete and immediate Very restricted range of contexts	Short and simple Highly explicit purpose Limited, highly familiar vocabulary	Concrete tasks of one or two processes, eg. locating, recognising
2	High level support May work with expert/mentor Modelling available and accessible if requested	Familiar and predictable contexts Limited range of contexts	Simple, familiar texts with clear purpose Familiar vocabulary	Explicit tasks involving a limited number of familiar processes, eg. identifying, interpreting
3	Moderate support Advice and modelling available	Range of familiar contexts Some less familiar/ routine contexts Some specialisation in routine contexts	Routine tasks May include some unfamiliar elements and embedded information Includes some specialised vocabulary	Tasks include a number of steps within the one task, eg. sequencing, basic inferencing, extrapolation, integration
4	Minimal support, as requested Establishes own support resources	Range of contexts including some that are familiar and/or unpredictable Some specialisation in non-routine contexts	Complex texts Embedded information Includes specialised vocabulary Includes abstraction and symbolism	Complex task analysis involving application of a number of processes, eg. extracting, comparing and interpreting information
5	Little or no support Initiates support from own established resources	Broad range of contexts Adaptability within and across contexts Specialisation in one or more contexts	Highly complex texts Highly embedded information Includes highly specialised language	Sophisticated task analysis including interpretation, analysis, reflection, synthesis, evaluation and recommendation

(Left vertical label: FIVE LEVELS OF PERFORMANCE)

Determining core LLN skills requirements of training

Before you can design an effective training plan, you need to unpack the core skills from the unit of competency you will be using.

The following table lists 'trigger words' for each core LLN skill that will help identify where the learning, reading, writing, oral communication or numeracy skills exist in a unit. The list is not exhaustive and you might like to add your own words to it. Sometimes the words in this list might represent more than one core skill. For example, 'follow procedures' might apply to the two core skills of reading and oral communication. You will then need to think about the application of the skill in the workplace to decide which way learners will be expected to 'follow instructions' – either by reading or listening, or a combination of both.

Learning	Reading	Writing	Oral communication	Numeracy
organise and monitor progress	apply legislative, organisation and site requirements and procedures	articulate	access relevant information	interpret site plans
apply a range of mediums to learn	according to policies and procedures	chart	recognise and respond to alarms	according to signage
apply planning and organising skills	according to signage, codes and labels	complete reports	articulate	adjust
clarify meaning or advice	analyse	document	allocate	allowance
follow step by step instructions	appropriate documentation	format	clarify	analyse
sequence learning	check	identify	conduct a meeting	calculate
take follow up action	comply with directions	inventory	contribute	collect data
identify and access information sources	follow written procedures	label	deliver	computations
select from processes	identify	maintain records	discuss	convert
transfer skills and knowledge	interpret and monitor	monitor	explain	determine value
organise and make connections	legislation	obtain permits	feedback	directions
organise ideas	obtain information from written instructions	notes	follow verbal instructions or procedures	estimate
select from a range of strategies	understand	outline	identify	formula
build on prior knowledge and experience	written reporting	record data	inform	interpret charts and graphs
critically evaluate		report	liaise	levels
compare and contrast		tag out	make suggestions	measuring techniques
		written reporting	monitor	perform
			negotiate	proportion
			refer to	size
			relate	time
			supervise	tolerance
			team discussions	
			use questions	
			verbal reporting	

Trigger words in units of competency

In this section, the trigger words list has been used to help analyse the core LLN skills in two core units of competency. The trigger words are highlighted in bold text throughout the units to show where the core LLN skills are located.

Note that to gain a full understanding of the 'built in' core LLN skills, you should analyse the entire unit. The range statement and evidence guide provide specific examples of the types of texts that may need to be read, the types of documents that may need to be written and the types of communication practices that may be expected.

In the following examples, notice how many trigger words are highlighted.

RIIOHS201A	Work safely and follow OHS policies and procedures
Unit descriptor	This unit covers working safely and follow OHS policies and procedures in resources and infrastructure industries. It includes accessing and apply site safety procedures; applying personal safety measures and operational safety measures; maintaining personal wellbeing for job; and identifying and reporting incidents.
ELEMENT	**PERFORMANCE CRITERIA**
1. Access and apply site safety procedures	1.1 **Access, interpret** and apply **compliance documentation** relevant to working safely and **follow OHS policies and procedures**
	1.2 Carry out isolation of energy sources and immobilisation of potential energy sources, including **tagging according to required procedure**
	1.3 Locate destinations within the site **by interpreting and applying site plans, transport rules and signage**
	1.4 Identify and act on or **report breaches** in site safety in **accordance with required procedures**
2. Apply personal safety measures	2.1 Use personal protective equipment **in accordance with required procedures**
	2.2 Establish and maintain a clean and tidy safe working area **in accordance with required procedures**
	2.3 **Obtain** permits and **clearances** in **accordance with required procedures**, before specialised work is carried out
	2.4 Apply safe manual handling **procedures** in **accordance with guidance** and/or **procedures**
	2.5 **Identify and apply site procedures** for conduct of high-risk activities
3. Apply operational safety measures	3.1 **Recognise and respond to alarms** in accordance with required **procedures**
	3.2 Identify and clarify own responsibility in regard to **emergency situation procedures** and respond to and **report** emergency situations **in accordance with required procedures**
	3.3 Apply basic fire fighting techniques in accordance with **requirements**
	3.4 Identify emergency escape route(s) and **procedures** in accordance with **requirements**
4. Maintain personal wellbeing for job	4.1 Identify risks to personal wellbeing and recognise preventative strategies to minimise impact on site
	4.2 Identify, act on and **report situations** which may endanger the individual or others
	4.3 **Access and explain site requirements** for fitness for duty
	4.4 **Adhere to site policies** in relation to smoking, alcohol and drug use
5. Identify and report incidents	5.1 **Understand site incident and injury statistics** in accordance with required **procedures**
	5.1 **Report and record incidents and injuries** in accordance with required **procedures**
	5.1 **Contribute to** and **participate in incident investigations** in accordance with the responsibilities and protection under **the relevant legislation**

Think about what this means in your training context. Compliance documentation can include policies, procedures and legislation. Sometimes these types of documents are difficult to engage with, particularly within lower AQF level programs. Within lower AQF level programs, it's important that learners at lower levels understand the intent of the documentation.

Reading plans is a skill that may need to be scaffolded for learners – assist with recognising shapes and symbols, aerial views, across and down measurements, abbreviations, directions, orientations, etc.

Reporting can be verbal or written, and could vary from completing a checklist to writing reports with an introduction, body and conclusion. In your training situation, what types of reports are required of learners or workers at this introductory level?

RIIOHS201A	Work safely and follow OHS policies and procedures

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Specific skills are required to achieve the performance criteria in this unit, particularly for the application in the various circumstances in which this unit may be applied. This includes the ability to carry out the following as required to work safely and follow OHS policies and procedures:

- **apply legislative, organisation and site requirements and procedures** *for working safely*
- **source, interpret** *and* **apply safety information**
- *use and care of personal protective equipment*
- *apply safe lifting and handling techniques*
- *implement workplace* **reporting procedures**
- **communicate** *clearly and directly,* **listening** *carefully to instructions and information,* **responding to** *and* **clarifying** *directions*
- *apply* **teamwork** *to a range of situations, particularly in a safety context*
- *solve problems, particularly* **in teams** *and in dealing practically with safety issues such as* **recognising and responding to alarms**
- *show initiative in adapting to changing work conditions or contexts particularly when working across a variety of work areas and in choosing appropriate personal protective equipment for each context*
- **manage time***, particularly in organising priorities and planning work*
- *take responsibility for* **self organisation** *of work priorities to follow site safe work* **procedures**
- *apply a range of mediums to* **learn**
- **apply and use** *appropriate technology in a safety context*

> Teamwork requires particular communication skills – listening, awareness of others' needs, responding to others' needs, contributing a point of view, etc.

Required knowledge

Specific knowledge is required to achieve the Performance Criteria of this unit, particularly its application in a variety of circumstances in which the unit may be used. This includes knowledge of the following, as required to work safely and follow OHS policies and procedures:

- *equipment safety* **requirements**
- *personal protective equipment*
- *hazardous substances* **procedures** *and handling techniques*
- *materials safety data sheets (MSDS)* **information** *and its application*
- *isolation* **procedures**
- *lifting techniques, including for both manual and automated lifting*
- *OHS* **procedures**
- *primary and secondary ventilation*
- *site safety* **requirements and procedures**
- **participative procedures** *for workplace management of others (e.g. consultation, safety representatives, committees, dispute resolution)*
- *potential biological effects (e.g. circadian rhythms, sleep, alertness, fatigue, stress, effects of heat stress and hypothermia)*
- *drug and alcohol* **policy**
- *use of emergency equipment*
- *basic fire fighting techniques*

RIIRIS401A	Apply site risk management system
Unit descriptor	This unit covers applying the site risk management system in resources and infrastructure industries. It includes: providing information to the work group; applying and monitoring participative arrangements, the procedures for providing training, for identifying hazards and assessing risks, for controlling risks; and the procedures for maintaining records.
ELEMENT	**PERFORMANCE CRITERIA**
1. Provide information to the work group	1.1 **Access**, **interpret** and **apply** compliance documentation relevant to applying the site risk management system 1.2 **Accurately explain** relevant **compliance documentation** to the work group 1.3 **Provide information** on the organisation's risk management policies, procedures and programs to the work group in an accessible manner 1.4 **Regularly provide** and **clearly explain information** about identified hazards and the outcomes of risk assessment and control to the work group
2. Apply and monitor participative arrangements	2.1 **Explain** the importance of **effective consultative mechanisms** in managing risk to the work group 2.2 **Conduct and monitor consultative procedures** to facilitate participation of work groups in managing work area hazards 2.3 Promptly deal with issues raised through consultation in **accordance with** organisational consultation procedures 2.4 **Record** and **promptly communicate** the outcomes of consultation over risk management issues to the work group
3. Apply and monitor the procedures for providing training	3.1 **Systematically identify** risk management training needs **in line with organisational requirements** 3.2 **Make arrangements**, in **consultation** with relevant individuals, to meet risk management training needs of team members 3.3 Provide workplace learning opportunities and **coaching** and **mentoring assistance** to facilitate team and individual achievement of identified training needs 3.4 **Identify and report costs** associated with provision of training for work team for inclusion in financial planning
4. Apply and monitor procedures for identifying hazards and assessing risks	4.1 Identify and **report** hazards and risks in the work area in accordance with risk management and related policies and **procedures** 4.2 Action team member's **hazard reports** promptly in accordance with organisational **procedures**
5. Apply and monitor the procedures for controlling risks	5.1 **Apply procedures** for controlling risk using the hierarchy of controls and organisational requirements 5.2 **Identify and report** inadequacies in existing risk control measures **in accordance with hierarchy of controls** 5.3 Monitor **outcomes** of **reported** inadequacies where appropriate to ensure a prompt organisational response
6. Apply and monitor the procedures for maintaining records	6.1 Ensure **accurate completion** and maintenance of risk management records of incidents in the work area in accordance with **organisational requirements** 6.2 **Use aggregate information and data** from **work area records** to identify hazards and **monitor risk control procedures in work area**

Many tasks need to occur according to organisational policies and procedures and relevant legislation. Particularly at higher AQF levels, it's important that learners know how to access, read and interpret these documents, and their particular conventions.

Systematic identification implies that a system is in place – use of questionnaires, checklists, charts, recording tools, planning documents, etc.

Many tasks require a particular type of communication skill, for example coaching and mentoring requires giving feedback (sometimes negative feedback) and also providing encouragement and reassurance.

RIIRIS401A	**Apply site risk management system**

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Specific skills are required to achieve the performance criteria in this unit, particularly for the application in the various circumstances in which this unit may be applied. This includes the ability to carry out the following as required to apply site risk management systems:

- apply **analysis skills** *to identify hazards and assess risks in the work area*
- apply **data analysis** *skills including:*
  - *incident* **monitoring**
  - *environmental* **monitoring**
  - **evaluation** *of effectiveness of risk control measures*

> Monitoring requires recording levels and rates, compiling data and looking for trends or discrepancies – a range of core LLN skills.

- apply **assessment skills** *to assess resources required to apply risk control measures*
- **apply literacy skills** *for* **comprehending** *documentation and* **interpreting** *risk management* **requirements**
- apply **coaching and mentoring skills** *to provide* **support** *to colleagues*
- demonstrate the ability to **relate to people** *from a range of social, cultural and ethnic backgrounds and physical and mental abilities*

Required knowledge

Specific knowledge is required to achieve the Performance Criteria of this unit, particularly its application in a variety of circumstances in which the unit may be used. This includes knowledge of the following, as required to apply site risk management systems:

- *relevant* **legislation** *from all levels of government that affect business operations*
- *legal responsibilities of employers, supervisors and employees in the workplace*
- **site policies and procedures** *relating to hazard management, fire emergency, evacuation, incident and accident investigation and* **reporting**
- *relevance of* **consultation** *as a key mechanism for improving workplace risk management*
- **principles** *and practices of risk management*
- *characteristics and composition of the workgroup*

Identifying where and how core LLN skills are incorporated in a unit of competency can assist you with developing learning strategies and activities to address the content of the unit. Sometimes there will be a requirement to assist learners in developing the skill to access and interpret information. For example, a workplace may have all its policies and procedures on an internal intranet. It is important that learners know how to access the system, how the system is indexed so that they can get to the information they require, and also to understand how to read documents from the system, which will usually follow particular conventions (for example similar headings), use particular workplace terms, etc.

Core LLN skills in the workplace

When deciding how to deliver training, it is important to know about key workplace communication and documentation, and how these are applied in a workplace.

To help you work this out, ask:

- what do workers have to listen to and understand?

- what do they have to say?

- what do they have to read?

- what do they have to write?

- do they need to understand diagrams, pictures or symbols?

- what maths calculations do they need to do?

- what technology do they need to use?

Once the answers to the questions above are identified, it is also important to consider:

- what are points of 'key risk' to a workplace around the application of core LLN skills?

- where can things go wrong if something is not:

- read and interpreted correctly?

- written down correctly?

- said clearly to the right person?

- interpreted properly when following an instruction?

- measured accurately?

These requirements will vary between industry sectors, between organisations and between contexts. For example it might be perfectly acceptable to estimate the number of loads dumped on a particular shift and be out a bit in the estimation because there may not be any consequences. But it is certainly not acceptable to be incorrect in calculating the number of loads dumped after a day's work when there is a payment or a cost linked to each load.

Think through the workplace context that you and your learners are operating in and the ways you can support learners to develop the skills necessary to perform effectively on the job.

Build or bypass?

There is often debate on the need for learners to be able to read, write and speak in English to operate in a workplace or to undertake a training program. The units of competency from the Training Package and the assessment guidelines within the Training Package will give you an idea of whether performance in English is a critical form of assessment evidence or if there is room for reasonable adjustment, for example practical demonstration of competence followed by verbal questioning in the learner's first language.

If the delivery and assessment of a unit or a complete qualification is delivered or carried out entirely in a language other than English, there is an opportunity for a statement of attainment or a qualification to note that it has been completed in a language other than English.

Sometimes you might decide to bypass the development of English language skills where competence can be demonstrated through an effective mapping or translation tool.

Here is what one trainer said about reasonable adjustment in record keeping.

> *"When it comes to the compulsory record keeping of commercial chemical use, you need to find a way of complying with regulations. Our workers, who came from a non-English speaking background, found it was not possible to accurately fill in the forms in English.*
>
> *"My project developed a record keeping form where only numbers needed to be filled in. Help was required to set up an initial list of chemicals, application machinery and applicators (people). After that, it was only necessary to fill in a number under each bilingual heading."*

In some cases such approaches are appropriate, but by choosing to bypass English language skill development you are accepting that your learners will not transfer into English speaking environments. This will limit their future employment and further study options.

In consultation with your employers, or your client, you need to make a professional judgement about the learning requirements of your group, the core LLN skill requirements of the units you are delivering and the resources you have available when you are planning how much time and emphasis to place on building core LLN skills.

This resource assumes that where possible you will assist your learners to build on their repertoire of core LLN skills. The following section takes a more in-depth look at how those skills can be developed in the resources and infrastructure industry.

Part 2
Developing core LLN skills

This part of the resource is divided into the core LLN skill areas: learning, reading, writing, oral communication and numeracy. Each skill area includes:

- case studies of how skills have been developed in industry settings
- sample activities that may be contextualised for the setting in which you work
- tips to help with skill development.

Some of the activities could form a part of a training program at work or they could be activities that learners take home and practise in their own time.

As you read through this section, remember that although the skills are discrete, they are interconnected, for example the skill of writing usually involves reading as well, and the skill of numeracy often involves reading. You will notice that many of the case studies and activities include reference to more than one skill.

Learning

The skill of learning is a recent addition to the range of core LLN skills. It has been added because it underpins the acquisition of all other skills and reflects a growing understanding that, to learn effectively, learners need to have an awareness of themselves as learners and trainers need an awareness of how different individuals learn.

The ACSF describes learning as:

- the active awareness of self as a learner, learning orientations and approaches to the management of learning
- the acquisition and learning of practical strategies that facilitate learning.

The factors that influence a person's learning include:

- how one identifies as a learner, self-esteem
- the degree of motivation and engagement
- the ability to manage one's own learning
- the ability to reflect on performance
- approaches to learning, such as persistence and risk taking
- social interaction, including mentoring and coaching, and participation with others.

Individuals have preferred learning styles – some people would prefer to learn through a practical hands-on approach rather than reading about how to do something in a book. The more learners understand about how they learn, the more effective they can be as learners. This process sometimes involves overcoming past negative learning experiences.

In the workplace, understanding one's identity as a worker, and as part of a company or organisation that fits into an industry, can help to motivate learning.

Getting comfortable about learning

Learners must feel comfortable about learning to be able to learn effectively. Unfortunately, many people have had negative learning experiences at school, which result in them having low self-esteem in any learning environment they encounter as an adult. This low self-esteem can act as a barrier to learning. The following case study shows one way to break down the barriers.

CASE STUDY

Being open about skill levels

QMAG is one of the world's largest producers of magnesia. It produces a range of magnesite products. The magnesia is quarried at Kunwarara site, 70 km north of Rockhampton in Central Queensland.

John is the training coordinator at both the Parkhurst and Kunwarara sites. He is very aware that many people who join the company have low level literacy skills, low self-esteem in a learning environment and are often embarrassed about their skill level. John encourages the industry trainers to put some effort into getting the learners to feel comfortable.

"When I start with a new group one of the first things I say is 'Don't worry if you have trouble reading and writing – lots of people do – just see me after the session and we'll work out a way to deal with whatever issue you might have. We can work anything out.'

"Some of our best workers are people with low level reading and writing skills – we need to reinforce that this isn't a huge problem. We need people to feel comfortable about where they're at so that we can get on with it. If we make low level skills a negative, then people won't move on."

John's approach has resulted in an open and supportive attitude among the workers at the site.

Michael is a diesel mechanic.

"Yeah... I have trouble with reading and writing – always have. But I just let everyone around me know, and I ask for help when I need it. I don't need to be embarrassed – I just ask. I've picked up bits and pieces along the way so I can usually fill out the basic forms and things that I need to do, but sometimes I need help so I ask for it.

"There are things I need to check in manuals. The manuals I use have good pictures to mark each of the sections – I can find the section that I need to go to, I just have trouble with the detail, so I ask and other people help me.

"Sometimes I can do things that other people can't – we all work together and help each other out."

Getting to know the industry

Understanding the bigger picture of an industry and how a job role fits into that big picture can be motivating to learners. The following case study is one example of how a trainer developed the skill of learning.

CASE STUDY

Knowing about coal mining

Justin worked with a new group of trainees at a coal mining company in NSW. One of the first topics he covered in the training was encouraging the participants to get to know the industry they have started working in, and how the job that they carry out fits into the bigger picture of mining in Australia.

"I get a discussion going around questions like:

- *What's my job?*
- *What's the product produced through my work?*
- *How are standards of the product maintained? (Who's the regulator?)*
- *What's the industry?*
- *Where does my company 'fit' within the industry?*
- *Where does the money come from to buy the product? (Who's the client?)*
- *What's the product used for?*
- *Who are the competitors?*

"I write some key words and phrases on the whiteboard through the discussion, then I divide the groups of trainees into small groups – groups of mixed level reading and writing ability so that learners with higher skill levels can assist those with lower level skills. I get them to think about how the information on the whiteboard would connect to the worksheet.

"Some trainees need to copy the words and phrases from the board, while others work more independently. The worksheet is a way to capture the information from the session. The completed document is one trainees can keep in their personal file for reference."

SAMPLE ACTIVITY: Investigating career opportunities

Think about your job and the possible career pathways that may follow. Talk to people that you work with about where they started in the industry, and how their career has developed.

Talk to two of your co-workers about their career pathways. Find out about the training they have completed and the different roles that they have worked in, and where they would like to go in the future. Complete the information in the following table.

Name	
Job role	
Training / Qualifications	
Career background	
Future pathway	

Name	
Job role	
Training / Qualifications	
Career background	
Future pathway	

This sample activity addresses ACSF indicators 2.01 and 2.02.

Learning
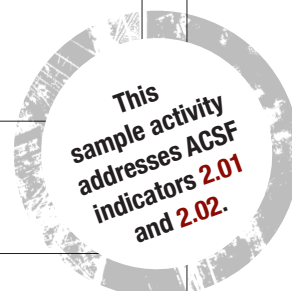
Think about your own work. What do you enjoy doing? What are your strengths?

_____

_____

_____

_____

_____

What pathway would you like to take?

_____

_____

_____

_____

_____

What steps do you need to take to get to where you would like to be?

In one year I would like to:

_____

_____

_____

_____

_____

_____

In two years I would like to:

_____

_____

_____

_____

_____

_____

Understanding the company

Learning

No matter where you work, it is important that everyone understands who they work with and the roles that various people have. What is meant by 'appropriate lines of communication'? Who are 'key staff'? Where do I go if I need assistance? Working all this out helps people feel more comfortable in their work environment and assists with carrying out work appropriately.

CASE STUDY

Who's who?

Newmont Asia Pacific has an underground gold mining operation in the remote Tanami Desert in the Northern Territory. Newmont Tanami staff have created a unique 10-week training program to provide Indigenous people with skills to work at the mine.

Paul and Audrey, who have responsibility for community relations, work with groups of Indigenous people to support them through the training program.

"It's important that new people know who's who around the site.

"I do a session with new trainees. We talk about who people are and I introduce them to some of the terms that are used here – words like superintendent, foreman, crew ... they're pretty strange words if you're not used to them. It helps people settle in and come to grips with a new workplace."
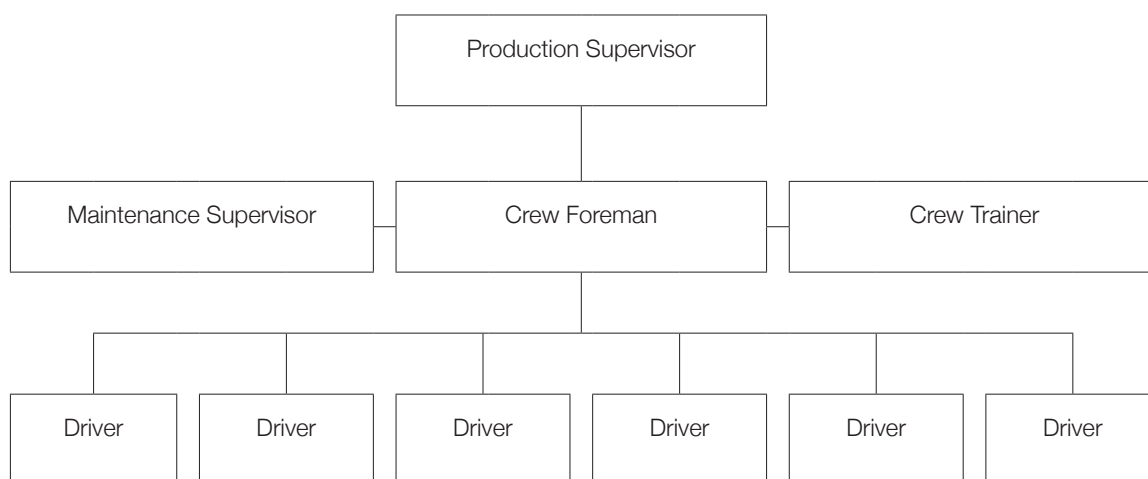
CASE STUDY

An organisational chart

Justin does an activity with new workers that involves putting together an organisational chart.

"I do this activity that's about making a chart of the people who work in the immediate area that the group works in, or where they'll work. We talk about the relationships that people have, and arranging all that on the board in a diagram helps a lot of people work it out. We talk about lines of communication, about where work instructions come from. I provide a lot of support – it's complex if you're not used to it. But it helps learners to integrate if they can see themselves as part of an organised structure, with their own roles and responsibilities.

"We add photos and business cards and it just all helps with understanding the work environment. Then I use the chart to guide conversations around roles and responsibilities, like 'What would happen if Micky was away for the day?' or 'Who would Sabrina ask if she was unclear about a job task?'."

```
                    Production Supervisor

Maintenance Supervisor    Crew Foreman    Crew Trainer

Driver  Driver  Driver  Driver  Driver  Driver
```

"At the end of the activity, we make sure everyone has their own copy of the organisational chart. They can keep it in their personal folders for reference to whip out whenever they need to check who's who."

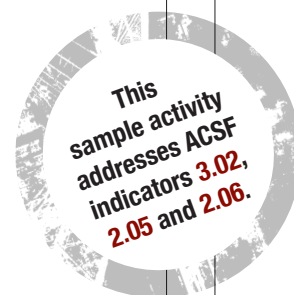This sample activity addresses ACSF indicators 3.02, 3.03 and 3.04.

SAMPLE ACTIVITY: Understanding the company

Fill out a card below for each member of staff in your organisation or your team. Then cut out the cards and arrange them into a chart that shows the structure of the company.

Add photos wherever you can.

Ask your trainer for help if you need it.

Job: _____

Name: _____

Job: _____

Name: _____

Job: _____

Name: _____

Job: _____

Name: _____

Job: _____

Name: _____

Job: _____

Name: _____

Job: _____

Name: _____

Job: _____

Name: _____

Job: _____

Name: _____

This sample activity addresses ACSF indicators 3.02, 2.05 and 2.06.

Support from a buddy

Reluctant learners can also be assisted by a buddy or a mentor – someone who the learner feels comfortable with, who can be asked questions, and who can be relied on for assistance.

CASE STUDY

Buddy systems

Like many mine sites in Australia, Newmont Tanami is set up on Aboriginal land. The lease agreement specifies that local Aboriginal people should be employed at the site.

Steve talked about his role at Newmont Tanami.

"This mine is on my country, my family's country. So I'm really at home when I'm at work!

"Yeah – we have a couple of programs to encourage Aboriginal people to work here. I work as a mentor to many people... I'm around to help them out and make them feel comfortable. Sometimes it's a big change for Aboriginal people to work on a site like this, with 12-hour shifts, sleeping in the camp, eating at the mess. I help them along and they know that they can come to me if they have questions or any hassles, and that includes reading various documents and forms. We can usually work it out together."

CASE STUDY

Mateship

Jellinbah Resources Pty Ltd operates a coal mine in the in the Bowen Basin of Central Queensland. The training section at Jellinbah has well-established processes for inducting new trainees and delivering innovative training programs. Sue has been a trainer there for many years, and she talked about the importance of mateship.

"Usually what happens is that people form friendships – we don't usually have to set them up. People surround themselves with others that they trust, and it's those people that help out with any difficulties that there might be with training, particularly with reading and writing issues. Many employees have been here for a long time – that allows for long periods of mateship and a lot of stability."

Reading

Reading is one of the key ways that people process information. It involves the interpretation of texts and these texts usually take two forms: continuous and non-continuous.

- Continuous texts are those that have sentences organised into paragraphs, pages and possibly sections and chapters. Continuous texts can also be categorised according to purpose, such as descriptive or narrative.
- Non-continuous texts are those that have information organised in graphic or diagrammatic form and include lists, tables, graphs, maps and forms.

Many texts, for example websites, combine continuous and non-continuous elements.

Texts found in the workplace are often non-continuous, in the form of policies, procedures, forms and checklists. Continuous texts are also used usually to describe information about a particular topic.

The core skill of reading recognises the different levels to which readers can engage with text and critically examine and understand the purpose (including the relationship between the creator and intended audience), reflect on meaning (embedded or implicit), source and categorise information, and understand specialised vocational vocabulary and the expression of ideas.

The ACSF describes reading against two performance indicators:

- audience, purpose and meaning-making strategies
- text structure and features, grammatical expression of ideas, word identification strategies and vocabulary.

Think about the reading tasks required at the workplace where you train. Usually, there are safety instructions, work instructions, messages, policies and procedures. What other texts are people required to read? How can you assist learners to access these documents?

_____

_____

_____

Also think about the reading tasks that your particular training requires of your learners. Do you need to circulate pages of text to explain a particular concept or process? Could the concept of the text be better explained by an activity, a role play or a demonstration?

_____

_____

_____

_____

The following scenarios and activities demonstrate some options.

Signs and symbols

Reading and understanding signs and symbols is important for safety reasons, and often for operational work.

Matching activities can be a good way of learning what signs and symbols mean. They could be completed by simply pointing to the sign or symbol, and asking what the symbol stands for. Asking learners to complete these activities on paper is a way to develop vocational vocabulary – that is, learners start to read the words that explain what the sign or symbol represents.

The next activity can be used to orient learners to signs specific to the workplace.

SAMPLE ACTIVITY: Reading safety signs

Draw a line between the sign and its meaning. The first one has been completed for you.

Ear protection must be worn

No mobile phones

No smoking

Head protection must be worn

Foot protection must be worn

No naked flames

No admittance

First aid

This sample activity addresses ACSF indicators 1.03 and 1.04.

Locating information

The task of locating information is not always straightforward. Learners will sometimes need assistance to access the format of a document, such as a chart with rows and columns, an index or a work instruction such as the example in the following case study.

CASE STUDY

Reading work instructions

Project managers at Newmont Tanami operations have a unique way of writing up work instructions. Here's an example for Crew 2, working on day shift on 10 February.

Sue from HWE Mining works with new trainees to help them read the document and find out where they are scheduled to work for the day.

"The work instruction is good because it summarises on one page which vehicles and jobs all the crew are working on, and where. But it needs some explaining and it takes new people a while to get used to. You have to read some sections across, some sections down, and some sections both across and down! Sometimes I get a highlighter out – that helps."

SAMPLE ACTIVITY: Locating information in a document

Answer the following questions using the company telephone guide.

What is the number to call in an emergency?

_____

How do you contact your OHS representative?

_____

How do you get an 'outside' line on the telephone?

_____

What is your trainer's telephone number?

_____

This sample activity addresses ACSF indicators **2.03** and **2.04**.
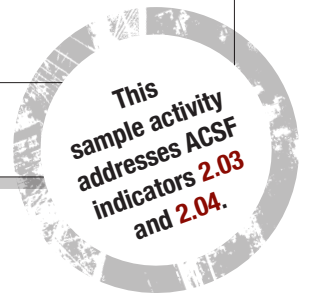
Industry vocabulary

Posters are a great way to get a message across and using the development of posters as a training activity helps to reinforce their purpose.

CASE STUDY

Spreading the word

Lucas encouraged drill crews to create posters to communicate a safety message. This example, put together by crew DRS028, was pinned to a noticeboard at the workshop in Rockhampton. It's a great example of a poster that reinforces a safety message (using tools that protect and cause less strain on the body) and it also reinforces vocational literacy, using graphics to illustrate industry terms that may take learners a while to familiarise themselves with.

This activity addresses ACSF indicators 3.03 and 3.04 or with support, 2.03 and 2.04.

Strategies to learn industry vocabulary

Linking words to graphics can be a way of assisting learners to remember new vocational words. For example, graphics of different types of screws could be provided to learners along with a short explanation about the different types of screw heads and the situations they are used in.

SAMPLE: VOCABULARY CARD

Types of screws

hexagonal   Allen   fluted   Phillips

round   countersunk   fillister   oval

This card addresses ACSF indicator 2.04.
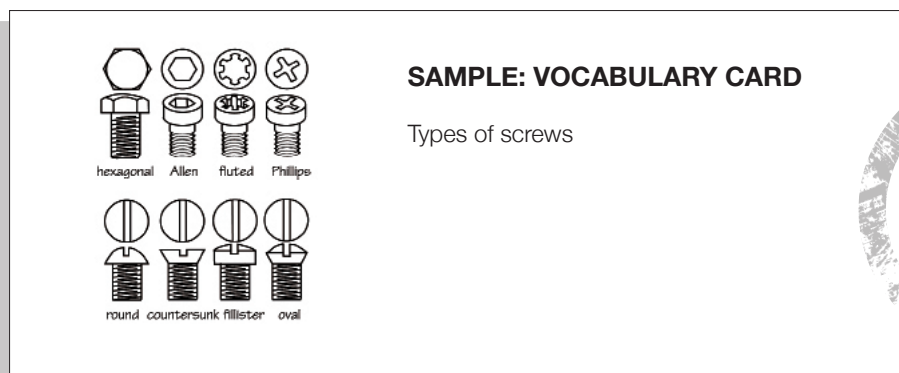
Learners can create their own visual vocabulary file of vocational terms by taking photos or locating graphics and matching them with the words.

Remembering new words is also important. There are different strategies that will help learners to remember, and different strategies will work for different people. Some ideas include:

• understanding why the word is important

• understanding how the word fits into the wider industry

• understanding what the word means in practice (for example situations for use of countersunk screws)

• linking the word to a fact

• explaining unusual and interesting words.

The following vocabulary includes some tips.

SAMPLE: VOCABULARY CARD

Fixed jaw (internal)

Fixed jaw

Movable jaw (internal)

Scale (mm)

Lock screw

Movable jaw

Vernier scale

Sliding bar

Depth guage

Vernier callipers are used for accurate linear measurements (including internal and external measurements of cylindrical shapes, such as pipes). Invented in the 1700s by a French man called Vernier.

This card addresses ACSF indicators 3.03 and 3.04.

Policies and procedures

Compliance documentation, such as policies or safe operating procedures, can sometimes be difficult to read and understand. Adding graphics such as photos to these types of documents can assist learners to understand key steps in a process and help to develop vocational literacy.

EXAMPLE: Fitting hearing protection	
	Inspect earmuffs to ensure they are not damaged or worn. Some earmuffs are marked TOP or FRONT. Some are marked **L**eft and **R**ight.
	Extend the headband to its maximum length.
	Brush as much hair as possible away from your ears.
	Place the muffs over your ears, making sure that the ears fit completely inside the cup or the space inside the ear muff.
	Hold the cups firmly in place by pressing inwards and upwards with your thumbs, then tighten the headband so that it takes the weight of the cups and holds them firmly in position.
	Check the cups are firmly sealed to your head. Some things can prevent a good seal, for example a hat or the arms of spectacles.
	If you cannot get a good seal, try different muffs or earplugs.

This strategy is useful for assisting to communicate the intent of a complex document, if not the fine detail.

Reading

SAMPLE ACTIVITY: Illustrate a workplace procedure

Work as a group to choose a workplace procedure. Take photos to illustrate the safe and correct way to carry out each of the steps.

Procedure	Written steps	Photos
STEP 1		
STEP 2		
STEP 3		
STEP 4		
STEP 5		
STEP 6		

This sample activity addresses ACSF indicators 3.03, 2.05 and 3.04.

Accessing factual information

Workers often need to access information in dense written texts such as manufacturer's instruction manuals, legislation or documents from legal authorities. Understanding the conventions of these documents and learning how to access them can help learners to understand how the document is set up and where to find the information they need.

CASE STUDY

Reading dense texts

Alex teaches a group at Certificate IV. She says that, at that level, it's important for learners to understand how to access dense texts. Alex shared her approach to working with legislation.

"Firstly I get learners to have a quick look at the document and think about its purpose, who it's written for and to predict what it will include. I point out that these types of documents are made up of various levels of headings and sub-headings – that might be obvious to you and me, but it's not always obvious to people who haven't dealt with these documents before. I give them a limited time to look at the main headings, the sub-headings and the diagrams, and also to look at the contents page of a document. So they quickly get an idea of what's inside and where – they start to get the gist of what it's all about.

"Next we have a quick chat about what the document is about and how it's structured. I encourage learners to identify words that they don't understand and to have a go at working out their meaning. Legislation sometimes incorporates very complex words. I ask learners to try and work out the meaning for themselves by looking at the surrounding text and graphics, or by breaking the word up into parts – you know, prefixes, suffixes, splitting up compound words – that sort of thing. I always try to get learners to keep their own wordlists.

"Then I get them to do some exercises on skimming and scanning for information. Skimming includes strategies like reading the first sentence (or the topic sentence) of paragraphs to get the main points of a bulky text. Scanning involves looking for specific words about a topic to locate particular information that can be read in detail."

This case study activity addresses ACSF indicators 3.03 and 3.04.

CASE STUDY

Reading can be difficult!

Juanita trains staff at QMAG on how to use earthmoving equipment. Part of her role is to ensure that the learners know about the policies and procedures that guide the operation of heavy equipment.

"I say to the blokes – it's hard! These documents are difficult to read. They feel a bit more comfortable when I give them some reassurance and let them know that they're not the only ones who find it hard."

TIP	Accessing a new document

→ Preview the content.

→ Think about the meaning and structure.

→ Identify new words and work out their meaning.

→ Skim to work out the gist of the document.

→ Scan to locate particular meaning.

Writing

The core skill of writing is concerned with the ability to shape written language according to purpose, audience and context. Writing includes traditional methods of using pen and paper, but also covers writing methods using technology such as word processing, email and mobile phone SMS.

The writing core skill describes performance against two indicators:

• audience, purpose and meaning-making strategies

• vocabulary, grammatical structure and the conventions of writing.

A key factor in judging writing performance is deciding whether it fulfils its purpose and meets the need of the intended audience. Learners should be explicitly introduced to the type of writing for different purposes and the features of different texts, for example how to write clear instructions.

At lower levels, learners may have model texts or wordlists to copy from and at higher levels, learners will be able to write for an increasing range of purposes and audiences.

What are the writing demands required of your learners? Are there forms to be completed? Work instructions to be written? Information to be passed on? How can you assist learners to produce these types of documents?

_____

_____

_____

_____

_____

_____

Like any other core LLN skill, writing does not occur in isolation from other skills. For example, a person may listen to or read information, speak to others and then write a response. The following scenarios and activities demonstrate some options that focus primarily on developing writing skills for particular purposes.

Writing simple messages

Writing tags for equipment is an important way of communicating a safety message. The message on the tag needs to be simple and clear. To achieve this task, the writer would normally use a limited range of familiar words relating to the particular work carried out, using phrases or short sentences.

CASE STUDY

Tagging out

"Filling out tags might seem like a simple task, but if you've never done it before it can be a bit daunting. I explain the purpose of the out of service tags, the personal danger tags and the information tags, and about how they're used in the workplace. Then I show a few examples of tags that have been filled out – that gives the learners an idea of what's required. I highlight how they're filled out: name, date, time, equipment and the reason why the plant or equipment shouldn't be operated.

"Then as a group we work out a list of typical words that would be used on the tags in the context that they work in. This is a list they can put in a folder and keep for whenever they might need it."

brakes	slipping
not working	electrical
worn	belt
needs replacing	motor
leaking	needs attention
faulty	short
fuel	sticking

This case study activity addresses ACSF indicators 2.05 and 2.06.

Writing

TIP — Ways to write dates

→ There are many different ways to write dates. Write some different ways on the whiteboard and talk about the differences with learners.

Some computer software programs use an automatic Americanised date, which puts the month before the day. This may need to be explained to learners.

29-06-2011

29/6/11

29th June, 2011

29 July '11

SAMPLE ACTIVITY: Complete 'out of service' tags

Hand out three blank tags to each learner and ask them to complete the tag using the following information that you will read out.

1. You are using the electric drill and you notice that the drive is slipping.

2. You take the four-wheel drive to the site office and on the way you notice that the handbrake is not working.

3. The compressor has an on and off switch that sometimes does not work properly.

4. On a walk around inspection of the front end loader, you notice the bucket is bent across one corner.

5. The mouthpiece has been ripped off the cord connecting it to the radio in the truck.

6. The flashing warning lights on the top of vehicle V1796A are not working.

This sample activity addresses ACSF indicators 2.05 and 2.06.

Messages

Listening for key information and then transferring that information in the form of a written message is a skill that is often required at work and there are usually consequences if key information is not passed on. Learners may need assistance and practice at writing short messages for others.

SAMPLE ACTIVITY: Writing telephone messages

Work in groups of three. Ask two learners to role play the telephone message while the other listens and notes down the key information for the written message.

Reassure the message writer that that the message does not have to be written in complete sentences – the important thing is communicating the key information.

Bettina:	*Hello. Minx Mining, Bettina speaking.*
Rick:	*Ah – g'day. Rick Stevens here. Could I speak to Alan Weaver please.*
Bettina:	*Sorry, he's not here at the moment. Could I take a message for him?*
Rick:	*Yes, could you tell him that I'll be at the site meeting next Wednesday, and I'll be bringing Petra Dunbar with me. Also tell him that it's important that we talk about the Westfield site while Petra is there. And you better ask him to call me.*
Bettina:	*OK. I'll pass that on. What's your number?*
Rick:	*It's 0419 090314*
Bettina:	*I'll just check the number. It's 0419 090314.*
Rick:	*Yeah – that's right, Thanks.*
Bettina:	*No problem. Bye.*
Rick:	*Seeya.*

TELEPHONE MESSAGE

To:

From:

Date:

Message:

Taken by:

Jim:	*Good afternoon. This is Minx Mining. How may I help?*
Paul:	*Paul Thambu speaking. Put me through to Dave Davis please.*
Jim:	*Unfortunately he's working offsite today. Can I pass on a message?*
Paul:	*Yes. Please let him know that the starter motor for the truck has finally arrived, so I'll get a driver to drop it off at the workshop tomorrow. Can you get him to make sure that someone will be there to sign for it?*
Jim:	*Yes, I'll pass that message on.*
Paul:	*Good on ya. Thanks buddy.*
Jim:	*That's fine. See you later.*
Paul:	*Yeah. Bye.*

TELEPHONE MESSAGE

To:

From:

Date:

Message:

Taken by:

This sample activity addresses ACSF indicators 2.05 and 2.06.
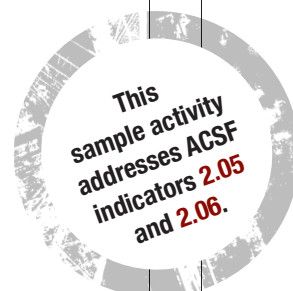
Writing reports

Reports in the workplace take many different formats – they can vary from forms with tick boxes to extensive, more complex reports, for example a position paper or an analysis of data based on consultations.

Many units of competency refer to the 'completion of workplace reports' or to recording information. Reports may be verbal, but for various compliance and quality assurance reasons they are often written. Learners may need to be introduced to the format of different reports and to the type of content required.

CASE STUDY

Completing a report

"We have a few different report formats that we use here. I usually start with the incident report because it's in the initial safety awareness program. I pull the form apart and go over it in detail – in some sections the information is filled out by ticking boxes, other bits need to be filled out with prose text. I always have some completed forms on hand to use as examples for how the forms can be filled out.

"Most learners are OK with the tick box information, it's where they have to write sentences that they often fall down. I encourage them to write what happened, just as they'd say it, then read what they've written to make sure it says what they mean. That process of drafting, reading and redrafting is an important one to learn. I also encourage learners to get others to read their work and see how they interpret what they've read. It takes practice to really communicate what you mean.

"Here's one of the models I use..."

This case study activity addresses ACSF indicators 3.05 and 3.06, or 2.05 and 2.06 with support.

TIP | Ways to learn spelling

→   There are several different strategies to encourage the correct spelling of words. Keeping a personal spelling list is one, another is the 'Look, say, cover, write, check, remember' routine. When 'looking' at a word, it's helpful to notice its shape. For example, the word 'workplace' has letters that have tops and tails in the middle .

Many people find the sounding out strategy helpful. Encourage learners who are having difficulties with spelling to listen closely to the sounds (or syllables) of a word. The skill of being able to break words into small sounds can assist with correct spelling.

Many words have one syllable, such as: map, plan, say, brake.

You need to adjust your mouth to be able to say words with two or more syllables: mes/sage, Fri/day, meet/ing, con/sult, work/shop, com/mun/i/cate.

Ask learners to practise writing down words with similar sounds and highlight the patterns. Also encourage them to look for small words inside larger words, for example: and, stand, standing, understandable.

Reassure learners that everyone needs help with spelling at some time or another – it's OK to ask.

Writing

SAMPLE ACTIVITY: Complete a report

Provide learners with a copy of the blank report form on the following page and ask them to identify the type of information required. Tell the learners that they are to work together in pairs. Ask them to listen to the information that you are about to read, and use that to complete the incident form.

Read out the scenario twice and then ask learners to fill out the form.

Incident scenario

It's 6.25am and you're on your way to work at the Wooltabah site, heading east along a site access road.

Ahead of you is a small hill and over the hill is a fence, with a cattle grid crossing a track that's flanked by two large strainer posts.

You're travelling at about 45 km per hour and as you come over the hill, the sun strikes the windscreen and you can hardly see a thing.

You brake, but as the vehicle comes to a stop the right side strikes one of the strainer posts. You get out of the vehicle to have a look. The headlight is broken and there's a long scratch on the side panel.

While inspecting the vehicle, you notice that the windscreen is dirty and it looks like it hasn't been cleaned for some time. You think this may have contributed to why you couldn't see clearly. Use model texts and wordlists to assist learners and encourage them to help each other out.

Follow up this task with another where learners are required to work independently.

Note: This task could be simplified by providing learners with the written scenario. That way they will have some of the words, phrases and sentences that could assist them to complete the task.

This sample activity addresses ACSF indicators 2.05 and 2.06 using model texts and wordlists. Completed independently, it would address indicators 3.05 and 3.06.

INCIDENT REPORT FORM

Division		Incident no:	

Section:

Project no:		Site:	

INCIDENT CLASSIFICATION

			OFFICE USE ONLY
☐ First Aid Injury ☐ Medical Treatment Injury ☐ Restricted Work Injury ☐ Lost Time Injury	☐ Infrastructure/Utilities Damage ☐ Occupational Illness ☐ Vehicle Damage ☐ Plant/Equipment Damage	☐ Environmental Harm ☐ Public Impact ☐ Compliance/Procedural Breach ☐ Near Miss ☐ Report Only	Reportable ☐

INCIDENT DETAILS

Involved/ Injured person				Position		Date of birth:	
Incident time/date	Date	Time	Reported by		Time/Date reported	Date	Time
Reported to				Witness			
Employment status	☐ Employee	☐ Other	☐ Contractor	Contractor company name			
Involved person's experience	☐ 1-6 mths	☐ 6-12 mths	☐ 1-3 yrs	☐ 3-5 yrs	☐ 5-10 yrs	☐ >10 yrs	
Damaged plant/equipment	ID #		Type		Make		
	Model		Hours/Kms		Year of manufacture		
Description of damage					Estimated repair cost	$	

INCIDENT SUMMARY

What was happening just before the incident?	
Describe what happened (including brief description of any injury sustained)	

SUPERVISOR TO COMPLETE

Action:	
Referred to:	

Using technology based systems for writing

Many worksites use technology based systems for a range of purposes. Examples include vehicle logging systems, personal digital assistants, SMS and more. Each of these devices will have particular operating features and using the system is usually a matter of practice.

However, some systems have a particular language, for example logging systems will use particular codes and SMS messages within a network of people will follow certain conventions.

CASE STUDY

Using wordlists for particular purposes

"I work on earthmoving equipment at various sites and the boss sends me text messages to let me know where I should be, when, and any other information I need to know. I wasn't used to the thing. He'd ring me up saying that he hadn't had a reply and asking if I got the message.

"My partner sat with me one weekend and showed me what I should do. She wrote the steps I needed to go through to reply to a message, and then she wrote a list of some of the words to use – shortened words like c for see, and then the ones that use numbers for words that sound the same, like '4' for 'for', and '2moro', and 'm8' – they're clever I reckon. I keep the list in my wallet – I don't use it much anymore, but it was pretty handy for a while!"

This sample activity addresses ACSF indicators 2.05 and 2.06.

TIP | Record progress of core LLN skill development

→ It's important to acknowledge the progress of core LLN skills development. One way of doing this is to keep a core LLN skills checklist. The tool should be a list of the core LLN skills that a learner requires for the training program. As learners progress and become competent at the tasks identified, they can be ticked off. See a sample core LLN skills checklist at the back of this guide.

Oral communication

Oral communication combines the skills of speaking and listening, and can be both transactional and interpersonal. Transactional interactions are usually practical and about achieving a specific outcome, providing or obtaining information for example, or obtaining goods. Interpersonal interactions are usually about developing a relationship, problem solving or exploring issues.

Oral communication exchanges can be both formal and informal, and influenced by power relations, attitude, social distance and emotional factors.

The core skill of oral communication recognises a range of interactional strategies, including:

- understanding and responding to audience, context and purpose
- pronunciation, fluency and sustained interaction
- use of generic structures (including vocabulary and grammar in the way that they are used in different interactions)
- use of appropriate paralinguistics (such as the use of facial expressions)
- aural information processing.

At a minimum, the workplace requires people to have functionally competent interactions. If English is not your learners' first language you may need to provide support with pronunciation and establishing spoken dialogues, following conventions typically used in the workplace. For English speakers, the skills required usually relate to active listening and articulating clear messages.

What are the typical oral interactions that occur in the setting in which you work? What are the skills required? To listen and understand instructions? To clarify information? To give feedback? Or perhaps learners need to present particular points of view and persuade audiences.

How can you assist learners to develop these skills?

_____

_____

_____

_____

_____

_____

The following scenarios and activities demonstrate some options for developing oral communication skills for work.

Workplace instructions

Work instructions are often given verbally and it is important that the instructions are understood and followed. Try the following activity with your learners. Add some of your own instructions that are relevant to the context in which you work.

SAMPLE ACTIVITY: Following instructions

Instructions to trainer

Explain to learners that the purpose of this activity is to practise listening to instructions. Learners will be asked to listen and then repeat the instruction to check their understanding.

- Make sure you wear all the correct PPE when you are on site – especially near the concentrator – that means ear muffs, safety glasses, hard hat and high visibility vest.

- Pack up the four-wheel drive with all the equipment that you will need for a survey job inland from Geraldton on Thursday. We need to camp out overnight, so make sure we have the camping gear and food and water for two days. We also need to take extra fuel.

- Take Malcolm over to the Wooltabah site and on the way back call in at the post office and pick up the parcel addressed to me. Here is the notice. I think it is that part for the mower that we have been waiting for. And can you also pick up a roll of barbed wire from Macreadie's when you go past.

- While you are driving it is very easy to find yourself slouching, with your shoulders rounded and your chin poking forward. This can lead to pain and stiffness in your back, neck and shoulders and it can also lead to headaches. Make sure that you sit well back in your seat, sit tall, bring your chin down and have your shoulders back.

- Make sure that you drive on the established tracks because soils and plants can be easily damaged. Never drive across the bush. Never remove plants or trees unless you have authority. Do not chase or handle animals.

- Cut the pipe at 39 mm long and attach it to the existing pipe with a joiner. Make sure you put some of that sealer in the join. Then fix the tap to the wall at the end. We have to have this finished by 2.30pm to meet the deadline, so be quick about it.

This sample activity addresses ACSF indicators 2.07 and 2.08.

Oral communication

Communication in teams

The work setting often calls for communication to occur in teams and units of competency often include phrases like 'work with others to ...' or 'problem solve as a group'. But communicating within a group is not always straightforward.

CASE STUDY

Focused team communication

"One day I sat in on a toolbox meeting to listen to a group go through a job safety analysis for driving the loader on circuit. I got a bit of a shock at how the group interacted – lots of talking over the top of each other, three people who didn't say anything, one of them seemed very disengaged, no one seemed to be listening to anyone, and the supervisor trying to run the meeting had to really yell to get any attention! At the end of the meeting nothing had really been discussed or decided on – it just seemed like a waste of time and most people were really frustrated.

"I decided to act.

"I had a chat to the group about communicating as part of a group and outlined a few protocols. You know, things like:

- *there's usually someone who will take the lead on a discussion – it's important to listen to them and let them take that role*
- *it's important to be polite*
- *let one person talk at a time*
- *listen to what others have to say*
- *help to manage interruptions so the conversation can flow and so everyone has a chance to contribute.*

"We also talked about:

- *clarifying and explaining issues and points of view*
- *making suggestions*
- *appropriate ways to respond to suggestions*
- *considering others' points of view*
- *appropriate ways to agree and disagree.*

"I borrowed a video camera and recorded the next toolbox meeting and at the training session that followed I played it back to them. I asked the group to watch their interactions and talk about them. It was a really good way to get the message across, because it was clear when people were talking over others and butting in – at the time they hadn't realised they were doing it, but watching it on the DVD it was really obvious. I asked them to reflect on their input and think about how they would participate next time.

"It took some practice – we followed up with little activities like how to clarify information, being polite when discussing different points of view, and how to summarise information – that sort of thing. The meetings are pretty well-run and efficient now."

This case study activity addresses ACSF indicators 2.02, 2.07 and 2.08.

Oral communication

> **TIP** Guide to communication in a group
>
> → Be polite.
> → Listen to others.
> → Ensure that one person talks at a time.
> → Respect the leader of the conversation.
> → Keep focussed on the topic.
> → Encourage quiet people to contribute.
> → Summarise discussion at the end.

SAMPLE CHECKLIST: Observing group communication

Use the following checklist to record observations of learners' group interactions. Use the observations to follow up with the group, and with individuals about their input.

Discussion observations	Comments
INTRODUCTION TO THE DISCUSSION	
• *Is the reason for the meeting made clear?* • *Are participants given guidelines for communication?*	
THE DISCUSSION	
• *Do participants:* • *take turns to speak?* • *listen to others?* • *manage interruptions?* • *clarify and explain?* • *make suggestions?* • *respond to each other appropriately?* • *stay on topic?* • *move onto different topics as appropriate?*	
CLOSING THE DISCUSSION	
Are: • *key points summarised?* • *follow up steps identified?* • *participants thanked for their participation?*	

Providing clear messages

Many units of competency call for communications to be 'positive and professional' and to be 'effective'. But often people do not say what they really mean. Many people rely on colloquialisms or euphemisms to get a message across, but the real message can be easily lost.

Using colloquialisms and euphemisms

Roderick was a young Indigenous man from a remote northern community whose third language was English. He seemed to be losing interest in his training and often appeared distracted. Just before Roderick headed off to train on a truck for the day, his work supervisor called him in to have a chat.

"Roderick, you've nearly got this course squared away – is there anything I can give you a hand with? I want to you to know that I'm here to help… the gate's always open, mate," said the supervisor. "You know you can level with me about anything that might be playing on your mind."

The trainer wasn't sure that Roderick really understood what his supervisor was talking about, so later she quietly asked him what his supervisor had said.

"I'm not real sure, but I think he wants me to go and dump some gravel at his place," said Roderick.

Roderick had a strong understanding of the practical requirements of the course, but was often confused by communication loaded with colloquialisms and euphemisms. The trainer resolved to have a chat to the supervisor about making instructions clear and straightforward.

Oral communication

How clear is the language you use when you are training? Do you say what you really mean?

It is not easy to talk about difficult topics at work but that does not mean that they should not be discussed – bringing up difficult topics can be very important. Learners might need to practise having difficult conversations and talk about why certain conversations may be difficult.

Try the following activity with your learners. Add further situations that would typically occur in your workplace setting.

SAMPLE ACTIVITY: Talking about difficult topics

Think about how you would deal with the following situations. Work in groups and practise what you would say and how you would say it.

- Your boss asks you to take the Toyota over to the Wooltabah site and pick up Gerry. You don't have a site driver's licence yet. What do you say to her?

- You just dropped a dumpy level and a lens has broken. You know that they cost a lot of money. What do you do?

- One of your team members keeps coming to work really late. You really like him, but it means that you have to cover more and more work each morning. What would you say? How would you say it?

- Your cousin is getting married and it is all very last minute. The ceremony is planned for this coming Wednesday afternoon, when you know that a shipment of new supplies is due in. You need to ask your supervisor for some time off. What will you say?

- You reckon the system of recording usage of consumables is really clumsy and you know a better way that it could be done. What would you say to your supervisor? How would you say it?

- One of your colleagues has really bad body odour. What would you say to him? How would you say it?

The first two questions in this sample activity address ACSF indicator 2.07.

The next four questions in this sample activity address ACSF indicator 3.07.

Numeracy

Numeracy is about using mathematics to make sense of the world. The skill of using numeracy in the ACSF is described against three indicators:

- identifying the meaning of the mathematical information in activities and texts
- problem solving and mathematical processes used
- communicating using formal and informal mathematical conventions such as symbols and diagrams.

Numeracy involves understanding and applying mathematical ideas and techniques in a number of different ways, depending on the purpose. It involves drawing on knowledge of particular contexts and circumstances in deciding when particular strategies will be used, reflecting on and evaluating the use, and then communicating outcomes.

At work, people may be expected to locate and recognise key mathematical information in texts such as charts, tables and diagrams. People may also need an understanding of metric measurements for distances, quantities, mass, capacity, time and temperature.

What are the expectations of learners in your workplace context? How can you assist learners to develop the skills required?

_____

_____

_____

_____

_____

_____

The following scenarios and activities demonstrate some options for developing numeracy skills for work.

Reading symbols

Work often involves reading and interpreting symbols. Symbols can be complex and some learners may need step by step assistance to build the skills to read and recognise them. Once recognised, the symbols need to be interpreted, as in the following case study.

CASE STUDY

Dashboard symbols

Sue from HWE Mining trains new employees to work on heavy vehicles. She has some great techniques for assisting workers to read new symbols.

"There's a lot to learn to be able to understand the symbols on a heavy vehicle dash. I do activities that involve matching words to simple symbols to start with, then move on to put the symbols together to work out what the warning lights on dashboards mean.

The next step for the learners is to work out why they're lit up. It can take a while... sometimes it's easier for the drivers to just radio the workshop and ask, but there's a sense of pride in being able to understand and interpret the symbols for themselves."

The next three activities are linked – the first scaffolds the learning for the second, and the second scaffolds the learning for the third. The activities combine the skills of reading and numeracy.

SAMPLE ACTIVITY: Reading symbols

Draw a line between the symbol and its meaning. The first one has been completed for you.

Steering

Engine

Temperature

Warning

Fuel

Park

Fluid level

Pressure

Brake

Battery/charge

Charge

Coolant

Oil

Transmission

This sample activity addresses ACSF indicators 1.04 and 1.09.

SAMPLE ACTIVITY: Reading instrument warning lamps

Use the information in the previous activity to help fill in the gaps in the activity below. Either write the words, draw the separate symbols that make up the warning lamp, or draw the warning lamp. The first one has been completed for you.

Words	Symbols	Warning lamp
Engine + oil + pressure		
Transmission + oil + temperature		
Fuel + level		
Park + brake		
Engine warning		

This sample activity addresses ACSF indicators 3.04 and 3.09.

If you see the warning lamps light up in your vehicle, take action.
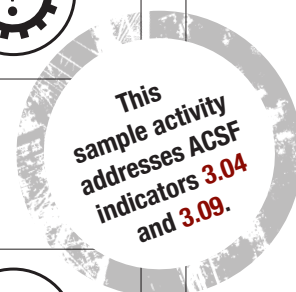
SAMPLE ACTIVITY: Reading gauges and scales

Read the gauge in the left column, which is a measurement of what is represented in the middle column. Then work out if the gauge reading requires action.

Gauge reading	For	Does this reading require action? If so, what?

This sample activity addresses ACSF indicators 3.04 and 3.09.

Estimating

Estimating is a skill often required at work. But before people can estimate, they need to know about units of measurement and which measurements are used to measure what. Then it is a matter of getting an 'in the head' picture of how the measurements apply in reality.

SAMPLE ACTIVITY: Estimating

Estimate the measurements of the items listed in the left column, using an appropriate unit of measurement.

	Unit of measurement	Your estimation	Actual measurement
The distance between your home and the site office			
The height of the office door (specify which)			
The width of a four-wheel drive vehicle (specify which)			
The area of a carpark that is nearby (specify which)			
The distance away from a dump truck before the operator can see you			
The length of your smallest finger			
The capacity of a dump truck (specify which)			
The weight of a particular book (specify which)			
The distance between the training area and the lunch room			
The volume of a cup			

This sample activity addresses ACSF indicator 2.10.

Numeracy
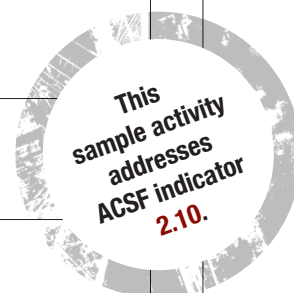
TIP   Calculating in different ways

→ Be aware that there are lots of different ways to calculate numerical sums (for example there are several methods used to 'borrow' in a subtraction sum). You may not be familiar with the way that your learners work out answers, especially if they come from a different generation or a different culture. If it works, let them stick with it. You may want to ask learners to explain how certain processes are carried out and talk about different methods for working out the same sum.

SAMPLE ACTIVITY: Doing the sums

Work out the answer to the following situations. Show your working out, which might be a sum or a drawing. Ask your trainer for assistance where required.

The first question addresses ACSF indicators **1.09**, **1.10** and **1.11**.

- A plane is scheduled to leave at 21.50. The service is running an hour and a quarter late. What time will the plane leave?

- The air pressure on a tyre measures 83 psi. It should have 90 psi. How many psi should be added?

The next three questions address ACSF indicators **2.09**, **1.10** and **1.11**.

- The towing capacity of your vehicle is one tonne. You have a load of 1214 kg. Can you use your vehicle to haul this load?

- A roll of cable is 1000 metres. You use 46 for a job. How many metres are left on the roll?

- Diesel costs $1.92 per litre. The capacity of the tank on the bogger is 200 litres. How much does it cost per tank of fuel?

These three questions address ACSF indicators **2.09**, **2.10** and **2.11**.

- Tyres for the articulated truck cost approximately $6250. Approximately how much will it cost for four tyres?

- The dry mess is open from 4am to 7.30am, and 4pm to 8pm every day, seven days a week. How many hours is the mess open for each week?

This question addresses ACSF indicators **2.09**, **3.10** and **2.11**.

- It takes 18 minutes to fill the tipper and 13 minutes to complete the circuit to the dump. You need to make sure that there are 10 loads in the dump by the end of the shift. How long will this take with two trucks on the go?

- A company has 32 lost time injuries in a year. The target for next year is to reduce this number by 20%. What is the maximum number of injuries that could occur and meet the target?

The final question addresses ACSF indicators **3.09**, **3.10** and **3.11**.

Understanding time

Effective work practices often rely on workers having a work plan and a daily routine. It is not only important to understand the concept of time and how it relates to routine tasks, but also how it is incorporated into the bigger picture of completing work and projects on time. Time is written in a number of different ways.

SAMPLE ACTIVITY: Reading time

Clock display can be displayed in a number of ways:

- analogue – on a clock face
- 12-hour time – followed by either am (morning before noon) or pm (afternoon and evening)
- 24-hour time – displayed with or without a colon, for example 4pm can be displayed as 1600 or16:00.

Complete the following table with the information that is missing. The first row has been completed for you.

Time in words	Analogue time	12-hour time	24-hour time
Half past nine (or nine thirty)		9:30am	0930
		11:15pm	
Quarter to five (in the afternoon)			
		4.30pm	
Twenty-five to four			
		10.15pm	

This sample activity addresses ACSF indicator 1.09.

SAMPLE ACTIVITY: Planning time

Use the timetable below to schedule your tasks for the week ahead. What needs to be done? How much time is needed for each task?

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
0600							
0700							
0800							
0900							
1000							
1100							
1200							
1300							
1400							
1500							
1600							
1700							
1800							

This sample activity addresses ACSF indicators 2.09, 2.10 and 2.11.

Part 3

What will help?
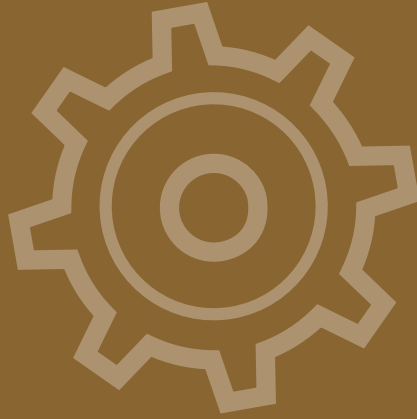
Resources

Taking the Lead is an online, self-paced professional development resource on core LLN skills in training and assessment.
Go to <www.takingthelead.com.au>.

Learning Progressions is a series of resources designed to improve learning outcomes for adult learners, covering reading, writing, speaking, listening and numeracy. Developed in New Zealand by the Education Commission, the resources are aimed at trainers and relevant for the vocational education and training sector in Australia. Resources are free and can be downloaded from the internet.
Go to <www.tec.govt.nz> and select the 'publications' link. The Learning Progressions resources are listed individually on the publications page.

A bank of *ACSF Assessment Tasks* written for levels 1-3 of the ACSF covers a range of industries. Each of the assessment tasks includes:
• a summary of the ACSF skills covered
• notes about industry coverage and contextualisation
• instructions for the assessor
• a mapping of the ACSF skill indicator and aspects of communication covered in the task.
Go to <www.precisionconsultancy.com.au/acs_framework>.

Creating the Connections is a flexible resource kit aimed at developing students' literacy and information technology skills as well as project planning and teamwork skills using digital story based technology.
Go to <http://www.ames.net.au/ames-bookshop> and search the title.

The Adult Literacy Resource provides a list of various websites supporting the development of adult LLN.
Go to <www.adultliteracyresource.edu.au/Literacyportals>.

Making the Link: Employability Skills & Further Education is an online professional development resource for trainers to support the identification of employability skills in programs, and to support learners to make the links between their learning and employability skills.
Go to <http://tls.vu.edu.au/employability_skills/index.html>.

The Language Centre bookshop produces an adult literacy resources catalogue that lists both visual and text based core skill support materials.
Go to <www.languagecentre.iinet.net.au>.

AMES bookshops list a range of language skill based resources for use in vocational learning contexts.
Go to <http://www.ames.net.au/ames-bookshop>.

Core LLN skills checklist

To identify what is required of the training program that you deliver, you need to analyse the units that make up the training program and to think about the core LLN skills required for the particular work context.

Work with learners to develop a checklist that is specific to the program that you will deliver and they will participate in.

The following list can be used as a guide to help you to develop a core LLN skill checklist for your training program. Not all the skills will be required for your particular program and there will be skills not listed that you will need to add.

Work with learners throughout the training program to tick off the skills as achieved and as examples are collected.

Core LLN skills checklist	
The training program requires learners to use the following core LLN skills: (select those appropriate or add others)	I can: (✔)
LEARNING	
understand how own work roles fit in the bigger picture	
identify steps in a process or goals for a task	
watch a process and then repeat a process	
know the equipment needed to complete a task	
know the basic OHS rules for using equipment in the workplace	
seek assistance from mentor or supervisor if unsure of what to do	
access information on a topic from internet or other sources, for example newspaper article	
keep list of frequently used words/vocational vocab	
keep notes and information in a labelled folder	
use simple strategies to clarify and reinforce learning, for example copying, underlining, memorising, practising skills in own time	
engage in learning with others, for example use basic approaches such as distribution of tasks and unstructured discussion to achieve group outcomes	
pose simple questions to focus information search	
pose who/what/why questions to help direct information search	
READING	
read signs, symbols and notices	
sort in alphabetical order or date order	
use product or materials information checklists	
read notes, memos, faxes or letters	
order forms or price lists	
use procedure lists/instructions or equipment manuals	
phone directory	
read enterprise or community newsletters	
read OHS information	
read SMS messages	
read and send emails	
use trainer notes or handouts	
use workbooks	
read internet information	
read newspapers or pamphlets	

Core LLN skills checklist

The training program requires learners to use the following core LLN skills: (select those appropriate or add others)	I can: (✔)
WRITING	
fill in time sheets	
fill in sickness or injury/accident forms	
copy information from one source to another	
complete work records	
write labels or signs	
write lists	
take notes, memos or phone messages	
write instructions or directions for others	
report problems in writing	
complete short answer assessment tasks	
make PowerPoint presentations	
word processing cut and paste, spellcheck, etc	
SPEAKING AND LISTENING	
communicate with team members to clarify job roles and responsibilities and personal role in job task (ask clarifying questions)	
give/listen to directions, instructions, descriptions, explanations, opinions or messages	
leave telephone messages	
provide positive/negative feedback	
use telephone or two-way radio	
listen to assessment instructions or answer assessment questions	
listen to presentations or give presentations	
listen to and respond to assessment feedback	

Core LLN skills checklist

The training program requires learners to use the following core LLN skills: (select those appropriate or add others)	I can: (✓)
NUMERACY	
complete pay rate or timesheet calculations	
add and subtract whole numbers	
multiply and divide whole numbers	
use fractions, decimals, percentages or ratios	
count orally or tally	
read and write numbers as figures or numbers as words	
calculate (in head methods) or use a calculator	
measure length, weight, capacity, volume, speed, area, time or temperature	
estimate length, weight, capacity, volume, speed, area, time or temperature	
read dials, scales or digital readouts	
read, interpret or create graphs and charts	
use money – count and give change, and use a cash register or point of sale machine	
keep a simple record of accounts – resources used and costs	
calculate costs of materials/resources	
read a map or plan	
use grid references and understand scale	
understand time 12-hour clock, 24-hour clock, use a stop watch, read analogue and digital clocks, or read parts of hour (minutes and seconds)	
use a daily planner or a weekly timetable and use a calendar	
keep to time in a test or assessment task	
turn up on time to a prearranged meeting or appointment	

Glossary

ACSF	Australian Core Skills Framework
DEEWR	Department of Education, Employment and Workplace Relations
LLN	Language, literacy and numeracy
LLNP	Language, Literacy and Numeracy Program (a program funded by DEEWR)
WELL	Workplace English Language and Literacy (a program funded by DEEWR to build skills in the workplace)
Core LLN skills	Learning, reading, writing, oral communication, numeracy