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ABSTRACT
         This guide is designed to help workplace trainers and
curriculum writers to understand the role that language plays in vocational
education and training, and to provide strategies to address language,
literacy, and numeracy as part of the training provided. The guide is
organized in four sections that cover the following: (1) learning about
language, literacy, and numeracy; (2) redesigning training packages to better
support and develop learners with language, literacy, and numeracy needs; (3)
managing the learning for learners with language, literacy, and numeracy
needs; and (4) assessing learning for learners with language, literacy, and
numeracy needs. Designed for self-study, the guide outlines the main issues
involved in developing major projects such as training programs. Relevant
examples and self-assessment activities are presented throughout the book.
Also included is "A Directory of Professional Development Programs and
Resources." The directory lists 55 resources in alphabetical order according
to title, providing some or all of the following for each resource: author,
publisher, publication date, target audience (vocational teachers, workplace
trainers, and curriculum writers), delivery mode, duration, and description.
Most of the resources originate in Australia. Contains 18 references. (KC)

Vocational Education

Better Training

Addressing English Language,

Literacy and Numeracy in

Vocational Education and Training

**AUSTRALIAN
NATIONAL TRAINING
AUTHORITY**

2

Better Training

Addressing English Language,

Literacy and Numeracy in

Vocational Education and Training

Acknowledgments

Contents

Introduction

What is the purpose of this resource?

This resource is designed to help you, as workplace trainers and curriculum writers, to understand the role that language, literacy and numeracy plays in vocational education and training and to give you some strategies to address language, literacy and numeracy as part of the training you provide.

This resource is not designed to equip you to become language, literacy and numeracy teachers. A major strategy we recommend for addressing language, literacy and numeracy in workplace training is collaboration with a language, literacy and numeracy teacher. This might mean a team-teaching situation or, for curriculum writers, liasing with a language, literacy and numeracy teacher.

Who are the units for?

The units are for workplace trainers and curriculum developers. They have been designed with the different aspects of the training process in mind. As a result, at times, some of the units are more relevant to curriculum developers while others are more relevant to trainers.

Section 1 is important for both trainers and curriculum developers. Section 2 is of particular relevance to curriculum developers as it is concerned with the development of the training resource. Section 3 is of particular relevance to trainers since it is about the dynamics of the teaching and learning process. Section 4, about assessment, is of importance to both groups.

How should you should use the units?

This is a self-access resource.

The units are designed to be used by you as a workplace trainer or curriculum writer, in different ways to suit your own needs. Sometimes you may only have a few minutes to look through a couple of pages in a unit and think about one of the questions; at other times, you may be able to use several of the units to help in a major work project such as designing a whole training program, or parts of one.

Throughout these units there will be self-assessment activities. Completing the activities will help you to develop your own resource as a reference for incorporating language, literacy and numeracy competencies in all your training programs.

It will always be useful for you to find another person who works with you or in another workplace, either as a trainer, a curriculum writer, or another supervisor to collaborate with.

This peer partner can enhance your own understanding and knowledge of the field by:

- discussing the reflective questions with you

- participating in the activities with you

- undertaking the work-based tasks in collaboration with you

- presenting another perspective on issues in the units.

What is the relationship of the units to Workplace Trainers Competencies, Categories 1 and 2?

The units are based on Workplace Trainers Competencies Categories 1 and 2. They reflect the principles of good practice in training and learning, both on-the-job and off-the-job, which underpin the revised Category 1 and 2 Workplace Trainers Competencies and Workplace Assessors Competencies.

These involve the recognition of:

- the importance of the influence of trainee characteristics on the learning process

- the barriers to learning in the design and delivery of training

- the need to adapt training approaches to meet trainees' needs more effectively.

How is this professional development resource organised?

There are four sections:

Section 1   Getting to know about language and literacy and numeracy

Section 2   Making training packages better for learners with language, literacy and numeracy needs

Section 3   Managing the learning for learners with language, literacy and numeracy needs

Section 4   Assessing the learning for learners with language, literacy and numeracy needs

Section 1 contains:

Unit 1: Learning about language, literacy and numeracy

Unit 2: Identifying the language, literacy and numeracy demands in competency standards, work tasks and curriculum

Unit 3: Identifying the language, literacy and numeracy needs of learners

Section 2 contains:

Unit 4: Re-designing existing training packages to support learners with language, literacy and numeracy needs

Unit 5: Designing learning programs and materials which support and develop learners with language, literacy and numeracy needs

Section 3 contains:

Unit 6: Managing learning: speaking and listening in training off-the-job

Unit 7: Managing learning: reading and writing in training off-the-job

Unit 8: Managing learning: communication skills in on-the-job training

Unit 9: Managing learning numeracy on and off-the-job.

Section 4 contains:

Unit 10: Designing appropriate assessment tasks

Getting to know about language, literacy and numeracy

Unit 1: Learning about language, literacy and numeracy

Unit 2: Identifying the language, literacy and numeracy demands in competency standards, work tasks and curriculum

Unit 3: Identifying the language, literacy and numeracy needs of learners

These three units aim to help you:

- understand what is meant by language, literacy and numeracy

- recognise language, literacy and numeracy demands in competency standards and work tasks and take account of them when designing curriculum based on standards and work tasks

- recognise language, literacy or numeracy needs in learners which you should take account of in your training.

Unit 1: Learning about language, literacy and numeracy

Introduction

In this unit, we'll introduce you to some key definitions of language, literacy and numeracy and some features of language and literacy learning. You'll have a chance to get answers for the following questions:

What do we mean when we talk about language and literacy and numeracy?

Why is language, literacy and numeracy important in workplace learning and training?

Why do many people have difficulties with language, literacy and numeracy at work and in training?

Why is it a good idea for language, literacy and numeracy support and development to be integrated into vocational training

What do curriculum developers and trainers need to know about language and language learning in order to integrate language, literacy and numeracy skills awareness and development into their training?

Information in this unit will also help you to:

- define what is meant by integrating language, literacy and numeracy into vocational training

- demonstrate the effectiveness of integrating language, literacy and numeracy with vocational training as a strategy to support and develop learners skills.

What do we mean when we talk about language and literacy and numeracy?

What is language?

Language is one of the ways by which we, as human beings, make meaning. It is the means through which we communicate for a whole range of purposes in many different situations. We choose

our language to fit each situation, depending on what we're talking about, who we're talking to, and whether we are speaking or writing.

What is literacy?

The Australian Council for Adult Literacy's definition of adult literacy in *No Single Measure*, Wickert, R. 1990 states that:

Literacy involves the integration of listening, speaking, reading, writing and critical thinking; it incorporates numeracy. It includes the cultural knowledge which enables a speaker, writer or reader to recognise and use language appropriate to different social situations. For an advanced technological society such as Australia, the goal is an active literacy which allows people to use language to enhance their capacity to think, create and question, in order to participate effectively in society.

Another definition, from a survey of young adults, states that literacy involves:

Using printed and written information to function in society, to achieve one's goals, and to develop one's knowledge and potential.

What is numeracy?

Numeracy is often referred to within definitions of language and literacy but here is a definiton of numeracy on its own from J. Thiering and R. Barbaro, *Numeracy and How We Learn*, 1992:

Numeracy is the confident use of whatever mathematics a person needs for daily life.

In numeracy in the workplace, numeracy involves understanding and using numbers, graphs, charts, tables, diagrams, shapes and measurement.

Now, let's investigate some commonly held myths about language and literacy.

Myth 1: You get your quota of language and literacy while you're at school and this quota will last you throughout your working life.

If you think about your own experience of life and work you've probably learned to read and write a lot of different things which you weren't taught at school.

Think about some of the things you've learned to read and write since leaving school.

These may include reports, business letters, ballot papers, taxation forms, standard operating procedures, instructions, minutes of meetings and presentations.

How did you learn to do these things?

Many of us learn to develop our skills

- by looking at examples of how others have written the same types of things
- by listening to others doing it
- by talking with others.

Many of us learn to develop our skills for a particular purpose in or outside of work. What does this imply?

1. That we might have learned basic language and literacy skills at school, but we need more than these throughout our working lives.

2. That many of us have learned how to read and write a number of new and different things since we left school.

3. That we may have learned how to do these new things because we had to or because we wanted to.

4. That we learned how to do them by looking at what others who already knew how to do them had done.

5. That we only learned what we needed to know when we needed to know it.

Myth 2: If you haven't got good language and literacy skills, you can simply do some training to get them?

We learn to do particular reading, writing and speaking tasks depending upon when and why we need to do them.

This means that we often develop literacy skills when they are called on in a particular situation. It also means that we can't learn everything all at once. We learn new things as we need them.

It also suggests that at some stage everyone will find themselves in situations where they need to extend their literacy skills.

What are the implications of this for training people in language and literacy skills?

1. People are more likely to remember how to do particular reading, writing or speaking tasks because they need to **do** them. They probably won't remember general reading, writing and speaking tasks learn in the language classroom.

2. People will learn better if the speaking, reading and writing task is related to something they are doing in their real life, either their work life or social life.

3. Training people in language and literacy beforehand, so they'll be 'ready' to start vocational training, is not likely to be as successful as linking the language and literacy training with the vocational training. The vocational context has it own language, literacy and numeracy demands that may be quite different from whatever 'general' or 'preparatory' training in language your learners may have experienced.

Why is language, literacy and numeracy important in workplace learning and training?

Principles of adult learning

Over recent years, the issue of language, literacy and numeracy in training has become very important. Trainers are now being asked to consider the language, literacy and numeracy requirements of their training programs, materials, assessment tasks and presentation styles. They are also being asked to consider the English language, literacy and numeracy skills of their learners.

This is because the effectiveness of training hinges on the main principles of adult learning. These principles are that adults learn best when there is:

- a real purpose for learning

- a real need to learn it

- a real situation to learn it in.

These same principles apply when adults are learning to read, write, speak and do the mathematics involved in new kinds of tasks.

Changes in work practices

New technology, new ways of working such as outsourcing, competitive tendering, self-directed teams and consultative committees, quality assurance and legal obligations such as occupational health and safety legislation have meant that there are now many more types of reading, writing and speaking required at work than before. People are needing to read, write and speak for purposes they've never met in their working lives before, and therefore they are needing to learn how to do these new tasks.

More workplace learning and training, both on and off-the-job

Employees often learn about new ways of working in work-based projects or training sessions.

As a result, people are spending more time at work learning, either on-the-job, in team groups or in training off-the-job. This means there is now more language, literacy and numeracy which is related to the process of training itself.

Trainers need new types of language, literacy and numeracy for the new demands of competency-based training and assessment and for training people with diverse skills.

More culturally diverse workplaces

We all work in culturally diverse workplaces which are likely to become more diverse as the notion of a global economy takes hold. For more and more workers, English is a second language, which means that not only are they meeting new ways of reading writing and speaking at work, they are meeting these new ways in a second language. They may have learned English before they started work but they didn't learn the English for these new purposes.

Trainers and curriculum writers need to think about:

- whether the people they are working with can read and write what they need to

- whether the people they are training can understand them.

- whether they can speak and write their own ideas appropriately for their learners and whether they can explain the maths in their training programs.

Why do many people have difficulties with language, literacy and numeracy at work and in training?

Many people have difficulty with the reading, writing, speaking and numeracy which they come across in the workplace either in training off-the-job or just doing their job. There are many reasons for this.

New demands of work

Workers in many types of jobs have always met new language, literacy and numeracy demands at work as they changed jobs or were promoted. Literacy is not a finite skill which equips us for every new situation. As new language, literacy and numeracy demands emerge due to technology and changing work practices, more people are meeting new language, literacy and numeracy tasks at work.

Think about these situations:

- Jim has been training for years but he has never needed to contribute to a training plan before. How does he do it?

- Brian has worked as an engineer in a government job for years but never had to write submissions until the process of tendering was introduced. How does he do it?

- Julia now has to write down the operating procedures for several tasks she has been doing quite well for years. How does she do it?

- Wal has to sit in a training room to learn how to manage hazardous chemicals even though he's been working with them for years. How does he manage?

All of the tasks above represent new literacy demands on workers. They all need to learn how to do the new tasks, even though they can do what they were required to do in their old jobs.

Lack of basic skills

Many people, because of a range of factors in their personal lives, didn't learn the basic skills in English and mathematics at school. These factors include:

- spending a short time at school

- sickness or death of a parent

- separation of parents

- ill health as a child

- moving often

- racial discrimination

- war

- money problems

- rural isolation

- lack of private space in a large family

- parents' attitude to schooling.

In the past, not being good with English and maths didn't matter much. Workers were often able to do their jobs without much reading and writing. Many had good working lives; some were promoted to supervisors. Changes in work practices and technology has meant that these people can no longer get by without better language, literacy and numeracy skills .

Non-English speaking background (NESB)

Many people speak languages other than English as their first language. Many of your trainees will have had a good education in their first language, some not. But all of them will know how to speak another language, and that maybe a useful resource for you to use as a trainer and for the learners to use in their learning. Some people of NESB are excellent speakers of English, understanding everything they hear, but cannot read or write it confidently. Others are the opposite. They can read and write

English very well, but have great difficulty understanding others and making others understand them.

Why is it a good idea for language, literacy and numeracy support and development to be integrated into vocational training?

It makes good sense to integrate language, literacy and numeracy skills with vocational skills.

Integrating English language, literacy and numeracy into vocational education and training involves concurrently developing language, literacy and numeracy and vocational competence as interrelated elements of the one process. This involves designing and delivering programs which meet the skills need of the job or occupation and which are responsive to the diversity of learners skills, needs and resources.

'Integrating English Language, Literacy and numeracy into Vocational Education and Training: A Framework', Courtenay and Mawer, 1995.

Programs which integrate language, literacy and numeracy have four key characteristics:

- They identify the language, literacy and numeracy competencies essential for work performance and address them as part of vocational education and training.

- They take into account the language, literacy and numeracy competence of learners and develop it as part of vocational competence.

- They make sure that the language and processes used in the vocational program are consistent with the language, literacy and numeracy requirements of the job or vocational area.

- They assess language, literacy and numeracy outcomes in terms of successful *performance of relevant and authentic vocational tasks.*

The real challenge for curriculum developers and trainers is to learn enough about language, literacy and numeracy to be able to work out how to integrate language, literacy and numeracy skills development with their vocational and workplace training.

What do curriculum writers and trainers need to know about language and language learning in order to help workers with their language, literacy and numeracy needs?

The Workplace Trainers' Competency Standards for Category 2 Trainers state that trainers need to be able to take any barriers to learning into account in the design and delivery of their training.

These barriers include, among others, language, literacy and numeracy barriers.

Here are several principles about language, literacy and numeracy, which will help you to design your curriculum and training materials.

1. Language, literacy and numeracy is best learnt in context with a specific purpose.

    Learners need to know why they are learning and how their learning applies to their particular workplace situation. Include this information in your learning materials.

2. Language and literacy can be learned by providing examples and models.

    Include examples of forms, reports and other models of documents trainees need to read and write.

3. Use language appropriate to the purpose for which your learners will use it.

    For example, if the work task involves spoken language, design or use speaking/listening activities.

4. While it may be useful to break up a text into smaller chunks, make sure learners have the opportunity to work with the whole text.

    For example a site report can be broken up into its parts, but needs to be presented as a whole, so that trainees can see how the parts fit together.

5. Even though we might be mainly using one mode of communicating, eg. speaking, in most communication events, a combination of speaking, listening and/or reading, writing often occurs.

    An example of this combination might be writing a memo. In order to write the memo, the writer may discuss the content of the memo with others, and read other documents.

6. The language we use depends on the shared familarity of the situation.

If we know a situation well, and are speaking with someone else who knows it well too, our language will reflect our shared knowledge, ie we won't have to explain what we mean.

If we are speaking to someone who does not know the situation as we do, our language will have to include definitions and explanations which create the context for them.

In a training context we are usually introducing new and unfamiliar content and our learners will need to rely on us to create the context for them. As a result, we are often stuck with having to use

complex and abstract language to get our points across. This is unavoidable when training takes place off-the-job or when a trainer is trying to teach new concepts on-the-job. As trainers we need to be aware of the impact of abstract language on learners with language, literacy and numeracy needs.

Summary

The features of language and language learning which curriculum writers and trainers need to know to support and develop learners' language and literacy skills in vocational training are:

1. Language is best learnt in context with a specific purpose.

2. Language is learnt from examples and models of the language we need to use in a given situation.

3. Learners benefit from the opportunity to work with and appreciate the whole text.

4. Language learning, like ordinary language use, involves people interacting with each other, using language to get things done.

5. Even though we might be mainly using one mode, in most communication events, a combination of modes occurs.

6. The language you choose in a given situation depends on your and your listener's familarity with the situation.

Activity for curriculum writers

You are a curriculum developer who has to deliver a session to your peers to raise their awareness of and commitment to integrating language, literacy and numeracy into vocational training.

For the session:

1. Make an overhead transparency with three or four main points which you will use to assist you to explain to a group of curriculum writers or fellow trainers why they need to consider language, literacy and numeracy in their curriculum writing and/or training.

2. Design an activity based on this information to illustrate your ideas.

Activity for trainers

1. What are the most useful points you have learned about language in this unit?

2. How could you put these ideas into practice in your training?

Check your progress	Yes	No	Need to review
I can discuss current views of language, literacy and numeracy.			
I can explain why learners have difficuly with language, literacy and numeracy .			
I can explain the importance of effective language, literacy and numeracy skills at work.			
I can describe what is meant by integrating language, literacy and numeracy into vocational training.			
I can explain why integrating language, literacy and numeracy with vocational training is an effective way to support and develop learners' skills.			

Unit 2: Identifying the language, literacy and numeracy demands in competency standards, work tasks and curriculum

Introduction

This unit is written for curriculum developers. To do this unit, you will need to have quite a thorough understanding of the curriculum design process and be aware that language, literacy and numeracy issues emerge for many trainees in the practical, concrete, everyday world of training, both on and off-the-job.

Other units in this series which are aimed primarily at helping trainers with language, literacy and numeracy in their day-to-day training, are useful background information for curriculum designers doing this unit. These units will help you to understand the hands-on reality of language, literacy and numeracy demands in vocational training, so that this will be reflected in your curriculum design. We suggest that you work through some of the practical ideas in the other units in order to get the best value from this unit.

Information in this unit will help you to:

* identify language, literacy and numeracy demands in competency standards.

* identify language, literacy and numeracy demands in workplace tasks.

* design curriculum which includes language, literacy and numeracy tasks explicityly stated or implied in competency standards and work tasks.

What you'll do in this unit

* Look at a useful model for identifying the language, literacy and numeracy demands in competency standards.

* Examine an example of how this model has been applied to identify the language, literacy and numeracy demands in a particular set of competency standards.

- Identify the language, literacy and numeracy demands in a set of competency standards yourself.

- Examine a useful model for identifying the language, literacy and numeracy demands of workplace tasks.

- Identify the language, literacy and numeracy demands in workplace tasks.

- Consider ways in which these language, literacy and numeracy demands can be reflected in the design of curriculum, learning resources and assessment tasks.

- Design guidelines to help curriculum developers take the language, literacy and numeracy demands into account in the curriculum design process.

Questions we'll try to address in this unit are:

How do you identify language, literacy and numeracy demands which haven't already been identified in the competency standards?

How do you ensure that your curriculum and learning resources include the language, literacy and numeracy demands in competency standards, whether or not they have been made explicit?

How do you make sure that the language, literacy and numeracy demands you make on trainees in the training context, ie exercises, activities and assessment tasks are not more difficult than the language, literacy and numeracy demands in the standards?

Language, literacy and numeracy in competency standards

Let's start by referring to the National Board of Employment, Education and Training and Australian Language and Literacy Council publication: *Literacy at Work, Incorporating English Language and Literacy Competencies into Industry and Enterprise Standards*, published by the Australian Government Publishing Service in June 1996.

In this work, there is a model of how to identify language, literacy and numeracy demands in competency standards in order to integrate them into the standards. The model includes several options.

Language, literacy and numeracy demands can be identified and integrated:

- as separate competency standards

- as elements within competency standards

- as performance criteria for elements

- within competency standards

- within the range of variables statement of competency standards.

The model proposed in *Literacy at Work* described on pages 18-24 is a useful starting point for you if you are dealing with standards for which the language, literacy and numeracy demands have not been identifed. While it is not your job to systematically identify these demands in order to write them into the standards, you can use this process to predict the types of language, literacy and numeracy tasks trainees would need to do in order to achieve these competencies.

Language, literacy, numeracy in the training context

As a curriculum designer, you need to be aware that language, literacy and numeracy demands arise in two different contexts in training.

These are:

1. Language, literacy and numeracy demands which are essential tasks or components in the achievement of the competency eg reading a standard operating procedure to operate a machine, or discussing a problem within a team, or calculating the required quantity of an ingredient.

2. Language, literacy and numeracy demands which are a component of training itself, eg reading an overhead transparency, following what the trainer is saying, interpreting statistics or taking notes.

These two different contexts generate different language, literacy and numeracy demands.

When designing curriculum from standards you need to be sure that you take account of the essential language, literacy and numeracy tasks in the competency standard itself at the same time as you recognise the nature of the language, literacy and numeracy demands you are making on the trainees in the exercises, explanations, tasks and projects you include in your learning resources.

A model for identifying language, literacy and numeracy demands in Industry Competency Standards from *Literacy at Work*

The Model

Summary of the Model

This section provides a summary of one method of dealing explicitly with English language and literacy in competency standards. This method is described in full in the following three sections:

The Model Part A: Principles

The Model Part B: Analysing the Workplace

The Model Part C: Writing the Standards

These sections and this summary have been written for people whose job it is to write or review industry/enterprise competency standards and who have decided to incorporate English language and literacy explicitly into these standards.

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The model itself can be summarised diagrammatically as follows:

```
                    ┌─────────────────────────────┐
                    │ Do you wish to incorporate English
                    │ language and literacy explicitly into
                    │ competency standards?
                    └─────────────────────────────┘
                                   │
                                   ▼
```

No	Yes (Read Part A: Principles)

English language and literacy competencies are to be implicit:

- draw up a map/matrix to show where they are located; and

- develop a strategy for English language and literacy training.

Phase 1

Do an analysis of the workplace to identify English language and literacy skills.

Read Part B: Analysing the Workplace

→ **Method**

Undertake research in the workplace in order to identify:

- aspects of communication;

- modes of communication; and

- complexity of communication;

across different occupations and types of work within the industry or enterprise. Techniques may include:

- analysis of documents;

- interviews;

- focus groups; and

- observation of work.

Phase 2

Organise the information gathered in the English language and literacy analysis.

Incorporate explicitly in the standards.

Read Part C: Writing the Standards

→ **Method**

Use **Table 1** to identify English language and literacy units of competence.

Use **Table 2** to identify and locate English language and literacy elements of competence, range of variables, and evidence guide information.

The Foundations of the Model

Wherever the industry/enterprise decides to locate English language and literacy in competency standards, the use of this model will ensure that the approach is systematic and thorough and:

- is based on a set of principles;

- has internal consistency and includes English language and literacy for each level in the competency standards;

- has the capacity to reflect degrees of complexity of English language and literacy; and

- includes enough information for assessment procedures and training curriculum to be written.

The two documents that have been central to the development of this model and which are important source documents are:

- *National Framework of Adult English Language, Literacy and Numeracy Competence* (Australian Committee for Training Curriculum 1993); and

- *National Reporting System* (Commonwealth of Australia and the Australian National Training Authority 1995).

One of the key features of the *National Framework of Adult English Language, Literacy and Numeracy Competence,* which is the starting point of this model, is the fact that the National Framework describes communication competence as having six aspects which are required at work and in broader community life.

The *National Reporting System* is a mechanism for reporting the outcomes individuals achieve as a result of undertaking English language, literacy, and numeracy training programs. It provides a benchmark against which to judge an individual's English language, literacy, and numeracy achievements.

Part A: Principles

A competency-based approach requires that training is based on what the industry/enterprise expects people to do at work. Similarly, English language and literacy competence in the workplace is best acquired and developed by using the language within relevant workplace contexts. These contexts provide the purpose, meaning and the environment for learning to take place.

Literacy at Work, June 1996, Australian Language and Literacy Council National Board of Employment, Education and Training.

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This model for incorporating English language and literacy competence explicitly into competency standards outlines the various *aspects* of communication in which people need to be competent for work. It also considers the *modes* and the *complexity* of the communication that takes place at work.

Aspects of Communication

The model takes as its starting point the fact that, at work, people communicate about:

- work tasks *(handling procedural information to perform work tasks)* (e.g. giving or receiving instructions);

- work as part of a team *(interacting as a member of a work team)* (e.g. negotiating the allocation of work tasks);

- work with people outside the organisation/enterprise *(communicating with members of the public)* (e.g. asking for some information from an external customer);

- the workplace *(interacting in the organisation)* (e.g. participating in quality management meetings);

- themselves *(expressing information about our own needs and identity)* (e.g. writing an application for a job promotion or leave);

- learning new skills *(communicating when learning on the job)* (e.g. reading operating procedures); and

- technology *(using technology to communicate information)* (e.g. using a computer system to find out product details).

Modes of Communication

When people communicate they:

- read a range of printed material

    - including words, symbols, numbers, diagrams,

    - ranging from single words and symbols on signs through to long reports on a work-related topic, and/or

    - on paper, on computer screens, on signs, on notice boards;

- write a range of material

    - including words, symbols, numbers, diagrams,

    - ranging from filling in forms with single words and numbers, to short letters, to long reports on a work-related topic,

    - including handwritten or produced using a computer, and/or

    - transmitted by fax or electronic mail; and

eracy at Work, June 1996, Australian Language and Literacy Council National Board of Employment, Education and Training.

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- listen to and talk about work with a range of people either

  – face-to-face,

  – as a member of a group, or

  – using a telephone.

While the different modes of communication can be separated, many communication events involve a combination of all three modes. For example, when discussing a report, a person might also read other reports or ask others for advice.

Levels of Complexity

The level of complexity is tied to three factors that work together to influence the level or degree of difficulty or complexity of English language and literacy competence.

These factors are:

- *What has to be done?* That is

  – task complexity (the breadth of the task and the knowledge and skills required to do the task), and

  – text complexity (how technical and abstract the language in the text is).

- *Who is doing it?* That is

  – the employee's familiarity (knowledge and experience) with the context, task, text.

- *How much support/assistance is provided?* That is

  – the amount of expert assistance needed to do the task.

All these factors need to be considered when determining the range of English language and literacy competence expected at work. This understanding of English language and literacy competence includes such features as spelling, punctuation, and pronunciation, which many employers traditionally associate with English language and literacy competence. But it goes well beyond any restricted concept of English language and literacy competence that is limited to such isolated features.

This model allows for a consideration of all the features of English language and literacy that people need in order to communicate in the changing workplace.

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Part B: Analysing the Workplace

In order to gather information about English language and literacy, analyse the workplace. The best way to carry out such an analysis is to visit work sites, talk to people about the work they do, observe work, and collect samples of documents that people at work deal with.

Identifying the Number of Sites that are Representative of the Industry

If you are writing or rewriting industry standards, you need to select organisations/enterprises that are representative of the diverse nature of the industry. Consider the following criteria when selecting sites:

- size of the organisation (large, medium, small);
- locations (across a number of states, rural, urban);
- product or service variety (if appropriate);
- organisation of work (e.g. traditional hierarchical or autonomous teams);
- extent of quality systems in place;
- extent and nature of technology; and
- composition of the workforce (gender, ethnicity, education, age).

Research (Phase 1)

Having selected the appropriate number of sites to research, use a combination of the following techniques to gather the information you need to incorporate English language and literacy in the competency standards:

- undertake background research—analyse documents;
- undertake background research—go on site tours and interview key personnel such as the site manager, union delegate, human resource manager, supervisor, trainer, health and safety officer;
- interview employees at different levels within the organisation;
- conduct focus groups with employees in order to identify communication systems and processes and critical issues surrounding communication and training within the organisation; and
- observe work.

Part C: Writing the Standards

This phase (Phase 2) involves making sure that the information gathered about English language and literacy in the research phase is incorporated into the various components of the standards and that this information is incorporated systematically and consistently across the standards for each level of work.

In consultation with key stakeholders, decisions need to be made about the status and ranking of English language and literacy. Factors such as the nature of work in the industry, the organisation of work, the purpose and use of standards, and the composition of the workforce will all influence the location of English language and literacy in the standards.

Options for incorporating English language and literacy explicitly include:

- adding English language and literacy units of competency to the set of industry/enterprise standards;

- adding English language and literacy elements of competence to units;

- adding English language and literacy performance criteria; and

- adding information about English language and literacy to the range of variables and the evidence guide.

Note: There is no single formula for every industry/enterprise.

Key documents to be used in this phase are:

- *National Competency Standards Policy and Guidelines* (National Training Board 1992); and

- the *National Reporting System* (Commonwealth of Australia and the Australian National Training Authority 1995).

With English language and literacy incorporated explicitly into the standards, English language and literacy training is more likely to be delivered and this training is more likely to be tailored specifically to the needs of the workplace.

To really work out the language, literacy and numeracy demands in the standards, you need to research the workplace itself. In this way, you can determine the language, literacy and numeracy requirements of the various work tasks or job functions and the communicative practices in the enterprise from which the competency standards have been derived.

For you as curriculum developer, whether you are developing curriculum for your workplace only or writing curriculum in an educational institution, the more you know about the language, literacy and numeracy associated with various job functions, the more easily you'll be able to work out the implicit language, literacy and numeracy demands in competency standards

Activity

Here's an early unit of competency from the drilling industry.

Read through it and answer the questions on p. 28.

Unit 7: Construct monitoring/production wells

Note: For Elements 1 and 2 performance criteria are in accordance with the Organisation's operating procedures

Element	Performance Criteria
1. Assemble and insert casing and screens	Assemble and insert casings and screens using approved procedures
	Use any equipment required for assembly correctly, safely, and in accordance with approved procedures
2. Develop wells	Develop wells
	Carry out standard borehole tests

Unit 7: Construct monitoring/production wells

Range of Variables statement

1. Procedures that can be used for assembling and inserting casing and screens include:

   - solvent cement (PVC)

   - stainless steel screws (PVC)

   - welding (steel)

   - threaded (PVC)

2. Equipment required for assembly and insertion can include:

   - hand tools

   - power driven (electric, hydraulic or air) hand held tools

   - welder

   - solvent

3. Contaminants that may be encountered can include:

   - Hydrocarbons (MAHs, PAHs)

   - Organic compounds (Pesticides)

   - Chlorinated Hydrocarbons (Dioxins) (PCB)

   - Heavy metals

   - Asbestos

   - Acids

4. Procedures and standards that should be observed or considered in constructing wells can include:

   - Australian Standards e.g. AS 2368

     Other regulations and standards

     – ANZECC/NHSMRC Guidelines (for working on contaminated sites)

     – AWRC Guide to sampling contaminated groundwater

     – U.S. OSHA Guidelines

   - Organization's own internal procedures

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Questions

1. Are there language, literacy and numeracy demands explicitly identified in this standard?

2. What are they?

3. Where do they occur?
   - Elements
   - Performance Criteria
   - Range of Variables

4. Develop learning outcomes and performance criteria which represent these language, literacy and numeracy demands.

5. How would you make sure these demands are addressed in the learning resources you would develop for this standard?

5. Can you identify any other possible language, literacy and numeracy demands in this competency which have not been explicitly identified?

6. How would you go about checking that you have captured all the language, literacy and numeracy demands in the standard to make sure they are present in your curriculum and learning resources?

Comment

In this version, the only explicit language, literacy or numeracy demand was reading of the regulations, standards and guidelines.

These demands were identified in point 4 of the Range of Variables statement.

You would need to include reference to these regulations and guidelines in your performance criteria at least. You may even decide to write a learning outcome around the reading of these documents. You would need to include copies of them in your learning resources. You may include activities or tasks which require the learner to refer to these regulations and guidelines in the process of achieving both elements of the competency.

Other language, literacy and numeracy demands are quite likely but not very obvious in this version of the competency.

You would need to follow some of the principles set out in *Literacy at Work* to ensure that you had captured the language, literacy and numeracy requirements.

This would include:

- talking with experts who know the job and these particular tasks

- collecting examples of written texts associated with the job.

Activity

Here's the same unit of competency in its recently revised version. In the process of revision, several new language, literacy and numeracy demands have been identified.

Read through it and respond to the questions on p. 36.

DRILLING INDUSTRY
NATIONAL COMPETENCY STANDARDS

Unit 10.0	**Construct Monitoring/Production Bores**
Description	This unit covers the design and construction of production bores, decontamination, bore maintenance and abandonment of test/bore holes. *Water Well, Geotechnical and Environmental drilling sectors.*

Element of Competence	Performance Criteria
10.1 Liaise with client and/or other relevant parties	Scope of work is discussed with client to gain general agreement on drilling plan.
	Regular up to date information on progress, and/or problems encountered, is regularly communicated to client and/or other relevant parties.
10.2 Design monitoring/ production bores	Most appropriate construction methods are determined from the reading and interpretation of all available documented information.
	If necessary, calculations are undertaken to determine appropriate screen design parameters, ie
	– diameter – length – aperture size.
	Appropriate gravel pack design parameters are calculated, if required.
	Information is plotted on graphs and interpreted.
	Ability to differentiate between a water table aquifer and an artesian aquifer is demonstrated.
	All necessary materials for the job prior to commencement of construction phase are available and on site.

| Unit 10.0 | Construct Monitoring/Production Bores... continued... |

Element of Competence	Performance Criteria
10.3 Construct monitoring/ production bores	Approved procedures are used to assemble and insert casing and screens.
	Equipment for assembly is used safely and in accordance with approved procedures.
	Artificial pack material is placed in a manner so as to ensure uniform distribution in the annular space without bridging.
	Bore is constructed in accordance with any applicable regulations, standards and the organisation's internal procedures.
	A knowledge of basic geological data is demonstrated.
	Records are maintained accurately & legibly.
	A range of plans diagrams and logs are read and interpreted to determine the appropriate design for the production well.
	Ability to accurately calculate volume in cubic metres or litres is demonstrated.
	Standing water level and application of flow metres are measured/calculated and recorded.
	Symptoms of a formation kick are recognised and action taken to control the bore.
10.4 Develop bore.	Development techniques are used with care to prevent collapsing of casing or screens.
	Development techniques are used to improve hydraulic transmissivity around the bore.
	Development is undertaken until a continuous, clean supply of water is obtained, in accordance with site, contractual or regulatory requirements.
10.5 Disinfect/decontaminate bore and drilling equipment	Disinfection/decontamination procedures to comply with relevant standards or regulatory requirements.
	Hazard codes and instructions in the use of hazardous chemicals are read and complied with to ensure hazardous chemicals are handled in accordance with manufacturer's recommendations/instructions.

Unit 10.0   Construct Monitoring/Production Bores... continued...

Element of Competence	Performance Criteria
10.6 Carry out bore maintenance and rehabilitation.	A process of diagnosis is undertaken to determine likely cause of bore deterioration. A program of rehabilitation is devised to ensure that the site is restored to a reasonable condition. Protective equipment is worn when handling hazardous cleaning chemicals and manufacturer's recommendations are followed.
10.7 Abandon test/bore holes.	Correct procedures for the abandonment (decommissioning) of test holes or bore holes in any given type of geological formation, are carried out. Properly sealed hole is verified for future reference. Drill and other fluids are disposed of safely.

Unit 10.0   Construct Monitoring/Production Bores... continued...

Range of Variables

Evidence for designing bore includes:

- geophysical logs
- physical samples
- interpretation of soft/hard zones
- losses of mud

Documents to be read and interpreted to determine construction methods are.

- results of test hole
- hydrogeological data
- geological data
- old bore hole logs
- results from Sieve Analysis test
- geophysical logging results

Procedures that can be used for assembling and inserting casing and screens include:

- solvent cement (PVC)
- stainless steel screws (PVC)
- welding (steel)
- threaded (PVC, FRP, ABS)
- locking strip or wire rope

Equipment required for assembly and insertion can include:

- hand tools
- power driven (electric, hydraulic or air) hand tools
- welder
- solvent

Basic geological knowledge may include:

- rock types
- aquifer systems
- drillability
- stability

Numerical tasks may include:

- Calculations such as
    - volume eg. mud pits, drums, tanks or bore holes of given dimensions.
    - up hole velocity
    - cement/water/additives quantities
    - mud weight, control of pressurised formations
    - screen design parameters
    - gravel pack design parameters
    - flow rates eg L/sec, GPM etc
    - conversion for imperial to metric and vice versa
    - conducting a sieve analysis.

Unit 10.0   Construct Monitoring/Production Bores... continued...

Range of Variables... continued...

Writing tasks may include:

- State Bore Completion Report
- Daily Drill Operation Report
- Diagrams
- Brief descriptions
- Plotting information on a graph

Reading and interpreting of materials may include:

- plans
- diagrams
- Bore Log
- graphs

In environmental drilling, contaminants that may be encountered can include:

- Hydrocarbons (MAH's, PAH's)
- Organic compounds (pesticides)
- Chlorinated Hydrocarbons (Dioxins) (PCB)
- Heavy metals
- Asbestos
- Acid

Licences required can include:

- Water Well licence
  - Class 1
  - Class 2
  - Class 3
- Licence for particular machine eg.
  - cable tool
  - auger
  - rotary air
  - rotary mud

Procedures and standards that should be read and interpreted in constructing wells can include:

- Australian Standards eg. AS 2368 (Test Pumping Water Bores)
- Other regulations and standards:
  - ANZECC/NHSMRC Guidelines (for working on contaminated sites)
  - AWRC Guide to sampling contaminated groundwater
  - U.S. OSHA Guidelines
- Organisation's own internal procedures
- ARMCANZ "Minimum Construction Requirements for Water Bores in Australia".

Unit 10.0 Construct Monitoring/Production Bores... continued...

Evidence Guide

(1) Critical aspects of evidence to be considered
A demonstrated understanding of
- the rights & responsibilities of employers & employees under the relevant State Workplace/Occupational Health & Safety Act
- Compliance with company safety codes
- Environmental awareness
- Isolation/work permits
- Geological formations
- Ability to complete required documentation legibly & accurately within specified time frame
- Application of calculations, measurements eg annular volume; similarity and ratio to estimate depth, width, eg. estimate the volume of a mud pit; basic geometry eg. when calculating the direction of a hole
- Effective communication in spoken and/or written form with crew, Bore owner & Government
- Ability to adapt to new situations using appropriate strategies eg. innovation, persistence, resourcefulness, contingency planning

(2) Interdependent assessment of units

Assessment of this unit will need to consider the relative literacy/numeracy skills as well as competence in the operation of a range of communications equipment. Prerequisite units are Units 1.0 - 9.0.

(3) Underpinning Knowledge
- Equipment - characteristics, technical capabilities and limitations
- Basic geological formations, ie. various formations which permit groundwater movement and factors affecting groundwater quality
- Characteristics of ìgood samplesî required for water well construction
- Ways in which sampling errors can occur
- Types of muds
- Problem solving techniques
- Grout placement methods and procedures
- Range of numerical calculations

(4) Resource Implications
The resources available will be specific to the individual employer and the particular work site.

(5) Consistency in Performance
Competence in this unit needs to be assessed over a period of time to ensure consistency of performance in a range of conditions.

(6) Context of assessment
Competency shall be assessed in the normal or simulated work environment within the bounds of safety and in accordance with work procedures

(7) Key Competencies

Key Competencies	Level
Communicating Ideas and Information	(2)
Planning and Organising Activities	(2-3)
Working with Others in Teams	(2)
Using Mathematical Ideas and Techniques	(2)
Solving Problems	(2)
Using Technology	(2)

Questions

1. What additional language, literacy and numeracy demands have been recognised and made explicit in the rewriting of this competency?

2. Where are these demands identified in the competency?

3. How would you include these demands in your curriculum design and learning resources?

4. Is it easier to include these language, literacy and numeracy demands in your curriculum design process with this revised version of the competency than it was with the earlier version of the competency? Can you explain why?

Suggested answers are in the comment on the next page.

Comment

In the revised version of the competency, there are many language, literacy and numeracy demands identified. Most of these demands are identified in the performance criteria, as essential aspects in the performance of the elements of the competency. The first of the new elements which have been added is a language and literacy demand in itself with two performance criteria which are, of course, also language and literacy demands.

The fact that the language and literacy demands are made explicit in the performance criteria of the competency gives a considerable amount of guidance to the curriculum developer in translating the language, literacy and numeracy demands of the competency into curriculum because the language, literacy and numeracy demands are described in the context in which they occur.

As curriculum developer and learning resource writer you can go to the source to collect examples of these types of spoken and written texts. You can get examples of spoken texts by recording examples of meetings, discussions, instructions or writing notes on what you hear

These collected texts will serve two purposes:

1. They can be used as models in your curriculum resources

2. They will give you an idea of the level of difficulty of the spoken and written language the learner will face in this job or in achieving this competency.

In this revised version of the competency, the specific language, literacy and numeracy tasks associated with achieving specific elements of the competency are clearly linked and therefore it is easier to integrate them into the curriculum and resources.

If the language, literacy and numeracy demands are clearly placed in the performance criteria of the specific elements, it is possible to design holistic tasks which entail the development of the specific language, literacy and numeracy skills in the context of their use for different types of trainees.

Activity

Here is a unit of competency from Sawmilling and Processing.

Read through it then answer the questions.

UNIT S3.2		**SAWMILLING AND PROCESSING** **Visually determine hardwood stress grade**

Element S3.2.1   Determine stress/strength grades

Performance criteria
a. Properties of structural timber are identified.
b. Structural grades applicable to hardwood are identified.
c. Branding and colour code requirements for graded hardwood boards in accordance with standards.
d. Stress grade and strength group are determined for seasoned hardwood boards in accordance with standards.
e. Stress grade and strength group are determined for unseasoned hardwood boards in accordance with standards.

Element S3.2.2   Identify and evaluate sawn timber characteristics

Performance criteria
a. Grain direction and grain slope ratio are determined on hardwood boards.
b. The structure of hardwood is recognised and characteristics of heartwood and sapwood are identified.
c. Sawn timber characteristics including want and wane are identified.
d. Imperfections including knots, gum veins and shakes are identified and timber graded in accordance with standards.

Element S3.2.3   Evaluate the effect of imperfections on grades

Performance criteria
a. Imperfections which standards permit and do not permit for each grade are distinguished.
b. Extent of each permissible imperfection determining grade is identified.
c. Specific imperfections and limits allowed for each grade are identified for the most common species and grades encountered within the enterprise.

Element S3.2.4   Determine the grade of boards

Performance criteria
a. Sawn boards are evaluated systematically against all grading criteria.
b. Correct stress and structural grade for sawn boards are identified.
c. Marking appropriate to grade is applied to boards.
d. Assistance is sought for difficult grade decisions.

From: Forest & Forest Products and Employment Skills Co. Ltd.

SAWMILLING AND PROCESSING
Visually determine hardwood stress grade

UNIT S3.2

Range of variables

- Stress grades, strength groups, structural grades, imperfections and hardwood species are those listed in the applicable standards.

- Boards graded include seasoned and unseasoned with as-sawn and dressed finishes.

Evidence guide

- Visually identifies the structures and features of hardwood.

- Demonstrates the ability to:

  - identify and measure imperfections

  - mark timber for grade and interpret markings

  - consistently identify correct grades for sawn boards within the species and grades typically encountered in the enterprise

- Describes and identifies hardwood species.

- Describes the relationship between stress grades, species and structural grades.

Questions

1. Are there language, literacy and numeracy demands in the various components of this competency?

2. How will you take them into account when you design a curriculum?

Comment

In this standard, there are requirements to confer over difficult decisions such as Element S3.2.4, Performance Criteria d: *Assistance is sought for difficult grade decisions*. There are requirements to read applicable standards in the Range of Variables statement. There is also in S3.2.2, Performance Criteria a a need to determine the ratio of grain direction and slope. There are very likely to be other language, literacy and numeracy demands not made explicit, which you would need to identify through discussion with workers in the industry.

Activity

Let's take a look at curriculum designed from standards in the food industry now. The Certificate in Food Processing has modules entitled 'Industrial Communications A to D', from which learning resources for communicating in the industrial context can be designed, and a module entitled 'Calculations' from which resources involving numeracy can be designed.

However, in each of the other core modules, there are other language, literacy and numeracy demands.

Read through the description of the module and then answer the questions.

COURSE:	CERTIFICATE IN FOOD PROCESSING

MODULE:	OCCUPATIONAL HEALTH AND SAFETY B

MODULE CODE:	C20HSB94

MODULE VALUE: Twenty (20) points (As a guide for planning purposes a reasonable length of time to undertake the module is twenty (20) hours of formal instruction. However, this is not to construe that the learner's progress is to be based on a time served arrangement. Rather, the principles and practices of competency based learning are to be applied.)

PURPOSE: This module provides the learner with knowledge and skills to apply safe work procedures to the operation of machinery and to enable the learner to contribute to improving workplace occupational health and safety.

PREREQUISITES: Occupational Health and Safety A or equivalent

RELATIONSHIP TO PREVIOUSLY ACCREDITTED MODULES: This module replaces the following modules previously accredited in the Certificate in Food Processing: C20HSB92 Occupational Health and Safety B.

Learners who have previously completed C20HSB92 will receive full credit for C20HSB94.

Learners who have part completed C20HSB92 may seek advanced standing in C20HSB94 on the basis of recognition for prior learning.

RELATIONSHIP TO COMPETENCY STANDARDS: This module is based on the national food industry NTB competency standards endorsed by the National Training Board. It is the training response to Units 2.3 and 2.4 of the Food and Beverage Industry Competency Standards (December, 1993).

Normally, it will be undertaken as part of studies at Australian Standards Framework (ASF) Level 2.

CROSS REFERENCING MODULE WITH STANDARDS: The following is a summary of the association between the competency standards and this module descriptor.

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COMPETENCY STANDARDS		MODULE DESCRIPTOR LEARNING OUTCOMES
UNIT	**ELEMENT**	
2.1 Apply safe work procedures to the operation of machinery	2.1.1 Implement safe work procedures 2.1.2 Respond to emergency situations 2.2.1 Participate in conduct	1. Apply safe work procedures in the operation of machinery 2. Implement emergency and fire situations safety procedures
2.2 Contribute to improving OHS	2.2.2 Participate in investigating accidents 2.2.3 Participate in controlling OHS hazards 2.2.4 Provide on-the-job training consistent with safe work procedures	3. Participate in the improvement of improving OHS in the workplace

ARTICULATION: This module extends the knowledge and skills acquired in Occupational Health and Safety A. It also enables the learner to develop competencies for application in other modules at ASF 2 and at higher levels.

DELIVERY: This module may be taught in-house and/or externally. Regardless of the delivery mode every effort must be made to relate the training to the learner's workplace,

to strengthen the nexus between the acquisition and application of knowledge/skills/attitudes.

ASSESSMENT: A variety of methods may be used to assess learner performance. The assessment should be used to verify competence in the Learning Outcome and the overall module. The methods used could be either verbal and/or non verbal and/or written; with the central purpose of the assessment being the learner's ability to demonstrate competence. It is vital that the assessment measures what is intended to be measured, as indicated by the Learning Outcome/Assessment Criteria. In addition, the following clarification of terms is to assist assessment reliability:

(a) "Explain" – typically, this requires a broad/general response
(b) "Describe" – this is a more specific/detailed response than "explain"

From: *Certificate in Food Processing*, Dec 1993, National Food Industry Training Council.

CONDITIONS: The learner will be provided with,

(a) National and State Codes of Practice;

(b) Company OHS policy, practices, procedures and safety rules;

(c) an outline of employee and employer responsibilities as provided for by OHS legislation;

(d) work processes and production equipment typical of the workplace; and

(e) hazard control equipment which can include fire extinguishers, machine guards, dust extraction, mechanical aids, acoustic insulation and Personal Protective Equipment.

LEARNING OUTCOMES: On completion of this module the learner will be able to:

LEARNING OUTCOME	ASSESSMENT CRITERIA
1. Apply safe work procedures in the operation of machinery	1.1 Explain the purpose of the use of equipment guards, warning devices and safety features of equipment related to own work and immediate work area
	1.2 Describe and demonstrate the correct procedures for the use of equipment related to own work and immediate work area
	1.3 Explain typical machine related health and safety risks related to equipment used in own work of immediate work area
	1.4 Outline the purpose and process for undertaking emergency stops, machine lock outs and/or isolation procedures
2. Implement emergency and fire situations safety procedures	2.1 Identify, describe and locate in the work area appropriate fire extinguishers for each type of fire
	2.2 Demonstrate safe operation of fire extinguishers for each type of fire by manufacturer's specifications
	2.3 Describe, given each type of fire, what may happen if the incorrect fire extinguisher is used
	2.4 Outline roles and responsibilities of self and key personnel in following evacuation/ fire safety procedures
	2.5 Identify and follow procedures for reporting accidents and injuries

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LEARNING OUTCOME	ASSESSMENT CRITERIA
	2.6 Outline the differences between accidents requiring first aid treatment and those requiring emergency treatment
	2.7 Demonstrate ability to distinguish between accidents requiring first aid treatment and those requiring emergency treatment
	2.8 Outline the implications/potential implications of not reporting accidents and injuries or inaccurately reporting accidents and injuries
	2.9 Complete accident and incident reports
3. Participate in the improvement of OHS in the workplace	3.1 Explain the purpose, company procedures of OHS in the workplace and responsibility for undertaking: (a) safety audits (b) risk assessments (c) accident investigations (d) hazard control
	3.2 Identify workplace hazards related to actual or simulated examples from own work area and a broader work environment
	3.3 Outline the concept of levels of risk
	3.4 Outline approaches to hazard control consistent with hierarchy of control
	3.5 Participate in group/team problem solving processes to improve OHS in the workplace
	3.6 Identify and demonstrate application of basic principles for communicating workplace information to others in situations such as reporting incidents

From: *Certificate in Food Processing*, Dec 1993, National Food Industry Training Council.

Questions

1. What are the language, literacy and numeracy tasks which are mentioned explicitly in these learning outcomes and assessment criteria?

2. What are some of the tasks you would need to include in your learning resources to adequately address the language, literacy and numeracy demands in this module?

Comment

Some of the language, literacy and numeracy demands in this module are

- Explain several procedures and functions
- Outline roles and responsibilities
- Follow procedures
- Describe possible events
- Complete accident and incident reports
- Participate in group/team problem-solving processes.

These are quite significant language, literacy and numeracy tasks which would need specific integration into the learning resources. This could be in the form of presentation tasks, report-writing tasks procedure writing, reading and listening, group-discussion activities, strategies for giving feedback, turn taking, asking for clarification, repetition etc.

Summary

What can we conclude about language, literacy and numeracy and competency standards and existing curriculum so far?

1. If language, literacy and numeracy demands are made explicit in the different components of the competency standard, then the process of building these tasks in context into the curriculum is made more achievable.

2. If language, literacy and numeracy demands are made explicit in the learning outcomes and assessment criteria of curriculum documents, then the process of including relevant activities and materials in the learning resources and hence in the training itself is made much easier.

3. If language, literacy and numeracy demands are not made explicit or are only partially identified in competency standards, then the process of building them into the curriculum in context is made more difficult for the curriculum writer. He or she needs to research the workplace to establish these tasks.

4. If language, literacy and numeracy demands are not identified explicitly in all competencies but only in specific communication competencies then it is more difficult for the curriculum developer to recognise the specific vocational contexts in which these language, literacy and numeracy demands operate and to include them in a contextualised way in the curriculum. Again, he or she needs to research the workplace to establish these tasks in context.

How do you make sure that the language, literacy and numeracy demands you make on trainees in the training context, ie exercises, activities and assessment tasks, are not more difficult than the language, literacy and numeracy demands in the standards or work tasks?

Up to now we have been concerned to capture the language, literacy and numeracy tasks which are an integral part of achieving the vocational competency in the curriculum and learning resources.

However, these are not the only language, literacy and numeracy tasks associated with curriculum and learning resource development. Curriculum developers need to be aware of the language, literacy and numeracy skills which are required in order to teach and learn the competency both on and off-the-job. The process of teaching and learning is essentially a language-based activity and even when there are significant amounts of practical and demonstrable tasks in the training context, the training context is dominated by speaking, listening, reading and, to a lesser extent, writing.

This fact is illustrated by the use of terms like *explain, describe, outline,* in the performance criteria of competency standards.

What is important for you as a curriculum developer is to ensure that the type of language, literacy and numeracy used in the curriculum and learning resource reflects, as far as possible, the language, literacy and numeracy requirements of the competency and work tasks. If this is the case, then the language, literacy and numeracy of training off-the-job can reinforce the essential language, literacy and numeracy tasks of the competency required at work.

Activity

Select a curriculum document or learning resource you have recently designed based on competency standards.

1. In Column 1, list all the essential language, literacy and numeracy tasks which the trainees have to do **during the training**.

2. In Column 2, list the actual language, literacy and numeracy tasks associated with the competency standards or **job functions** on which the standards are based.

3. In Column 3, make a judgment whether there is some correlation in terms of difficulty and appropriateness between these two sets of language, literacy and numeracy tasks.

4. In Column 4, where there is an inappropriate fit between the two sets of language, literacy and numeracy tasks, suggest an alternative task.

Language, Literacy and Numeracy			
1. Tasks of the training	2. Tasks of the job	3. Good fit?	4. Alternative training task

Workplace tasks

Two different tasks follow. You should choose which one is more appropriate for your situation.

In some cases, you might need to do both tasks.

Task A

Part 1

Choose a set of competency standards from which you will develop curriculum or assessment tasks.

1. Examine these standards for the language, literacy and numeracy demands on the workers doing these tasks.

2. Note down each type of language, literacy or numeracy task required.

3. Note down where the language, literacy and numeracy tasks appear, whether in the standard itself, the elements, the performance criteria or the range of variables statements.

Here is a framework to use to do these tasks

Standard: eg Participates in daily team meetings and discussions				
LLN task	**Standard**	**Element**	**Performance criteria**	**Range of variable**
eg Read meeting documents		✔		

Part 2

Consider how you would ensure that all of these tasks are included in the curriculum you are designing.

1. Where appropriate, write learning outcomes to include these tasks.

2. Where appropriate, include these tasks in the assessment criteria .

3. How would you make sure you provided the trainer with appropriate guidance and materials in the learning resources to accompany this curriculum? Consider the tasks and activities, the documents and the assessment tasks you would include.

Task B

Choose a set of competency standards from which curriculum and assessment tasks have already been developed.

1. Compare the standards with the curriculum, especially the learning outcomes and assessment tasks, and note:

   a. all the language, literacy and numeracy tasks which are present in both the standards and in the curriculum

   b. any language, literacy and numeracy tasks in the curriculum which are not present in the standards

   c. any language, literacy and numeracy tasks which are present in the standards but not in the curriculum.

2. Compare the language, literacy and numeracy tasks which you identify in the curriculum with the language, literacy and numeracy tasks to actually do the job which the training is designed for and decide whether the tasks are appropriate or too difficult.

3. Consider how you would redesign the curriculum, including the assessment tasks, to more fully match the requirements of the standards.

Check your progress	Yes	No	Need to review
I can identify language, literacy and numeracy demands in competency standards.			
I can identify language, literacy and numeracy demands in workplace tasks.			
I can explain why learners have difficuly with language, literacy and numeracy.			
I can design learning outcomes and assessment criteria which include language, literacy and numeracy tasks explicitly or implicitly stated in competency standards and work tasks.			
I can make a judgment about the difficulty of language, literacy or numeracy task in learning resources compared with the task in the job itself.			

Unit 3: Identifying the language, literacy and numeracy needs of learners

Introduction

This unit is built around four questions. If you don't have very much time, look at these four questions and go to the part of the unit which addresses the questions for which you most want answers.

1. Is it helpful for trainers to know something about their trainees' interests, skills and experience before the training begins?

2. What sorts of speaking, listening, reading, writing and numeracy tasks do trainees have to do, both in the training sessions and back in their jobs?

3. How can you find out if trainees can do the reading, writing, speaking, listening and numeracy tasks in the training and in their jobs?

4. How can you keep track of all the information you are collecting so you can make use of it again?

Is it helpful for trainers to know something about their trainees' interests, skills and experience before the training begins?

To get some answers to this question, let's look at the following scenario.

Jim, the trainer, goes in to meet a new group of learners for their training session on cardio-pulmonary resuscitation. He's an experienced and popular trainer and has a very friendly manner. Because the subject matter can be quite dry, he usually tells the group a few anecdotes in a chatty, colloquial kind of way first to get their interest. He likes talking about things he's had a lot of experience with, and most of the groups he's taught before like this approach. They chat with him, telling him similar experiences they've had.

He knows this new group he's about to train is a contract group from outside the organisation. What he doesn't know is that this new group are mostly from a non-English speaking background. And, as the training goes on, they can't follow his stories which are rich with Australian idioms, such as 'Geez, the poor bloke was a gonner from the start,' and told in a very quick and broad Australian accent. The training session falls a bit flat and much of the important detail which he tells through his stories can't be used again later when he starts the more practical part of the training session and when he assesses the trainees.

Jim feels a bit negative towards his learners and also a bit of a failure as a trainer.

What could Jim have done?

Comment

Jim could have found out more about this group of trainees before they arrived in his training room. For example, if he had known that they were of non-English speaking background, he'd have realised that they would not understand his stories very easily. So, he may have spent more time on preparing the key points which he could back up with overheads or handouts, or on the telling stories with fewer idioms.

For you as a trainer, it helps to know a bit about the people you are training before you start the training.

- It gives you an idea of how much background information on the subject you need to provide for your trainees.

- It gives you an idea of what activities and exercises the trainees might enjoy.

- It gives you a chance to fit the way you do the training to the trainees' own experiences, needs and skills.

What sorts of things do you think it would be useful to know about the trainees' background?

Comment

It may be useful to know:

- whether they have come to Australia as adults from overseas
- whether they speak other languages
- what sort of work they've done in Australia/other countries
- how long they went to school (anywhere)
- how long ago they left school
- whether they've got a trade certificate, a diploma or a degree.

All of these factors make a difference to the way people learn and to the types of skills they bring to their training. Some of this information will help you to make predictions about the trainees' language, literacy and numeracy needs.

People who didn't spend much time at school, or who have worked in very practical jobs for a long time may not be very confident with their reading and writing and their numeracy.

They may not like to sit for long periods of time while the trainer lectures or reads or writes.

Others who may have high qualifications but have not always lived in Australia may be very unsure of themselves when speaking and listening in English, especially when it is colloquial language. They may prefer lecture-style training.

As a trainer, you need to find out these important details and plan your style of training to make sure that different trainees can all benefit equally.

How can you find out some information about people before they start training?

Comment

Some suggestions include:

- interview the trainees themselves in person or by phone before the training
- ask people who work with the trainees (their peers, bosses and subordinates) about them
- ask the trainees to fill in a pre-training questionnaire about their strengths and weaknesses
- ask the trainees to fill in a questionnaire about themselves and their background before the training.
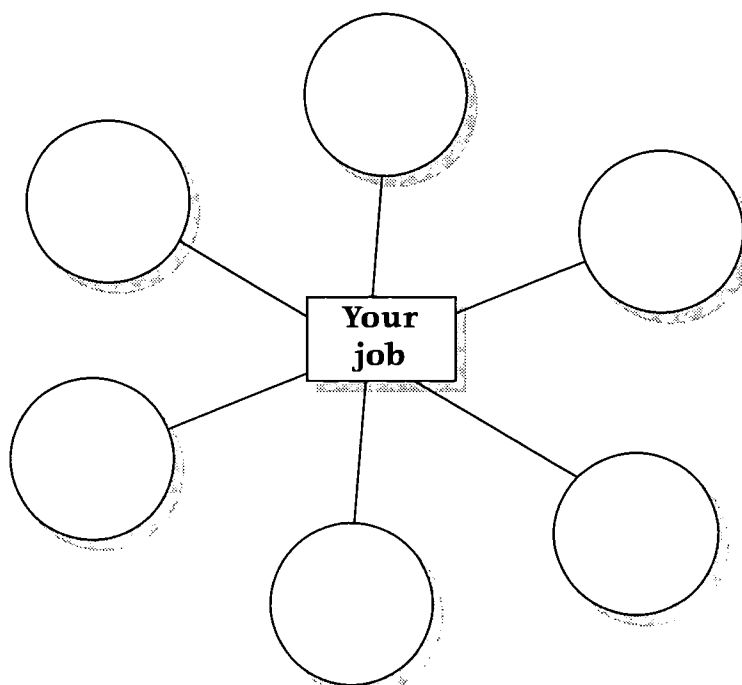
Activity

Design a simple and short questionnaire for trainees who will be in your training programs so that you can find out something about them before the training starts

What sorts of speaking, listening, reading, writing and numeracy tasks trainees have to do, both in training sessions and back in their jobs.

One way to get an overview of these communication tasks is to try a communication network map.

A communication network map, pictured below, helps you to get a picture of what speaking, listening, reading, writing and numeracy tasks trainees do in their particular jobs. Many of these tasks aren't separate but happen together, involving speaking, listening, reading and writing at the same time.

Your job

You can use this map in different ways:

- trainees fill it in on their own before their training
- trainees fill it in in collaboration with bosses, peers and/or subordinates at work.
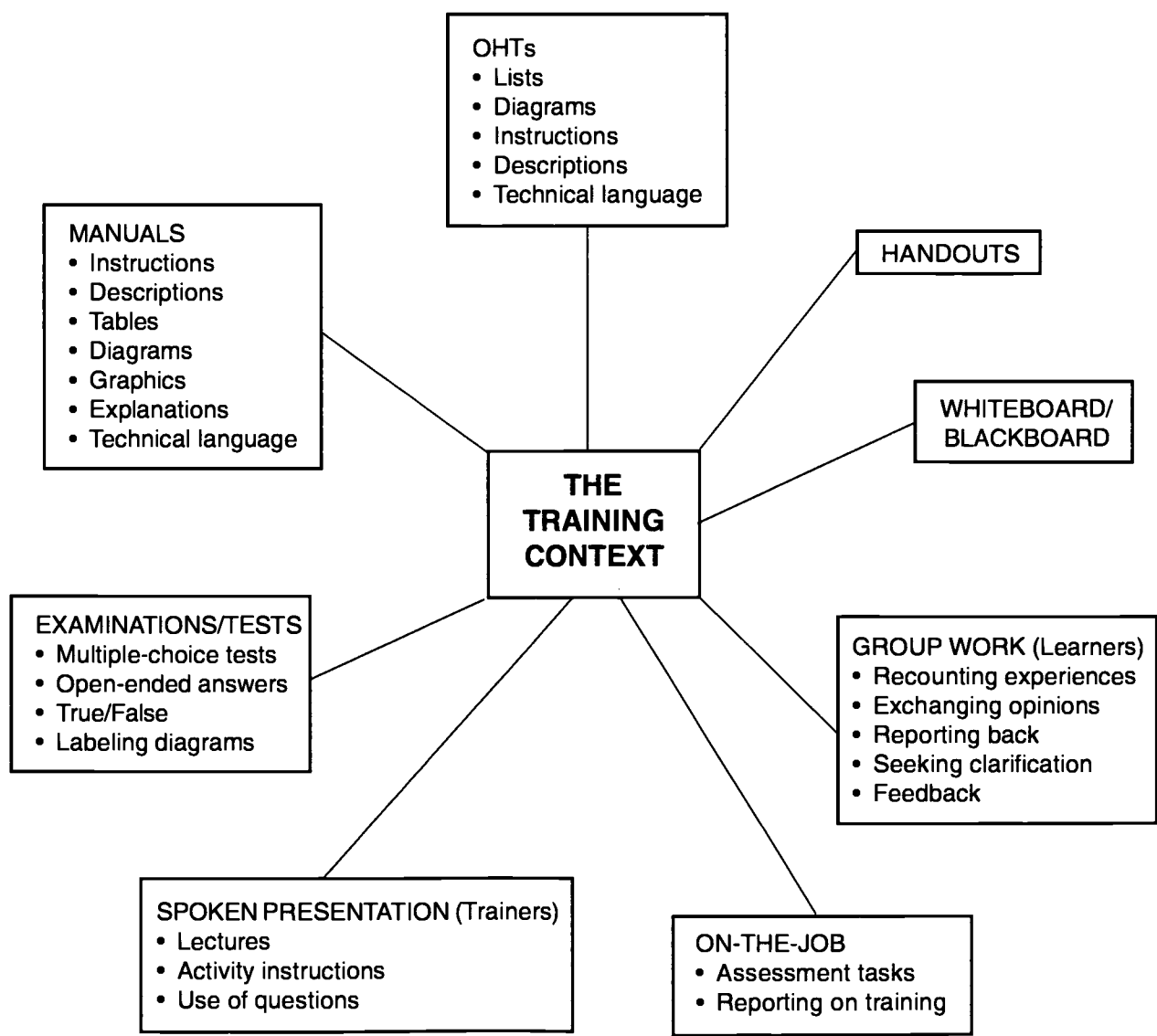
Activity

You need to know more than what trainees do in their jobs. You also need to know what they have to do in your training.

So that you can work out what sorts of reading, writing, speaking, listening and numeracy your trainees need to do in your training sessions, both on-the-job or off-the-job, you can prepare a similar map for yourself.

The following chart adapted from a training package prepared for workplace trainers, *Spoken Language in the Restructured Workplace*, lists the main types of communication in the training context.

Training Context

OHTs
- Lists
- Diagrams
- Instructions
- Descriptions
- Technical language

HANDOUTS

MANUALS
- Instructions
- Descriptions
- Tables
- Diagrams
- Graphics
- Explanations
- Technical language

WHITEBOARD/ BLACKBOARD

THE TRAINING CONTEXT

EXAMINATIONS/TESTS
- Multiple-choice tests
- Open-ended answers
- True/False
- Labeling diagrams

GROUP WORK (Learners)
- Recounting experiences
- Exchanging opinions
- Reporting back
- Seeking clarification
- Feedback

SPOKEN PRESENTATION (Trainers)
- Lectures
- Activity instructions
- Use of questions

ON-THE-JOB
- Assessment tasks
- Reporting on training

Adapted from *Effective Communication in the Restructured Workplace: Spoken and Written Communication in Workplace Training*, 95, National Food Industry Training Committee.

Make a note of two things for each task you find.

1. Is it the trainer or the learner who has to do the task?

2. What type of task (ie reading, writing, speaking or listening) is it for that person doing the task?

How can you find out if trainees can do the reading, writing, speaking, listening and numeracy tasks in the training and in their jobs.

While it is relatively easy to work out what the communication tasks of the job or training are, it is a bit more complex working out whether people can actually do these tasks.

Before you start, it is important to make sure that the trainees know why you want information about their language, literacy and numeracy skills.

They must be assured that you are trying to find out about these skills only because you want to make sure that your training is appropriate and useful for them.

People may feel that if they admit to language, literacy and numeracy needs, they may lose their jobs or they may not be considered for other opportunities which may come up.

What are some ways you can find out if trainees can do the communication tasks required in their training and in their jobs?

Here are some suggestions:

*   ask the trainees themselves

*   ask their peers, bosses and subordinates.

Collect examples of written work they've already done relating to their job or in other training and ask them to evaluate it by themselves or in collaboration with you or peers.

Ask them to do one of the written tasks from work or the training program.

Remember

You are not assessing the learner's overall ability to read and write and speak English. You are working out only what they need for a particular purpose, eg to do their job or to cope with a training course.

You can say something about their performance of the task you asked them to do, but not about their 'general level' of English.

You are not expected to be a language, literacy and numeracy expert.

How can you keep track of all the information you are collecting so that you can make use of it again?

Keeping track of the information about trainees which you have collected in preparing, delivering and assessing your training is important for two reasons:

1. trainees will not have to give the information every time they do some training

2. it will help you and other trainers in any new training the trainees undertake to plan for these trainees' specific needs.

You already have:

- all the information collected in the questionnaire

- the information from the communication network map.

Make sure this information covers:

- name

- type of job

- section

- length of time in company

- previous work experience

- languages spoken

- highest level of education

- other training completed

- language, literacy and numeracy tasks associated with the job (keep a copy of the communication network the trainees fill out).

You may find it helpful to build up a portfolio for each of the trainees. You could:

- enter it into a database

- keep a file for each trainee in a filing cabinet

- summarise the information onto a single form.

Activity

Discuss the idea of a learner portfolio which will provide useful information on the trainees' language, literacy and numeracy needs in training with other members of the training team in your workplace in order to work out a way of recording the information for your organisation.

Choose a training program which you are about to deliver and do the following tasks:

1. Find out who the trainees for the next delivery of this program will be.

2. Send them the questionnaire you prepared in this unit to return to you before the training begins.

3. At the same time, send them a copy of the communication network map and ask them to evaluate themselves with regard to each task they note down. Provide a scale to help trainees do this.

4. Fill in a communication network map yourself for this training program, noting all the communication tasks the trainer and the learner will be required to do. Refer to the model on p. 54 to help you.

5. Analyse the trainees' questionnaires and communication network maps and compare them with your own communication network map and make some general judgements about the match between the skills of the trainees and how difficult the training program is likely to be for them.

6. Decide which parts of your training, both spoken and written, might present difficulty for some trainees and make a note of why.

Check your progress	Yes	No	Need to review
I can identify specific language, literacy and numeracy needs of learners through a range of strategies before training (or learning events) takes place.			
I understand the value and have some strategies to keep a record of identified language, literacy and numeracy needs.			

Section 2:

Making training packages better for learners with language, literacy and numeracy needs

Unit 4: Redesigning existing training packages to support learners with language, literacy and numeracy needs

Unit 5: Designing training programs and materials which support and develop learners with language, literacy and numeracy needs

These two units aim to assist you to build on what you have already learned about language, literacy and numeracy and put it into practice by:

- adjusting existing training packages so that they are more accessible to learners with language, literacy and numeracy needs

- learning how to structure new training packages and to design activities and exercises so that they are appropriate to people with language, literacy and numeracy needs.

Unit 4: Re-designing existing training packages to support learners with language, literacy and numeracy needs

Introduction

In this unit we will focus on existing training programs you might be using regularly to see what is taken for granted about the reading, writing, speaking listening and numeracy skills of trainees in the content of the program, in the activities and in the assessment tasks

We'll approach this unit by asking and trying to answer the following questions:

What are some of the language, literacy and numeracy demands in existing training programs?

Are these language, literacy and numeracy demands appropriate to the trainees and the jobs they are being trained for?

How can you reduce the language, literacy and numeracy demands on trainees in the training programs you use?

How can you help trainees to develop their speaking, listening, reading, writing and numeracy skills while they are doing this training?

The information in this unit will also help you to re-design existing training programs so that the language, literacy and numeracy demands are more appropriate to the trainees and their job function.

What are some of the language, literacy and numeracy demands in existing training packages?

Are these language, literacy and numeracy demands appropriate to the trainees and the jobs they are being trained for?

Consider this scenario:

Sando was an excellent tradesman before an injury stopped him working in his trade. Since then he's been training new blokes in safety issues in this area. He's done a Train the Trainer program and he has a good deal of knowledge and experience to draw on when he's training. Sando wasn't very confident when he first started training but now he's quite comfortable delivering a range of training courses.

He regularly trains people in a two-day program, Confined Spaces Entry and Gas Detection, a training program which covers the dangers and requirements for safe working in confined spaces.

It complies with the requirements of the Occupational Health and Safety (Confined Spaces) Regulations. This program is run for in-house and external clients. Many of the clients are of non-English speaking background who didn't get much education in their own country and do not read and write English well. Others are English-speaking background people also without much school education. They lack confidence with pen and paper activities.

Here is the contents page from the course manual *Work in Confined Spaces*.

Work in Confined Spaces

CONTENTS

Adapted from *Work in confined Spaces Training Manual*, Energy Australia.

All participants are given a manual and follow the course through reading this manual with Sando. They might watch some relevant videos during the two days. Overhead transparencies and whiteboards are used to present some of the information and newspaper clippings are used for discussion of accidents involving improper procedures in confined spaces. Assessment of the knowledge component of the course is by a written examination at the end.

After the room-based part of the program, there's a practical component which is done in a simulated confined space nearby with mannequins.

In the delivery, Sando relies heavily on reading the content of the program because he needs to be sure that he has covered it all for legal reasons. His concern is to cover himself because of the legal consequences of not doing it right.

Activity

Read the following example of a typical page from the training manual which is approximately 50 pages long.

Supervisors

Supervisors are responsible for all personnel under their control, including Nominated Officers, to ensure work is carried out in accordance with the procedures detailed in this bulletin. Where work is carried out by persons under the control of more than one supervisor, the relevant supervisors should arrange the work so that only one entry permit is required.

Note: A supervisor can be a Nominated Officer.

In particular, supervisors are responsible for:

(a) Ensuring staff and contractors under their control carry out all work practices and procedures in accordance with the relevant instructions.

(b) Ensuring staff and contractors under their control who are to enter confined spaces or are standby personnel are trained and made aware of the hazards associated with work in confined spaces and of any protective measures that may be required.

(c) Issuing gas detection equipment.

Note: Gas detection equipment is provided by the supervisor who must ensure:

- *personnel have been instructed in its correct use,*
- *it is in good order,*
- *it is within its test and calibration periods.*

(d) Issuing of communication equipment. This may include:

- portable radio transceivers
- movement detectors
- mobile phones.

(e) Raising and maintaining the awareness of the requirements for entering and working in a confined space.

(f) The storage of completed confined spaces entry permits.

3.3 Nominated Officers

Nominated Officers are responsible for:

(a) Co-ordinating the planning and supervision of the work.

(b) Evaluating the hazards of the particular confined space.

(c) Formulating emergency rescue plans.

(d) Authorising the entry by the issue of a permit.

(e) Withdrawing the entry permit if the conditions of the regulation are not met.

Note: A Nominated Officer can be a receipt of an entry permit.

Adapted from *Work in confined Spaces Training Manual*, Energy Australia.

And here's an example of the kinds of questions contained in the written test.

CONFINED SPACES ENTRY AND GAS DETECTION (TRAINERS COURSE)

THEORY EXAMINATION ANSWER SHEET

QUESTION	MARK VALUE

1. How would you define a confined space in relation to a place of work? 2

_____

_____

_____

_____

_____

_____

1. Give 4 examples of confined spaces within company X's operations. 2

_____

_____

_____

_____

_____

_____

_____

lapted from *Work in confined Spaces Training Manual*, Energy Australia.

Focus question 1

What are some of the reading, writing, listening, speaking, and numeracy requirements of this course as it has been described?

These requirements of the course as seen in the sample course materials are:

1. Extensive reading of detailed and abstract information in the manual.

2. Much listening required to follow Sando reading the information aloud, and to follow the videos, although the listener is assisted by the visuals of the video and the written words in the manual

3. Fairly detailed writing required to complete the written test.

4. Not much speaking required from trainees.

5. Readings and interpretation of gas levels with the gas detector.

Focus question 2

How does your answer to the question above fit with what you know about the trainees in this course?

Reading

The amount of reading required is too much for the typical learner we've described.

They may have trouble with some technical words.

They may have trouble following the main ideas in the long chunks of information.

Listening

Listening while someone reads a large amount of information is boring and difficult for anybody, especially for trainees who usually work in active jobs and are not often in training rooms. It is likely to be even more difficult for non-English speaking background trainees.

They may not be able to concentrate for long periods.

They may lose the thread of what its all about and not be able to pick it up again.

Again, they may have trouble with the technical words, whether they are read or spoken.

Writing

The written exam is very inappropriate for this type of learner. It is like a school exam and assumes that the trainees are capable writers, used to being in educational institutions and writing frequently.

These trainees are unlikely to be required to write very much in their jobs. Some of them may not write at all in other parts of their lives.

Numeracy

The gas levels readings require that the trainees can identify the numeracy demands such as measuring, calculating the levels as well as understand the language around the levels themselves.

These trainees may never have learned calculations at school. Or, they may have learned them in their first language but not recognise them in English

Focus question 3

What could you do to this course to make it a bit easier for the trainees to understand the information they need to know, eg in the sample text on p.62.

1. Introduce different types of classroom activities, such as working in pairs or small groups, to allows trainees to display/ share their knowledge.

2. Make overheads and worksheets which summarise, define or explain the information in the training manual with examples, illustrations and photos.

3. Break the material which has to be read into smaller chunks with activities for the trainees to do, so that both you and they can check regularly whether or not they understand.

4. Check whether trainees know the maths involved rather than assuming they do, and fully explain how to do any calculations or measurements required.

5. Make sure that there are small assessment tasks during the training sessions so that trainees have an idea of how well they are doing. These are known as formative assessment tasks.

6. Change the final written examination into other types of assessment tasks which don't require writing, such as practical demonstration, speaking, use of photos and illustrations, and written tasks which reveal the trainees' content knowledge without becoming tests of writing skills.

How can you reduce these language, literacy and numeracy demands to make training more successful?

How can you help trainees to develop their speaking, listening, reading, writing and numeracy skills while they are doing this training?
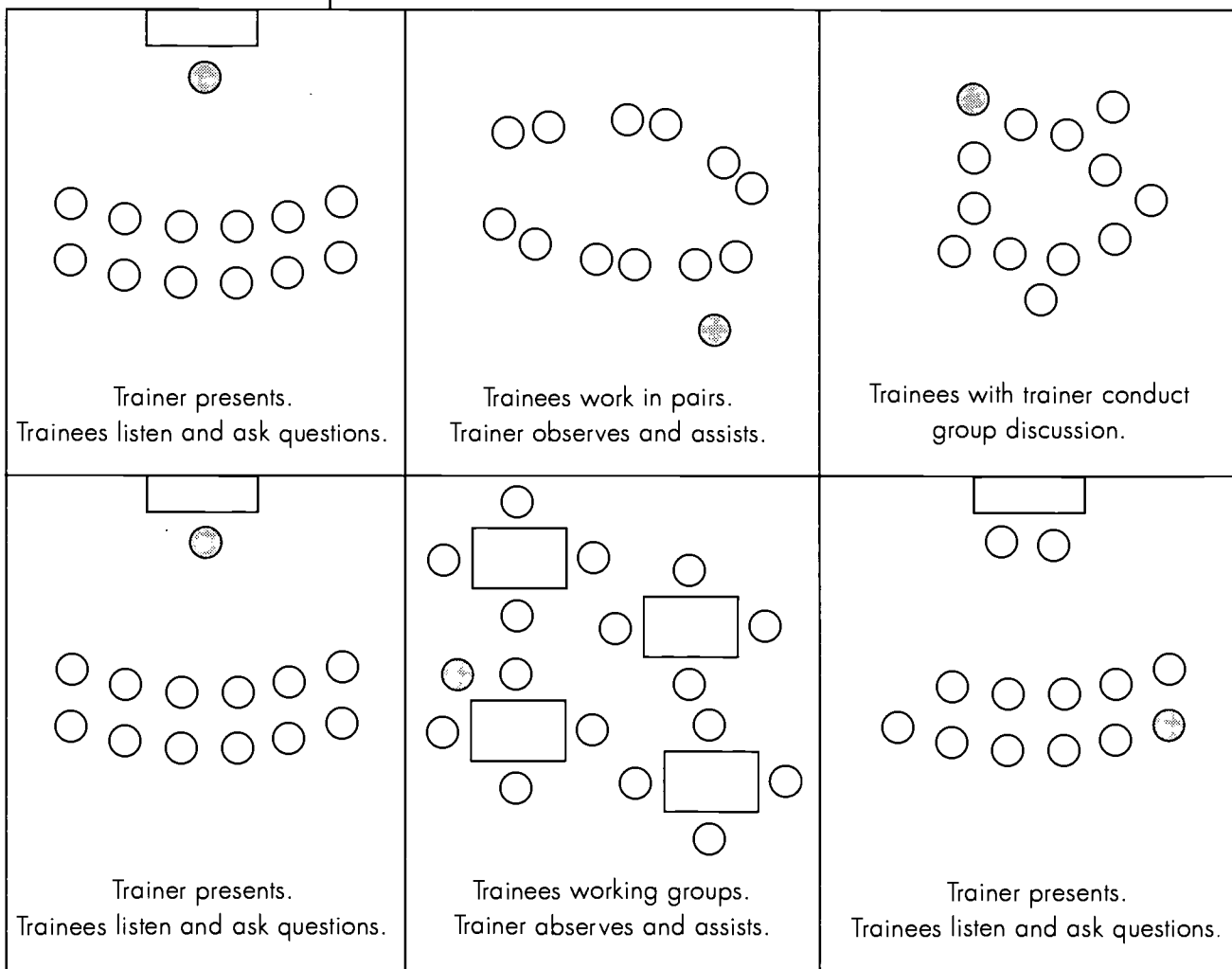
Developing language skills through training

Let's look at the first suggestion:

Introduce different types of classroom activities, such as working in pairs or small groups, to break up the time to allow trainees to display/ share their knowledge.

How can you do this?

One way is to look at the overall structure of the entire training program. Work out a balance of different types of activities for each day, so that more of the training is centred on the trainees (rather them on the trainer) and the groupings are varied.

Trainer presents. Trainees listen and ask questions.	Trainees work in pairs. Trainer observes and assists.	Trainees with trainer conduct group discussion.
Trainer presents. Trainees listen and ask questions.	Trainees working groups. Trainer observes and assists.	Trainer presents. Trainees listen and ask questions.

Activity

Read the following grouping pattern for the day and represent it as a diagram.

Day 1

Session 1

Trainer introduces the day. Trainer presents the first content session, with overheads and discussion with whole group.

Session 2

Trainer divides group into pairs and gives them a short summary based on the material covered in Session 1, to read, with an activity, like a case study to discuss and a work sheet to complete in pairs rather than the trainer reading the material in the manual to them.

Trainer brings group back together and presents a summary of the reading on an overhead. Asks the group to add further comments.

Session 3

Trainer introduces new topic, eg. Learning Outcome 2, by dividing the trainees into groups of 4 or 5 and giving each member of the group a short section from the manual to read and a task for the small group to complete when they have each read their section. One person from each small group is to report back to the whole group showing them their group's completed task on an overhead transparency.

Discussion from whole group occurs as each group leader reports back. Trainer checks that groups have not left anything out and joins in the discussion if necessary, then summaries the main points of the reading.

Session 4

Trainer introduces next topic, eg Learning Outcome 3, by showing a video. Before trainer starts the video, s/he explains what it is about and hands group a some key questions to ask in discussion after the video.

After watching the video the group discusses the video in relation to the key questions.

Focus questions

What do you think are the advantages of pair work and small group work in training?

Do you think these suggested pair and small group activities would work in your training? Think of some reasons.

Comment

The advantages of learner-centred activities, like group work and pair work are:

- the trainer will have more feedback from the group about their level of understanding from group work than he or she would have had by simply reading from the manual in front of the group, or from asking the whole group if they understand

- the trainer will have more time to get some idea about whether trainees have achieved the learning outcomes, and can add more information or activities if necessary

- the trainees will be more involved and motivated because they are in control of their learning tasks

- there will be less demand on trainees' listening and reading skills because they can check with others in smaller groups and work at their own pace

- the training will be more effective for more people because people's different ways of learning are taken into account by different types of tasks.

Activity

Closely examine a complete training program you know well to see how it is delivered and how learner-centred the exercises and activities in the program are.

Presenting information

Now let's look at the second suggestion on p.65.

Make overheads and worksheets which summarise, define or explain the information in the training with examples, illustrations and photos.

Here is example of a simple activity developed from a leaflet on teaching the safe use of chainsaws.

Chainsafe Pty Limited

ACN 050 212 176

Indicate with letters where the following safety features are on the chainsaw:

A.	On/Off switch	F.	Effective exhaust
B.	Safety chain	G.	Chain brake
C.	Bar cover	H.	Anti-vibration mounts
D.	Chain catcher	I.	Sprocket nose bar
E.	Dual action throttle	J.	Rear hand guard

3

om Chainsafe Pty. Ltd. – Training Workbook
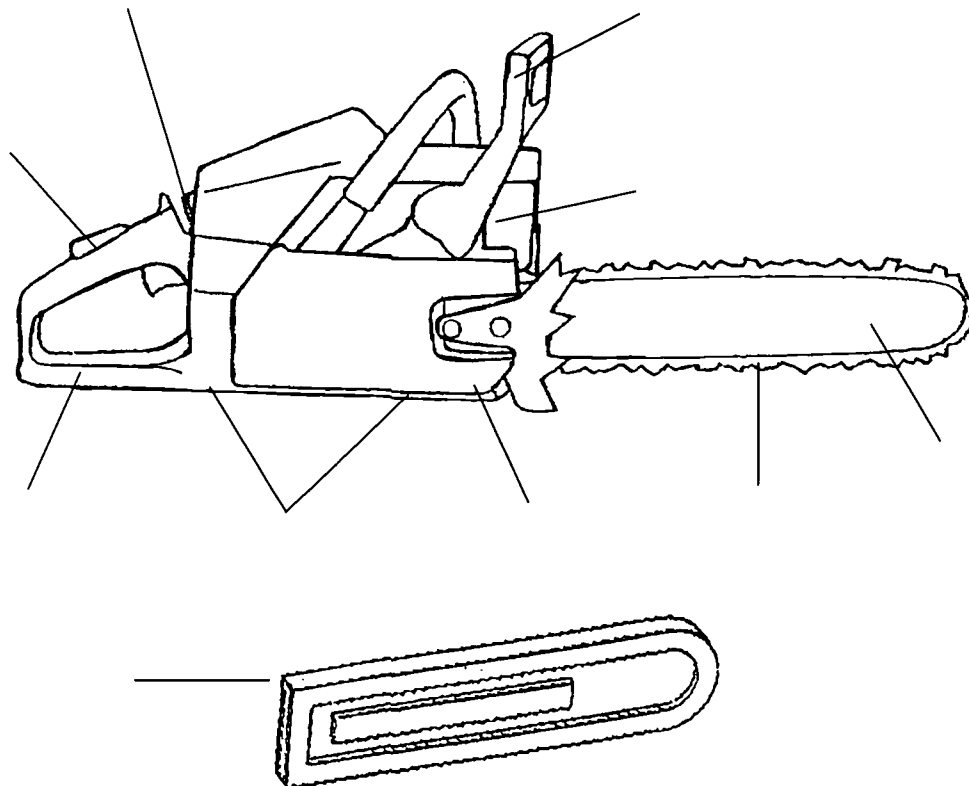
Focus question

What makes this example suitable for people with reading difficulties?

Comment

This worksheet doesn't require the trainees to read very much.

In this way they can learn the technical terms they need to know without lots of reading.

Reading

Let's have a look at the third suggestion on p.65 about reading:

Break the material which has to be read into smaller chunks with activities for the trainees to do, so that both you and they can check regularly whether or not they understand.

Here are some ways of making reading easier by breaking information into small chunks:

1. Reduce the amount of writing on each page.

2. Pick out the main points in the reading and shape them into key questions to come before the details for trainees to discuss.

3. Summarise the reading into key areas using lots of headings to direct the reader to the main ideas.

4. Use diagrams, illustrations and photos to back up the ideas and information.

5. Develop case studies based on the key points of the reading for discussion.

6. Design checklists which trainees can read and tick when they have finished each point.

7. Design interactive tasks to help trainees read such as:

    *   ask trainees to predict what part of a text will be about just by reading the heading/sub-heading

    *   ask trainees to match words with definitions
    *   mix up the order of a set of instructions and ask trainees to order it correctly
    *   ask trainees to summarise a small section into a question
    *   break reading in several small parts and give one part to each learner in a small group. Ask them to put it back together

There are further references of these types of activities in Unit 5.

Reading mathematics

Now let's look at the fourth suggestion on p.65:

Check whether trainees know the maths involved rather than assuming they do, and fully explain how to do any calculations or measurements required.

Often, mathematical calculations, measurements, charts and graphs are embedded within the reading the learner needs to do. These are examples of very compressed information which assumes that the reader understands the format in which the information is presented and can make sense of it.

Look at the example on the following page.

Moisture content

In order to understand what is meant by the seasoned timber the term "moisture content" must be understood. This is simply the weight of water contained in a piece of timber compared with the weight of actual woody substance in the same piece. This is usually expressed as a percentage.

Expressed as a formula:

$$\frac{\text{Moisture}}{\text{content}} = \frac{\text{Weight of water}}{\text{Weight of wood substance}} \times 100 \text{ per cent}$$

Consider an ordinary sponge. This could weigh only 100g when dry, but when it is saturated with water it could weigh 500g. It's saturated moisture content could be said to be $\frac{400}{100} \times 100$ per cent or 400 per cent. In other words it holds four times its own weight in water.

The green moisture content, that is the moisture content of a freshly sawn log, varies with the density of timber. Balsa, a very light porous timber, can have a green moisture content of 400 per cent, but iron bark, a very heavy timber can have a green moisture content of only about 40 per cent. In iron bark, there is so much woody tissue that there is a very little space to hold water. This water is not only contained in the hollow spaces in the woody cells (ie. in the cell cavities) but also saturates the walls of the cells...

...Timber does not dry to a state of zero moisture content, unless placed in an oven kept at a temperature above the boiling point of water. Timber in use will be exposed to air, which always contains some moisture The quantity of moisture in the air is a measure of its humidity. The moisture content of timber in service depends on the relative humidity of the air surrounding it. As the humidity rises and falls, so does the moisture content of timber. Table 1 shows the relationship between relative humidity and the moisture content of timber.

TABLE 1

This gives the Equilibrium Moisture Content of timber at various Relative Humidities at 20 degrees Celsius.

Relative Humidity	Moisture Content	Relative Humidity	Moisture Content
(per cent)	(per cent)	(per cent)	(per cent)
10	2.6	60	11.0
20	4.6	70	13.2
30	6.2	80	16.1

The piece of timber will eventually dry out until the moisture content of the core reaches approximately that of the case. If the timber is used indoors and not exposed directly to the whether, its moisture content from then on will fluctuate only a few per cent following changes in the relative humidity. When timber has dried to this state, it is said to be at its equilibrium moisture content (e.m.c) and is fully seasoned. For indoor situations in most of New South Wales, the moisture content of seasoned timber will vary between the limits of 10 to 15 per cent.

Hence, any timber dried to within these limits can be said to be adequately seasoned. In coastal areas, seasoned timber will maintain a moisture content of mainly 12 to 15 per cent, though in the very dry western areas of New South Wales such as Broken Hill, timber will dry down to approximately 7 per cent moisture content during summer.

It has also been found that in air-conditioned buildings timber should be seasoned to the low side of the range, that is, about 10 per cent. In these buildings, the relative humidity is usually kept low, and when the air is heated in winter time, the moisture content of the timber in such buildings drops to about 8 per cent. In summer when no heating is required, the relative humidity of the air is higher and the moisture content rises to between 11 and 12 per cent. Therefore attention should be paid to the location of the timber in order to determine which moisture content would give the best results.

Focus questions

What could you do to help the learner who is not familiar with the mathematical concepts or processes needed for a proper understanding of the text on p.72?

Comment

Here are some general strategies for trainers from *The Professional Development Kit*, Saw Milling and Processing Wood Panel Products, Saw Doctoring.

- Help the learner to identify exactly what is needed by finding out what is the problem.

- Help the learner work out what maths/calculation/ measurement is needed.

- Show the learner how to do the calculation or measurement.

- Encourage use of calculators. Demonstrate how to use them.

- Get the trainees to estimate results so that they can check whether answers are reasonable. Make sure that the learner is comfortable with each stage before moving on.

- Get them to explain the problem and the process for working out the solution.

- If there is a formula, make sure that the learner has an easy-to-find copy

- There will be lots of problems if trainees have to use a mixture of imperial measurements and metric measurements. Young trainees will need to have the relevant measurements carefully explained and demonstrated. Allow lots of time for this.

Assessment tasks

Now let's look at the fifth and sixth suggestion on p.65, to do with assessment tasks:

Make sure that there are small assessment tasks during the training sessions so that trainees have an idea of how well they are doing. These are known as formative assessment tasks.

Change the final written examination into other types of assessment tasks which don't require writing, such as practical demonstration, speaking, use of photos and illustrations, and written tasks which reveal the trainees' content knowledge without becoming tests of writing skills.

One way to reduce the language demands of assessment tasks is through the activities we've been describing. Many of these activities can be used as assessment tasks for formative or final assessments.

Formative assessments are assessment tasks done along the way to give both the trainer and the trainees some idea of ongoing progress.

For more about assessments, refer to Unit 10.

Activity

You have already covered parts of this task throughout the unit so you should bring all your work together for this final task.

Choose a training package that you use at work.

1. Look through it carefully and think about the way you deliver the different parts of the package.

2. Select one unit/section/module that you think is crucial for trainees to learn well.

3. Note down all the different speaking, listening, reading, writing and numeracy tasks which the trainees have to do in this unit/ section/module, using the chart provided on the next page.

4. Consider whether any of the language, literacy and numeracy tasks in the training program are more difficult than those required in the job that the training program is training the trainees to do.

5. Decide which of these tasks suit the typical trainees and which ones are too difficult by rating each task in the last column of the chart. Then give your reason.

Rating scale:

> 1. Much too hard – change it completely
> 2. Hard – needs big changes
> 3. Okay but still needs some changes
> 4. Good – should stay as it is

6. Make a suggestion about what to do to change each of the tasks or sections which you've identified as needing changes.

7. Re-design at least one whole day's worth of the training, including all the reading content, OHTs, worksheets, tasks and exercises as well as the way you would present them. Include one case study in your set of activities, tasks and exercises.

...ction:

Topic	Tasks Writing/Speaking/Listening/Numeracy	Rating	Reason

Check your progress	Yes	No	Need to review
I can identify inappropriate language, literacy and numeracy demands in existing training programs.			
I can re-design existing training programs so that the langugage, literacy and numeracy demands within them are more appropriate to the trainees and their job functions.			

Unit 5: Designing training programs and materials which support and develop learners with language, literacy and numeracy needs

Introduction

In this unit, we focus on methodologies, drawn from a range of disciplines including language, literacy and numeracy teaching, which will help trainers and developers of curriculum and learning resources to design training programs. The aim is to support trainees with language, literacy and numeracy needs in training and to develop their language, literacy and numeracy skills in the context of vocational training.

The information in this unit will help you to:

* design training programs which have methodologies appropriate to the language, literacy and numeracy skills of the trainees

* design learning tasks, materials and resources which will help trainees to develop their language, literacy and numeracy skills when they undertake the training.

We'll explore the following methodologies which are applicable to both language teaching and to vocational teaching or training:

* learner-centred curriculum design

* task based curriculum design

* using models in curriculum design.

One of the key differences between designing curriculum for vocational training and designing curriculum for language teaching is the nature of the content.

In designing vocational training you have a large amount of information, either in written or spoken form, which you will need to include in the curriculum. In language teaching you need to find information in the shape of authentic texts from which you can draw your teaching points. At times, finding the right information can present a real challenge.

Current language teaching methodology focuses on developing the communicative competence of trainees through their involvement in authentic tasks (though mostly in the simulated context of the classroom) rather than drilling trainees in correct usage. The teacher's role is to involve trainees in solving communication problems, giving them explicit guidance where necessary, rather than dictating content. In so doing the learning of the language should develop through practice and experience for the trainees with strategic intervention in the learning process occurring when necessary.

It is easy to see from these comments how some of the methods and strategies of language teaching will transfer readily into the vocational training context.

Before we consider some approaches to curriculum design, think about how you prefer to learn new skills.

I learn when I need to know something.

I learn when I'm involved.

I learn when it's something of relevance to me that I need to know.

I learn when I can see myself in the picture.

I learn when I can put what I've learnt into practice straightaway.

I learn when I can do it while I'm learning.

I learn when I can talk about what I'm learning with others.

I learn when I feel good about the learning.

I learn when I feel that what I think is listened to.

I learn when I have to work things out for myself.

I learn when I see how others have done something.

Learner-centred curriculum design

Learner-centred curriculum design, in attending to those aspects of learning listed above, works from the trainees' own experiences, knowledge, skills and needs. Shifting the focus from the teacher/ trainer to the learner has implications for the way teaching and learning is expected to occur, and for the roles that teachers and trainees take up at different times. The way in which a learner-centred curriculum characterises these roles are outline as follows:

Varying the role of the teacher or trainer

Sometimes, the trainer will be director, facilitator, interventionist, mentor, preparer of materials, asker and answerer of questions, manager of learning, provider of resources, assessor or evaluator of progress.

The trainer needs, at times, to be the main source of information in training off-the-job or on-the-job, but there are other times when the ideas of fellow trainees are just as valid as the trainers.

It is important for the trainer to design the training in such as way that these different roles are provided for. Trainers in this way will become more approachable for the trainees. They will also have more opportunity to observe the learning taking place either in training off-the-job or on the job and respond by varying the pace, the feedback and the activities they set according to the dynamics of the training at the time.

Varying the role of trainees

Sometimes trainees are students, critics, mentors, managers of learning, advisors, askers and answerers of questions, evaluators of progress, directors of learning. Adult trainees respond well to varied roles in the training context which give them the chance to display their range of skills and expertise.

It is especially important to recognise this need when some of the trainees may have language, literacy and numeracy problems, so that they can display other aspects of themselves in which they are more confident and more expert to their fellow trainees and to the trainer.

Varying the grouping of trainees

Sometimes trainees are organised to work in whole groups, sometimes in small groups or pairs and sometimes individually. This strategy ensures that you appeal to the full range of adult learning styles in the group. It allows people who are less confident in large groups to work individually or in small groups. It also maintains a lively pace in the training room so that trainees remain involved in the training activity.

You should also look at Unit 4, where this principle has been explored in more detail.

Task-based curriculum design

Task-based curriculum design focuses on the *how of learning* not just the *what of training*

It is important to move away from a model of curriculum design which is focused only on the *what* of learning, ie the content. Vocational training is about content. That won't change. The challenge is to recognise that no matter how much content is covered by the trainer, if learning doesn't take place, then the result is the same as if no content has been covered. So, as curriculum writers and resources designers, you need to build in the *how* of learning into your curriculum and resources. Task-

based learning works when trainees apply the principles and theory relating to the content and solve problems in context.

Task-based curriculum is a model of learning/teaching which is independent of the trainer or teacher as the source of information

Because it is focused on the task, task-based learning can take place independently of the trainer/teacher. As long as the learner has access to a trainer's or teacher's knowledge and experience in some capacity, the learning will take place through the performance of the task. In this way, task-based learning is independent of the traditional training-room-based model of learning. It works readily in on-the-job training and with mentoring and coaching relationships.

Task-based learning integrates learning and the workplace

Task-based learning gives the learner the chance to apply knowledge in familiar situations. The learner can move from the familiar to the unfamiliar, thereby taking on new information when she or he is ready for it. It ensures that the real world in which the learner works has a part to play in the learning process.

Having tasks to do plays an important role in ensuring learner involvement, motivation and commitment.

In adopting a task-based curriculum design process, there are two categories of tasks to consider:

Work-based tasks

These are tasks which engage the learner or group of trainees with a set of activities designed in the training room but performed in the real workplace context. These tasks create the link for trainees between the training context and active learning in the workplace itself. These tasks are very learner centred, self-directed and can require the assistance of workplace peer tutors or mentors in the process. In this type of task, trainees are able to control their learning. They can change the way they go about the tasks to avoid language and literacy demands they cannot meet. They can draw on the resources of their peers and mentors to assist them where language and literacy issues emerge.

This type of task can put trainees in touch with the authentic language, literacy and numeracy tasks which are components of the job.

It also develops problem-solving skills, skills in collecting and organising information and skills in communciating in teams.

Communicative tasks in training off-the-job

Training whether on or off- the-job is essentially a communicative practice. On the following pages are activities and exercises which

require trainees to participate more actively in the speaking, listening, reading and writing in training off-the-job. They go hand in hand with small-group and pair work.

By using these types of activities, both trainers and trainees themselves will be more aware of times when trainees have trouble with language, literacy and numeracy and will be able to look for solutions.

Also, curriculum developers and trainers will be contributing to the development of trainees' language and literacy skills by encouraging interaction between trainers and trainees, and between trainees and trainees.

Most of the activities presented below involve all the communication skills of speaking, listening, reading, writing and numeracy as well as problem solving and critical thinking.

Communicative tasks in training off-the-job

Type of activity	How to do it	Uses	Main skills involved
Sequencing	Learners can be in small groups or the whole group. Mix up meaningful bits of information (ie whole sentences/paragraphs) in jumbled order. Ask the learner to sequence the information in the correct order. (You can cut these sentences out and put all cut up sentences for the text together in an envelope).	Helps learners with reading procedures, manuals and instructions.	Reading/numeracy
Matching	Learners can be in the whole group or in small groups. Create two columns on a page. List activities, items, terms in one column and in other column, list definitions, uses, or characteristics in jumbled order. Ask learners to match items in each column.	Helps learners to learn definitions, characteristics/qualities/terms when there are large numbers of items to learn.	Reading/numeracy
Information gap activities: Jigsaw reading or listening	Divide learners into small groups of 3 to 5. Divide information into same number of parts and give one part to one learner. Learners read their own part and come together to discuss and work out how to put the information together in correct order or format.	A useful activity to break down amounts of information into small chunks when learners have to read or listen to a large quantity of information.	Listening/reading/numeracy
Filling in a grid	Learners can work in small groups or whole group. Trainer prepares a grid of key questions or short summaries based on information which the learners need to read. The learners fill in the grid as they read or hear the information which either answers the questions or expands the summary.	Helps learners to concentrate as they read or listen.	Listening/reading/numeracy

Communicative tasks in training off-the-job

Type of activity	How to do it	Uses	Main skills involved
Designing questionnaires or surveys	Learners work in small groups. Learners consult together to design questions to work out what information they need to find out from relevant people or from written materials. They formulate questions for an oral interview or a written survey, or to help them gather information from the written text, eg regulations or manuals.	Learners have to think about what type of information they might need to know in advance. This makes the reading or listening easier for them because they are listening or reading for key ideas or words.	Speaking/ writing / listening / reading/ numeracy
Role plays and simulations	Learners work in small groups or the whole group depending on the nature of the role play. Learners simulate together difficult situations such as meetings with guided preparation and real information, ie agendas, topics etc.	Learners learn to perform in dry runs of real situations they will face at work. All are involved and they work in small groups which reduces the likelihood of stagefright.	Speaking/ listening/ numeracy
Case studies and scenario-based problem solving activities	Learners work in small groups. Learners are presented with written or spoken case studies or scenarios of familiar situations where there is a problem.They consult in small groups to discuss and resolve the problem where possible.	Learners have the chance to solve problems in familiar situations.	Speaking/ listening/ reading/ numeracy
Pooling information to solve a problem	Learners work in small groups. Learners contribute information either in written form or spoken form to solve a problem.	Learners make a contribution according to their skill level. Some will read from regulations, others will share experience and anecdotes to help solve a problem.	Speaking/ listening/ reading/ writing/ numeracy

Communicative tasks in training off-the-job

Type of activity	How to do it	Uses	Main skills involved
Oral interviews and reporting back to the group	Learners work in small teams. They conduct interviews with key personnel to gain information they need from experts and then they report back to their group on the information they have found for discussion.	A useful exercise for learners with poor reading skills to collect important information and discuss it with others.	Speaking/ listening/ writing/ numeracy
Checklists	Learners work individually. A list of important information from a module or regulation is presented in familiar, relevant, practical and contextualised way so that learners can check their own knowledge and work out how they can improve this skill.	A way of presenting summarised information in useful format, without too much reading.	Reading
Brainstorming	Learners are asked to contribute ideas about a topic or question. These suggestions are then analysed and grouped. Any necessary reading which takes place after this should be easier because they have been introduced to some of the key words already.	Allows learners to make a contribution without fear of failure, drawing on their experience.	Listening/ speaking
Mindmapping	Learners work individually. Information is ordered and mapped into related categories.	Learners become acquainted with the group and categories of a subject. This task makes it easier for them to understand and then discuss, read or write on the subject.	Listening/ speaking
Workbased project	Learners work in groups, pairs or individually. This type of activity is complex and related as closely as possible to real work tasks. It will often involve several of the above activities in the development stage.	Gives all learners the chance to demonstrate their own expertise.	All skills

Examples of some of these activites are scattered throughout these units, especially in Unit 4. Look at these examples and try to find others which may have been developed by trainers in workplaces.

Using models in curriculum design

A very useful strategy for teaching speaking and writing is using models. By using models, we mean that trainers, mentors and supervisors, either on-the-job or off-the-job provide a range of real examples (models) of the written or spoken product which they want the trainees to be able to do. Then opportunities are provided for them to pull apart, analyse and discuss these examples and to try to model them themselves.

Modelling as a learning strategy is equally useful in on-the-job and off-the-job training because it focuses on the learner doing the work. It is a strategy which allows the learner to become an independent learner able to ask relevant questions and seek information he or she needs rather than relying on the trainer for explanations and information.

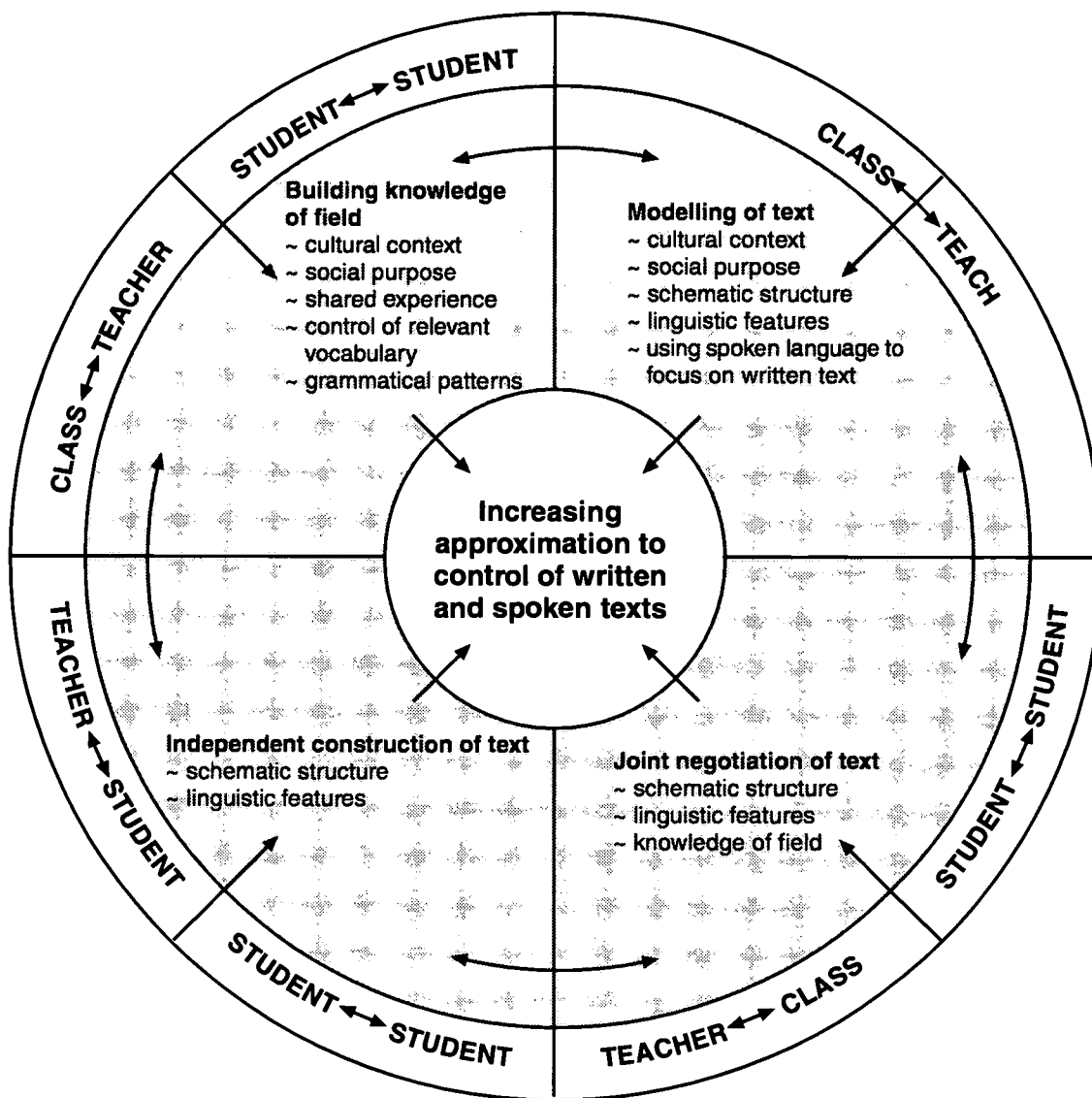How can you build this strategy of modelling into your curriculum design?

Many of the speaking, listening, reading and writing tasks in training off-the-job are associated with the processes of teaching and learning such as overhead transparencies, worksheets, whiteboard notes and training notes.

Other training tasks, however, are related to the jobs trainees are being trained in. Essential paperwork, instructions, letters, memos, short reports, standard operating procedures, manuals and various kinds of meeting documents are often part of the requirements of the job.

If the trainer can produce real and good examples of these types of writing for the trainees to analyse and discuss in the training, they will be able to continue to improve in these tasks after the training is finished.

A systematic way in which the trainer can help the learner by using models is presented in Helen Joyce's *Workplace Texts in the Language Classroom* published in 1992 by the NSW Adult Migrant English Service. The basic features of the model are provided in the following diagram, and in the book, the author sets out details of the kinds of activities that would be appropriate in each phase of the cycle. The intended audience for this book is language and literacy teachers.

TEACHING/LEARNING CYCLE

Building knowledge of field
- cultural context
- social purpose
- shared experience
- control of relevant vocabulary
- grammatical patterns

Modelling of text
- cultural context
- social purpose
- schematic structure
- linguistic features
- using spoken language to focus on written text

Increasing approximation to control of written and spoken texts

Independent construction of text
- schematic structure
- linguistic features

Joint negotiation of text
- schematic structure
- linguistic features
- knowledge of field

STUDENT ↔ STUDENT
CLASS ↔ TEACH
STUDENT ↔ TEACHER
CLASS ↔ TEACHER
TEACHER ↔ STUDENT
STUDENT ↔ STUDENT
STUDENT ↔ STUDENT
TEACHER ↔ CLASS

Adapted from Callaghan, M. and Rothery, J. (*Teaching Factual Writing – a Genre Based Approach 1988*, Syney: DSP) by H. Joyce and A. Burns, and included in Joyce, H. 1992 *Workplace Texts in the Language Classroom*, NSW AMES, Sydney.

Activity

If you think back to the story of Sando, who was training groups to work safely in confined spaces, you'll remember that he read from the training manual for a good part of the training. One of the reasons he did this was in order to comply with WorkCover obligations. His reason for reading the manual, as he said, was,

I have to be sure they have covered it.

For Sando, it was the only way he could be sure they had covered it and that he had discharged his obligations.

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Identify a training sequence, which relies heavily on trainees understanding regulations or procedures from a relevant grouping of standards or learning outcomes. This could be a technical procedure, or an OHS obligation, such as manual handling, chemical hazards, confined spaces.

Design the training sequence and accompanying learning resources in a learner-centred way which doesn't rely on the trainer reading the manual to the whole group, and which gives trainees with poor language and literacy skills a chance to participate in, and contribute to, the training.

Determine the content to be covered in this sequence.

Consult with a teacher of adult English as a second language or a teacher of adult literacy to help you with the remaining tasks:

- Consider the way the trainers and trainees will interact, using a range of different roles for both.

- Consider all the speaking, writing, reading, listening and numeracy tasks likely to be involved in the sequence and how they are interconnected with each other.

- Determine which tasks are work tasks and which tasks are training-based tasks. Ensure that they are as similar to each other as possible.

- Consider what types of activities you could use.

- Consider how you would put all these activities together.

- Consider how you would ensure that learning had taken place.

Check your progress	Yes	No	Need to review
In consultation with a language/literacy teacher I can begin to design training programs which have methodologies appropriate to the language, literacy and numeracy skills of the learners.			
In consultation with a language/literacy teacher I can begin to design learning tasks, materials and resources which will help learners to develop their language, literacy and numeracy skills when they undertake the training.			

Section 3:

Managing the learning for learners with language, literacy and numeracy needs

Unit 6: Managing learning: speaking and
listening in training off-the-job

Unit 7: Managing learning: reading and writing
in training off-the-job

Unit 8: Managing learning: communication skills
in on-the-job training

Unit 9: Managing learning: numeracy on and
off-the-job

These four units aim to assist you to:

- examine the range of communication that goes on in the training/ learning process

- identify the language, literacy and numeracy demands in written training/learning materials and activities

- use strategies to make the training/learning more appropriate to learners with language, literacy and numeracy needs

- design some communication strategies for your own training

- focus on on-the-job training to see if there are different language, literacy and numeracy demands being made on people with language, literacy and numeracy needs from those in off-the-job training.

Unit 6: Managing learning: speaking and listening in training off-the-job

Introduction

In this unit we will look at speaking and listening in the training room. We will be looking at how trainers can support and assist people to develop their English language skills for speaking and listening in training sessions. The unit will focus on the needs of trainees who come from non-English speaking backgrounds (NESB).

The information in this unit will help you to:

- identify the nature of the spoken language demands in instructions, activities and feedback mechanisms in the training room

- choose and design appropriate instructions, activities, videos, and feedback processes to meet the spoken language requirements of different trainees.

Have you ever lived or travelled in a country where you did not speak the national language? How long would it have taken you to learn to speak that language fluently? The Australian Government provides some English language tuition, but for many migrants this is just the start of a long process of becoming fluent in English. Next time you are sitting on a bus or in a restaurant, listen to the flow of conversation in a language you don't speak. You will notice that the people talking have no trouble conversing with each other. People with limited English have at least one language they are good at. Limited English does not make someone dumb or deaf.

The main differences between spoken and written language

Spoken texts	Written texts
are usually accompanied by body language	are not accompanied by body language
may accompany action, eg during a cooking demonstration	are usually removed from an action, eg a travel diary, sports report
are usually unrehearsed; the participants construct the meaning together as they go along	are usually planned, but we don't see the draft, redrafts and edits; we see the final version
involve more than one person to produce	involve writer/reader alone
are temporary (unless on tape/ whiteboard etc)	are permanent (unless on a video)
are dynamic, fluid and change continually	are fixed, static and is not subject to continual change
are processes	are products
tend to be grammatically intricate	tend to be lexically dense

Activity

Imagine you are learning a new language in a new country. How could people help you? Make a list. If you don't have any ideas, ask a friend from a non-English speaking background, or someone who has lived in a non-English speaking country to help you.

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-
-
-
-
-
-
-
-
-
-

Comment

Here are some suggestion you may have thought of:

- have a friendly and helpful attitude
- be patient with my mistakes
- speak slowly
- repeat and spell important vocabulary words
- repeat and explain things as often as I need them to
- demonstrate what they mean using their hands and actions where possible
- take the time to make sure I understand
- encourage me to practise their language
- help me to find an interpreter for difficult ideas
- encourage me to use a dictionary.

If we practise these attitudes in the training room, we will assist our non-English speaking background trainees to develop their English speaking skills.

Speaking in the training room

A training room is a little world unto itself. You go in there with your trainees and you probably shut the door and shut out the rest of the world! You can use this microworld very effectively to support trainees' language skills development at the same time as you are training them for the workplace. The list of helpful ideas in the activity above is a starting point. Remember, it is a waste of time to 'get through the training notes or manual' if trainees don't understand what you are talking about. Better to aim for less content and full comprehension!

In this section we will explore the following opportunities to integrate the development of language skills with vocational training:

- presenting information
- giving instructions
- asking questions
- giving feedback
- catering for different learning styles
- interacting in the training room.

Presenting information

Think of the most boring training session, lecture or seminar you ever went to. Why was it so painful?

Now think of an exciting and stimulating session you attended. What made it exciting? Did the speaker:

- speak with enthusiasm about the topic

- speak clearly and at a pace that was easy to follow

- start his or her presentation of the subject matter by referring to aspects of the subject that the audience was already familiar with

- introduce new ideas in a logical sequence

- explain new terms carefully and write them up for all to see

- illustrate the presentation with relevant examples and stories

- invite questions and audience participation.

Trainers must be enthusiastic about what they are doing.

There will always be occasions when you are called on to present information in your area of expertise. Remember your audience and consider these suggestions:

Delivery

- Speak clearly.

- Speak at a speed which everyone can follow.

Practise, and tape yourself before the lecture. Ask a friend to comment on these two points.

Developing your ideas

- Start your presentation of the subject matter by referring to aspects of the subject that the audience knows already.

- Introduce new ideas in a logical sequence.

Write down the logical sequence in points you can refer to, and follow the sequence.

Supporting trainees' learning

- Explain new terms carefully and write them up for all to see.

- Illustrate your presentation with relevant examples and stories.

- Use pictures and brief snatches of **relevant** video material to support your presentation.

- Invite questions and audience participation.

Preferred learning styles and the limitations of the lecture

Many of us cannot listen to someone speaking for very long. We like to learn by seeing and doing as well as listening. This is why we fall asleep when a trainer or teacher reads from a set of notes. In the training room, we should try to cater for different learning styles by:

- keeping our lecture presentations to a minimum

- offering our trainees the chance to work together in groups to solve problems.

We will discuss different training styles later in this unit.

Activity

Minh works as a trainer and supervisor in a cake factory. The factory is making some changes to their Christmas cake recipes. She has to present a 10-minute talk to her Christmas cake team on the proposed changes.

She has thought about the topic and written down all her ideas as they come to her, as a brainstorming exercise. Her notes look like this:

- availability of new recipes

- changes to the storage area

- first delivery of new ingredients

- Minh: overall responsibility for the new product

- new look: walnuts instead of almonds on top

- new recipe: add apricots and reduce sultanas

- Paul in the laboratory to work with mixers and bakers

- story about other brands and nutrition

- summarise main points

- Why change; market research?

Put these ideas into a logical sequence for Minh's talk.

Minh's lecture structure:

-

-

-

-

-

-

-
-
-
-

How could she make the talk easier for some people to follow?
(Hint: some people find it difficult to listen without seeing
anything, and some people have to do something active to absorb
new information.)

Comment

Did you end up with a list looking something like this one?

- Why change; market research?
- story about other brands and nutrition
- new look: walnuts instead of almonds on top
- new recipe: add apricots and reduce sultanas
- availability of new recipes
- first delivery of new ingredients
- changes to the storage area
- Paul in the laboratory to work with mixers and bakers
- Minh: overall responsibility for the new product
- Summarise main points.

Here Minh is starting with the background to the changes in the
cakes. She continues by outlining what the changes will be; looking
at the new arrangements needed and then explaining who will be
responsible for assisting the team in the change process.

Minh makes it easier for the people from non-English speaking
backgrounds to follow her ideas by:

- speaking slowly and repeating key ideas
- inviting and encouraging her audience to ask questions
- summarising the main ideas for each point on overhead
  transparencies
- showing the team a sample of the new cake
- taking them into the production area, showing them where the
  changes will need to be made and asking them for their ideas.

In the example above, Minh will find it easier to change work
practices if she invites her team to contribute their ideas. Of course,
she must then acknowledge the ideas and use those which the team
agrees are the best.

Giving instructions

Instructions are an important part of workplace training.

Tape yourself giving instructions and then evaluate your performance using the checklist below:

Checklist for giving clear spoken instructions	Tick
Make sure everyone can hear.	
Make sure everyone can see you.	
Introduce the procedure and explain new words.	
Write new words where all can see them.	
Explain why they are doing this and how it fits into their learning process.	
Demonstrate in small steps, what they are to do and invite them to ask questions at each step.	
Ask questions to check trainees understanding of each step.	
Mark the introduction of steps with *first, next, then, lastly...*	
Use the correct action word for the procedures, eg first **ask** your supervisor to..., next, **arrange** a meeting with..., then **record** the information in... etc.	
Use correct standard technical terms, eg arrange a **quality assurance** meeting; record the information from each **production run** on the **log** in the laboratory, etc.	
Explain any calculations carefully as you are demonstrating what they have to do.	

Use the checklist above as a guide to presenting clear spoken instructions.

Asking questions

There are many ways to ask questions in English. Answers to questions can be 'yes' or 'no', they may require a name or a time. Other questions require a statement or an explanation. Some questions are designed to encourage discussion.

Closed questions

When the trainer knows the answer to the question before he or she asks it, we say the question is 'closed'. There is only one answer, or one set of correct answers. We use closed questions to check that our trainees are following what we are saying. Closed questions are very important in training. However, they will probably not encourage healthy debate about an issue or a problem.

Open questions

To encourage discussion we need to ask questions which do not have just one correct answer. Open questions involve us and our trainees in making choices and arguing for or against a particular decision. Asking open questions encourages our trainees to think critically about a situation, eg 'We only have $50 000 to spend on the alterations this year, so what are our priorities?' or 'How would you go about checking the consequences of raising the oven temperature by 2° ?'.

Training and asking questions go together. Good questioning techniques are part of being a good trainer. We will consider the value of open questions further in the section on 'training room techniques'.

Activity

Tape yourself delivering a training program. Write down the open and closed questions you ask your trainees in the table below.

Open questions	Closed questions
•	•
•	•
•	•
•	•
•	•
•	•
•	•
•	•

Listen to your tape again. What happened when you ask closed questions? Did you get a simple statement of fact? Did any discussion occur as a result of any of these questions?

What happened when you asked open questions? Were more trainees involved in providing answers?

Open questions may stimulate discussion and assist trainees

to think more deeply about the subject matter. They can help trainers think more deeply about the subject matter too!

Giving feedback

Trainers provide feedback every time they respond to a trainee's words or actions. Giving good feedback is the way we motivate our trainees to continue learning and asking questions.

If possible get another trainer or trainee to use a video camera to video you while you are training. Watch how you offer feedback to your trainees and answer the questions below. If you can't make a video, ask another trainer to observe you and answer the questions for you.

- How often do you offer positive feedback in words like 'Good', 'Yes, that's right', 'Yes, and what about...?'.

- Do you interrupt someone when they are speaking? This is guaranteed to discourage most people from speaking again.

- What does your body language say? Do you make eye contact? Do you turn to face the person speaking?

- Do you always answer questions from trainees, or do you invite others to provide answers?

Catering for different learning styles

Traditional training and teaching methods were teacher centred. The teacher was the source of knowledge; the students were the 'empty vessels'. It was the teacher's job to fill the vessels full of his or her knowledge.

This style of teaching and learning may not suit the learning style preferences of many of your trainees.

Think of a successful and enjoyable learning experience you have had such as learning a sport, learning a musical instrument, learning a new skill at work. Make a few notes here about the experience. What made it enjoyable? Here are some suggestions which may have contributed to your experience:

- setting out to solve a 'real' problem

- researching information from different sources

- testing hypotheses and trying different options

- learning in a team: and cooperating with others

- finding a mentor: someone who could answer your questions and share their experience

- applying what you learned to change and improve your world in some way.

How could you recreate this kind of experience in the training room? Make some notes of your thoughts on this proposition.

Activity

Consider this training scenario

Simon will train a group of six trainee store persons to use the on-line store management system in a packaging factory. There will be four training sessions of two hours per week over the next four weeks. The outcomes for the course are:

- process internal orders for requisitions from the stores using the electronic management system

- place electronic orders with external suppliers to replace depleted stocks.

He has been offered the use of two spare computers connected to the file server running the management software.

If possible, work with another trainer to consider the following questions.

How could Simon go about planning this course. He should plan a course that gives trainees the opportunity to:

1   work together as a team

2   solve a 'real' problem

3   research information from different sources

4   apply what they learn to change and improve their working world in some way.

What speaking reading writing and calculating skills will the trainees need?

How can Simon support the development of these skills? Add more rows to the table if you need to.

Skill	Support by...

Comment and discussion

Working together as a team

Working together as a team will develop listening and speaking skills. As a trainer–facilitator, Simon's task is to encourage team members to work together. He will have to:

- encourage and include every member's contribution
- demonstrate tolerance and appreciation of different learning styles
- demonstrate tolerance and appreciation of cultural differences.

Solving a 'real' problem

To motivate the trainees and put their learning into a real context, Simon needs a real problem to work on. It will be his job to:

- assist the trainees to identify the problem they want to work on by facilitating a group discussion
- encourage them to approach senior members of staff for information and resources
- support their requests for equipment and access to materials.

Research information from different sources

Simon will also assist his trainees to develop their research skills:

- teach them how to access information
- guide them to appropriate sources of technical information.

trainees will be developing reading, writing and calculating skills in the context of problem solving, and will be developing valuable learning skills.

Apply what they learn to change and improve their working world in some way

The relevance of the learning experience and its lasting impact will be guaranteed if the training results in changes in workplace procedures, or if there is a positive change in the traineess' attitude to the workplace.

Supporting language development

Trainees from non-English speaking backgrounds can be supported by the rest of the group as well as by the trainer. Here are some suggestions for improving training room dynamics and encouraging trainees as a group to take responsibility for their learning process.

Interacting in the training room

Encourage more able trainees to act as mentors for those who find English a barrier to learning.

Training room strategies include:

- asking trainees to work together in groups of 3 to 5 for discussion and when reading and writing are required

- getting trainees to check each other's work

- encouraging less confident trainees to speak when they are ready though never putting them 'on-the-spot' to speak

- encouraging the use of dictionaries

- encouraging more able speakers of English to act as translators, when necessary.

The culturally diverse training room

It should be obvious that trainees will learn and develop their communication skills if they find themselves in a non-threatening training environment. It is your responsibility as a trainer to make sure this is provided for all your trainees.

Be aware of cross-cultural considerations in your training room.

Strategies include:

- explore your own racial and cultural biases and prejudices through issues arising in the media

- seek professional cross-cultural training if you find any particular group(s) triggers a negative reaction in you

- research and respect cultural differences represented in any group of trainees

- encourage discussion of cultural differences as they arise in the training room.

Activity

1. Outline a training program you deliver and state the learning outcomes and the environment in which the trainees work.

2. Describe how you will facilitate the learning process

3. Describe how you will assist the development of trainees' communication skills

Check your progress	Yes	No	Need to review
I can identify the kinds of spoken language skills needed to follow instructions, respond to feedback and participate in training activities.			
I can deliver training with instructions and activities appropriate to the English language skills of my trainees.			

Unit 7: Managing learning: reading and writing in training off-the-job

Introduction

In this unit we will look at the reading and writing skills trainees need if they are going to respond to training materials distributed in group training sessions. We will practise designing and adapting appropriate written materials for trainees with literacy and numeracy needs.

The information in this unit will help you to:

* identify the reading and writing demands of a range of print materials used in the training context

* adapt, redesign and design appropriate written materials for use with trainees in the training room.

You will find more information if you go back and review Unit 4 which looks at modifying existing training packages and on to Unit 9 which looks at assessment.

Tony works for an electricity company. He is training a typical group of lineworkers to operate a boom-type elevating work platform (EWP) used to work on overhead power lines. Three of the trainees come from a non-English speaking background and can speak English well enough to do their work, but find reading and writing in English quite difficult. The other one finished Year 10 high school in Australia in 1970. Tony has been offering this training course for two years and he usually goes through the information in the manual in the training room, and then goes out to a special mock-up area set aside for practising the procedures.

Even though Tony knows that the trainees have trouble with the course because of their background, he feels that he can't help them. He's nearing the end of this course and has already covered the legislation governing the use but he knows that these trainees haven't really understood what they've read in the manual even though he made overhead transparencies and discussed them in the training room.

One of the problems that Tony is facing is the fact that all training involves some reading. It doesn't matter how many summaries and simple worksheets he designs, his learners will still need to read the material in the manual.

Designing Tony's training materials

In this section we are going to help Tony to:

- design his own training materials which will help his trainees to understand the training manual better

- design activities which will help the trainees to read their manual and at the same time develop their reading skills

- re-design writing tasks so that they are not more difficult than the writing tasks required on-the-job.

One of the ways you can really help trainees to understand their training manual is to design simple and clear materials such as overhead transparencies and worksheets based on the information which is in the manual. This will help them to read the manual later.

Rather than just taking a chunk of the manual and enlarging it for the overhead transparencies, you should rewrite the chunk to suit the purpose of the OHT.

Here is an example from industry training. The information in the computer training manual looked like this:

HOW TO SIGN ON

Production System

From the program manager using mouse click on the icon (double click) this will take you to your first step.

Step 1. Black and White Screen

LOGIN: Payroll Number eg. 012 < ENTER >

PASSWORD: payroll number and name eg. 012sam. < ENTER >

Step 2 Production Screen

Userid: payroll number eg. 012 < TAB >

Password: secret password (the one you have chosen) < ENTER >

The next screen is your Main Menu. From here you select the option you want and < ENTER >

The trainer took the information and made an overhead transparency like this:

SIGNING ON TO
THE PRODUCTION SYSTEM

1 Double click on the icon

On the Opening Screen

2 AT LOGIN: type your payroll number and press the Enter key

3 AT PASSWORD: type your payroll number and name and press the Enter key

On the Production Screen

4 AT USERID: type your payroll number again and press the Tab key

5 AT PASSWORD: type your secret password and press the Enter key

On the Main Menu screen

6 Select the option you want and press the Enter key

Notice that the trainer has:

- Summarised the information in logical steps
- Put the information into a large font (print) size.

Activity

Here is an extract from Tony's training manual, *Boom-Type Elevating Work Platform Operator Training Course*. This material comes from Operational Text from EWP 3 Boom Type EWP Operation Course, produced by Electricity Association of NSW. Make this information from the manual into a number of overhead transparencies for the training room. Use headings and points, and make sure the print size is large.

1.12 AS2626-1983 INDUSTRIAL SAFETY BELTS AND HARNESSES SELECTION. USE AND MAINTENANCE

This standard is called up in regulation 135B of the Construction Safety Regulations and describes various circumstances and assemblies for the safe use of safety belts and harnesses and the inspection, storage and cleaning practices to be observed.

In brief, the standard requires that all anchorage and attachment points be designed to be compatible for prevention of inadvertent release. 'D' rings and snap hooks must be properly mated to ensure that the snap hook cannot 'roll out' of the 'D' ring. Belts and harnesses should be visually inspected before use to ensure the equipment is in a serviceable condition. A thorough examination of the belts and harnesses should also be made at intervals not exceeding 6 months.

Storage and transport of belts and harnesses should be in a cool, dry place away from direct sunlight. The equipment should not be subjected to chemical and/or mechanical damage during storage and transport and should not be subjected to undue strain or pressure.

Normal cleaning of synthetic materials can be carried out with soap and water but if more severe cleaning is required, reference must be made to the manufacturing standards as they apply to the belt.

Comment

How did you go? Tony's overhead transparency should look something like this. If you had any problems with this exercise read through Part 1 again.

Safety Belts and Harnesses

Selection

See 135B of the Construction Safety Regulations

- anchorage and attachment points must be designed so that they cannot be accidentally released

- a snap hook must not be able to roll out of a 'D' ring

Safety Belts and Harnesses

Use and Maintenance

- inspect all belts and harnesses before using them

- examine all belts and harnesses throughout every 6 months or less

- store belts and harnesses in a cool dry place out of the sun

- keep belts and harnesses away from chemicals

- do not store belts and harnesses under strain or pressure

- clean belts and harnesses with soap and water or according to the manufacturer's standards

Did you notice the following points:

* the headings have been simplified
* the information is less crowded
* whole sentences have become dot points
* 'inadvertant' has been changed to 'not ... accidentally' because this is more commonly used
* in OHT 2 sentences have been turned into commands, eg 'inspect all belts and harnesses' instead of 'belts and harnesses should be visually inspected'.

What we have seen in the activity above is that Tony has to rewrite training materials to make sure his trainees can follow the training. Rewriting training materials requires some skill and practice. Let's look at how we can help Tony do this.

Let's begin by looking at the language in the materials Tony will use. An extract from the manual that he is using is included below. The manual is for training operators on boom-type elevating work platforms (EWPs) (like cherrypickers). Trainees receive a copy of this. We have a few ideas on how to make the material easier to read.

Here is the extract. We have highlighted some of the words in the original.

4.0 GENERAL

Rescue and emergency escape procedures cannot be defined in detail in all cases. However, basic principles and methods **should** be known to all **personnel** working with EWPs, or to **those** assisting with such work, whether or not those persons are working on or working adjacent to electrical **apparatus**, or **merely** assisting in **such** work...

We are going to change the words in bold type to make the sentences easier to understand.

1. UPPER CASE is hard to read, even though it is often used for headings, so use upper case print sparingly. Try using bold type instead.

2. 'Rescue and emergency escape procedures' is a long phrase which may hide the fact that what we are talking about is how to do something - the 'procedures'. In this case it would be better to begin with 'procedures' and say 'procedures for emergency rescue and escape'.

3   'should' means 'it is preferable' or 'it is desirable'. If what
we really mean is 'must' then we must use the word 'must'.

4   'Personnel' here means 'anyone working at the site'.
'Personnel' is not a word we use in spoken language and some
people may not know the word. It could be replaced with
"people" or "everyone".

5   'Those' means "those people". People from a non-English
speaking background may find it difficult to understand a
passage if we leave out words, even when this is correct
English. It would be better to repeat the word "people".

6   'Apparatus' could be replaced with "equipment".

7   'Merely' and "such" do not add meaning to the paragraph.
They could be left out.

Now let's look at the sentences. There are two sentences: the first
sentence starts with "Rescue", and the second sentence starts with
"However".

The first sentence is not the main idea of the paragraph; it is just
extra information. The main message or idea in the paragraph is
that anyone working on or near an EWP must know the basic
principles and methods of rescue and emergency escape. This idea
is clearly stated in the second sentence, but the paragraph would
be clearer if the main idea was stated first.

Look at the second sentence beginning with "However". This is a
very long sentence with three main pieces of information in it.
Here they are:

•   basic principles and methods [of emergency escape and
rescue] must be known to all personnel working with EWPs

•   those [people] assisting must also know basic methods and
principles

•   it doesn't matter whether people assisting are working on the
equipment or next to it; they must know the basic safety
methods and procedures.

We can make this into three sentences which are easier to
understand.

Following our suggestions the paragraph will look like this:

4.0 GENERAL

Everyone working with EWPs should know the procedures for
rescue and emergency escape. Everyone assisting with the work,
or working nearby should also know them. Procedures for rescue
and escape cannot be defined in detail here for all emergency
situations.

Compare this rewrite with the original:

Notice we have

1. replaced the UPPER CASE heading with bold type.

2. put the main point of the paragraph first

3. changed some of the words to make the passage easier to understand

4. used simpler sentences.

Activity

Here's a paragraph about skin cancer for outdoor workers. Have a go at re-writing it for outdoor workers who come from a non-English speaking background:

1. underline any words you want to change and then change them. A dictionary or a thesaurus (a dictionary of words with their synonyms) will help.

2. make sure the main point is made in the first sentence.

WORKING IN THE SUN

More than 60% of Australians get skin cancer some time in their life. Australia has the highest incidence of skin cancer in the world. Irrespective of what kind of skin you have, you are at risk if you have lived in Australia for most of your life, have ever been sunburnt, have moles or sunspots and have a family history of skin cancer. Protect your skin before you go out in the sun to work.

Comment

You probably underlined <u>irrespective of</u> and perhaps you underlined <u>incidence</u>. "Irrespective of" can be changed to 'It doesn't matter', "incidence" can be changed to "number of people with".

You may have changed the BLOCK LETTER heading to bold.

Did you take the last sentence and put it first? "Protect your skin..." is the main point of the paragraph.

Did you shorten the third sentence, by turning it into two sentences?

Here is our suggestion for the re-written paragraph:

BEST COPY AVAILABLE

Working in the sun

Protect your skin before you go out in the sun to work. It doesn't matter what kind of skin you have, you are at risk from skin cancer. You are at risk if you have lived in Australia for most of your life, have ever been sunburnt, have moles or sunspots and have a family history of skin cancer. Australia has the highest number of people with skin cancer in the world. More than 60% of Australians get skin cancer some time in their life.

Helping learners to develop reading skills

Everyone has to know how to read for work these days. However, there is so much information in the world today that no-one has the time to read everything that arrives on their desk or in their work space. We all need the skills to decide what's important to read and how to read more effectively.

Choosing what is important to read involves:

* quickly finding the main point of what we are reading and deciding whether it is relevant to us. This process involves *skimming* written information

* deciding how much and how carefully we need to read is part of the *skimming* process

Reading effectively involves:

* finding and reading the information we need. For this we have to be able to *scan* the written information without reading every word until we find what we want (eg the date or location of the meeting)

* understanding what we see on the page; the language, the way information is presented including pictures, tables, graphs and other illustrations

* using our own experience to understand what we read

Tony's trainees need his help to become better readers. Using the tips we discuss in this section, Tony will be able to help his trainees read more confidently.

Reading and training

As trainers it is our responsibility to provide written information for our trainees that is relevant and easily understood. If our trainees are good readers they will progress quickly through the material; and if their reading skills are not so good we will assist them to develop better skills. We can show them how to;

* **predict** what the material is about and use their own experience to help them understand what it says

- **skim** through the whole text to check their predictions and decide if it is relevant to them

- **scan** the headings, subheadings and illustrations to find the information they need

- only **read** all the details when necessary.

Let's look at these skills one at a time.

Predicting

We select what to read on the basis of:

- our interest in the subject and what we know about it

- our predictions on the content from the headings, layout. For instance, we recognise the difference between a page in a dictionary and a bank statement by the way it looks on the page

- our need to know the information in a document.

If we predict that the content will interest or benefit us, we may decide to read on, but we will probably only read the bits we want.

In the training room

Note: only ask your trainees to read what is relevant and of interest to them.

1. Show them a written document you want them to read and ask them to brainstorm these questions before you give it to them to read:

    - Where do you think this document comes from?

    - What do you think the document will be about?

    - What do you already know about the subject?

    - What do you think will be in this document?

2. From your trainees' responses you should be able to demonstrate to them that they already know something about this and their knowledge will help them to read the document.

3. Make them aware that the answers to these questions are important preparation for reading anything.

Skimming

If the headline or title of an article/paper/book interests us, we will probable flick through to the end of it looking at headings and illustrations, or checking the table of contents to see if we were right about the content.

In the training room:

1. Tell your trainees the heading(s) of a work-related article.

2. Ask them to predict what the article will be about from the headings

3. Give them the article and a time limit (about 3 seconds per page) to decide if their predictions were right.

4. Demonstrate what skimming is and why it is an important reading skill.

Scanning

Sometimes when we read we just want the facts and figures. We don't need to read every word. We've skimmed the article looking for charts, tables and now we scan it and the charts and tables for details such as times, totals or scoreboards.

In the training room

1. Explain the difference between scanning for information and reading every word. Give workplace examples of when scanning would be appropriate, eg scanning a workplace memo about a meeting for the date, time and place. Give trainees examples where scanning would not be sufficient, eg safety procedures which must be read thoroughly

2. Demonstrate the skill of scanning to find relevant information. If necessary, show them how to read charts, graphs and tables relevant to their work.

3. Ask trainees to locate factual information in an article you hand out, and give them a time limit.

Thorough reading

If we want to know the details of the article: who did what, and where, and when, and why and how and what the writer thinks, then we have to read every word in the article. If we are following instructions we will also have to read every word carefully and check any diagrams.

In the training room

1. Go through the predicting and skimming and scanning exercises first.

2. Tell your trainees when it is important for them to read something thoroughly and tell them why it is important.

3. Guide their thorough reading with questions about who, where, when, how and why in the order they occur in the text.

4. Ask them why the writer has written the piece they are reading, whether he or she has expressed an opinion and, if yes, what that opinion is. These questions will help the reader to get the writer's main message

5. If the text is expressing an opinion ask the trainees to discuss the author's point of view and give their own reasons for agreeing or disagreeing with him or her.

Activity

Tony is training his group in occupational health and safety issues next week. He is worried because they will have to read a summary of the 1983 Act (included below). Use the training room steps above to assist Tony in his preparation. Describe how he could help his trainees to:

1. predict the content of the publication

2. skim the document for overall meaning and context

3. scan the text for information

4. **read the document thoroughly.**

The Occupational Health and Safety Act

1983

As of 1 February 1996, maximum penalties under the Act have doubled

A Summary of the Main Provisions

WORKCOVER
NEW SOUTH WALES

A Summary of the Main Provisions

The New South Wales Occupational Health and Safety Act, 1983 aims to protect the health, safety and welfare of people at work.

It lays down general requirements which must be met at places of work in New South Wales. The provisions of the Act cover every place of work in New South Wales. The Act covers self-employees and employers.

General duties *(Part 3, Division 1 of the Act)*

The general duties set out in the Act are summarised below.

❏ **Employers** must ensure the health, safety and welfare at work of their employees. Things employers must do to ensure this include:
  ✓ providing or maintaining equipment and systems of work that are safe and without risks to health.
  ✓ Making arrangements for ensuring safe use, handling, storage and transport of equipment and substances
  ✓ providing the information, instruction, training and supervision necessary to ensure the health and safety at work of employees
  ✓ maintaining places of work under their control in a safe condition and providing and maintaining safe entrances and exits
  ✓ making available adequate information about research and relevant tests of substances used at the place of work.

❏ **Employers and self-employed people** must ensure health and safety of people visiting their places of work who are not their employees.

❏ **Manufacturers and suppliers of plant and substances** to workplaces must make sure that they are safe to use when properly used.
  They must:
  ✓ carry out necessary research, testing and examinations
  ✓ make available adequate information about research and relevant tests of substances they manufacture or supply
  ✓ make available adequate information about conditions for the safe use of equipment and substances they manufacture or supply.

❏ **Persons who erect or install equipment** at a workplace must make sure that it is a safe to use when properly used.

❏ **Persons in control of non-domestic premises** used as a place of work must ensure that the premises and exits and entrances are in a safe condition.

❏ **Employees** must take responsible care of the health and safety of others. Employees must co-operate with employers in their efforts to comply with occupational health and safety requirements.

❏ No person must:
  ✓ interfere with or misuse things provided for the health, safety of welfare of persons at work
  ✓ obstruct attempts to give aid or attempt to prevent a serious risk to the health and safety of a person at work
  ✓ refuse a reasonable request to assist in giving aid or preventing a risk to health and safety.

Health and safety committees *(Part 3, Division 2 of the Act)*

The Act states that occupational health and safety committees must be established in workplaces of 20 or more where the majority of employees request it.
  ✓ The WorkCover leaflet 'OHS committees: Powers, functions, rights and duties' outlines the powers and functions of the committees.
  ✓ WorkCover's 'The health and safety committee starter kit' outlines the steps to be taken to set up a committee according to the Act.

Unlawful dismissal *(Part 3, Section 26 of the Act)*

The Act makes it unlawful to dismiss an employee for being an occupational health and safety member or for performing his or her duties as a committee member. It also makes it unlawful to dismiss any employee for making a complaint about a health and safety matter.

Offences and penalties *(Part 6 of the Act)*

There are various offences and penalties associated with the Act and regulations. The maximum penalty for a company found guilty of an offence is 2,500 penalty units. For individuals found guilty of offences, the maximum penalty is 250 penalty units and two years in jail. A 'penalty unit' is an amount of money—$100 at the time of printing—that can be altered from time to time by the government. This means that the maximum penalties in dollar terms, are presently $250,000 for corporations and $25,000 for persons.

It is a defence to charges made under the Act or regulations that:
  ✓ it was not reasonably practical to comply or
  ✓ the incident was due to causes over which the person had no control and it was 'impractical' to make arrangements to prevent it.

Designing appropriate writing tasks for trainees

In this section we will look critically at the writing tasks we might ask our trainees to do. For example, Tony usually asks his trainees to complete a multiple-choice or short-answer question test to make sure they have learned the theory of the course he has presented. Do you think this is a good way to test their knowledge? Why or why not? How do you decide whether trainees have learned the theory in your courses?

Consider the writing your trainees do in their work: these are essential writing tasks. Consider what you ask them to write in the training room: are these writing tasks essential?. For example, Tony's multiple choice writing exercise is not essential to working safely. Tony could probably test his trainees' knowledge of OHS by asking questions orally and observing what they do on the job. If possible:

1. avoid asking trainees to do non-essential writing tasks

2. give them a choice of spoken, written and action-based activities to cater for different levels of literacy skills and learning styles.

Writing tasks can be very difficult for some of our trainees. If they do not have to write much in their work or in other areas of their lives, they may avoid training to avoid the embarrassment they feel when asked to write.

Think about a training session you have offered recently.

*   What did you ask them to write?

*   What writing do they have to do in their job?

*   What differences are there between writing in the training room and writing for the job?

Complete the table below to compare the writing that trainees do in their job with the writing they do in training sessions.

Training program	Writing for training	Writing on the job

Here are some guidelines for preparing written exercises for trainees who have limited writing skills (in English):

- consider exercises which can be done by a group so that the responsibility of writing rests with more than one person

- ask trainees to do 'real' tasks, tasks that they will have to do on-the-job, using the 'real' forms and stationery

- give them plenty of examples of the kind of completed writing tasks you want them to be able to do. Go through the examples with them and explain each step

- make sure trainees know who will read what they have written and ask them to keep their reader in mind

- wherever possible, make sure that any forms they must complete are written and formatted in plain English

- enlist the help of trainees in designing better documents and forms for the workplace. This can be a great learning exercise and will involve trainees in issues related to good workplace communication.

Activity

Here is the extract from Tony's EWP training course again. Tony designed some multiple-choice questions to test the trainees understanding. Some of these questions are printed here.

1.12 AS2626-1983 INDUSTRIAL SAFETY BELTS AND HARNESSES SELECTION. USE AND MAINTENANCE

This standard is called up in regulation 135B of the Construction Safety Regulations and describes various circumstances and assemblies for the safe use of safety belts and harnesses and the inspection, storage and cleaning practices to be observed.

In brief, the standard requires that all anchorage and attachment points be designed to be compatible for prevention of inadvertent release. 'D' rings and snap hooks must be properly mated to ensure that the snap hook cannot 'roll out' of the 'D' ring.

Belts and harnesses should be visually inspected before use to ensure the equipment is in a serviceable condition. A thorough examination of the belts and harnesses should also be made at intervals not exceeding 6 months.

Storage and transport of belts and harnesses should be in a cool, dry place away from direct sunlight. The equipment should not be subjected to chemical and/or mechanical damage during storage and transport and should not be subjected to undue strain or pressure.

Normal cleaning of synthetic materials can be carried out with soap and water but if more severe cleaning is required, reference must be made to the manufacturing standards as they apply to the belt.

Circle the correct answers

1. The standards for belts and harnesses are outlined in:

    a 135B of the Construction Safety Regulations

    b The OHS manual

    c The Electricity Safety Regulations.

2. The standard specifies the following requirements:

    a after 6 months the belts and harnesses must be inspected

    b rings must not be used with snap hooks that don't match

    c snap hooks must be able to roll out of D rings.

3   Belts and harnesses should be cleaned:

a in transit

b with soap and water

c with chemicals

What skills does this kind of exercise test?

Comment

Did you recognise that there is as much emphasis on the trainees' ability to read and do multiple-choice questions as there is on testing their knowledge. Trainees who come from a different educational and cultural background may also find it difficult to do this kind of exercise.

Activity

List as many other ways that Tony could have checked their knowledge.

Comment

Did you suggest:

*   asking questions orally?

*   asking for an illustrated response to the questions?

*   asking them to show you what is required by doing it?

*   other suggestions?

Refer to Unit 9 on assessment for more information about testing and assessment.

Workplace task

1. Select a training package that you deliver/will deliver:

    • identify a section which you would like to use as an OHT

    • prepare an OHT using the skills you've learned in Part 1 of this unit.

2. Mark sections of the training manual that you think could be too difficult for your trainees to read. Design a task around one of these sections which will help the trainees to read it more confidently using the suggestions in part 2 of this unit.

3   Refer back to the table of writing tasks on p.120. Choose one of the training tasks you identified and:

- describe the task as it currently exists

- describe your trainees

- explain what the task is designed to teach or test

- design a more appropriate task for your trainees.

Check your progress	Yes	No	Need to review
I can identify some reading and writing demands on trainees of a range of print materials used in the training context.			
I can begin to adapt, re-design and design appropriate written materials for use with trainees with literacy and numeracy needs in the training room.			

Unit 8: Managing learning: communication skills in on-the-job training

Introduction

In this unit we will look at the language, literacy and numeracy needs of on-the-job training. We will identify common spoken and written language demands on trainees on-the-job and examine how these demands can be modified.

The information in this unit will help you to:

- identify spoken and written language demands on trainees in 'on-the-job' training

- adjust your spoken and written language to suit the needs of the trainees in on-the-job training.

Speaking and listening in on-the-job training

In this section you will be asked to think about your own style of delivering on-the-job training. Begin by completing the questionnaire below. It should help you get a picture of how you approach training on-the-job. Then read the comments and suggestions that follow.

Activity

Q	Speaking and training on-the-job	Yes	No	Not sure
1	I check before I train to see if any trainees have problems with hearing, sight or English language.			
2	I prepare to deliver my training with my trainees' language skills in mind.			
3	I demonstrate what to do as I talk.			
4	I describe what to do and then show them.			
5	If their English is not good, I prefer not to say much, just show them and get them to show me.			
6	I prefer to point to things and make it obvious what they have to do.			
7	I demonstrate what to do more than once, if necessary.			
8	I ask questions as I proceed to make sure trainees are following what I'm saying.			
9	I always ask questions to check that each person understands the OHS issues involved.			
10	I let people ask questions at any time.			
11	If possible, I get them to work out the answers themselves.			
12	If I don't understand what a trainee is saying I ask them to repeat it until I am sure I do understand.			
13	I tell stories and/or jokes to help get my message across.			
14	I always use the correct technical name for any tools and equipment we are using.			
15	Sometimes I use the correct term and sometimes I use the slang/colloquial terms for things.			
16	I always speak clearly and repeat any new words several times.			
17	I write down important words and phrases for my trainees.			
18	I encourage learners to use dictionaries if they need to.			
19	I explain and demonstrate any calculations that need to be performed.			
20	I encourage speakers of the same language (if it is not English) to help each other.			

Comments and suggestions

Q 1–2

Be prepared; find out who your trainees are.

It is important to know what skills and what difficulties your trainees may have when you are preparing your training session. Trainees with:

• hearing problems

• English language and pronunciation problems

may need special help to benefit from the training.

Q 3–7

Speak slowly and clearly and demonstrate what you mean as you speak.

Break your training into 'chunks' of information and get trainees to demonstrate what you have taught them with each chunk.

It is important to explain the terms related to the tools and the job carefully. If there is more than one word used for a particular item or activity you must tell them. Wherever possible, you should use the term which is used throughout the industry.

Q 8–12

• Check your trainees' understanding as you proceed.

• Encourage them to ask questions and give others a chance to answer questions.

• **Never** flatly contradict an incomplete or incorrect answer. Build on whatever is correct in the response or rephrase your question to make the correct answer more obvious.

Q 13

Be aware of culturally sensitive jokes, for example, jokes about other national groups, sex, and religion may offend some people. Jokes which require an extensive knowledge of Australian history and idioms or slang may confuse and bore people from other cultures.

Q 14–19

People learn differently and at different rates. Provide as many different opportunities as possible for people to learn. These include:

• learning by watching

• learning by listening

• learning by doing

• learning by a combination of these.

In every training session, try to include:

- demonstrations
- explanations
- activities .

It is important to foster an atmosphere where trainees from non-English speaking backgrounds are encouraged to develop their language skills. Always check that they have understood the meaning of new terms by giving definitions, explanations and asking questions that will demonstrate trainees' understanding. Encourage them to use dictionaries and glossaries.

Reflection

- How do you like to learn? Do you prefer learning by listening, watching or doing?
- How do you train others? Do you combine demonstrations, explanations and activities?

Activity

Get someone to video you training on-the-job. Play back the video tape and:

- identify the kinds of speaking and understanding involved and make a list of them
- examine the degree of difficulty of the speaking and listening demands on trainees. Discuss the tasks you identified above with other trainers (where possible) and with trainees. Write their comments below.

Observe yourself carefully on tape and write comments on:

- how much speaking time you take up; how much speaking time the trainees take up. Is there a big difference, favouring the trainees?
- how slowly and clearly you speak
- how carefully you explain new/key words and phrases and technical terms
- how often you ask questions
- how often trainees ask questions
- how you respond to trainees' questions
- how you encourage them to develop their speaking skills.

Assisting trainees to understand spoken instructions

Let's look at some examples of what trainers might say.

Joanne is a trainer in a biscuit factory. She is training packaging employees to stack pallets for the pallet trucks to collect. The large cartons must be stacked carefully in a special pattern or they will fall off the truck.

Here are Joanne's exact words:

'Cast your eye over the empty and check out any broken slats. Rip any old sticky off like this and wack the first six down like this. Chuck a bit of tape around it like this. Then do the next layer like this, repeat the first layer and this one etc. 'Ave a go, mate!'

How could you say this more clearly?

Checklist for giving clear spoken instructions on-the-job	Tick
Prepare to demonstrate instructions in a logical sequence.	
Make sure everyone can hear.	
Make sure everyone can see your demonstration.	
Introduce the process and explain new words.	
Write new words where all can see them.	
Demonstrate the procedure once, explain why you are doing it and how it fits into the whole production process.	
Repeat the demonstration in small steps, explaining what you are doing and inviting questions at each step.	
Always use correct terms for processes and things.	
Ask questions to check trainees understand after each step	
Mark the introduction of steps with 'first...', 'next...' 'then...', 'lastly...'.	
Use the correct action word for the process, eg 'First **check** the scales; next, **measure** the correct quantity; then **record** the results... etc.	
Use correct standard technical terms, eg 'set the **checkweigher** to 0'; 'load the **pallet truck** safely'; 'use **callipers** to check the **gas ducts**', etc.	
Explain and demonstrate any calculations that need to be performed.	

Reading, writing and calculating in on-the-job training

Think about an on-the-job training session you have recently offered where trainees had to read or write or calculate as part of the training session. In the table below:

- list the different tasks trainees were asked to do

- decide if the tasks were 'real' tasks associated with the job they were training for

- decide if any tasks were too difficult for your trainees when they started the training.

Describe task	Was task 'real'?	Was task too difficult?

How did you assist the trainees who found a task too difficult?

Making the literacy tasks simpler

Refer back to Unit 7 for a more extensive look at writing tasks.

Always encourage trainees from non-English speaking backgrounds to carry and use a dictionary.

Some guidelines for making literacy tasks easier are:

1. encourage trainees to assist each other

2. eliminate any unnecessary reading and writing tasks

3. summarise information in point form wherever possible

4. demonstrate how to read graphs, charts and tables

5. provide good models of writing that trainees need to do

6. provide simple instructions and examples of how to fill in forms

7. make sure trainees know where any information they write will go, who will read it and what the information will be used for

8. work through examples of forms and documents to demonstrate what they need to write

9. check that all trainees are familiar with the measuring scales and instruments that are used before you ask them to calculate anything

10. explain any calculations that they will be expected to perform and make sure trainees know why they are necessary

11. demonstrate the required calculations as often as necessary and encourage those who learn more quickly to assist others

If you follow these guidelines and still find that someone is having problems, discuss the problem confidentially with that person, and if possible, seek professional assistance from a literacy expert.

Activity

Here is an example of an operating procedure. Read through the procedure and then list any difficulties you think it may present for trainees.

HOW TO FIX A PAPER MISFEED

- Make sure the power is turn off.
- Open the photocopier and check the area that is indicated in the display.
- Remove any paper making sure you do not tear the jammed paper and reset the copier.
- If this doesn't work you will have to check the manual in the cabinet under the copier.

Someone who is unfamiliar with this photocopier may not know where the power switch is. They may not know how to interpret the display to find the jam; they may not know the reset button is.

A diagrammatic explanation like the one below would be easier to follow.

turn off power

- **open area of copier indicated and remove paper**

- **turn power on**
- **depress 'reset' button inside front cover**
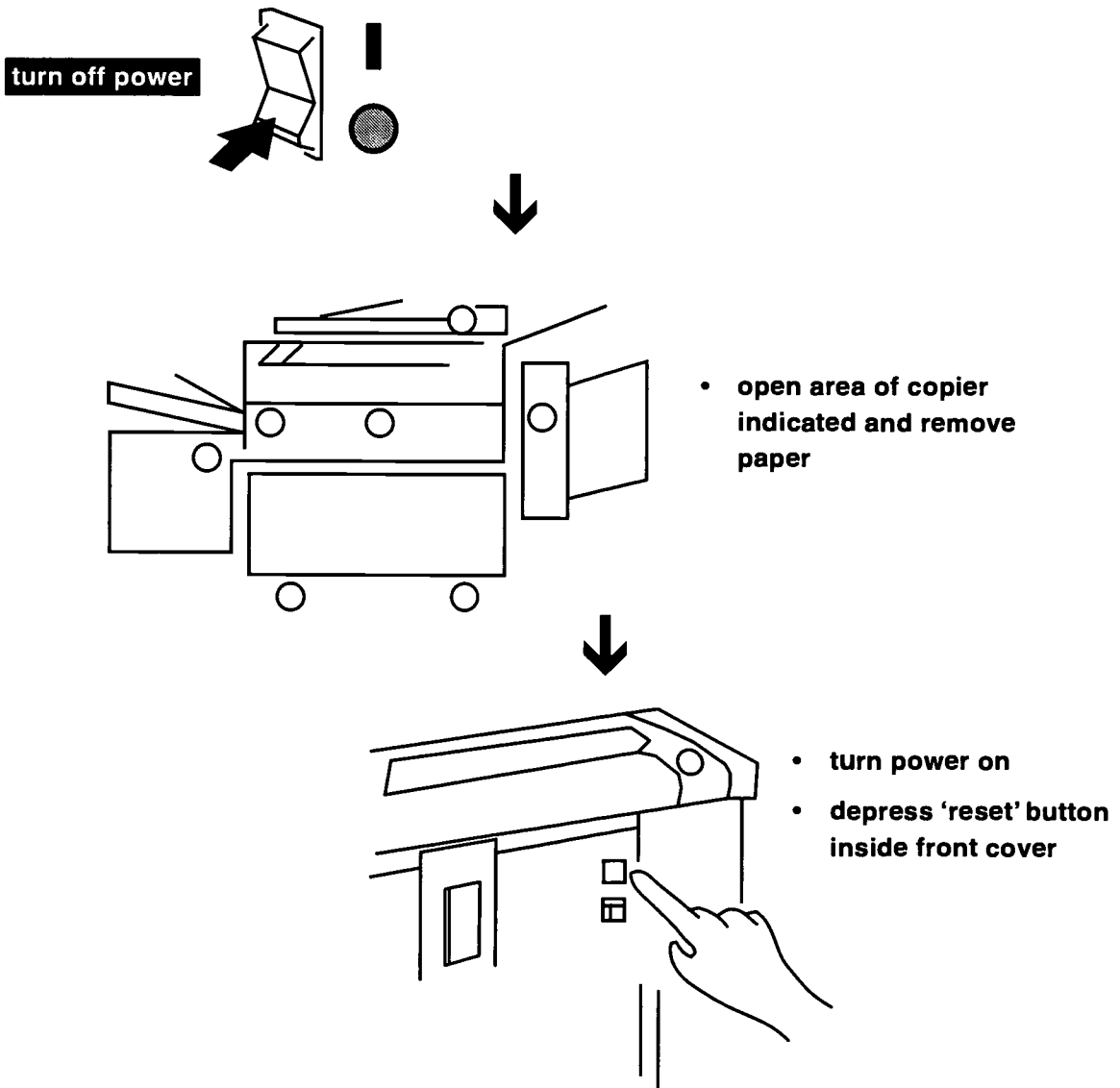
▶ **For further information please see 'Operator's Manual' in cabinet below photocopier**

Activity

Huang is training packing staff in a food factory to complete this form to record the details of the production run. The information goes to the accounting department and is analysed for wastage and to monitor the supply of ingredients.

1. How would you design this form to make it easier for Huang's staff to complete? Sketch the new form.

2. List in order the steps Huang should use to train her group.

RUNNING REPORT

LEADING HAND _____ DATE _____

No	Item	Start	Finish	Total KG	Waste KG	Comment

SUPERVISOR'S COMMENT:

SIGN _____

Comment

1. You could think about asking Huang's team what would make the form easier for them to complete. For example, you could add some instructions to the form, as shown on page 181.

   Note: If you want to change a form you must take it to the rest of the production team and to the any other people who will be affected, such as the accounting department, to negotiate the changes you want.

   You will have to explain why the form should be changed, so jot down your reasons for the changes you are proposing.

Huang could assist her workers by changing some of the column headings to make it obvious what information should be entered. The format could be changed to give more room to write.

The new form might look like this:

RUNNING REPORT

LEADING HAND ___*Ziggy Jepetski*___   DATE ___*4/4/97*___

Product no.	*91178*
Description	*apple pudding*
Start time	*8.05 am*
Finish time	*10.26 am*
Total weight packed in KG	*250*
Total wasted KG	*8*
Comment **(Any problems)**	

SUPERVISOR'S COMMENT:

SIGN ___*Ziggy Jepetski*___

Huang could also provide a page of instructions and an example of what the trainees should do:

1. Under **PRODUCT NO.** write the product number which is on the packet or tin, eg 91178.

2. Under **DESCRIPTION** write the name of the product, eg 'apple pudding'.

3. Under **START TIME** write the time the run started.

4. Under **FINISH TIME** write the time the run finished.

5. Under **TOTAL KG** write the total weight packed this run. Get this information from the checkweigher printout.

6. Under **WASTE KG PACKED** write the total weight that was wasted. Weigh all the product that was not packed for the warehouse.

7. Under **COMMENT (ANY PROBLEMS)** write down any problems you had on the run. For example, if you had a lot of waste it might be because the packaging machine broke down.

8. Don't forget to **SIGN** and **DATE** your **REPORT.**

9. Give the completed form to your supervisor.

Here is an example of how to fill in the columns.

RUNNING REPORT

LEADING HAND _____   DATE _____

Product no.	
Description	
Start time	
Finish time	
Total weight packed in KG	
Total wasted KG	
Comment

(Any problems) | |

SUPERVISOR'S COMMENT:

SIGN _____

2. You could outline a training program for Huang which included these steps:

- set up a meeting with the accounting department to meet with the trainees

- take the trainees to the accounting department to meet the people who will process the information. Ask them to explain briefly what the information is used for and encourage the trainees to ask questions

- back on the floor, briefly review the whole production process and how information is collected at each step along the way

- ask trainees to tell you where they will find the information they need

- demonstrate how to record information and do the calculations for you

- ask trainees to record the information and do the calculations

- give them real situations to practise in groups on-the-job

- supervise them individually on-the-job.

Accident reports

Here is an accident report form from an insurance company.

N✝I NZI Insurance
SYDNEY – WORKCOVER
EMPLOYER'S REPORT OF INJURY

NZI Workers' Compensation (NSW) Ltd.
7th Floor, Underwood House
37-49 Pitt Street, Sydney N.S.W. 2000
P.O. Box R180, Royal Exchange P.O., Sydney 2000
Telephone (02) 232 0122
Facsimile (02) 233 8910
AUSDOC DX 10150

Before completing this form, please read the notes on the back.
Print in block letters in the white areas and mark with a tick where appropriate

EMPLOYER DETAILS

Full name as per policy

Telephone No.   Policy No.

Postal address   Postcode

Location address (specify number, street, suburb)

Name and location where worker employed (depot, branch, etc.)

Relevant location No.

Business activity or profession

Name of Rehabilitation Co-ordinator

WORKER'S EMPLOYMENT PARTICULARS

Full name of injured worker   Married   YES ☐   NO ☐

Sex M or F ☐   Date of Birth   Date Employed

Permanent ☐   Part-time ☐   Casual ☐   Occupation

Main tasks performed by worker

If worker is not an employee, explain relationship (e.g. contractor)

Where time lost please complete questions on rear of form. N.B. Please complete the declaration on the back.

INJURY DETAILS – Where did the injury occur?   ☐ During a break at work   ☐ Vehicle accident while working

☐ At work   ☐ During a break away from work   ☐ Travelling to or from place of employment

Date of injury   Time of injury   AM/PM   Date notice given

Time notice given   AM/PM   To whom was the accident reported?

Address and place where injury occurred

Names and addresses of witnesses (if any)

Details of previous related injuries if known

How did the injury occur and what was the worker doing at the time? (e.g. slipped while walking down stairs.)

Describe the worker's injury or condition (e.g. laceration, dermatitis.)

Which parts of the body were affected? (e.g. upper arm, ankle.)

GIVE DETAILS OF OTHER CIRCUMSTANCES WHICH WOULD ASSIST THE INSURER TO ASSESS THE CLAIM (e.g. Do you query the validity of the claim? If so, why?)

In my opinion

PLEASE CONTINUE OVERLEAF

You cannot change the form, but employees may have problems completing it. To help them you could demonstrate the procedure for filling it out to small groups:

- take copies of the form, and a large sheet of white paper and a dictionary to the first aid room

- paste the form onto a large sheet of paper (or a whiteboard, if you have one). You are going to demonstrate how to complete the form using this one as a model

- ask them to read the headings. Make sure they understand them and can correctly pronounce all the words

- underline any words they don't know on your model and ask them to use a dictionary to find the meaning

- circle the sections on your model that they must complete and demonstrate on your model how to complete the form.

Activity

For this activity, you will need to get a copy of the insurance form your workplace uses. Follow the steps in the example above:

- paste the form onto a large sheet of white paper or board

- underline any words that could cause difficulty for any of your trainees

- circle the sections trainees have to complete

- write a brief explanation of what they have to do beside the form (see example above)

- write an example of the kind of information beneath the explanation

- put a border around the explanation and the example and connect it with a line to the appropriate section on the form.

Workplace task

Select an on-the-job training program that you deliver/will deliver and demonstrate how you will modify it to meet the needs of trainees who have English language, literacy and numeracy difficulties.

- Describe the training situation and the trainees.

- List the training outcomes.

- Outline what you will say while you are training.

- Outline any written materials you will give trainees to read or tasks where they must write or calculate.

- Give your reasons for including each of the reading, writing and calculating tasks.

- List steps you will use to make the reading, writing and calculating they need to do as easy as possible >

Check your progress	Yes	No	Need to review
I can identify some spoken and written language demands on learners in on-the-job training.			
I can adjust my spoken and written language in some ways to suit the needs of trainees in on-the-job training.			

Unit 9: Managing learning: numeracy skills on and off-the-job

Introduction

In this unit we will focus on numeracy. Throughout the other units hints on how to help trainees with numeracy tasks have been offered. This unit presents a model to help you analyse your training materials, presentation and assessment for numeracy demands more systematically. You are not expected to be a maths teacher but you may have to teach:

- the language of maths even though the processes may be known basic concepts:

- concepts of estimating and degrees of accuracy

- concepts of measurement

- conversion from imperial to metric units

- numerical conventions for recording numerical data

- the use of calculators

- holistic problem solving.

The information in this unit will help you to:

- identify the numeracy demands of competency standards, training programs and learning resources

- identify the trainees' numeracy needs

- adapt training materials to suit the numeracy skills of your trainees.

Mathematical functions

Here is a checklist of common mathematical functions. Photocopy it and use it to:

- check your own numeracy skills
- help you identify the numeracy demands implicit in various components of competency standards
- identify the numeracy demands of training programs and learning resources.

Checklist of mathematical functions	Yes	No	How is this function used in the context you are considering (standards, training materials)
Using a calculator to add, subtract, divide, multiply			
Measuring time, temperature, weights, angles, distances using the appropriate instruments			
Calculating areas, volumes and quantities			
Converting metric to imperial and the reverse			
Calculating averages			
Calculating percentages			
Calculating with fractions			
Estimating quantities, weights, lengths, time, areas, volumes, costs			
Reading charts, graphs, tables, specifications, plans			

Activity

On the following pages is an example of a competency standard from a sawmilling and processing course unit.

Use the checklist to identify the mathematical functions embedded in this standard.

UNIT S3.2	SAWMILLING AND PROCESSING
	Visually determine hardwood stress grade

Element S3.2.1   Determine stress/strength grades

Performance criteria
a. Properties of structural timber are identified.
b. Structural grades applicable to hardwood are identified.
c. Branding and colour code requirements for graded hardwood boards in accordance with standards.
d. Stress grade and strength group are determined for seasoned hardwood boards in accordance with standards.
e. Stress grade and strength group are determined for unseasoned hardwood boards in accordance with standards.

Element S3.2.2 Identify and evaluate sawn timber characteristics

Performance criteria
a. Grain direction and grain slope ratio are determined on hardwood boards.
b. The structure of hardwood is recognised and characteristics of heartwood and sapwood are identified.
c. Sawn timber characteristics including want and wane are identified.
d. Imperfections including knots, gum veins and shakes are identified and timber graded in accordance with standards.

Element S3.2.3   Evaluate the effect of imperfections on grades

Performance criteria
a. Imperfections which standards permit and do not permit for each grade are distinguished.
b. Extent of each permissible imperfection determining grade is identified.
c. Specific imperfections and limits allowed for each grade are identified for the most common species and grades encountered within the enterprise.

Element S3.2.4   Determine the grade of boards

Performance criteria
a. Sawn boards are evaluated systematically against all grading criteria.
b. Correct stress and structural grade for sawn boards are identified.
c. Marking appropriate to grade is applied to boards.
d. Assistance is sought for difficult grade decisions.

SAWMILLING AND PROCESSING Visually determine hardwood stress grade	UNIT S3.2

Range of variables

- Stress grades, strength groups, structural grades, imperfections and hardwood species are those listed in the applicable standards.

- Boards graded include seasoned and unseasoned with as-sawn and dressed finishes.

Evidence guide

- Visually identifies the structures and features of hardwood.

- Demonstrates the ability to:

  - identify and measure imperfections

  - mark timber for grade and interpret markings

  - consistently identify correct grades for sawn boards within the species and grades typically encountered in the enterprise

- Describes and identifies hardwood species.

- Describes the relationship between stress grades, species and structural grades.

Identifying trainees' numeracy needs

Consult Unit 3 for information about how to identify trainees' needs. It is important that trainees do not feel that they are being tested in mathematics. You can estimate their current skills with regard to mathematical functions by:

- asking them questions about their background and education which will reveal the amount of formal mathematics training they have had and how they have used mathematics in their work since they left school.

- using a checklist like the one in this unit to get trainees to assess their own skills.

Activity

Here is an example of material from a training program which requires some mathematical knowledge.

EXAMPLE SIEVE ANALYSIS RECORD

HOLE NO: 2

SAMPLE FROM INTERVAL: 82.5 – 83 m

SAMPLE MASS: 463 g

REMARKS: Two small lumps sandy clay in sample.

ASTM Sieve	mm Size	Mass of sand on sieve	Progressive totals (grams)	Percentage
8	2.38	0	0	0
16	1.19	40	40	9
30	0.60	90	130	28
40	0.42	118	248	53
50	0.30	134	382	82
PAN	0	81	463	100

463 ÷ 2 = 232

ie ASTM 40 = 0.42 mm OR .016 in. median size

Describe task	Was task 'real'?	Was task too difficult?

1. What are the mathematical functions required here?

2. How would you check that the trainees could complete the tasks?

3. How would you go through each function in the task with trainees who could not do the task easily?

Comment

The language of mathematics

There are many different ways of describing mathematical processes in English which may pose difficulty for those who do not speak English as their first language. While they may understand the processes, they may not recognise the words or symbols. For example, the mathematical operation 6 x 2 can be expressed as *six multiplied by two* or *six times two* or *six twos*. It can also be represented as 6.2, or 6(2).

How many different ways can we express the idea of adding things together?

For example, A **and** B.

Did you think of these?

*   A plus B

*   Add A to B

*   Add A and B

*   The sum of A and B

*   Total A and B

What about subtracting? dividing? multiplying? The table below gives some examples.

6 + 2	6 − 2	6 x 2	6 ÷ 2
6 plus 2	6 minus 2	6 multiplied by 2	6 divided by 2
add 6 and 2	2 from 6	6 times 2	2 into 6
the sum of 6 and 2	6 take away 2	6 by 2	how many times does 2 go into 6?
add 6 to 2	take 2 from 6	2 sixes	half of 6
the addition of 6 and 2	subtract 2 from 6		
2 more than 6	6 less 2		
	the difference between 6 and 2		

Mathematics has its own technical language, like other disciplines, but there is a variety within this technical language which trainers need to be alerted to.

Check your trainees' knowledge of these terms and symbols and be consistent in your own use of them.

Problem-solving strategies and maths

Because your trainees are adults, they probably have many strategies for solving problems in everyday practical tasks such as buying a house or car, filling tax returns etc. Many of these problem-solving techniques involve mathematics. Trainees have worked out ways of doing things which work for them. Rather than overwhelming trainees with formal mathematical techniques, you should seek to draw on their well-developed capacity to solve problems when you are dealing with maths in training. Often, the difficulties for trainees are in the **language**, not the maths.

Here are strategies from *Working Together*, Module 2, Topic 5 which adult trainees typically use which you may be able to enlist:

- categorising information
- guessing and checking
- using trial and error
- estimating
- making a hands-on model or drawing a diagram
- looking for patterns and connections.

Sometimes these strategies won't produce the right answer, but will provide a starting point and will give trainees the confidence to pursue the problem.

Using calculators

There is no need to ask your trainees to do what a machine will do for them. Only ask trainees to perform calculations relevant to their job, and show them how to do the calculations using a calculator in a 'real task' situation

The desk calculator

Make sure they have the appropriate calculator for the job they are doing. If they need to calculate sines, cosines, tangents etc, give them the calculator to do it. If your trainees need to learn how to use a calculator, follow the steps below:

- show them what to do in the context of solving a real workplace problem

- make sure you explain each step carefully, as you demonstrate to the whole group, small groups or individuals

- demonstrate as many times as needed

- encourage questions

- make sure the trainees can perform the function unaided and unprompted before you move on to the next point.

If your attempt to show them is not successful, and you suspect that they do not have enough mathematical knowledge to understand, call in the experts! Get a consultant in numeracy to assist your trainees. If English seems to be the problem, seek the help of bilingual trainees or a language teacher.

The computer calculator

If trainees have access to a computer and need to use one at work:

- show them where to find the calculator on a computer

- demonstrate how to use the ALT and TAB keys together to access it without closing files.

- if necessary, demonstrate how to use the calculator as suggested above.

The computer spreadsheet

A human being is usually a slower number cruncher than a computer. If possible, let a computer do the calculations and arrange for computers to be available to workers to use on-site. They will need training on how to use the software so provide them with samples of the spreadsheets and databases you want them to use, and show them how to enter data. Again you will need to explain each step carefully and give them lots of opportunities to practise.

Summary

Here is a useful checklist from the professional development kit *Sawmilling and Processing, Wood Panel Products, Saw Doctoring.* You can use this checklist to help trainees with mathematical problems:

- help the trainee to identify exactly what is needed

- help the trainee work out what maths, calculations, measurement is needed

- show the trainee how to do the calculation or measurement

- encourage use of calculators and demonstrate how to use them

- get the trainee to estimate results so that they can check whether answers are reasonable. Make sure the trainee is comfortable with each stage before moving on

- get them to explain the process

- if there are formulas, make sure that the trainee has an easy-to-find copy

- there will be lots of problems if trainees have to use a mixture of imperial measurements and metric measurements. Young trainees will need to have the relevant imperial measurements carefully explained and demonstrated. Allow lots of time for this.

Workplace task

Select a training program which you have delivered or will be delivering and use the first checklist in this unit to help you to identify the numeracy requirements of the training package. Outline how you would teach these functions to a group of trainees with poor numeracy skills.

Check your progress	Yes	No	Need to review
I can identify some numeracy demands of competency standards, training programs and learning resources.			
I can begin to address the teaching of work-related mathematics in a systematic way.			

Section 4:

Assessing learning for learners with language, literacy and numeracy needs

Unit 10: Designing appropriate assessment tasks

This unit aims to assist you to:

*   design assessment tasks which assess workplace competence and
    which are fair to people with language, literacy and numeracy
    needs

*   evaluate forms of evidence and methods of assessment which are
    appropriate to people with language, literacy and numeracy needs.

Unit 10: Designing appropriate assessment tasks

Introduction

In this unit we will look at designing assessment tasks for training programs.

The information in this unit will help you to:

- identify a range of assessment tasks which have high language, literacy and numeracy demands

- design appropriate and non-discriminatory assessment tasks for trainees with language, literacy and numeracy needs

- evaluate forms of evidence and methods of assessment which are appropriate to people with language, literacy and numeracy needs.

Diagnostic, formative and summative assessment

Assessment in competency-based training is the process of collecting evidence and making judgments about how competent a person is to do something. There are three main purposes for assessment and each provides us with different types of information. A summary explanation of the different purposes for assessment is provided below. The summary is taken from the Department of Employment, Education and Training publication, Rumsey, D. 1994 *Assessment, Practical Guide.*

Diagnostic assessment

Diagnostic assessment is the process of helping trainees decide on their education and training needs. For example, workers in a learning organisation are interviewed about their training needs to determine the overall training program for the organisation.

Formative assessment

Formative assessment is designed to help trainees form a judgement about how well they are progressing towards the desired learning outcomes. It may take the form of written or oral testing or, more simply, comments and feedback from a trainer on how a trainee is doing. The evidence collected in formative assessment may contribute to an end-of-training summative assessment.

Summative assessment

Summative assessment is designed to check that trainees have achieved the learning outcomes for the training course.

Evidence for summative assessment may include:

- samples of their work

- observation of their performance on-the-job or in a simulation

- results of practical tests

- written and oral tests

- information about their performance from supervisors, managers, other workers, and workplace assessors.

Usually, vocational courses will include assessments for all of these purposes.

Activity

Think about a short (eg one day) training course you have recently offered and jot down information about your assessment practices on the form below.

Learning outcome(s)

Description of learners

What kind of diagnostic assessment, if any, did you conduct for this course?

Diagnostic assessment

If you didn't conduct any diagnostic assessment, how did you know the course was needed? What evidence did you have?

Evidence

Did you conduct any formative assessment during the course to provide the trainees with feedback, or another form of evidence on how they were progressing?

If you did conduct formative assessments, what did you ask the trainees to do?

What was their response?

Did you use the information to change how you delivered the training?

Formative assessment tasks

Trainees' responses

Any changes you made

Did all your trainees achieve the learning outcomes for this course? How did you decide whether they had achieved them, ie what evidence did you collect for a summative assessment?

Summative assessment

Comment

Look back over your responses and decide whether there were any other ways you could have conducted diagnostic, formative and summative assessment for this course. Make a note of your ideas in a different coloured pen beside your responses.

Language literacy and numeracy in assessment

Language, literacy and numeracy emerges as an issue for trainers and curriculum writers in assessing competencies in two ways:

1. There are speaking, reading, writing and numeracy tasks which are part of the competency standards and therefore part of the job function.

    In Unit 2 of this module we looked at determining the speaking, reading, writing and numeracy tasks which are part of the competency standards and making sure that they were picked up in the curriculum and learning materials designed from the standards.

    In this unit, we are going to look at how we assess these communication skills.

2. There are speaking, writing reading, listening and numeracy tasks which are required to perform the actual assessment.

    We cannot avoid the fact that training is a language-based activity and requires trainees to read, speak, listen and write to a certain extent. In the same way, assessment is a communicative practice which involves some reading, writing, speaking, listening.

We need to make as close as a match between work and training in the assessment methods we choose.

Activity

Look back at your answers to the last activity (p.152) and identify the speaking, reading, writing and calculating tasks in these different assessments.

Break these tasks into two groups:

Group 1: Types of language literacy and numeracy tasks which were required to achieve the competency itself.	
Group 2: Types of language literacy and numeracy tasks which were required to do the assessment tasks in the training course.	

Were the tasks in Group 2 harder than the tasks in Group 1?

Comment

Sometimes, language, literacy and numeracy tasks used to assess training outcomes are harder than the language, literacy and numeracy required in the job.

You will be aware of the importance of developing valid and reliable assessment tasks. Remember:

Assessments are valid when they assess what they claim to assess. (Rumsey, 1994)

It is usually inappropriate to ask trainees to complete training and assessment tasks which demand better communication skills than they need to complete the task they are being assessed for. For example, if the assessment task seeks to establish competence in a technical skill then we must be careful not to ask trainees to complete written tasks which assess their ability to write essays, or answer multiple-choice questions.

Analysing typical assessment tasks

Here are some of the typical assessment tasks you might come across in training.

Add any others you know to the list.

Evaluate the language and literacy demands of each type of task as high, medium or low.

Type of activity	Language and literacy demands
Write a paragraph	
Short answers	
Multiple choice	
Labelling diagrams	
True/false questions	
Writing essays	
Problem solving	

Comment

These types of assessment tasks derive from educational contexts usually associated with the assessment of knowledge. They assume that students operate successfully in an educational environment. They do not necessarily fit a competency-based assessment model and they do not take account of trainees' different language, literacy and numeracy skills.

Many of these test types require good writing skills, eg paragraphs, short answer and essays. Others require good reading skills, eg multiple-choice and true/false questions. Labelling diagrams is the least demanding.

A word of warning about multiple-choice tests

Though they are cheap to administer and therefore widely used, multiple-choice questions are usually a very poor assessment tool, and may disadvantage trainees who have little formal education. They demand excellent reading skills and the ability to unravel the meaning in complex written sentences presented in an unconventional and decontexualised format. These skills are not usually important to workplace competence, but are associated more with school education in Western education tradition.

Activity

Look at the examples below of different kinds of assessment tasks:

- in the margin beside each task make a note of the speaking, reading, writing and calculating skills that trainees need to successfully complete the task

- look at the tasks and the skills you have identified and decide whether each task will provide valid and reliable assessment information

- use your notes to complete the table.

Example/industry dept.	Type of assessment	Communication skills needed	Valid yes/no	Reliable yes/no
1 Food	Formative			
2 Human resources department	Diagnostic			
3 Electricity	Summative			

Example 1 is a task based on the food industry's *Industrial Communications A* module and is part of a course to assist trainees develop the communication skills they need for work. These tasks could be used as formative assessment tasks to let the trainees see how well they are doing.

Production line

Identify others in the line who deal with the product immediately before and after you.

BEFORE → YOU → AFTER

Bread plant process diagram

| Flour + Ingredients | → | Mixing | → | Dividing |

| Rounding | → | Intermediate Proofing | → | Moulding |

| Final Proofing | → | Baking |

| Cooling | → | Slicing + Packaging | → | Distribution |
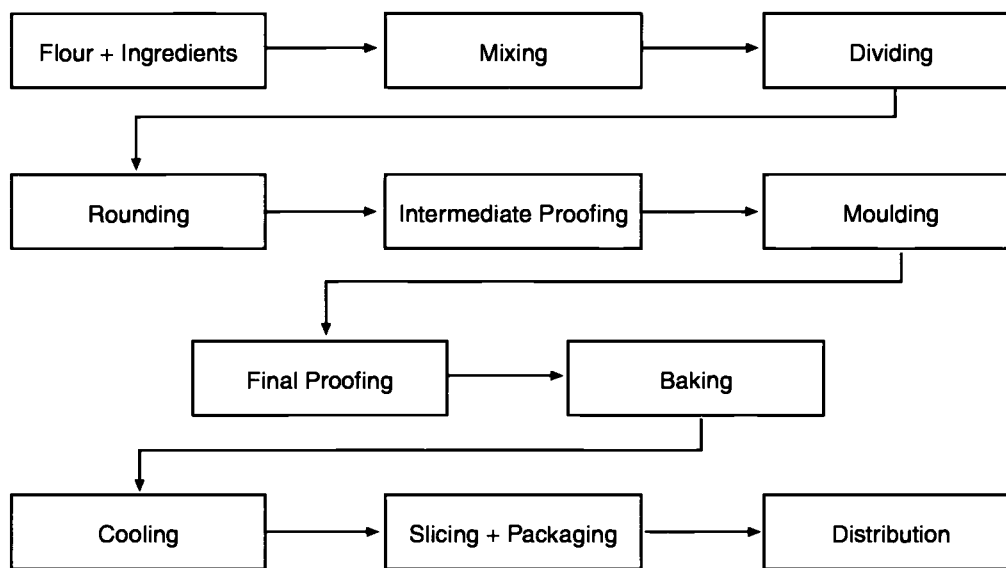
What process does the product go through:

• before it comes to you? _____

_____

_____

• after it comes to you? _____

_____

_____

Example 2 is a typical form human resources departments might use for workers.

TRAINING QUESTIONNAIRE

Family name _____

Given names _____

Position _____

Tasks you are responsible for _____

Languages spoken _____

Position you would like _____

Training you require for this position _____

Previous training and qualifications: please complete the table

Name of course	Year completed

Previous work experience: please complete the table

Company	Position/job	Years employed

Example 3 is an adapted version of part of a summative assessment task from the electrical industry.

TEST 1

PART 1: PRELIMINARY

DEFINITIONS:

Q1 If you were working at operating switches or links, removing or replacing of fuses providing de-energised, earthing and short circuiting of electrical apparatus, you are doing:

a) cable work

b) isolated work

c) live work

d) operating work

Q2 Electrical apparatus that is not connected to a source of electrical supply is:

a) alive or live

b) earthed

c) de-energised

d) unsafe to work on

Q3 The Electricity (Workers' Safety) Regulation applies to work:

a) on or near high or low-voltage electrical apparatus or exposed conductors

b) carried out by owners of high-voltage electrical apparatus

c) in high-voltage electrical stations or generating stations

d) all of the above

Comment

Example 1 'Production Line'

The communication skills required are:

- reading and understanding a flow diagram
- writing short answers.

This is part of a communication skills development course for work. If trainees need to read flow diagrams and write short answers to questions related to work when they are on-the-job, then training in these skills will be appropriate valid feedback on whether a trainee can perform these tasks. To be reliable the trainees must be able to successfully complete a similar task under the same conditions.

Example 2 'Training Questionnaire'

This is a typical form which a trainer or human resources department might ask workers to complete. It demands the following skills:

- reading and understanding the form
- completing information in spaces and tables.

A task like this is valid for assessing a trainee's skill at completing forms relevant to their experience. It is will only provide reliable information for diagnostic purposes if those who cannot complete the form are assisted by someone who can.

Example 3 'Test 1'

This example of a multiple-choice assessment tests the following communication skills:

- ability to read complex sentences
- ability to substitute alternative answers to complete a complex sentence
- understanding of the multiple-choice test format.

An ability to complete multiple choice questions does not guarantee the trainee's understanding of individual items being tested. Multiple choice tests are an artificial assessment format. They do not occur on-the-job, and therefore both their validity and reliability must be questioned.

Assessing trainees with language and literacy difficulties

Here are some strategies for collecting evidence to assess the competency of trainees with language and literacy difficulties

- Ask questions orally. Ask questions which encourage a full description or explanation. Prepare a checklist of what you expect them to tell you, and tick the items they include. This will help to keep the assessment reliable.

- Observe trainees at work and recording your observations against a checklist of the performance criteria.

- Design tasks which allow trainees to demonstrate what they know on-the-job or in a simulated job situation. Practical tests in rescue and resuscitation are examples of simulated assessment tasks.

- Design holistic work-based tasks based on real workplace activities. These tasks should involve the trainee in some research activity such as locating the people, collecting written and spoken texts as models, records and electronic data to complete documentation.

- Ask trainees to provide labels for diagrams.

- Match items, eg parts of a diagram and words for each part.

- Ask trainees to explain a chart or graph in spoken English.

- Interview supervisors and collecting documents that provide indirect evidence of competence.

- observing trainees participating in group discussions.

If your trainees have difficulty with spoken English you could consider an appropriate assessment format such as:

- asking for a demonstration of their skills on-the-job

- collecting evidence of their competence by interviewing their supervisors, other team members, peers

- if they have good reading and writing skills in English, asking them to research information and or supporting their practical assessment with written description and explanation of their skills and knowledge of the job.

Collecting evidence to assess trainees with language, literacy and numeracy needs

Trainees with language, literacy and numeracy needs can be assessed by collecting different types of evidence to demonstrate their competence such as:

- observation

- collecting references from other workers and supervisors

- self-assessment

- a portfolio of written work and calculations.

Using evidence takes the pressure off the learner to pass an 'exam' in a single performance.

Holistic assessment

Holistic assessment can be used to:

- test a number of competencies together in practical workplace projects or problem-solving tasks

- test a number of elements across a range of competencies

- include a range of evidence to demonstrate the learner's competence.

Trainees demonstrate their knowledge and skills by taking responsibility for a project. A holistic approach to assessment is a fairer, ie less biased, method of assessing a person's competence where language, literacy and numeracy may present a barrier.

A group of trainee supervisors have to demonstrate their competence across a number of tasks by organising and leading a productivity team to reduce wastage. They have been given a timeframe for the project of six months. Trainees have to achieve the following learning outcomes:

- demonstrate a knowledge of the whole production process

- develop practical tools for collecting data on waste

- use appropriate analysis procedures to decide which areas of production to target for a reduction in waste

- negotiate with maintenance staff and management to get the necessary changes to the workplace environment

- organise and motivate their teams to take responsibility for reducing waste.

Activity

What kinds of evidence could a workplace assessor look for to decide whether trainees have achieved the learning outcomes above? List as many types of evidence as you can think of.

Comment

Your list of evidence needs to establish that the learning outcomes have been achieved and probably includes the following:

- a clear statement of the goals of the project and the broad approach they will take to achieving these goals

- documentation of the team-building process including minutes of meetings

- documentation of the methodology used for data collection

- documentation of the analysis procedures used
- documentation of problems that arose and how solutions were reached
- a happy and productive team
- waste reduction of at least 10 per cent.

Self-assessment and peer assessment

Self-assessment and peer assessment are valuable tools for establishing how the trainee views their own competence. They are often used in diagnostic assessment and should inform the workplace training plan and course development.

Self-assessment should be included in the evaluation process for any course you offer. You will have had the opportunity to assess your own achievement of the learning outcomes for each of the units in this course.

Peer assessment can inform the summative assessment process by providing corroborating evidence of competence.

Activity

Refer back to the holistic training scenario above. Design a self-assessment checklist for the trainees to assess their own progress.

Comment

A simple self-assessment of the training program could be developed in a table using the learning outcomes such as the one below.

Competency	Achieved	Need to review
I can demonstrate my knowledge of the whole production process.		
I can develop practical tools for collecting data on waste.		
I can use appropriate analysis procedures to decide which areas of production to target a reduction in waste.		
I can negotiate with maintenance staff and management to get the necessary changes to the workplace environment.		
I can organise and motivate my teams to take responsibility for reducing waste.		

Check your progress	Yes	No	Need to review
I can design appropriate and non-discriminatory assessment tasks for trainees with language, literacy and numeracy needs.			
I can identify appropriate forms of evidence which will help learners with language, literacy and numeracy needs to illustrate their skills and knowledge.			

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Vocational
Education

A
Directory
of Professional
Development
Programs and
Resources

For Vocational Teachers,
Workplace Trainers and
Curriculum Writers

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A Directory of Professional Development Programs and Resources

For Vocational Teachers,

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Introduction

Who is the directory for?

This directory provides a comprehensive list of professional development resources that may assist vocational teachers, workplace trainers and vocational curriculum writers to address the needs of learners with limited English language, literacy and/or numeracy.

It has been compiled in response to one of the main recommendations of a national research project funded by the National Staff Development Committee and conducted by the Adult Literacy Information Office in 1995/96. This project aimed to identify the professional development needs of vocational teachers, workplace trainers and vocational curriculum writers in relation to their learners' difficulties with language, literacy and numeracy.

Many of the vocational teachers, trainers and curriculum writers interviewed as part of the research

project were unaware of the range of professional development resources in this area that were already available.

By compiling this directory we aim to address this need for information. For each professional development resource, details such as the author, publisher, date of publication, mode of delivery and the nominal duration are included to assist readers in making appropriate choices to pursue.

How the directory is organised.

1. All the professional development resources in this directory are listed in alphabetical order according to **title**.

2. The icons described below indicate:

   (a) the main focus of each resource, and

   (b) which of the target groups: vocational teachers; workplace trainers; and curriculum writers are most likely to benefit from a study of its contents.

Please note that some resources may have been written with a different target group, e.g. language and literacy teachers, in mind.

Updating the directory

This directory is as comprehensive and up-to-date as it could be at the time of writing. If you know of any new resource of this kind that should be included, could you please complete the proforma at the back of this directory to assist us in compiling future editions of what we hope is a valuable resource.

Language, Literacy and Numeracy Training

These resources could be suitable for personnel not already trained in language, literacy and numeracy provision. They include information for Adult English language, literacy and numeracy teaching and/or curriculum writing in the workplace and other vocational settings.

Higher Education

These resources include information on courses and modules within courses offered by universities targeting teachers, trainers and curriculum writers who seek some training in adult English language, literacy and numeracy teaching or in managing cultural diversity. They may be of particular interest to the three target groups because of the potential pathways to higher award courses.

Language, Literacy and Numeracy Awareness

These resources include information about general awareness raising about language, literacy and numeracy issues in the workplace and in vocational education and training as well as coverage of broader contexts relevant to language, literacy and numeracy training, e.g., government policy in relation to the National Training Agenda. These resources may be directly relevant to managers and supervisors as well as the three target groups.

Cultural Awareness

These programs are generally designed to promote awareness of cultural issues in a training environment. Some programs specifically address the relationship between language and culture and discuss strategies for training Non-English Speaking Background students.

Plain English

These are packages or parts of packages that specifically address the issue of writing accessible texts in English. This is identifiable as a category because the term "plain English" was used by all three target groups to describe an area of professional development need.

Suitable for Vocational Teachers

Suitable for Workplace Trainers

Suitable for Curriculum Writers

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A Peer Tutoring Kit for the Workplace

Author	Liz Barrow, Chris Dineen
Publisher	Barton Institute of TAFE
Date	1996
Target Audience	Workplace Trainers
Mode of Delivery	Face to face
Duration	Not stated

This kit is designed to help set up and run a peer tutoring English program in the workplace.

It is developed for use by workplace tutors who have no language teacher training.

Although the material in this kit relates to the Food Industry it can be adapted to suit the needs of other industries.

The kit is made up of 3 books.

1. Promoting the concept of peer tutoring to management

   • Setting up a peer tutoring program

   • Training tutors

2. Tutors' notes – workplace English

   • listening

   • speaking

- reading

- writing

- ways to practise

3. Tutors' notes – workplace Numeracy

- calculators

- dates and calendars

- weights and measures.

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Associate Diploma (Vocational Education and Training)

Author	Charles Sturt University
Date	1996
Target Audience	Vocational Teachers, Workplace Trainers, Curriculum Writers
Mode of Delivery	University course (distance mode)
Duration	1-3 years (8 subjects) normally completed in 2 years part time study

This course is designed as an entry level course for people who wish to work in vocational education and training as a teacher or trainer.

Areas of study that may be of interest to vocational teachers, trainers, and curriculum writers include:

• Teaching and Training Practices (1&II)

These courses are designed to develop the instructional competencies commonly used in vocational educational and training settings.

• Curriculum Studies (I&II)

These courses are designed to provide:

A broad overview of the development of vocational education and training in Australia.

An overview of the major bodies associated with curriculum development provision and accreditation.

Help in developing a sound understanding of the process of curriculum development.

Assistance in the development of initial skills in planning, instructing and evaluating a teaching program.

- Language, Literacy and Numeracy in Vocational Studies.

Concerns the oral language, literacy and numeracy demands of the workplace.

Develops strategies for assisting those engaged in vocational education and training programs.

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Bachelor of Teaching (Vocational Education and Training)

Author	Charles Sturt University
Date	1996
Target Audience	Vocational Teachers, Workplace Trainers, Curriculum Writers
Mode of Delivery	University course (Distance Mode)
Duration	3 streams. Varies from 1 year part time to 4 years part time

This course has been designed to prepare effective teachers and trainers who can operate successfully in a variety of vocational education and training settings.

Areas of study that might be of interest to vocational teachers, trainers and curriculum writers include:

- development of employment-related competencies
- language, literacy and numeracy in vocational education
- educational technology
- curriculum studies
- assessment and evaluation: VET
- teaching and training practices.

Breaking the Maths Barrier

Author	Beth Marr, Sue Holme, Dave Tout
Publisher	Department of Employment Education and Training, Canberra
Date	1991
Target Audience	Vocational Teachers, Workplace Trainers
Mode of Delivery	Face to face
Duration	20 hours

The purpose of this resource is to build staff development skills in adult numeracy.

There are five chapters covering the following areas.

1. Designing and running a numeracy staff development program.

2. What to teach.

3. Building positive attitudes.

4. Teaching strategies.

5. Language and Mathematics.

This package would be useful for trainers who want "general" teaching strategies for teaching numeracy.

Building Partnerships: TAFE and Industry-integrating English language, literacy and numeracy into training

Author	Elaine Jackson
	Western Sydney Institute of TAFE, Foundation Studies Training Division
Date	1996
Target Audience	Vocational Teachers, Workplace Trainers, Curriculum Writers
Mode of Delivery	Self access/reference
Duration	Not stated

This issue of Literacy Broadsheet focuses on the needs of particular groups in training such as those with limited English, language, literacy and numeracy skills.

Articles dealing with the professional development needs of industry trainers, vocational trainers and curriculum trainers are included.

There is also a list of resources and Industry Training Advisory Board (ITAB) contacts and a detachable listing of TAFE contacts who can respond to educational and commercial enquiries about TAFE's work-based English language, literacy and numeracy provision.

Communicating in the TCF Industries
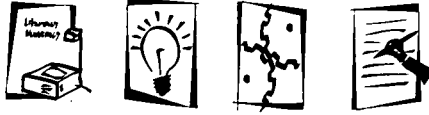
Author	G. Cohen & M. Mathers
Publisher	ATCFITB, Melbourne
Date	1994
Target Audience	Workplace Trainers, Curriculum Writers
Mode of Delivery	Self access
Duration	Not stated

These booklets were compiled for managers, supervisors and in-house trainers to help in the planning and delivery of workplace training. Although based on the Textile, Clothing and Footwear Industry, they could serve as a model for other industries.

The booklets contain:

- practical information on how to identify communication problems.

- information and hints to help trainers in helping those they train acquire language, literacy and numeracy skills.

- information on how to present workplace documents in a reader friendly manner.

Communication in the Workplace

Author	Leah Shmerling
Publisher	Macmillan Education Australia, South Melbourne
Date	1996
Target Audience	Workplace Trainers, Curriculum Writers
Mode of Delivery	Self access/reference
Duration	Not stated

Based on the TAFE National Communication Skills Modules, this book adopts a competency-based approach, and focuses on written and oral communicaion and interpersonal skills. Each of the six chapters is written as a learning module and is divided into two or four learning outcomes. Each includes:

- discussion of purpose
- performance criteria
- assessment and competency attainment checklists.

The six chapters are titled:

- Workplace Communication
- Writing Workplace Documents
- Dealing With Conflict
- Negotiation Skills
- Team Building and Work Team Communication
- Job Seeking Skills

Communication Skills

Author	Bruce Elder
Publisher	Macmillan Education Australia, South Melbourne
Date	1994
Target Audience	Workplace Trainers
Mode of Delivery	Self access/reference
Duration	Not stated

Written primarily for students studying the National Communications Skills Project modules, this work is particularly suited to competency based programs.

It contains theory and observation of each module topic, along with a number of case study situations and class exercises. However, the content is easily accessible and could be used without exposure to the training modules.

Chapters include:

• the theory of communication

• work team communication

• dealing with conflict

• negotiation skills

• team building

• speaking

Cultural Diversity

Author	M. Kalantzis, B. Cope, D. Brosnan
Publisher	NLLIA Centre for Workplace Communication and Culture. University of Technology, Sydney and James Cook University of North Queensland
Date	1992
Target Audience	Vocational Teachers, Workplace Trainers, Curriculum Writer
Mode of Delivery	Face to face/flexible
Duration	Not stated

The three manuals which make up this package provide extensive coverage of background information to, and issues around, cultural diversity.

The manuals cover the following areas:

Manual 1: Culture

- the challenge of cultural diversity
- understanding culture
- Intercultural understanding

Manual 2: Resettlement

- resettlement
- migration (facts and history)
- Intercultural communication

Manual 3: Settlement

- cultural differences
- identity spectrum
- strategies to deal with differences.

Developing Competency-Based Curriculum for Adult Literacy and Basic Education

Author	Rhonda Raisbeck
Publisher	TAFE National Staff Development Committee
Date	1994
Target Audience	Curriculum Writers
Mode of Delivery	Self access/reference
Duration	Not stated

This book contains a competency-based curriculum outline which focuses on good practice in Adult Literacy and Basic Education curriculum development. It uses State or National Frameworks to develop:

- curricula
- competency-based curriculum writing
- assessment in competency-based curriculum.

Developing Competency-Based Curriculum Modules:
A Guidebook for TAFE Teachers and Curriculum Writers

Author	Barry Porter
Publisher	NSW TAFE Commission, Sydney
Date	1993
Target Audience	Vocational Teachers, Workplace Trainers, Curriculum Writers
Mode of Delivery	Self access/reference
Duration	Not stated

This package would be of interest to curriculum writers in relation to understanding competency-based approaches to education and training, identifying language, literacy and numeracy requirements of job tasks as well as how to write curriculum. It would also assist in customising existing curricula or writing new materials to meet industry standards.

The areas covered in this package are:

• producing a plan for writing a syllabus and teaching guide

• identifying industry competency standards that the curriculum module will address

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- developing a syllabus for a competency based module

- recommending suitable methods and strategies for assessing learner achievement

- suggesting module content that is appropriate to the learning outcomes of the curriculum module

- recommending appropriate learning strategies, teaching methods and resources to achieve the learning outcomes of the curriculum module

- summarising the curriculum development process presented in the program.

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Effective Communication in the Re-structured Workplace

Author	Diana Slade, Helen Joyce, Chris Nesbitt, Nicky Solomon, Hermine Scheeres, Daphne Brosnan, Petey Sefton
Publisher	NLLIA Centre for Workplace Communication and Culture
Date	1996
Target Audience	Workplace Trainers
Mode of Delivery	Face to face
Duration	Varies (see notes on each manual)

This package is made up of four manuals.

1. Team work   (8-10 hours)

2. Team meetings   (1-2 days)

3. Job performance   (8-10 hours)

4. The language of training   (8-10 hours)

This professional development package is designed to meet the needs of trainers wishing to focus on the new forms of communication in the workplace, particularly spoken communication. It covers the following areas:

- the role of the trainer

- spoken and written language in training

- team meetings.

Effective Report Writing
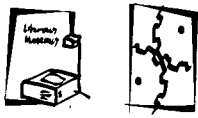
Author	Pauline Baylis, Helen Joyce, Diana Slade
Publisher	NLLIA Centre for Workplace Communications and Culture, University of Technology, Sydney
Date	1996
Target Audience	Workplace Trainers
Mode of Delivery	Self-access
Duration	Not stated

This series of modules is designed to help:

- Employees who need to write technical and/or scientific reports as part of their duties.

- Trainers who need to help personnel write effective technical and/or scientific reports.

- Workplace language and literacy teachers who are integrating the writing of technical and/or scientific reports in their workplace courses.

There are four modules in the series.

1. Eight Steps to Effective Writing

This module provides a guide to the writing of all workplace texts

2. Accidents and Incidents in the Workplace

This module provides a guide to recording accidents and incidents in the workplace

3. Effective Report Writing

This module provides a general guide to the writing of reports in the workplace

4. Writing Technical and Scientific Reports

This module provides a guide to the writing of technical and scientific reports in the workplace.

Getting the Message Across: Language, Literacy and Numeracy in Tourism and Hospitality Industry Training: A Guide for Workplace Trainers
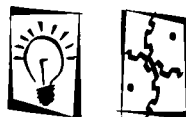
Author	Tanya Roddan
Publisher	NSW Adult Migrant English Service
Date	1996
Target Audience	Workplace Trainers
	Self access/reference
	Not stated

This kit is divided into three sections.

Section 1 has three parts:

- before training starts

- while training is taking place

- while assessing is taking place

Section 2 presents six case studies with questions and responses.

Section 3, an appendix, gives information on where to get further help.

The kit is designed to help trainers work more effectively when training employees with low language, literacy and numeracy skills. It could also be used by trainers, supervisors and managers as the basis for short training sessions to increase awareness of on-the-job communication problems and to suggest strategies to deal with them.

Graduate Certificate: Literacy in Education

Author	University of Tasmania, Launceston
Date	1995
Target Audience	Vocational Teachers, Workplace Trainers, Curriculum Writers
Mode of Delivery	Self access
Duration	14 weeks (1 unit)

The objectives of this course are:

- To develop an understanding of how literacy demands change in different contexts.

- To recognise and differentiate between some major approaches to the formal study of discourse, its structure and uses.

- To carry out a minor critical discourse analysis using one or more of the major approaches.

Graduate Certificate in Language and Learning
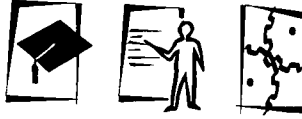
Author	University of Technology, Sydney
Date	1995
Target Audience	Vocational Teachers, Workplace Trainers
Mode of Delivery	Face to face
Duration	4 hours a week for 26 weeks

The overall objective of this course is to increase the skills and knowledge of teachers who are not language specialists. Specifically it deals with the role of language and literacy in teaching and learning vocational subjects.

The course consists of four subjects.

- Language and Learning 1
  Aims to develop understanding of the role and nature of language in education.

- Curriculum and Pedagogy 1
  Aims to help participants develop skills in the analysis, planning and teaching of the language and literacy of the subjects they teach.

- Language and Learning 2: Functional Grammar.
  Explores language as a social phenomenon.

- Curriculum and Pedagogy II
  Increases knowledge and skills in teaching and programming for the language demands in specialised areas.

Graduate Certificate in Vocational Education and Training (VET)

Author	Charles Sturt University
Date	1996
Target Audience	Vocational Teachers, Workplace Trainers, Curriculum Writers
Mode of Delivery	Distance mode
Duration	1 year part time

For curriculum writers, vocational teachers and trainers, the overview of learning and development in "Learning and Adult Development", "Curriculum Studies A" and "Teaching and Training Practices" could be a source of information on current theory and practice.

For curriculum writers the subject "Curriculum Studies B" covers competency-based approaches to education and training and curriculum writing.

Subject Descriptions.

Learning & Adult Development

This subject is designed to provide an overview of learning and development in adolescence and adulthood, including implications for vocational teaching and training.

Curriculum Studies A

Provides an overview of developments in vocational education and training in Australia with particular reference to the training market and training reform.

Teaching & Training Practices A

This subject begins to develop the instructional competencies commonly required in vocational education and training settings.

Curriculum Studies B

This subject has been designed to develop skills in curriculum development in the context of the participants' own vocational specialisation. Particular attention is paid to competency-based curricula.

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Graduate Diploma in Vocational Education and Training

Author	Charles Sturt University
Date	1996
Target Audience	Vocational Teachers, Workplace Trainers, Curriculum Writers
Mode of Delivery	Distance mode
Duration	2 years part time

This program is designed to provide an initial qualification for graduates wishing to work in vocational education and training settings as a teacher or trainer. Some areas of study may also be of interest to curriculum writers.

Areas of study include:

- learning and adult development
- curriculum studies
- teaching and training practices
- assessment and evaluation in VET
- literacy and numeracy in VET
- educational technology.

Language and Literacy in Competency Standards

Author	D. Prince & N. Solomon
Publisher	NLLIA Centre for Workplace Communication and Culture, University of Technology Sydney and James Cook University of North Queensland
Date	1994
Target Audience	Vocational Teachers, Workplace Trainers, Curriculum Writers
Mode of Delivery	Face to face
Duration	14 hours

This package focuses on the language and literacy demands of work and work based training and on reasons for integrating language and literacy with vocational training. The units on the development of competency standards and competency-based curriculum would be of interest to trainers devising or customising curriculum to meet industry standards.

The purposes of this package are to provide an understanding of:

- Developments leading up to current changes in the way in which work is done and is learned.

- The increased demands of language and literacy which accompany these changes.

- The limitations of descriptions of competency which do not address language and cultural knowledge and skills.

- The need to include language and cultural knowledge and skills in competency standards.

- A notion of competence which is inclusive of both technological and organisational competence and the cultural and linguistic diversity of the workforce and its clients or customers.

- Reasons for integrating language/literacy development with vocational or workplace training and of the link between competence and learning.

- The process of curriculum development.

And an introduction to:

- the ACTRAC (Australian Committee for Training Curriculum) National Framework of Adult English Language, Literacy and Numeracy Competence as a tool in the process of developing competency standards.

- Using the ACTRAC Framework in the development of competency-based curriculum.

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Language, Literacy and Organisational Change

Author	Foundation Studies Training Division
Publisher	NSW TAFE Commission Sydney
Date	1995
Target Audience	Workplace Trainers
Mode of Delivery	Face to face
Duration	10 hours

This package covers areas such as:

- key concepts relating to language, literacy and numeracy

- key factors affecting a person's development of language, literacy and numeracy competence.

- The identification of existing language, literacy and numeracy skills and practices within an organisation.

- Strategies for improving spoken and written communication in an organisation.

Literacy: A Trade Union Training Session
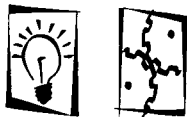
Author	Trade Union Training Authority (TUTA)
Publisher	TUTA Training Resources
Date	1990
Target Audience	Workplace Trainers
Mode of Delivery	Face to face
Duration	2 hours

The aims of this resource are:

- to give participants an appreciation of the extent of the literacy problem in the workplace

- to make participants aware of the relationship between literacy issues and award restructuring

- to enable participants to locate the appropriate expert advice for dealing with literacy issues at the workplace.

Literacy Awareness and Management Program
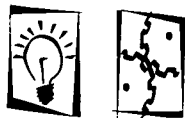
Author	Queensland University of Technology
Publisher	School of Language and Literacy Education
Date	1995
Target Audience	Workplace Trainers
Mode of Delivery	Face to face
Duration	Length varies according to module

This professional development package is designed to be used for training all levels of CES staff. However, there would be much in it to interest workplace trainers especially with assessing literacy levels and information on providers of literacy. It tries to raise staff awareness of literacy and its importance to Australian workers and jobseekers.

The modules are designed to be used sequentially. However, individual units and activities can be extracted to provide immediate and concise training activities.

The package is available on disk and/or hard copy. It is made up of five modules covering the following areas:

Module 1

- Literacy awareness (2hours)
- introduction to literacy
- job related literacy

Module 2

- Identifying clients with literacy needs. (90 minutes)
- literacy problems - literacy needs
- Australians with literacy needs.

Module 3

- Assessing clients' literacy needs (2hours)
- who needs a literacy assessment
- introduction to the Interim Literacy Course Matrix

Module 4

- Employment and training - bridging the gap
- job related literacy needs
- training pathways

Module 5

- Management of area/regional literacy provision
- understanding literacy.

Literacy in the Workplace:
A self study guide for teachers
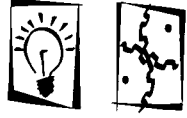
Author	Dianne Prince
Publisher	NSW Adult Migrant English Service
Date	1992
Target Audience	Workplace Trainers
Mode of Delivery	Self access/reference
Duration	Not stated

This guide is organised in 2 main sections.

Section 1 Issues Affecting Workplace Programs

Unit 1 The literacy teacher in the workplace context

Unit 2 The changing Australian workplace

Unit 3 Influences on organisational change

Unit 4 Aspects of Australian employment relations

Unit 5 Work, education and training

Unit 6 Language in the workplace.

Section 2 Practicalities associated with teaching language and literacy in the workplace

Case A Learning language for greater participation

Case B   Language for participatiion/new technology

Case C   Learning language for new technology

Case D   Learning language for multiskilling

Case E   Language and literacy for multiskilling

The appendices contain sample material for each case study.

Literacy Program Management
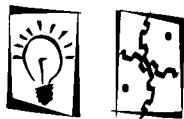
Author	Queensland Department of Employment, Vocational Education and Industrial Relations (DEVITIR)
Publisher	DEVITIR Brisbane
Date	1991
Target Audience	Workplace Trainers
Mode of Delivery	Workshops and negotiated assessment tasks
Duration	200 hours (in 5-hour modules)

The overall aims of this course are to enable trainers to:

- become effective advocates for increasing Literacy and Numeracy skills in the workforce.

- communicate more effectively to others the significance of promoting Literacy and Numeracy skills in the workforce.

- take an effective role in planning and implementing work based Literacy and Numeracy programs.

- understand the significance of reflective practice in their role as trainers in any context, particularly where it involves adults with different levels of Literacy and Numeracy.

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Made to Measure: Language Literacy and Numeracy in TCF Industry Training. A Guide for Workplace Trainers

Author	Sue Patterson
Publisher	NSW Adult Migrant English Service
Date	1996
Target Audience	Workplace Trainers
Mode of Delivery	Self access/reference
Duration	Not stated

There are two main sections to the guide:

Section 1 Background information

Section 2 Strategies for trainers

Each of these sections is divided into parts which contain:

- information and/or strategies for trainers to use
- examples from trainers and others in the TCF industry.

The guide includes:

- easy to read practical information
- strategies which trainers and teachers have developed to identify and meet the language, literacy and numeracy needs of their trainees
- examples of real solutions to real issues that have come up in a variety of workplaces in the industry.

Measurement for Work

Author	Margo Angel and Chris Bolton
Publisher	Foundation Studies Training Division , Western Sydney Institute of TAFE
Date	1996
Target Audience	Vocational Teachers, Workplace Trainers, Curriculum Writers
Mode of Delivery	Self access
Duration	Not stated

This resource was developed to support the TAFE NSW module "Measurement for Work" located in the Certificate in Local Government Foundation Studies.

However, it is also relevant in many workplace settings in which mathematics demands require focussed strategies.

This resource might be useful as:

- a source of sample learning activities developed to support vocational curriculum models.

- a model for integrating numeracy into mainstream vocational training.

- a source of ways to link theory with practice.

More Than Money Can Say: The Impact of ESL and Literacy Training in the Australian Workplace

Author	Geoff Pearson (Project Manager)
Publisher	Commonwealth of Australia
Date	1996
Target Audience	Workplace Trainers
Mode of Delivery	Self access/reference
Duration	Not stated

This report may be of interest to workplace trainers who need to access empirical evidence of the beneficial effects of integrating language, literacy and numeracy into mainstream training. It includes case studies from various enterprises Australia wide.

The report is the result of a project to determine the impact of workplace language and literacy training on key aspects of the workplace in regard to the whole process of workplace change.

It comes in two volumes:

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Volume 1

- the executive summary
- the findings
- case studies

Volume 2

- the statistical overview

The report's findings are organised under five key headings:

- direct cost savings
- access to and acceptability of further training
- participation in teams and meetings
- promotion and job flexibility
- value of the training survey.

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Multicultural Awareness Training in the Workplace

Author	Workplace Language Unit, Outer Eastern College of TAFE Victoria
publisher	Outer Eastern College of TAFE, Victoria
Date	1993
Target Audience	Workplace Trainers
Mode of Delivery	Face to face
Duration	Not stated

This module looks at language and how aspects of it can create difficulties for Non English Speaking Background workers. It also examines ways to make communication (both oral and written) more effective in the workplace.

The learning outcomes of the module are:

Trainees will be able

- To understand the difficulties of learning English

- To examine some verbal and written texts to ensure that the needs of the audience are taken into account

- To practise writing and speaking in plain English

- To evaluate practical steps in enhancing the training potential for NESB workers

National Reporting System (NRS) Professional Development Kit
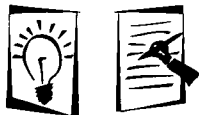
Author	Adult Literacy Information Office (TAFE NSW), National Languages and Literacy Institute of Australia, Victoria
Publisher	National Staff Development Committee for Vocational Education and Training, Australian National Training Authority
Date	1996
Target Audience	Curriculum Writers
Mode of Delivery	Self access
Duration	Not stated

The learning outcomes of this kit are:

The user

1. Is able to describe the purposes and uses of the NRS

2. Can identify each component of the NRS and show how each component is linked

3. Can explain the organising principles of the NRS

4. Can relate the education policy environment to the development of the NRS

5. Can use the NRS for reporting on student achievement in adult ESL and ALBE programs

6. Can demonstrate an understanding of how the NRS may be used for a range of other purposes

7. Can articulate the planned implementation of the NRS and the strategies for future development.

The Kit is made up of three components; workshops (self accessed or delivered face to face), video and newsletters (eight in total). The workshops are divided into four sections which can be accessed independently. It is not necessary to do all of the sections or to do them in numerical sequence. The newsletters can be read as introductory or support material to the NRS.

Numeracy and How We Learn
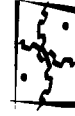
Author	Jeannette Thiering, Rosalind Barbaro
Publisher	TAFE National Staff Development Committee
Date	1992
Target Audience	Vocational Teachers, Workplace Trainers
Mode of Delivery	Face to face
Duration	7 hours

The aim of this package is to give teachers a theoretical framework based on a working knowledge of:

- the meaning of numeracy

- information on how people learn Mathematics and how they become numerate.

This package would be useful in a number of areas:

1. To gain an understanding of theory and practice in this field of Mathematics and Numeracy.

2. To develop assessment techniques.

3. To gain information on how to use concrete examples in developing materials.

Numeracy on the Line: Language Based Numeracy Activities for Adults

Author	Beth Marr, Chris Anderson, Dave Tout.
Publisher	National Automotive Language and Literacy Co-ordination Unit
Date	1994
Target Audience	Vocational Teachers, Workplace Trainers
Mode of Delivery	Self access
Duration	Not stated

This package is made up of eight sections, each one covering a different topic.

Each section is made up of trainers' notes, activity sheets, practice sheets and answers where appropriate.

It would be useful for NESB trainers, as materials focus of the language of Mathematics.

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Pathways to Active Literacy: A professional development program for senior secondary and technical teachers

Author	Department of Education, Queensland
Publisher	TAFE TEQ Department of Employment, Vocational Education, Training and Industrial Relations
Date	1995
Target Audience	Vocational Teachers
Mode of Delivery	Face to face
Duration	18-24 hours (in 6 units)

The overall aim of this package is to heighten teachers' understanding and skills in the areas of:

- the role of language in learning
- the integration of language and literacy education with vocational education and training.

This package would be useful for vocational teachers who wished to know more about how to deal with the language and literacy needs of students in a vocational setting, specifically in the following areas:

- Reading
- Writing
- Developing learning materials.

Plain English Training Manuals

|	
Author	K. Brown & N. Salomon
Publisher	NLLIA Centre for Workplace Communication and Culture. University of Technology, Sydney and James Cook University of North Queensland.
Date	1992
Target Audience	Vocational Teachers, Workplace Trainers, Curriculum Writers
Mode of Delivery	Face to face
Duration	8 hours

The aim of this package is to help develop written language skills appropriate to the wide range of workplace documents.

It addresses the issue of writing accessible texts and resources in English.

It would help workplace trainers and vocational teachers improve the effectiveness and accessibility of the written material they produce and/or use in teaching and training.

An understanding of "plain English" could be particularly beneficial if curriculum writers, teachers and trainers were undertaking other training covering theoretical and practical perspectives on the nature of language, literacy and numeracy requirements in the workplace and on how people read and write.

Professional Development Course for Workplace Education Teachers
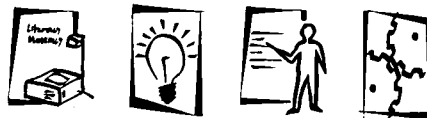
Author	Workplace Skills Unit
Publisher	Swinburne University of Technology
Date	1993
Target Audience	Vocational Teachers, Workplace Trainers
Mode of Delivery	Face to face
Duration	100 hours

The course consists of five modules:

1 Workplace Reform and the New Work Culture

2 The Worker/Learner

3 The Teacher in the Workplace

4 The Teaching/Learning Process

5 Managing Workplace Education Programs

Each module involves the following five main types of activities:

- information input

- interaction and fieldwork

- personal expression

- workshops

- assessment tasks.

Seeking Directions: Training Industry Trainers in a Multilingual Workforce

Author	Crina Virgona
Publisher	National Centre for English Language Teaching and Research, Macquarie University, Sydney
Date	1994
Target Audience	Vocational Teachers, Workplace Trainers
Mode of Delivery	Self access/reference
Duration	Not stated

This is a report which outlines a project trialing a model for training industry trainers of trainees from Non English Speaking Backgrounds. It contains information about language, literacy and numeracy issues and how to devise tests.

There are 3 parts to the report.

Part 1 - outlines the historical, philosophical and educational context which underpins the model.

Part 2 - provides an overview of the project and places it and its participants in context. It also provides an evaluation of the trialing and recommendations for future "train the trainer" programs.

Part 3 - gives a session by session account of the program and includes samples of material used on the program and generated by it.

Sessional Trainers Manual

Author	National Skillshare Association
Publisher	National Skillshare Association Ltd
Date	1991
Target Audience	Vocational Teachers, Workplace Trainers
Mode of Delivery	Self access
Duration	Not stated

The aim of this manual is to provide information on the theory of teaching adults. It also provides advice on techniques to overcome problems trainers may encounter in their sessions or to prevent them in the first place.

The manual covers the following topics.

1. How adults learn

2. How to plan a course

3. How to plan a session

4. How to present Competency Based Training

5. How to get to know the participants

6. How to motivate the participants

7. How to deal with difficult participants

8. What to do when things go wrong

9. How to evaluate sessions and courses.

Strategies for Success: Developing English Language, Literacy and Numeracy in Vocational Courses

Author	Ian Fegent (Project Manager)
Publisher	Foundation Studies Training Division, Western Sydney Institute of TAFE
Date	1996
Target Audience	Vocational Teachers, Workplace Trainers
Mode of Delivery	Self access/reference
Duration	Not stated

This publication is aimed at providing ESOL and ABE teachers with practical teaching strategies that can be applied across a broad range of vocational courses. It is also aimed at setting out guidelines for setting up Tutorial Support within the context of vocational courses. However, the book would also be suitable for workplace trainers and vocational teachers in helping them develop their own strategies in the contexts in which they work.

There are five sections in the book:

Section 1   The context of tutorial support.

Section 2   Teaching tutorial support.

Section 3   English Language and Literacy strategies.

Section 4   Maths strategies.

Section 5   References and appendices (including a skills checklist and sample literacy and numeracy screens).

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Strength in Diversity

Author	Ethnic Affairs Commission of NSW
Publisher	The Office of the Director of Equal Opportunity in Public Employment
Date	1995
Target Audience	Vocational Teachers, Workplace Trainers, Curriculum Writers
Mode of Delivery	Face to face
Duration	Not stated

This package could be of use in developing a greater understanding of issues of equity and access for students of diverse backgrounds.

The package aims:

- To increase the trainers' awareness and understanding of how to integrate cultural diversity issues into mainstream training.

- To develop skills of trainers to support the on-going implementation of training for a culturally diverse workplace.

- To provide cultural diversity training resources that can be integrated into mainstream people management training.

- To increase the trainers' awareness and knowledge of the principles underpinning the cultural diversity training package.

- To provide a greater understanding of what informs the selection of appropriate activities to include cultural diversity.

- To increase the trainers' awareness and understanding of the benefits of valuing a culturally diverse workforce and the range of strategies to manage people particularly in the functions of

  Workplace Communications (Module A)

  Managing Workplace Conflict (Module B)

  Corporate and Business Planning (Module C)

  Selection Techniques (Module D)

  Negotiating in an Enterprise Bargaining Context (Module E)

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Teaching and Learning Strategies

Author	Staff Training and Development Division, Pre-vocational Programs Training Division
publisher	NSW TAFE Commission
Target Audience	Vocational Teachers, Workplace Trainers
Mode of Delivery	Face to face
Duration	3 days

This program was developed to help teachers in the vocational sector to deliver educational programs by providing them with knowledge and skills to help students become more successful learners. It looks at ways of providing practical strategies for the delivery of lesson content.

The course consists of 11 sessions spread over a 3 day program.

- The first four sessions deal with how students learn

- sessions five to eight provide strategies for successful learning

- the last three sessions deal with how to create a learning environment.

Teaching Basic Workplace Literacy Skills to Employees with Intelluctual Disabilities
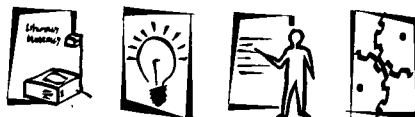
Author	Frances Shannon
Publisher	Western Institute of TAFE, Orange College.
Date	1995
Target Audience	Vocational Teachers, Workplace Trainers
Mode of Delivery	Self access/reference.
Duration	Not stated

This manual is intended to be a practical guide to assist teachers and trainers address the basic language, literacy and numeracy needs of employees with intellectual disabilities in the workplace.

It would be relevant to workplace trainers in industries which employ workers with intellectual disabilities.

There are five sections:

1. An introduction which gives the rationale behind the development of the manual.

2. Identification of learning outcomes and criteria for assessment.

3. Assessment formats.

4. Teaching strategies, activities, learning aids and compensatory approaches.

5. Resources.

Teaching Multi-Cultural Classes

Author	Marilyn Lewis, Ray Taylor
Publisher	Multicultural Education Unit, TAFE NSW
Date	1996
Target Audience	Vocational Teachers, Workplace Trainers
Mode of Delivery	Self access/reference
Duration	Not stated

This book is designed to help teachers:

- learn about teaching practices that could be useful in teaching multicultural classes.

- develop materials, techniques and learning tasks appropriate for multicultural classes.

Textiles, Clothing & Footwear
Train the Trainer (Modules II&III)

Author	R. Rainer & I. Morgan
Publisher	Holmesglen College of TAFE, Victoria
Date	1992
Target Audience	Workplace Trainers, Curriculum Writers
Mode of Delivery	Face to face
Duration	15 hours

The aim of module II is to provide trainers with the understanding and the skills to modify their training methods for people with language and literacy difficulties.

It would be useful for accessing information on:

- Language, literacy and numeracy issues.

- Assessment techniques.

- Access and equity issues.

The aim of module III is to provide trainers with the skills to utilise plain English techniques in workplace communication.

The Numeracy Handbook: A resource for literacy and numeracy teachers
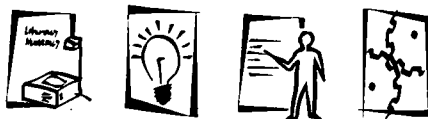
Author	Annabelle Lukin and Linda Ross
Publisher	National Centre for English Language Teaching and Research, Macquarie University, Sydney
Date	1996
Target Audience	Vocational Teachers, Workplace Trainers
Mode of Delivery	Self access
Duration	Not stated

This is a practical guide for teachers of numeracy and literacy, and would be of interest to workplace trainers and vocational teachers.

The focus throughout is on teaching numeracy and integrating the teaching of numeracy with the teaching of literacy.

The book is divided into five sections:

1. Issues in teaching numeracy

2. Numeracy in the workplace

3. Designing a course

4. Designing a unit of work

5. Numeracy strands and skills.

The Thinking, Working Learning Information Kit
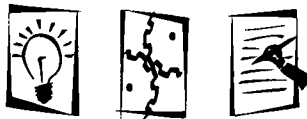
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Author	The Adult Literacy and Basic Skills Action Coalition
Publisher	NSW Food Industry Training Council
Date	1995
Target Audience	Workplace Trainers, Curriculum Writers
Mode of Delivery	Self access/reference
Duration	Not stated

The main objectives of this kit are:

- to provide an overview of workplace language, literacy and numeracy issues and developments for personnel in the Food Processing Industry.

- to provide a guide to references, resources and contact details for companies seeking to pursue these issues in more detail.

- to provide a general framework to assist in the planning and implementation of workplace language, literacy and/or numeracy programs.

There are six sections in the kit:

1. The Food Processing Industry: An Overview.

2. Workplace Language, Literacy and Numeracy.

3. Industry Trends and Basic Skills Development.

4. Language and Literacy in the Food Processing Industry.

5. Resources and Contacts.

6. References and Further Reading.

The Numeracy Workbook
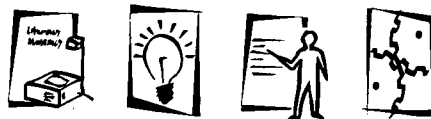
Author	Linda Ross
Publisher	NSW Adult Migrant English Service
Date	1996
Target Audience	Vocational Teachers, Workplace Trainers
Mode of Delivery	Self access
Duration	Not stated

This workbook is designed to accompany The Numeracy Handbook listed on the previous page.

It is designed for students at the beginner and post-beginner levels, especially those with limited literacy skills.

It takes a thematic approach through topics like shopping, banking, transport and sport.

Numeracy activities are in the areas of:

- number
- space
- measurement
- diagrammatic texts
- graphic texts

All these activities are presented through contextualised and sequential exercises.

Toolkit for Trainers

Author	Felicity Carrol, Marlene Huass
Publisher	National Staff Development Committee of ANTA. Commonwealth of Australia
Date	1995
Target Audience	Workplace Trainers
Mode of Delivery	Flexible
Duration	Not stated

The purpose of this manual is to provide facilitators of labour market programs with strategies and ready to use activities, lesson plans and ideas to use in teaching the long term unemployed.

There are 11 modules in the manual which are presented following 2 main themes:

- maintenance modules to help facilitators relate to participants and create an active learning environment.

- task modules to provide strategies for presenting material to achieve set outcomes of each session's content.

Although designed for trainers dealing with the long term unemployed, there is much in this manual which industry trainers would find useful It would be particularly useful in meeting the needs of trainers for general teaching strategies which would foster interest and motivation.

Training in Context. Customising Training in the Food Industry: Language, Literacy and Numeracy Issues. A Guide for Workplace Trainers

Author	Stuart Borrie
Publisher	NSW Adult Migrant English Service
Date	1996
Target Audience	Vocational Teachers, Workplace Trainers
Mode of Delivery	Self access/reference
Duration	Not stated

This package targets:

- workplace trainers

- vocational trainers who do not have a language, literacy and numeracy teaching background

- language, literacy and numeracy teachers who are new to work based training.

There are three sections:

Section one provides information on:

- customising training

- language, literacy and numeracy in workplace training

- trainees with language, literacy and numeracy needs.

Section two provides:

- examples of language, literacy and numeracy problems in training
- information about these problems
- strategies to address the problems
- examples of what particular trainers did to address these problems.

Section three provides:

- case studies which provide models of customised training.

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Voices of Experience: A Professional Development Package for Adult and Workplace Literacy

Author	Suzanne McConnell, Aileen Treloar
Publisher	Department of Employment Education and Training, Canberra
Date	1994
Target Audience	Workplace Trainers
Mode of Delivery	Self access/reference
Duration	Not stated

This set of seven books and three audio cassettes compises papers by, and interviews with practioners, academics and theoreticians from the field of Adult Literacy Education in Australia. A wide range of issues and topics are covered with each volume concentrating on a particular area;

Book 1   Changes and Challenges

Book 2   Positions on Literacy Theories and Practices

Book 3   The Challenge of Workplace Education

Book 4   Reframing Mathematics

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Book 5   Different Students, Different Learnings

Book 6   Professional Development for the Common Good

Book 7   Resources for Teaching and Learning

Audio Cassettes   Interviews

Books 1-7 include a number of suggested activities for Professional Development which were designed, planned, trialled and refined by a national working group and include both individual and group activities.

Book 3 aims to raise many questions: political, ideological, professional, educational and personal and includes both papers and a professional development secion.

Workforce Literacy Training Package
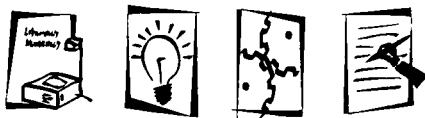
Author	N. Gilding, G. Le Duff, M. Persson & J. Zimmermann
Publisher	Department of Employment and TAFE (South Australia) and the Australian Council for Adult Literacy
Date	1993
Target Audience	Workplace Trainers, Curriculum Writers
Mode of Delivery	Self access
Duration	Not stated

This reference contains a set of guidelines to provide practical and theoretical advice to providers of workforce literacy and to practitioners, in the development, delivery and evaluation of workforce literacy.

Could be useful in the following ways:

- as a reference point for good practice in the area of workplace literacy training.

- for accessing information on guidelines for developing and evaluating training programs.

- for developing curriculum.

Working Together (revised edition)

Author	Foundation Studies Training Division
Publisher	NSW TAFE Commission
Date	1995
Target Audience	Vocational Teachers
Mode of Delivery	Combination of face to face and self access
Duration	32 hours (nominal)

This training package would meet the needs of vocational teachers in:

- developing teaching strategies

- applying a process approach to mathematical problems in their subject area.

- identifying and minimising language, literacy and numeracy demands on students in assessment.

- becoming aware of current theory and practice in language and literacy teaching.

- addressing access and equity issues.

- identifying models of good practice.

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Working Words: A User's Guide to Written Communication at Work
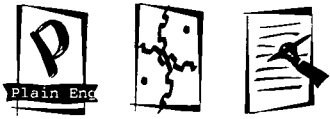
Author	Jan Kindler
Publisher	Adult, Community and Further Education Board, Victoria
Date	1994
Target Audience	Workplace Trainers, Curriculum Writers
Mode of Delivery	Self access/reference
Duration	Not stated

Working Words is a guide to making written material easier to read, understand and use. It is targeted at those who write workplace documents but would also be useful for people who want their writing to be clear and easily understood.

It covers:

- the things writers need to think about before they begin to write

- how to structure a document

- how language can be used to make a document easier to understand

- how to produce documents that look better and easier to read

- the importance of trialing a document before using it.

Sample documents are used to show what to do and what not to do. Checklists give writers a quick guide to see if they are on the right track.

Workplace Literacy Training Package
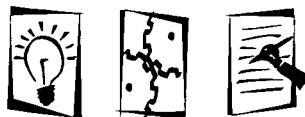
Author	N. Gilding, G. Le Duff, M. Persson & J. Zimmerman
Publisher	South Australian Department of Employment and TAFE and the Australian Council
Date	1993
Target Audience	Workplace Trainers, Curriculum Writers
Mode of Delivery	Self access/reference
Duration	Not stated

This training package is intended to provide practical and theoretical advice in the development and delivery of workplace literacy. It contains guidelines for:

- conducting a literacy skills audit

- performing a literacy task analysis

- developing curriculum

- training personnel

- delivering workplace programs

- evaluating workplace programs.

Writing and Teaching to Improve Literacy

Author	J. McLeod & S. Hatherly
Publisher	NSW TAFE Commission
Date	1991
Target Audience	Vocational Teachers
Mode of Delivery	Face to face
Duration	12 hours

The aim of this package is to improve the literacy skills of participants by giving them access to plain English materials and equipping vocational teachers with strategies for improving literacy while teaching in their area.

Could be useful for:

- learning to write student resource materials in plain English.

- developing teaching and learning strategies that encourage the use of effective reading and writing skills in their students.

Writing in Plain English

Author	ACTRAC Maryellen Haines (Co-ordinator)
Publisher	ACT Institute of TAFE, Canberra
Date	1992
Target Audience	Workplace Trainers, Curriculum Writers
Mode of Delivery	Face to face/self access
Duration	20 hours (nominal)

The purpose of this module is to provide competency based training in applying the principles of Plain English within organisations and in advocating its use.

It has three learning outcomes:

1. Plan and write documents in Plain English.

2. Edit others' writing according to the principles of Plain English.

3. Advocate the use of Plain English in the workplace.

It could help meet the Professional Development needs of curriculum writers and workplace trainers to write in Plain English.

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Writing in Plain English

Author	Robert D. Eagleson
Publish	Australian Government Publishing Service, Canberra
Date	1990
Target Audience	Workplace Trainers, Curriculum Writers
Mode of Delivery	Self access/reference
Duration	Not stated

The "Plain English bible" in Australia.

This book is divided into seven sections.

1. Why plain English should be used.

2. Planning a document.

3. About language.

4. Designing, testing and revising documents.

5. Documents are given in their original form, commented on and then compared with a plain English version.

6. Listings of alternative words to use in a plain English document.

7. Further readings.

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Writing in Plain English
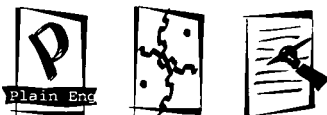
Author	J. McLeod & S. Hatherly
Publish	NSW TAFE
Date	1991
Target Audience	Workplace Trainers, Curriculum Writers
Mode of Delivery	Face to face
Duration	5 hours

The aim of this training package is to improve the effectiveness of written communication in the workplace. By completing the program participants should be able to:

- describe effective reading and writing strategies

- recognise the features of Plain English

- write materials in Plain English.

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New Resource

Title:

Target Group
(please tick)

Vocational Teacher   Workplace Trainer   Curriculum Writer

Author

Publisher

Date

Target Audience

Mode of Delivery
(please tick)

Face to face   Distance   Flexible

Nominal Duration

Please tear out and send or fax to the

Adult Literacy Information Office
6-8 Holden Street Ashfield NSW 2131
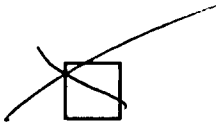Fax: (02) 9716 3699

Thank you for your help.

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