
Contents

Introduction	1
Module 1: Supporting reading	7
Module 2: Supporting writing	35
Module 3: Supporting speaking and listening	59
Module 4: Supporting numeracy	81
Module 5: Supporting organisational skills	105
Module 6: Supporting spelling	119
Glossary	137

Embedded Learning Materials: Key to abbreviations used in this pack, taken from the headers of the Embedded Learning Materials.

Ca	Catering
Cl	Cleaning
Co	Construction
Ee	E2E (entry to employment)
Ey	Early years
FHy	Food hygiene
Ha	Hairdressing
Ho	Horticulture
Hos	Hospitality
H+S	Health and safety
ICT	ICT
Ma	Production line manufacturing
Pa	Painting operations
Re	Retail
Sc	Social care
To	Trowel occupations
Tr	Transport
Wa	Warehouse

These and other titles can be ordered from DfES Publications:
tel. 0845 60 222 60.

Alternatively they can be accessed from the Embedded Learning Portal:

www.dfes.gov.uk/readwriteplus/embeddedlearning.

Introduction

This *Dyslexia Support Pack* derives from the work carried out in two major *Skills for Life (SfL)* Projects: the Embedded Learning Materials (ELM)(2002–05) and Supporting Dyslexic Learners in Different Contexts (2004–07). Both have provided high-quality *SfL* materials: ELM provided materials to use directly with learners, while Supporting Dyslexic Learners in Different Contexts trained teachers using a blended learning training course. This *Dyslexia Support Pack* has been developed from the strategies and techniques included in the ELM that support dyslexic learners, taking into account the strategies and techniques from Supporting Dyslexic Learners in Different Contexts.

The Embedded Learning Materials in the context of the *Skills for Life* Strategy:

*'Embedded teaching and learning combines the development of literacy, language and numeracy with vocational and other skills. The skills acquired provide learners with the confidence, competence and motivation necessary for them to progress, gain qualifications and to succeed in life and at work.'*¹

The Embedded Learning Materials are intended to assist those who are preparing learners for national

qualifications in work-, college- and community-based settings. The aim is to bridge teaching the specific content of the programme of learning on the one hand; and literacy, language and numeracy (LLN) on the other. The materials build on the firm evidence that there are many adult learners working towards national qualifications whose vocational skill level is not supported by their LLN confidence, and therefore certain 'barriers' stand in the way of successful vocational attainment.

By setting LLN learning in realistic context-based settings, the hope is that the value of enhancing LLN skills will be obvious to learners.

Supporting Dyslexic Learners in Different Contexts was commissioned by the DfES *Skills for Life* Strategy Unit in August 2004 to build on the earlier project, *A Framework for Understanding Dyslexia* (2004). The aim of the training was to develop a set of blended learning training materials to train staff from a number of different settings (e.g. FE/ACL, workplace and offender settings) in how to select and use dyslexia-friendly approaches. So far more than 3,000 teachers and support staff – all non-specialists in dyslexia – have been trained using the materials. During the project a set of video teaching

¹ DfES Embedded Learning Portal (www.dfes.gov.uk/readwriteplus/embeddedlearning/search.cfm).

snapshots were added to the training material.

To find out about training for Supporting Dyslexic Learners in Different Contexts, see:

- www.dyslexic-learners.org
- live.dyslexic-learners.qia.oxi.net.

Meeting the needs of the dyslexic learner

In order to understand how to meet the needs of your dyslexic learners, it is useful first to set out some of the known facts about dyslexia.²

- Dyslexia is a specific learning difficulty that mainly affects reading and spelling.
- Someone is said to have a specific learning difficulty if they have a distinctive pattern of strengths and weaknesses in learning and information-processing skills. This means that they have normal or relatively good skills in most area of thinking, learning and problem-solving, but specific weaknesses in other areas.
- Dyslexia is lifelong; it is just as common in adults as it is in children, although the impact of dyslexia varies at different stages in life.
- Dyslexia is the most common of all specific learning difficulties, affecting 10% of the population to some degree.
- For the purposes of the Disability Discrimination Act, dyslexia may be regarded as a disability. This means that there is a legal duty on employers and on educational institutions to make reasonable adjustments for dyslexic people so that they are not denied opportunities available to others.
- Dyslexia can be very frustrating and demoralising since so much in life depends on having effective reading and writing skills.
- People with dyslexia can feel undervalued or unfulfilled if they can't access the same opportunities and gain the same recognition for their talents as those who are not dyslexic.
- In adulthood the key to success is through an understanding of the individual pattern of strengths and weaknesses and of the consequences of that for learning and working in different ways. This enables the dyslexic person, and those who teach and support them, to develop coping and compensatory strategies.
- Dyslexic people often have difficulty with mapping sounds to letters and words (decoding), reading, spelling, memory, organisation, sequencing and numeracy.

² Adapted from 'What is dyslexia?', Dyslexia Action web site (www.dyslexiaaction.org.uk/Page.aspx?PageId=26).

On the other hand, many dyslexic people also show strengths in areas such as:

- good interpersonal skills
- good at practical activities
- good at 3D, visual-spatial activities
- lateral thinking
- problem-solving
- creativity
- imagination.

In developing the Embedded Learning Materials, account was taken of the needs of dyslexic learners, and many strategies suitable for supporting dyslexic learners were included. The presentation of the materials (layout, headings, graphics etc.) was also made deliberately dyslexia-friendly. (The same is true of this pack: although it is not aimed specifically at dyslexic learners, its design is informed by current good practice.) This *Dyslexia Support Pack* goes one step further in making the strategies more explicit so that staff can be made more aware of how much can be done to support dyslexic learners and how effective that support can be. Teachers will probably also find that strategies that help dyslexic learners are often very helpful for other learners as well.

It is important that dyslexic learners are encouraged not to feel negative or disheartened about making mistakes and to have the self-belief that they

can succeed. Teachers can help by being flexible in their approach and by enabling independent learning wherever possible.

What's in the Dyslexia Support Pack?

The pack contains six self-contained sections:

- Supporting reading
- Supporting writing
- Supporting speaking and listening
- Supporting numeracy
- Supporting organisational skills
- Supporting spelling.

The first five sections focus on specific literacy or numeracy skills that are required in many workplace settings. The last deals with generic spelling strategies that may be applied to a variety of workplace writing tasks.

Each section begins by defining what is meant by the specific skills in question, and explores when these skills may be needed in the workplace. Then follows more detailed advice and suggestions, under two different headings:

'Be aware that the dyslexic learner . . .' describes how the dyslexic person may be challenged by the skills requirements in different situations

'Try this!' gives suggestions for strategies and approaches that the support person can try out with the dyslexic person and see which ones

help. Many of the strategies for helping dyslexic learners that were included in the ELM have here been brought together in one place for ease of reference and access.

Samples and references to further pages from the various Embedded Learning Materials are included to illustrate how the same skills can be required in different ways in a variety of workplaces. The precise form in which the skills are used may be different in each workplace context, but the underlying skills needed are similar.

Reading product labels Focus

Customers may ask for your advice from time to time when they are choosing a product. You can find certain information quickly from the product label.

You might find information about what is in the product. This is important for people who have allergies.

Specialised words might be used, which you will need to know.

Some information is set out in an easily recognisable format to help you find it easily. This is an example of a table of information.

It might include a set of instructions.

Instructions are often positive – telling you what you should do.

Look for these features on other labels.

FRESH VEGETABLE SOUP
made with real vegetables

INGREDIENTS
Water, Vegetables (44%), (Potatoes, Carrots, Onion, Green beans, Leeks), Crème fraîche, Modified maize starch, Salt, Yeast extract, Vitamin C, Folic acid, Vitamin B6.

NUTRITIONAL INFORMATION

Typical values	per 100g
Energy	221 kJ (53 kcal)
Protein	0.9 g
Carbohydrate	4.3 g
(of which sugars)	1.4 g
Fat	3.7 g
(of which saturates)	0.3 g
Fibre	0.2 g
Sodium	0.4 g

NO ARTIFICIAL COLOURS

To hob cook
Heat the soup thoroughly in a saucepan, stir gently, take care not to let it boil.

NOT SUITABLE FOR MICROWAVE COOKING

Storing instructions
KEEP REFRIGERATED

425g e

SUITABLE FOR VEGETARIANS

Use subheadings to find particular information quickly. These might be:

- underlined
- in CAPITAL LETTERS
- in **bold**
- in *italics*.

Abbreviations might be used. For example:

- kcal for calories
- 'g' for grams.

Some labels include information on what the product does *not* contain.

Warnings are often in capital letters to stand out, and use negative words such as 'NOT'.

Symbols are useful as a quick reference but may also have an accompanying explanation.

Each section concludes with more detailed information about why dyslexia affects a person in the way it does with those particular skills. (Note that, although spelling is a fundamental part of writing at work, it is not highlighted as a separate skill in the

Embedded Learning Materials, so there are no sample pages in the section on spelling.)

The glossary at the end of the pack defines and clarifies some of the specialist terminology.

Using the Dyslexia Support Pack

The *Dyslexia Support Pack* can be used in a variety of ways:

Alongside the Embedded Learning Materials

A teacher might consult the *Dyslexia Support Pack* when using the ELM to ensure that lessons are totally supportive for dyslexic learners. Because the Support Pack explains why dyslexic learners have barriers to learning in certain ways, and why a strategy is effective, the teacher will gain useful insights into dyslexia-friendly teaching pedagogy, which can then be applied in different areas of the curriculum. The contexts of the strategies given in the Support Pack thus become illustrative of best practice that could be used by the teacher in another area of the curriculum or wherever it would be useful.

As a standalone resource

Any teacher working with dyslexic learners in the workplace, even if not using the ELM specifically, would find the *Dyslexia Support Pack* useful.

Accessing the strategies and rationale behind them will make most teachers

more aware of the barriers and challenges dyslexic learners often face with many literacy and numeracy tasks. Knowing that there is a handy pack of information readily available could make non-dyslexia specialist staff less daunted when faced with working with a dyslexic learner. It will also give staff the confidence to try some of the strategies themselves.

As a reference pack

If a teacher is working with a dyslexic learner in a workplace setting and wants to check which aspects of learning are likely to cause some challenges, then the *Dyslexia Support Pack* can be used as a reference to look up some specific strategies to try out. For instance someone who needs to know how to support writing can just look at that section for an explanation

of the issues and strategies to support the aspects of writing needed. Because each section is completely self-contained (it doesn't refer the reader to other chapters for different aspects of the same issue) the reader can be sure that everything they need is in one place.

As part of a training and support package

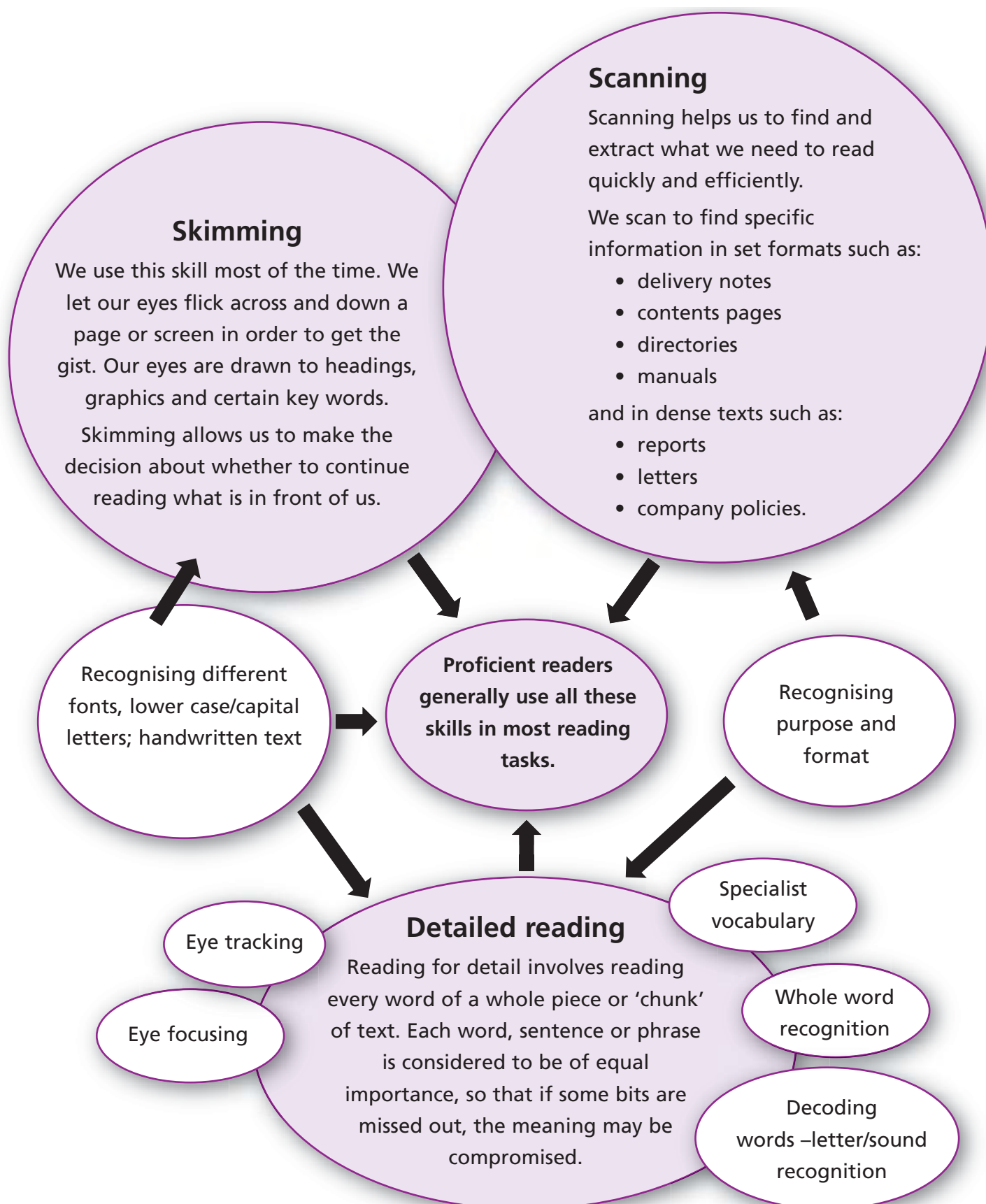
Teachers and support staff who have completed the Supporting Dyslexic Learners in Different Contexts training will have access to the full 26 modules of interactive materials, including six focused specifically on the workplace and four on embedded learning. The *Dyslexia Support Pack* signposts many of the strategies included in these modules. See page 2 for contact details to find out about training.

Supporting reading

Contents

1 What are the reading skills?	8
2 When do we use these skills in the workplace?	9
3 Reading skills and the Embedded Learning Materials	13
4 Reading skills and the dyslexic learner	13
5 Challenges and tips for the dyslexic reader:	14
• Reading everyday documents	14
• Product labels	14
• Charts and tables	16
• Codes	18
• Written instructions	20
• Reading more complex documents	23
• Making text easier to read	29
6 Why is it a challenge for the dyslexic learner?	30
Appendix: Readability	33

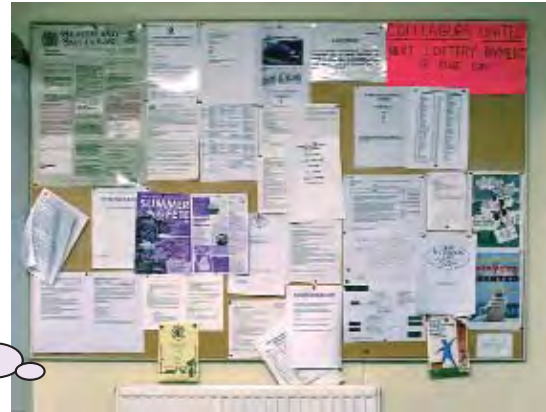
1 What are reading skills?



2 When do we use these skills in the workplace?

When do we 'skim' read?

Better check the board to see if there's anything I should know about.



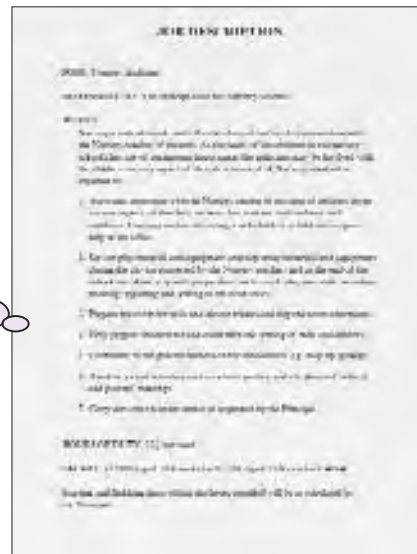
When do we 'scan' read?

There must be a job here where I can work flexible hours.



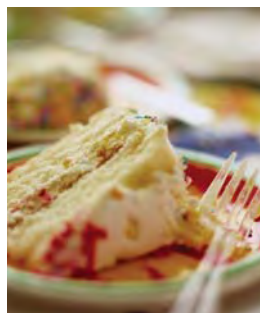
When do we read every word?

Do I really want
this job? I'd better
read it carefully.



Method

1. Preheat the oven to 180C/350F/Gas 4.
2. Grease two cake tins. Line the bottom of the two tins with a circle of greaseproof paper.
3. In a large bowl, cream together the butter and sugar, using an electric whisk or a wooden spoon. Beat well to get lots of air into the mixture.
4. Beat in the eggs one at a time.
5. Fold in the flour using a large metal spoon. Be careful not to over-mix it.
6. Pour the mixture equally between the two cake tins and level off the top with a spatula..
7. Put the cakes in the oven and bake for about 20 minutes, or until the cakes spring back when pressed gently with a finger and are pale golden in colour.
8. Remove from the oven and take the cakes out of the tins after about 5-10 minutes. Place them on a wire rack until they are completely cool.
9. Spread the sponge with the jam and the whipped cream, then carefully sandwich together.
10. Dust with icing sugar and serve.



So what have I got
to do? Mustn't miss
anything out!

What do we read in the workplace?

'It is not easy to find a job that does not involve some degree of reading. Most jobs at least require the reading of short memos or e-mails. Many involve the reading of lengthy and complex reports and other documents.'

Diana Bartlett and Sylvia Moody, *Dyslexia in the Workplace*, Whurr 2000.

Policies, health and safety information, reports:

- Dense text
- Complex, extended format
- Unfamiliar language
- Statutory
- 'Small print'



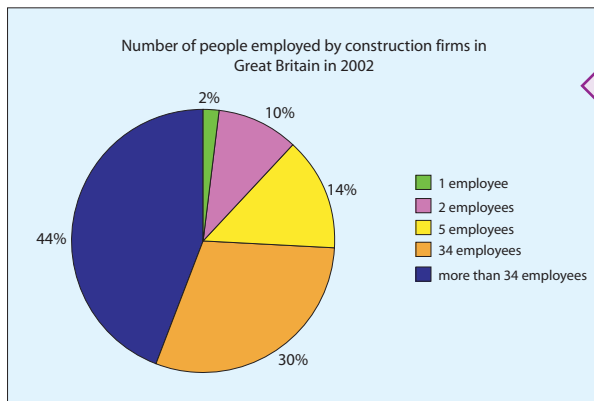
Instructions, specifications:

- Limited text
- Technical language
- Sequenced
- Numbered
- Critical information

Product information – labels, data sheets, forms:

- Format/layout
- Numerical facts mixed with text
- Abbreviations
- Symbols
- Handwritten
- Updated





Graphical information – tables, charts, diagrams, plans, drawings, signs:

- Format/layout
- 2D representation
- Symbols
- Abbreviations
- Codes
- Using a key/references
- Accuracy

Notices, memos, e-mails, delivery notes:

- Limited text
- Familiar language
- Speedy response time
- Key words
- Handwritten



3 Reading skills and the Embedded Learning Materials

The Embedded Learning Materials' examples of reading are based upon the requirements of individual workplace/vocational areas and many everyday situations. There are lots of examples; while they vary according to the situation, they do have much in common. For this support pack the

skills have been categorised under the following headings:

- Reading everyday documents
 - Product labels
 - Charts and tables
 - Codes
 - Written instructions
- Reading more complex documents.

4 Reading skills and the dyslexic learner

The items under reading everyday documents are those which can cause particular challenges to dyslexic readers. These challenges, along with some useful tips about how to help minimise them, are profiled on pages 14–22.

Reading complex, often lengthy

documents is dealt with as one topic, since a person needs to use all of their reading skills in order to read and understand continuous text. Many dyslexic readers are challenged by such texts. Some of these challenges and tips to help minimise them are given on pages 23–28.

5 Challenges and tips for the dyslexic reader

Reading everyday documents: product labels

Reading product labels Focus

Customers may ask for your advice from time to time when they are choosing a product. You can find certain information quickly from the product label.

You might find information about what is in the product. This is important for people who have allergies.

Specialised words might be used, which you will need to know.

Some information is set out in an easily recognisable format to help you find it easily. This is an example of a table of information.

It might include a set of instructions.

Instructions are often positive – telling you what you *should* do.

Look for these features on other labels.

FRESH VEGETABLE SOUP
made with real vegetables

INGREDIENTS
Water, Vegetables (44%), (Potatoes, Carrots, Onion, Green beans, Leeks), Crème fraîche, Modified maize starch, Salt, Yeast extract, Vitamin C, Folic acid, Vitamin B6.

NUTRITIONAL INFORMATION	
Typical values	per 100g
Energy	221 KJ (53 kcal)
Protein	0.9g
Carbohydrate	4.3g
(of which sugars)	1.4g
Fat	3.7g
(of which saturates)	0.3g
Fibre	0.2g
Sodium	0.4g

NO ARTIFICIAL COLOURS

To hob cook
Heat the soup thoroughly in a saucepan, stir gently, take care not to let it boil.

NOT SUITABLE FOR MICROWAVE COOKING

Storing instructions
KEEP REFRIGERATED

USE BY: JUNE 08

425g e

V SUITABLE FOR VEGETARIANS

Use subheadings to find particular information quickly. These might be:

- underlined
- in CAPITAL LETTERS
- in **bold**
- in *italics*.

Abbreviations might be used. For example:

- kcal for calories
- 'g' for grams.

Some labels include information on what the product does *not* contain.

Warnings are often in capital letters to stand out, and use negative words such as 'NOT'.

Symbols are useful as a quick reference but may also have an accompanying explanation.

Sample page from the Embedded Learning Materials (Re 2:3 p. 124).

Other examples of reading product labels from the Embedded

Learning Materials are: Co 4:7 p. 232; CI 0:25 p. 47; Ha 3:6 p. 160.

For more information about the skills that underpin the reading of labels and the challenges faced by the dyslexic reader, go to page 30.





Be aware that the dyslexic learner . . .

- **finds it harder to read the specialised words** used on many labels – e.g. nutritional, herbicide, plasticiser – and will often resort to guessing or ignoring them altogether
- **has difficulty reading words written in capital letters** because the ‘shape’ of words written in small letters gives them the visual clues they tend to rely upon when reading (compare HERBICIDE/herbicide)
- **might not understand the abbreviations** used on labels because they find it harder to connect them to the original words (perhaps already ‘fuzzily’ represented in their memory)
- **finds it hard to recognise key words** – these do not ‘leap’ out as they can do for other readers and therefore they need longer to find their way around the label to extract the information relevant to them
- might recognise the word but be **unable to pronounce it**.



Try this!

- Explore the label first to help the dyslexic learner gain the ‘big picture’ and to make meaningful connections. Model how a good reader approaches the task by pointing out the format, reading key words, headings, sections that may point to dangers, etc.
- Ask the learner to highlight the key words and important abbreviations. Encourage them to write them in a small, personal, alphabetically organised notebook, giving brief explanations. (You could encourage them to copy the word from the label in capital letters and then write a small-letter version beside it.)
- Use a glossary to reinforce meaning.
- Ask questions about parts of the label to check understanding and to help the dyslexic person focus on specific information instead of information gleaned from using random and often unproductive search strategies.

Reading everyday documents: charts and tables

Using rotas

Focus

Rotas are often used in Early years settings to plan day-to-day tasks. It is important that you know how to read them.

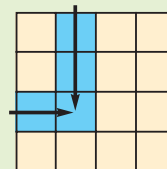
STAFF DUTY ROTA					
W/c 1st May	Mon	Tue	Wed	Thurs	Fri
Lana	Hols	7.30–3.30 b	7.30–3.30 b	7.30–3.30 b	7.30–3.30 b
Jane	Hols	7.30–4.30 b	7.30–4.30 b	7.30–4.30 b	7.30–4.30 b
Nargis	Hols	12.00–4.30 b	8.00–4.00 b	8.00–4.00 b	8.00–4.30 b
Sam	Hols	9.00–1.00 p	9.00–1.00 p	9.00–1.00 p	9.00–1.00 p
Sarah	Hols	8.00–1.00 p	12.00–6.00 p	12.00–6.00 p	12.00–6.00 p
Raffi	Hols	9.00–6.00 p	9.00–6.00 p	9.00–6.00 p	9.00–6.00 p
Sue L	Hols	Hols	1.00–5.30	Hols	1.00–6.00
Sue B	Hols	8.30–4.30	Hols	Hols	9.00–5.00
June	Hols	9.00–6.00	9.00–6.00	9.00–6.00	9.00–6.00
Mercy	Hols	Hols	3.00–6.00	3.00–6.00	3.00–6.00
Katie	Hols	12.00–6.00	12.00–6.00	12.00–6.00	12.00–6.00
Nicky	Hols	Hols	8.00–12.30	8.00–12.30	8.00–12.30

Abbreviations are used to save space. Some may be familiar. For example: W/c is 'week commencing', Mon is 'Monday', Tue is 'Tuesday' and so on.

Some abbreviations may be new to you. For example, on this rota: **b** means 'baby' unit **p** means 'pre-school'. If you come across an abbreviation you're not sure of, ask.

Using a rota

- Read the **title**, the **column headings** and the **row headings** to find out what the rota is about. For example, this rota is about staff duties for the week commencing 1st May.
- Track **down the column** for the day you need.
- Track **across the row** for the person you need.
- Read the information in the box where the column and row meet to find the hours that person is working and if they have been allocated to work with a particular group.



Example:

On Thursday, Nargis will be working in the baby unit from 8 o'clock until 4 o'clock.

Sample page from the Embedded Learning Materials (Ey 1:19 p. 126). Other examples of reading charts and tables from the Embedded Learning Materials are: Cl 3:15 p. 213; Tr 3:4 p. 224, To 5:13 p. 261.

For more information about the skills that underpin the reading of charts and tables and the challenges that face the dyslexic reader, go to page 30.



Be aware that the dyslexic learner . . .



- frequently **miscues words**, i.e. reads what they think they see **written**, particularly if words are similar in shape and share the same cluster of letters – Derby/Rugby, Northbound/Southbound, diary/dairy, etc.
- might experience **visual distortion** and therefore find it difficult to
 - read smoothly along and down through text, columns and rows
 - find and keep their place in text or within the rows or columns of a table or chart
- **finds it difficult to retain information** (short-term memory) whilst searching for more information such as using a 'key' with symbols or abbreviations on a timetable or graph.

Try this!



- **Highlight key information** to discourage prediction and promote accuracy
- **Use a simple L-shaped piece of card** to track for data items in a busy chart or table:

Ordering

Model	Description	Filter (cm)	Tube	Intensity	Filter (cm)	Tube	Wavelength (nm)
UTX 20M	HiLo intensity	20 x 20	6 x 8W	intensity	20 x 20	6 x 8W	312
UV/Vue Transilluminators (standard size)							
SXT 20S	HiLo intensity	20 x 20	6 x 15W	intensity	20 x 20	6 x 15W	254
SXT 20M	HiLo intensity	20 x 20	6 x 15W	intensity	20 x 20	6 x 15W	312
SXT 26S	HiLo intensity	21 x 26	6 x 15W	intensity	21 x 26	6 x 15W	254
SXT 26M	HiLo intensity	21 x 26	6 x 15W	intensity	21 x 26	6 x 15W	312
SXT 35S	HiLo intensity	20 x 35	6 x 15W	intensity	20 x 35	6 x 15W	254
SXT 35M	HiLo intensity	20 x 35	6 x 15W	intensity	20 x 35	6 x 15W	312
SXT 35L	HiLo intensity	20 x 35	6 x 15W	intensity	20 x 35	6 x 15W	365
SXT 40S	HiLo intensity	20 x 40	6 x 15W	intensity	20 x 40	6 x 15W	254
SXT 40M	HiLo intensity	20 x 40	6 x 15W	intensity	20 x 40	6 x 15W	312
STS 20WL Single intensity, dual wavelength							
		20 x 20	6 x 8W	intensity, dual wavelength	20 x 20	6 x 8W	365
		2 x 8W				2 x 8W	white light
STS 20WS Single intensity, dual wavelength							
		20 x 20	6 x 8W	intensity, dual wavelength	20 x 20	6 x 8W	254
		2 x 8W				2 x 8W	white light
STS 20WM Single intensity, dual wavelength							
		20 x 20	6 x 8W	intensity, dual wavelength	20 x 20	6 x 8W	312
		2 x 8W				2 x 8W	white light
STS 35W Single intensity							
		20 x 35	4 x 8W	intensity	20 x 35	4 x 8W	white light
BTS 20W Single intensity							
		20 x 20	2 x 8W	intensity	15 x 15	4 x 8W	254
		2 x 8W			15 x 15	4 x 8W	312
		2 x 8W			15 x 15	4 x 8W	365
BXT 20S HiLo intensity							
		20 x 20	6 x 8W	HiLo intensity	20 x 20	6 x 8W	254
BXT 20M HiLo intensity							
		20 x 20	6 x 8W	HiLo intensity	20 x 20	6 x 8W	312
BXT 20L HiLo intensity							
		20 x 20	6 x 8W	HiLo intensity	20 x 20	6 x 8W	365
BXT 26S HiLo intensity							
		21 x 26	6 x 8W	HiLo intensity	21 x 26	6 x 8W	254
BXT 26M HiLo intensity							
		21 x 26	6 x 8W	HiLo intensity	21 x 26	6 x 8W	312

- **Highlight the initial information** so that additional information can be referenced to it with ease.

Reading everyday documents: codes

Checking deliveries

Focus

It is important to check deliveries to make sure that the items received are the same type and quantity as those ordered. Most companies have a particular procedure to follow.

When a
delivery is
received

1 Check the **delivery note** against the **order form**.

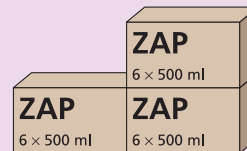
Delivery Note			
ITEM	QTY	BOX QTY	CODE
ZAP 500 ml	3	6	Z584

Purchase Order			
CODE	DESC	UNIT	QTY
Z584	ZAP 500 ml	1	18

Are the **items** the same on both?
Are the **quantities** the same?

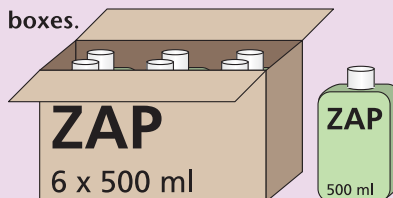
2 Check the **delivery note** against the **items received**.

Delivery Note			
ITEM	QTY	BOX QTY	CODE
ZAP 500 ml	3	6	Z584



Are they the **correct items**?
Are **all** the items there?

3 Open the boxes.



Do they contain the **stated contents**?
Are any items **damaged**?

Understanding the **words**
and **abbreviations** used
on the paperwork helps
the checking process.

DESC = DESCRIPTION **QTY = QUANTITY = amount**

DELIVERY					
CODE	DESC	UNIT	QTY	UNIT PRICE	TOTAL
Z584	ZAP 500 ml	1	18	£1.70	£30.60

CODE:
Each item is identified
by a unique set of
letters or numbers.

ml = millilitres

UNIT:
the number of
items included
in one purchase

UNIT PRICE:
the cost per item

Sample page from the Embedded Learning Materials (CI 3:19 p. 222).

Other examples of reading codes from the Embedded Learning Materials are: Wa 1:3 p. 57; Wa 1:2 p. 32; Ma 2:6 p. 147.

Be aware that the dyslexic learner . . .



- can miss out numbers, particularly if a code is long
- can reverse the digits within numbers and letters so for example **on** can be 'read' as **no** and **21** as **12**; **2141** as **1241**
- finds it hard to remember strings of numbers/letters
- can be impulsive and be drawn by the characteristics of a code and miss some of the detail
- can confuse **O (letter)** with **0 (nought/zero)**; **A** and **4**; **1 (digit)** and **I (letter)**
- has a tendency to see **one number/digit or letter** and to **say something completely different** – as much to their surprise as everyone else's.

Try this!



- Divide the code into manageable 'chunks' and see which one works:
20A0931T – 20A / 093 / 1T or 20 A0 93 1T
- Highlight each 'chunk' in a different colour:
20A0931T – 20A 093 1T
- Chunk and highlight the letters if they form part of the code:
20A0931T – 20A 093 1T
- Say each 'chunk' aloud as it is checked off.

For more information about the skills that underpin the reading of codes and the challenges that face the dyslexic reader, go to page 30.



Reading everyday documents: written instructions

Manufacturer's instructions

Focus

The leaflet that goes with a product provides information and advice as well as instructions. The instructions might be written in different ways.

Perform a skin sensitivity test at least 48 hours before applying this product.

direct

A skin allergy test is **recommended** 48 hours prior to using this product.

indirect

If **lightening**, begin in the areas where the strongest degree of lightening is required.

conditional

in a **certain order**

When development is **complete** emulsify the colour with a little warm water and rinse out well.

Instructions might be set out in different ways. They might also tell you what to do and what **not** to do:

• **DO NOT** USE IF:

- your client has previously experienced a reaction to a hair colourant
- your client has a sensitive, itchy or damaged scalp.

What not to do
set out as bullets

What to do set out in a table

Development time

	with heat	without heat
Nature/Classic	10 mins.	20 mins.
Special blondes/Reds/Intensive reds	15 mins.	30 mins.

Do not shampoo the hair. Apply the colouring mixture immediately from roots to ends.

Both set out as continual text

HINT: For best results when lightening, ensure you apply sufficient product.

'extra' instruction

In case of contact with eyes, **rinse** immediately with water. **Wear** suitable gloves.

In **direct** instructions, action words help you to work out the number of things to do.

Tip

- Read instructions all the way through before you start.
- Find out the meaning of any unfamiliar words.
- Picture the whole process in your head.
- Put instructions into your own words to check you know what to do.

Sample page from the Embedded Learning Materials (Ha 3:3 p. 248). Other examples of reading written instructions from the Embedded Learning Materials are: Ma 2:15 p. 165; Co 4:3 p. 223; Ey 0:16 p. 40.

Be aware that the dyslexic learner . . .



- **needs more time to read instructions** – they have to go through them more than once (maybe several times) before they can be certain they have understood everything
- **can become very flustered if required to read quickly or if someone watches them as they read** and will often resort to reading quickly, but probably inaccurately
- **finds it very difficult to read aloud without any preparation** – so whilst it may seem a good idea to ask a person to read something aloud to ensure that they have read the instructions accurately, this will almost certainly ensure that the dyslexic person ends up remembering nothing!
- **will find it harder to remember the instructions** and will need to keep them handy until the task has been carried out
- **often feels that he or she knows intuitively what to do** and pays little heed to instructions; sometimes they are right – and sometimes they come unstuck!



Try this!

- **Allow plenty of time** for the learner to read the instructions.
- **Encourage asking for clarification** – it's better to spend time at the beginning of a job making sure that the learner understands what to do than for them to get it wrong and waste time and resources putting things right.
- **Ask the person to repeat and explain** the instructions in their own words to a colleague or to the person who has given the instructions.
- **Ask the person to recall** how many parts there are to the instructions if they are sequenced or numbered to provide a memory 'hook'.
- **Ask direct questions** such as 'So what is the first thing you have to do? What is the last thing? What do you do if . . . ?
- **Try to influence the way in which the instructions are written in the first place** – well spaced, large typeface, key words in bold and with clearly numbered or bullet-pointed sections.
- **Support the person to carry out the job if at all possible.** This will pay dividends as most dyslexic learners are 'hands-on' learners and will have little problem doing the job once they have done it once. (If this is not possible, then encourage the learner to 'picture' themselves doing each part of the job/task: most dyslexic people are very imaginative and this will be almost as good as actually doing the job or task itself.)



For more information about the skills that underpin the reading of instructions and the challenges faced by the dyslexic reader, go to page 30.

Reading more complex documents

Many dyslexic adults become successful readers even though it may have taken them a long and sometimes tortuous time to do so.

However, as becomes clear in discussions with and by observing adult dyslexic readers, many continue to experience challenges with reading, particularly when, as one person put it, 'you're tired, caught off-guard or put on the spot to read'. The challenges are generally greater the longer and more complex the text is to read.

Policies and codes of practice Focus

Policies and codes of practice are important work documents that help you to do your job better and protect you and your colleagues and clients. The policies you are asked to read at work can be long and complicated. Reading strategies can help you to find particular information quickly.

When you read to get the **gist**, or general idea of what something is about, your eyes **skim** across the page.

Your eyes often pick out the things that stand out or look different.

This is a bit like looking over a crowd to get an idea of age group, sex and number.

Your eyes might pick out and read:

Titles and Subtitles
 – dashes • bullet points
italics **colour** **bold words**
CAPITAL LETTERS
underlined words

This helps you get a general idea of what the information is about.

Sometimes you know what sort of information you are looking for. You can search the text quickly for relevant words or phrases.

Your eyes move quickly, or **scan**, down the text to pick out the parts you want.

This is like looking for your name on a list.

The words you scan for will depend on what you want to know. For example, if you want information on your employer's duties, you would scan the text for related words such as 'employer'.

This helps you to find the part of the text you need to read.

Sample page from the Embedded Learning Materials (Ha 4:3 p. 304).

Other examples of reading more complex documents from the Embedded Learning Materials are: Ha 4:3 p. 304; Ey 1:9 p. 107; Pa 1:6 p. 81.



Be aware that the dyslexic learner . . .

- finds it **hard** to read accurately at speed
- generally **hates** reading aloud
- frequently **omits, inserts or transposes words** (on/no, was/saw)
- often **reads a word as another one** because of similar shape and/or length (e.g. diary/dairy, Wolverton/Wolverhampton)
- can **lose their place** in long text
- finds it **tricky to skim read** for gist and **to scan efficiently** for specific information
- finds it **hard to decode unknown words**
- **sometimes changes letter and/or number order**, e.g. friend/frenid; 2143/ 2341
- finds it **difficult to read handwritten text**
- does not always **read and understand** first time.

Since reading involves visual and auditory skills, the reading challenges listed above can be **visual, auditory, or both**.



Try this!

- **Observe** and, most importantly, **ask the dyslexic person** how they actually experience print itself. It may be the first time that anyone has actually talked about **what happens** when they read. If the reply mentions eyes watering or becoming sore, or print moving, swirling, going out of focus, or having difficulty sustaining the reading task when the text is long, then this certainly points to some underlying **visual disturbance**, and an appointment with an optometrist may be advisable.
- **Photocopy text onto pastel paper**. Many people with these particular visual challenges find lemon or pale blue to be the most effective, but any colour generally helps a person who is sensitive to white light.



- Use a transparent coloured overlay on top of the text that is to be read, and if at all possible remove any nearby white 'distracters', e.g. white paper.
- Encourage the learner to experiment with **changing the colour of the computer screen, font colour and size** until they find a combination that suits them. Use text to speech software such as Ommni reader or TextHelp.
- Increase line spacing and reduce distractions on the page.
- Do not use capital letters to emphasise words. Capital letters are harder to read because they lack the visual differences of lower case letters – compare **NOTTINGHAM** / Nottingham.
- Encourage line guides to track through text and find ways to mark text.
- Some people find it helpful to use a line guide held below the line they are reading. If the guide is transparent, the reader is still able to read what is about to come on the next line whilst reading the line they are on – this helps them to read with more meaning and fluent intonation. Some readers also find it helpful to use their finger to track word for word; encourage this, if it helps.

Introduction

This Dyslexia Support Pack derives from the work carried out in two major Skills for Life (SfL) Projects: the Embedded Learning Materials (ELM)(2002-05) and Supporting Dyslexic Learners in Different Contexts (2004-07). Both have provided high-quality SfL materials; ELM provided materials to use directly with learners, while Supporting Dyslexic Learners in Different Contexts trained teachers using a blended learning training course. This Dyslexia Support Pack has been developed from the strategies and techniques included in the ELM that support dyslexic learners, taking into account the strategies and techniques from Supporting Dyslexic Learners in Different Contexts.

qualifications in work-, college- and community-based settings. The aim is to bridge teaching the specific content of the programme of learning on the one hand; and literacy, language and numeracy (LLN) on the other. The materials build on the firm evidence that there are many adult learners working towards national qualifications whose vocational skill level is not supported by their LLN confidence, and therefore certain 'barriers' stand in the way of successful vocational attainment. By setting LLN learning in realistic context-based settings, the hope is that the value of enhancing LLN skills will be obvious to learners. Supporting Dyslexic Learners in

quality SfL materials: ELM provided materials to use directly with learners, while Supporting Dyslexic Learners in Different Contexts trained teachers using a blended learning training course. This Dyslexia Support Pack has been developed from the strategies and techniques included in the ELM that support dyslexic learners, taking into account the strategies and techniques from Supporting Dyslexic Learners in Different Contexts.

The Embedded Learning Materials in the context of the Skills for Life Strategy: 'Embedded teaching and learning combines the development of literacy, language and numeracy with

that there are many adult learners working towards national qualifications whose vocational skill level is not supported by their LLN confidence, and therefore certain 'barriers' stand in the way of successful vocational attainment. By setting LLN learning in realistic context-based settings, the hope is that the value of enhancing LLN skills will be obvious to learners. Supporting Dyslexic Learners in Different Contexts was commissioned by the DFES Skills for Life Strategy Unit in August 2004 to build on the earlier project, A Framework for Understanding Dyslexia (2004). The aim of the training was to develop a set of blended learning training

- Cover up what has been read and use a line guide above the line being read and move it down as they read the text.
- Mark the place in a piece of text where they stopped reading – a sticky note does the job well.

Dyslexic Learners in Different Contexts (2004-07). Both have provided high-quality SfL materials; ELM provided materials to use directly with learners, while Supporting Dyslexic Learners in Different Contexts trained teachers using a blended learning training course. This Dyslexia Support Pack has

numeracy (LLN) on the other. The materials build on the firm evidence that there are many adult learners working towards national qualifications whose vocational skill level is not supported by their LLN confidence, and therefore certain 'barriers' stand in the way of successful vocational attainment. By setting LLN learning in realistic context-based settings, the hope is that the value of enhancing LLN skills will be obvious to learners. Supporting Dyslexic Learners in Different Contexts was commissioned by the DFES Skills for Life Strategy Unit in August 2004 to build on the earlier project, A Framework for Understanding Dyslexia (2004). The aim of the training was to develop a set of blended learning training materials to train staff from a number of different settings (e.g. FE/AC, workplace and offender settings) in how to select and use dyslexia-friendly

combines the development of literacy, language and numeracy with vocational and other skills. The skills acquired provide learners with the confidence, competence and motivation necessary for them to

Be aware that the dyslexic learner . . .



- **has to work hard to read unfamiliar or specialist words;** they either guess because of what the word looks like or reminds them of, or they stop to decode each word, which interrupts their flow of reading
- **often needs to sub-vocalise** because they have to read every word
- **uses context a lot more than efficient readers to 'guess' or predict words,** but this often leads to mistakes
- **finds it difficult to fully master the sound/letter system** on which we base our reading system; this makes it difficult to tackle new words.

Try this!



- Encourage the learner to **split longer words up into syllables or manageable 'chunks'** that seem to make sense to them, e.g. in/for/ma/tion, pro/cess. This aids pronunciation (as well as spelling). Try using a card to move along the word as each 'chunk' is read, in order to gradually blend 'chunks' of letter sounds from left to right.

e.g. (with inflammable) in nable

- Decode grapheme by grapheme if the word is short. (The reader needs to know that some sounds or phonemes are represented by more than one written letter – e.g. sh in ship – however short the word may be.)
- **Identify the root word and any prefixes and suffixes.** This particularly aids comprehension (e.g. in transported, port means to carry or move; the prefix trans- means 'across', and the suffix -ed means that it has already happened, or that it is in the passive voice). Using this method the reader builds a word from its parts, but may not start at the beginning of the word.



- Encourage the learner to **look for recognisable words within long words** to help them to build up the word from its parts, e.g. **impairments**; **applying**; **performance**. (Be careful that the 'words within words' support the sounding out of the word – it doesn't help to identify the word **cat** in the word **vocational** because although it may help spelling it would not help the learner to pronounce the word. In this particular example, using syllables as a method of breaking up the word, would be much more helpful, e.g. vo/ca/tion/al.)
- **Make the text easier to read** in the first place. (This may not always be possible, either because specialist vocabulary is specific to the task or occupation and must be used, or because the text is fixed by the workplace and/or statutory requirements, e.g. health and safety law.)

Making text easier to read

In the workplace and in everyday life, texts are regularly produced at levels way above those of some of their readers. It is impossible and impractical to expect authors to write in a way which caters solely for those challenged by reading complex text, but there are certain principles that would make it easier for everyone to read published or in-house materials.

Design

The Basic Skills Agency identified the following elements as important in the design of written materials:

- sufficient 'white space'
- font style – avoid typefaces where 'rn' can be mistaken for 'm', etc
- font size – this depends upon nature and purpose of text, but 12 point is generally considered to be easily read by most people
- use of upper and lower case letters – overuse of capital letters makes text more difficult to read
- illustrations – density of text can be broken up by appropriate illustrations, photographs etc. (avoid placing text over illustrations because this makes it more difficult to read)
- page layout; page breaks – headings and new sections are best at the top

of pages; page numbering should be clear; lines between columns can be helpful

- appropriate use of bullet points.

Paper should be thick enough to ensure that there is no 'show-through' from the printing on the next page, and it can help some readers if the paper is a pastel or cream colour.

Check the 'readability' of text and if possible simplify

Readability is an attempt to match the reading level of written material to the 'reading with understanding' level of the reader.

When thinking about how to make text easier to read, you should bear in mind the following:

- **Sentence length.** Try to include one main point only in each sentence. Similarly, keep paragraphs quite short because it is easier for the eyes to 'track' and easier for the reader to follow the sense.
- **Choice of words.** If it is not possible to rewrite using words that are easier to read, it is better to help a person to use some reading strategies for dealing with them. Be careful about writing in the passive voice – expressions like 'the screw is to be placed in the securing hole' are

more difficult to understand than 'put the screw in the securing hole'.

- **Readability 'tests'.** You can check the readability of the material used in your workplace by using a facility available on many word-processing packages or by using a test such as SMOG, which will give a rough idea of the level of difficulty of your text. (See page 33 for more about the SMOG formula and two examples of how it has been used on a piece of text to find out its readability level.)

You may wish to check the **readability** of your materials. Some you may have some control over, some you may not. Even if you cannot change certain materials, knowing their readability level will help you anticipate the challenges that they could pose for dyslexic readers.

For more information about the skills needed for complex continuous reading, and the challenges faced by the dyslexic reader, go to page 30.



6 Why is it a challenge for some dyslexic learners?

Reading labels

Reading labels requires a person to use **skimming and scanning** reading skills.

Dyslexic readers generally share one thing in common – a difficulty with reading at speed.

Skim reading relies upon processing visual information quickly – reading whole words, understanding and recognising format and purpose, and recognising graphical information quickly in order to answer the following questions:

- What is this text about?
- Do I need to read any more of it?

Efficient readers can look quickly at any piece of text (including a label) and spot individual key words and usually gather what it is about within a few seconds; not so the adult dyslexic reader. Familiarity with a particular format (e.g. daily data sheets) does help, but in the case of unfamiliar text, the dyslexic reader may continue to harbour a fear that he or she may misinterpret the message. This can often lead them either to read the whole thing rather laboriously, or to ignore it.

Appropriate and relevant graphics that support and interpret the message help enormously – the majority of

dyslexic learners find that they can operate successfully within a multi-sensory, graphically supported ICT environment, where a label is often supported by graphics and has only small amounts of text.

Scan reading relies upon the reader being able to recognise whole words at a glance or to isolate specific data, whether the text is presented within a set format (e.g. label, delivery note, contents page, catalogue/manual), or is in a more densely written format (e.g. report, letter, company policy).

The dyslexic reader does not always have a clear image in their head of the word(s) they are looking for. Therefore they do not 'jump out at them' in the way they do for more confident readers.

Reading charts and tables

To extract information from charts and tables quickly and efficiently requires effective scanning skills and sometimes short-term memory.

Scanning skills help us to find, isolate and extract what we want very quickly and efficiently. **Good eye tracking skills** are required for this visual task but some dyslexic readers experience **visual distortion** (scotopic sensitivity / Meares Irlen syndrome), usually with black

print on bright white paper. This can cause a difficulty with tracking smoothly along and down through text, and with finding and keeping a place in the text or within the rows or columns of a table or chart.

Short-term memory is required when a particular chart or table requires the reader to hold one piece of information while they search for another. This happens when, for example, a 'key' is part of the chart or table. Using a 'key' (with symbols/abbreviations etc.) to interpret additional information is not in itself particularly challenging for the dyslexic learner. What is challenging is the additional demand it puts upon his or her short-term memory.

Reading codes

Eye tracking/convergence difficulties can make interpreting a long code very tricky, and the dyslexic reader is liable to miss or not consciously 'log' a digit or a letter. 'Chunking' is an effective strategy for all readers, but especially for the person who is dyslexic.

Some dyslexic have a strong tendency to switch letters and numbers, so for example **on** can be 'read' as **no** and **21** as **12**. This is disastrous when interpreting a code, so it is more important than ever that the dyslexic learner is encouraged to take their time when faced with codes and to use strategies that have been shown to work for them.

Reading written instructions

Written instructions at work may remain very much the same for long periods of time, whereas others may change almost daily. Both will require:

- accurate reading
- the ability to retain certain amounts of information
- that things are carried out in a sequence
- actions which may or may not be necessary – are conditional on what happens (e.g. **If** the machine runs hot, then . . .)
- reading new and/or technical or specialist words.

The possibility that a dyslexic learner will misinterpret some part of written instructions is very high, particularly if they feel under pressure from time constraints or are being observed.

Written instructions are not always presented clearly. This makes it even harder for dyslexic readers, who might already be feeling under pressure to read and respond quickly, to understand them because they need longer to decode words and re-read in order to convince themselves that they have read and understood everything.

Many dyslexic learners can be challenged by maps and plans/ directional tasks, in particular confusing left and right.

In many cases, especially for those (both dyslexic and non-dyslexic) who have a kinaesthetic learning style,

actually **doing** the job is the quickest and easiest way to learn it.

Reading more complex documents

Good readers use all of their reading skills in order to read complex text. This involves using visual skills and auditory skills.

Visual difficulties encountered by some dyslexic learners can result in:

- problems with reading at speed or conversely reading too quickly but inaccurately
- losing their place when reading
- skimming and scanning difficulties
- not being able to recognise the majority of whole words at a glance.

To read effectively using our visual reading skills we need to be able to recall words stored in our long-term memory and recognise them on the page; recognise and focus upon individual words (convergence); and track smoothly (saccadic eye movement) along a line of text and drop down to the next line with ease. We also need to be able to go away or look away and find our place back in the text with the same relative ease. For many dyslexic readers these things are a challenge: they have a lot of very hazy representations of words in their long-term memory and cannot reliably recognise some words in different contexts. Conditions such as scotopic sensitivity (also known also as Meares Irlen syndrome), which causes print to

become distorted, can be so disturbing for the person struggling to control his or her distorted vision that trying to read for any length of time can cause headaches and eyes to water and become sore. There is obviously a disincentive to continue reading.

Auditory difficulties encountered by some dyslexic learners can result in them:

- not easily applying auditory knowledge to decode new/unfamiliar words, e.g. sounding out the letters, blending sounds together, splitting words into syllables, recognising prefixes and suffixes
- not hearing a word correctly and therefore not recognising it in print.

The ability to 'decode' new or unfamiliar words is fundamental to reading English, and it requires an understanding of the connection between written symbols (graphemes) and the sounds they make when heard within words (phonemes).

Many dyslexic people find it very difficult to fully master this sound/letter system because their phonological awareness (ability to hear and manipulate sounds heard within words) is weak, and stopping to decode unknown words interrupts their flow of reading. Instead they often rely upon other strategies such as guessing and prediction. In all cases, understanding of the text is adversely affected.

Appendix: Readability

The SMOG Readability Formula is the simplest way of calculating the readability level of a piece of text. The following example is adapted from *Skills for Life* Issue 6 2002/03.

Sue Torr could not read or write until the age of 38. She told no-one about it, not even her husband or children. For **everyday** tasks she relied **heavily** on her **family**. She was **desperate** to tell someone that she could not read, tired of telling lies every day and lacked any self-esteem.

In 1991, she met Sue Collins a parent **education** worker at the **primary** school, who was there to help parents with their **literacy** problems.

Everything began to change for Sue. She began lessons and learnt to read and write. She was **encouraged** to write up her **experiences** and an outreach worker from the **Theatre** Royal Plymouth, turned her writings into a script. The play *Shout it Out* has gone on to win many awards and is part of a **successful national literacy** project **supported** by the Basic Skills **Agency**.

After 20 years of keeping her **illiteracy** a secret, Sue is now **regularly invited** to speak at **conferences** around the world, raising **awareness** of **literacy** issues and **inspiring** others with her **remarkable** story.

1. After selecting your piece of text, **count 10 sentences**

2. Count the number of **words with 3 or more syllables (24 in this text)**.

(Tip – say the longer words slowly and tap out how many

3. Circle the number closest to your answer

1	4	9	16	25	36	49	64	81	100	121	144	169
---	---	---	----	----	----	----	----	----	-----	-----	-----	-----

4. Find the square root of the number you circled

1	4	9	16	25	36	49	64	81	100	121	144	169
1	2	3	4	5	6	7	8	9	10	11	12	13

5. Add 8

Readability level



13

It is not surprising that this article, which has been written with readability issues in mind, comes out with a readability of 13. A readability level of **10** is understood by most people. **12 or 13** is an acceptable level to aim for. Have a look now at another example. Below is a piece of text taken from an employer's induction pack.

Working towards Equality for Employees

What is unfair **discrimination** and **harassment**?

It is treating people less **favourably** at work because of their race, colour, sex or other **characteristics**. Unfair discrimination may be direct or **indirect**. If it is direct **discrimination** it means that a person or group of people are denied certain workplace **opportunity** or **benefit**. People may be treated less **favourably** because of unfair or **arbitrary assumptions**, such as a **characteristic generally attributed** to people of their sex, race, colour, etc. For **example**, saying 'the best **candidate** for a job is a woman'. **However** the **employer** gives the job to a man because the **employer** assumes the woman will **eventually** ask for **maternity** leave.

Indirect discrimination occurs when a **seemingly** harmless **attitude**, rule or practice **discriminates** against a group of people. For **example**, a **company** requires **everyone** who applies for a job to take a written test. People with **visual impairments** may be indirectly discouraged from **applying**.

Harassment is an **unwelcome** or **offensive** remark, request or other act that **discriminates** against a person by harming the person's job **performance** or job **satisfaction**.

1. Count 10 sentences (there happen to be 10 here including the title and opening question).

2. Count the number of words with 3 or more syllables (43).

3. Circle the number closest to your answer

1	4	9	16	25	36	49	64	81	100	121	144	169
---	---	---	----	----	----	----	----	----	-----	-----	-----	-----

4. Find the square root of the number you circled

1	4	9	16	25	36	49	64	81	100	121	144	169
1	2	3	4	5	6	7	8	9	10	11	12	13

5. Add 8

Readability level



15

Supporting writing

Contents

1 What are writing skills?	36
2 When do we use these skills?	37
3 Writing and the Embedded Learning Materials	40
4 Writing skills and the dyslexic learner	41
5 Challenges and tips for the dyslexic writer	42
• Filling in forms and tables	42
• Writing letters, e-mails and memos/messages	46
• Taking notes	50
• Writing reports/assignments	52
6 Why is it a challenge for the dyslexic writer?	56

1 What are writing skills?

Planning

Everything we write – from a shopping list to a novel – involves an element of planning.

Decisions are made about how much to write and what to include or leave out.

Thinking about what to write in advance reduces the risk of straying from the point and writing too much or too little.

Writing appropriately for audience and purpose

Each piece of writing has a specific purpose, e.g. to pass on a message, to explain something in detail or to record selected details.

The writer has to make decisions about:

- format and structure
- language suitable for the reader ('audience') and purpose, e.g. text message, formal letter
- how much to write
- what to include.

Proficient writers generally use all of these skills when performing a written task.

Proofreading

Proofreading is more than reading through a completed piece of writing to find grammatical and spelling errors: the clarity and conciseness of the message need to be assessed as well.

Writing clearly and accurately

Legible handwriting and accurate punctuation, spelling and grammar help to convey the significance of the written message to the reader, especially in formal writing such as on forms or in assignments.

capital and lower case letters

select vocabulary

linking words

forming letters

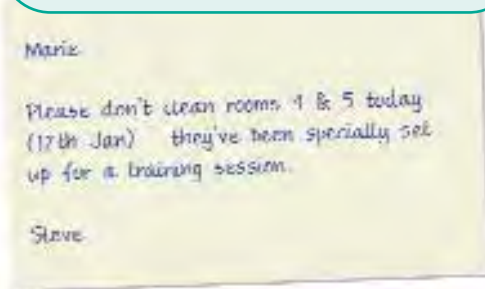
structure

letter order/word order

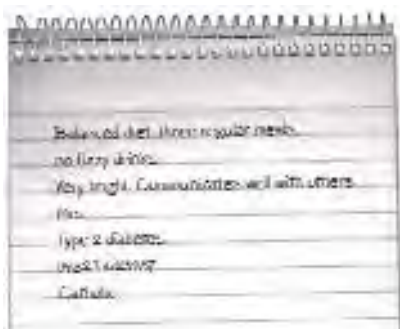
2 When do we use these skills?

To pass on information to others

This might be a message from the writer to another person or a message from a third party taken over the telephone.



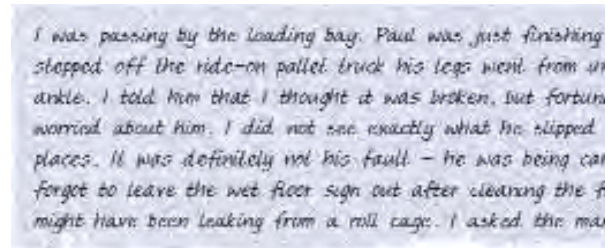
To record information for ourselves



This includes personal notes made during training sessions, or research notes from books or web sites.

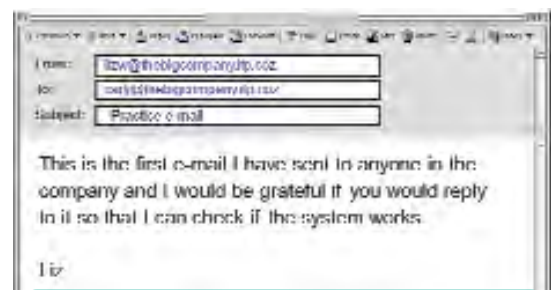
We might also use notes to remind ourselves about an important issue or how to carry out a particular job.

To record information for others



This includes things like accident report forms which need to be kept for legal reasons and may need to be read several times by different people.

To ask for, check or confirm information



For example, this might be in the form of an informal e-mail to a colleague or a formal letter to a customer asking for information.

For personal pleasure

This may include writing to a friend, text messaging, writing a diary, or writing poetry, a novel, an article etc.

What do we write in the workplace?

Forms and tables

- Specific format/style
- Limited space
- Accuracy
- Specific language conventions
- Technical words
- Abbreviations
- Codes
- Some self-generated text
- Concise level of detail
- Fact/opinion
- Limited planning time

[illegible]

Memorandum

To: Office assistant

From: Nicolaus Group

Date: 12th March

Re: Purchase order number 12345

Thank you e-mailed order to me 1 month ago.
I thought I might have been told to
check the purchase order of 10th March.

Thank you.



The screenshot shows an email client window with the following details:

- From: nicolausgroup@nicolaus.co.uk
- To: info@thebigcompany.co.uk
- Subject: Purchase e-mail

Below the email header, the beginning of the message body is visible: "This is the first email I have sent..."

The screenshot shows an email client window with the following details:

- From:** %recipient@example.com
- To:** cse@cs.cmu.edu
- Subject:** Practice e-mail

The body of the email contains the text:

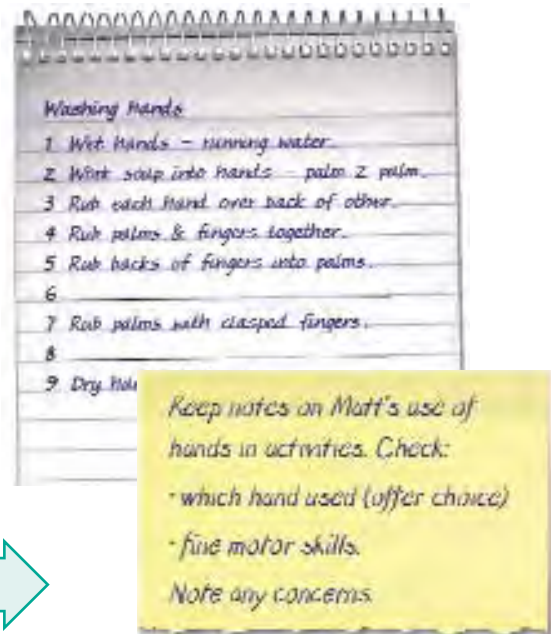
This is the first e-mail I have sent to anyone in the company and I would be grateful if you would reply to it so that I can check if the system works.

Letters, e-mails and memos

- Formal/informal language
- Format/style/layout conventions
- Specific language
- References
- Headings
- Abbreviations
- Grammar
- Punctuation
- Spelling

Notes

- Writing at the same time as listening
 - Self-generated text
 - Layout
 - Selecting key details
 - Speed
- writing/abbreviations
- Order/sequencing
 - Clarity of handwriting
 - Spelling



Reports or assignments

- Planning
- Researching
- Accuracy
- Length
- Selecting format/style
- Selection of information
- Specialist/technical words
- Self-generated text
- Formal language
- Checking
- Grammar
- Punctuation
- Spelling
- Keeping to deadlines



3 Writing skills and the Embedded Learning Materials

The examples of writing in the Embedded Learning Materials are based upon the requirements of individual workplace/vocational areas and many everyday situations. While they vary according to the situation, they do have much in common. For this support pack the skills have been categorised under the following headings:

- Filling in forms and tables – preset format, limited text
- Writing letters, e-mails, memos/messages – preset style, text length determined by purpose and audience
- Taking notes – open, informal style, text length determined by writer
- Writing reports/assignments – structured, formal, often complex style, generally lengthy text.

4 Writing skills and the dyslexic learner

Writing is the skill that presents the greatest challenge to the dyslexic person, who may be required to read and listen at the same time as writing, and to write while being observed with little time for planning and checking.

'Most workplace writing needs to be clear, well-structured, and easy to understand. It must also be precise and sharp: no unnecessary verbosity and no long rambling sentences.'

Diana Bartlett and Sylvia Moody,
Dyslexia in the Workplace,
Whurr 2000

The irony is that many people who are dyslexic have an abundance of thoughts and ideas, but have difficulty in expressing these in writing. They will often seek out employment that does not involve much writing, but are

dismayed to find that there is still a certain amount to be done.

Rather than having them resort to avoidance tactics, it is of course best to support dyslexic adults to:

- find ways of tackling the mental barriers associated with writing
- develop their writing skills
- use strategies to alleviate the worst of their problems
- inform employers to enable them to have more understanding of the possible difficulties faced by their dyslexic employees and to help in the first instance by allowing more time for writing tasks. (The Disability Discrimination Act 1995 asks that 'reasonable arrangements' be made in the workplace to accommodate specific needs.)

5 Challenges and tips for the dyslexic learner

Filling in forms and tables

Accident report forms

Focus

On forms like this accident report form, you need to write information clearly so that people can understand exactly what happened.

Before you start, **read** the form through to make sure that you:

- understand all the instructions on it
- know what goes in each part of the form
- have all the information you need to fill in every section.

If you are in any doubt about anything – ASK.

Use the:

- **HEADINGS**
- numbers
- *style of type*
- **colours**

to help find your way around the form.

ACCIDENT REPORT	
1. About the person who had the accident	
Name _____	
Address _____	
_____	Postcode _____
Occupation _____	
2. About the person filling in this record	
Fill this in only if you are <i>not</i> the person who had the accident.	
Name _____	
Address _____	
_____	Postcode _____
Occupation _____	
3. About the accident	
Say when it happened.	
Date _____	Time _____
Say where it happened. _____	
Describe how it happened and any injury caused.	

Sign and date the record:	
Signature _____	Date _____
4. For the employer only	
Complete this box if the accident is reportable under RIDDOR.	
How was it reported? _____	
Date reported _____	Signature _____

Part 3 is where you **write** the details of the accident.

There is not much room to write here so you should include just:

- **relevant facts**
- **necessary detail.**

You should also:

- use **formal** language
- write details in a **logical order**
- **check** what you have written for any errors in grammar, spelling or punctuation.

If an accident happens at work, a report has to be completed. This is the law. The report is confidential and must be kept safe. The form may be needed as evidence.

It is important that what you write is:

- clear
- to the point
- honest but not biased
- factual.

Tip

Draft your report on a piece of paper first so that you can check it through before you write on the form.

Sample page from the Embedded Learning Materials (Ca 1:17 p. 122). Other examples of filling in forms and tables from the Embedded Learning Materials are: Sc 3:9 p. 205; Wa 2:11 p. 130; Sc 3:17 p. 221.

Be aware that the dyslexic learner . . .



- appreciates the structure of forms and tables and the minimal amount of writing required but:
 - might write in the **wrong place**
 - can **enter data inaccurately**, e.g. reverse digits, get the wrong sequence of digits/letters
 - can **find it hard to copy accurately** from one written source to another because of visual tracking or short-term-memory difficulties
 - might **make spelling errors**
 - might find it **tricky to write small enough to fit** in a limited space or cell
 - **can become anxious** and sometimes impulsive if expected to record data on the spot in a busy environment, especially if being observed, e.g. recording down-time on a machine; temperature in the stores/kitchen.



Try this!

- Point out the importance of **double checking** everything – insist on it becoming ‘second nature’ to do so because of the learner’s high risk of making errors in data entry.
- Encourage the learner to **say things aloud** as they record and read back data – **say digits individually but in chunks**, e.g. 203467901 becomes: two zero three four six seven nine zero one (Note: It is risky to say chunks such as two hundred and three as numbers because the zero, being ‘silent’, can be left out accidentally.)
- Place the document to be copied from so that it is in a **position that is easy to read from**, without too much looking up and down (for example, use a paper stand with a line guide) to reduce the possibility of error.
- If **single words are called for** in the form, encourage the dyslexic person to **write in capital letters**. (Although capitals are not ‘dyslexia-friendly’ for reading, it may be easier for a dyslexic person who has poor writing skills to produce legible text in this way.)
- **Notify other people** who use these forms (e.g. supervisors) about the effect that rushing will probably have upon the dyslexic person.
- **Build confidence** by **allowing ample time** for the dyslexic person to become familiar with the form/table.
- Support the learner by **going through the form**, checking that they have understood the headings the type of entries required. ‘Model’ the process by doing it a few times – the dyslexic person generally learns well by watching and doing rather than by listening.
- If it is possible (and appropriate) **photocopy the form onto pastel paper** to ease any visual disturbances.
- **Use a coloured overlay or a transparent reading ruler** to help cut down on visual tracking problems.
- Show the learner how to **change the background screen colour** if he or she is entering data directly into a computer and how to change it back for other users, if necessary.



- Encourage the learner to keep a **personal pocket-sized dictionary** of words frequently needed for the job to reduce the strain of trying to remember how to spell them every time – the dyslexic person may well spell correctly on one of his or her 'good' days and forget that they've ever seen the word on a 'bad' day. This inconsistency is one of the greatest frustrations for the person with dyslexia and the least understood aspect of dyslexia for peers and colleagues.
- Use spare pages in notebook to **write down acceptable 'stock phrases'** which can be used on a form where a comment is expected. Make use of text messaging abbreviations and record these in notebook, if this is appropriate for the job.
- **Reformat the form** if possible particularly where the same data is required day after day, e.g. recording time for cooking:

Time in	Temp in
:	°C
:	°C
:	°C

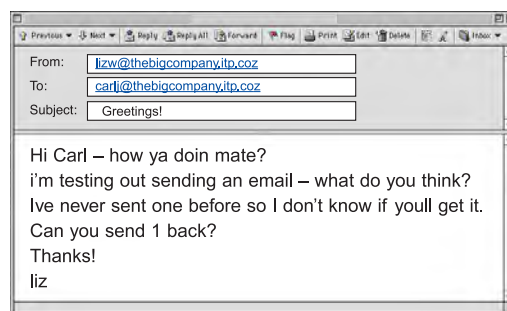
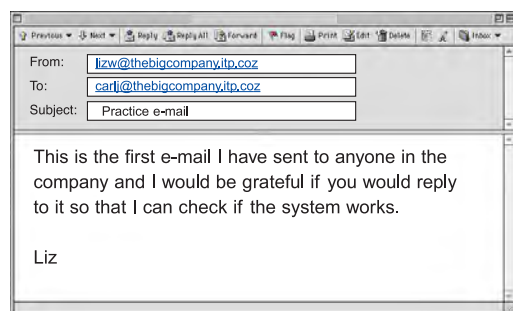
For more information about the skills that underpin filling in forms and tables and the challenge faced by the dyslexic writer, go to page 56.



Writing letters, e-mails and memos/messages

Writing an e-mail

Choosing the right words is important when writing an e-mail, to give the right impression. At work you may need to use a formal language style. If you are e-mailing friends from home, you can use a more informal style.



Formal or informal?

Which e-mail is brief and formal? Which e-mail has a chatty, informal style? Which one would you send to your work colleague? Why?

Look at these features of formal and informal language and pick out these features in the e-mails.

Formal language:

- reads like a letter or formal document
- does not use contractions or slang
- uses the correct technical terms
- is proof-read for spelling, grammar and punctuation
- is professional
- is best for use at work and for formal letters from home especially as it is a permanent record of what you have said.

Informal language:

- sounds more like a conversation, how you would speak to someone
- uses contractions and slang words
- uses exclamation marks
- may not use correct punctuation, grammar and spelling
- is not professional
- is fine for e-mailing friends.

Tip

Formal e-mails should have:

- | | | |
|--|----------------|--------------------|
| • a subject | • a greeting | • a closing remark |
| • an opening line, saying why you're writing | • main details | • an ending |

Sample page from the Embedded Learning Materials (ICT 4:3 p. 68). Other examples of writing letters, e-mails and memos/messages from the Embedded Learning Materials are: Ee 2:28 p. 184; Ee 3:11 p. 247; Sc 5:17 p. 317.



Be aware that the dyslexic learner . . .

- generally knows what they would like to say, but **finds it difficult to put it down in writing** – ‘It’s as if my mind goes blank the moment I put pen to paper!’
- finds it **hard to plan because of short-term-memory difficulties** – has the ‘big picture’ but not enough spare memory to be able to break it down into small sequenced steps and retain them long enough to make a note of them
- finds it **hard to recall the conventions** needed for writing a letter, e.g. layout, formal introduction, signing off
- is often **uncertain about how much to write** and either writes very sparingly using words he or she knows how to spell, or **writes long, complex sentences which tend to wander from the main subject** (the latter is more common)
- is greatly challenged **by the ‘clerical’ skills of writing (spelling, punctuation, grammar)** – anxiety and stress can stop the dyslexic person in their tracks and it can be with great reluctance that he or she begins to write – particularly if it is by hand
- **finds it difficult to proofread and spot own errors** – ‘sees’ what he or she think they have written, rather than what they have actually written, especially if the writing is recent; dyslexic people often have great difficulty proofreading from a screen.



Try this!

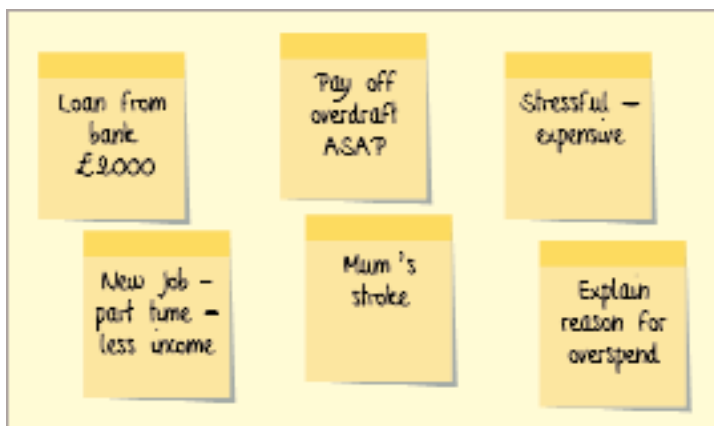
- Encourage the learner to use a **personal dictionary** to aid spelling and a **thesaurus** to extend vocabulary.
- Devise a '**crib sheet**' of **useful phrases** to use in formal letter writing, e.g. letter of complaint:
'I wish to point out . . .', 'I was disappointed to find . . .', 'I was concerned about . . .', 'I wish to bring it to your attention . . .', 'I look forward to an early reply . . .'
- Encourage the learner to **write fairly short, simple sentences** in the active voice, for example 'I will send you the information you need in the morning,' not 'The information you need will be sent in the morning.'
- Persuade the dyslexic person about the value of **planning what to write** before putting pen to paper or word-processing – this particularly important when writing a formal letter.
- Introduce a range of planning 'tools' such as those below, and encourage the learner to try them all to find which works best for them – point out that each has its own merits depending on the situation.

Concept mapping – you or the learner can create on paper or using a computer software program. The important thing about this 'tool' is that it allows thoughts and ideas to flow freely, yet become captured, linked together, added to and eventually ordered ready for writing.





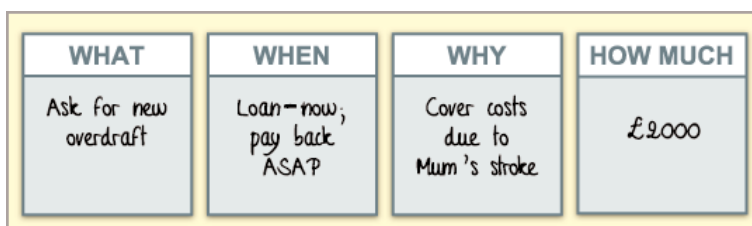
Sticky notes – useful for capturing random thoughts and for ordering/sequencing and re-ordering these thoughts before writing.



Spider diagram – another way of linking ideas around a central theme.



Box plans – each 'box' becomes a theme or eventually a paragraph. This appeals to those who like to use bullet points and a more linear approach to planning.



For more information about the skills that underpin writing letters, e-mails and memos and the challenges faced by the dyslexic writer, go to page 56.



Taking notes

Taking notes

Taking notes can help you remember important information and instructions. Here are some techniques to help you take notes while you are listening or reading.

To shorten words you can use:

- the **first letters** of related words
- the **first few letters** of a word
- **symbols** in place of words (= + @ & £)
- common **abbreviations** (i.e., e.g., etc).

HD = hard disk
App = applications
Ctrl + Alt + delete = reboot
Insert lets you put in things e.g. symbols, files, etc.

Pointer moves on screen when mouse moved.
Can drag objects - clicking left mouse button - keep down & drag across screen.
Read b4 printing 2 check 4 errors

To shorten sentences you can:

- **leave out words** that you don't need for the sentence to still make sense such as:
and the are as to is which
- use **arrows** or **hyphens** to link points.
- use **numbers** and **letters** in place of words (as in text messages).

The tab key can:

- indent paragraphs
- text across page
- skip to next box in forms
- across columns in tables

To switch on:

1. check power switch at rear of computer is in on position.
2. press on button at front of computer and monitor.
3. wait for dialogue box to appear.

To organise your notes you can:

- write related points in a bulleted list under headings
- use numbers to show the order to do things in
- keep your notes in a notepad or on sticky notes by your computer.

To help key points stand out you can:

- use **coloured pens** to link ideas and **underline** particularly **important points**
- use a **highlighter** for key words and phrases.



Tip

You can use a combination of these ideas. Make sure you can read and understand your notes.

Try it

Use short texts to practise some of these note taking ideas.

Sample page from the Embedded Learning Materials (ICT 1:6 p. 41). Other examples of writing notes from the Embedded Learning Materials are: FHy 1:2 p. 32; H+S 1:7 p. 44; Ey 4:12 p. 275.

For more information about the skills that underpin taking notes and the challenges faced by the dyslexic learner, go to page 56.



Be aware that the dyslexic learner . . .



- finds it **very challenging to listen and write notes at the same time**, particularly when answering the telephone and in training/lecture situations – notes may end up muddled, almost illegible, or they may not be taken at all; as a result, if the audience for the notes is someone other than the writer, then the writer's inadequacies are very exposed, and if the notes are for the writer only, they are probably of little use
- finds it **hard to write clearly and concisely** – it is sometimes easier to write at length than pare down information into note form whilst retaining all the meaningful information
- may have **handwriting difficulties** – sometimes so severe that the text is illegible
- **cannot always read their own writing.**

Try this!



- Relieve the stress of having to listen and make notes at the same time in training or lectures by suggesting that the learner records the session (with permission) using a **digital voice recorder**.
- Use a highly **structured telephone message pad** to 'scaffold' and minimise the amount that needs to be written by the learner – encourage the **learner to be assertive** and to ask the caller to slow down because he or she is dyslexic and is finding it tricky to listen and record information at the same time.
- Encourage learner to **slow down and plan** before writing. Even something as small and seemingly insignificant as a note or memo benefits from some planning. When there is too much writing, the main points are often obscured.
- **Highlight key points; use bullet points; use abbreviations** if they are commonly understood by recipients of the notes and remembered by the person using them!
- Use **recording facilities on a mobile phone or digital voice recorder** if notes are for personal use – bypass writing on the spot altogether.

Writing reports/assignments

Evidence for NVQ

Focus

To get an element signed off, you need to show that you have covered each of the points in the 'What you must do' section.

You may have to write a personal statement, explain to somebody what you have done, take part in a role-play or simulation or collect a witness statement from somebody who has observed you.

Before you start, make sure you know **what** you need to do to collect your evidence and **how** you need to do it.

Read the heading and think about **when** this happens.

Read each point and think about **what** it actually means in relation to the way you do your job.

Think about **how** you can prove that you do each thing mentioned on the list. Make a list of evidence you need.

Think about **what** you can say to prove what you know about the things on the list and **how** you can improve your knowledge.

Unit 1GEN4

Element 1Gen4.2

Support the work of your team

What you must do

To meet the national standard you must:

1. give your **team members** help when they ask for it
2. make sure the help you give them is within the limits of your job role and does not prevent you from completing your own work on time
3. pass on important information to your **team members** as soon as possible
4. maintain good working relationships with your **team members**
5. report any problems with working relationships to the relevant person
6. **communicate** clearly and effectively with your **team members**

What you must know

K13. why it is important to help team members in their work

K14. the limits of your job role – what you can and cannot do when helping other team members

K15. what could be essential information that needs to be passed on to a member of your team and why you need to pass it on as soon as possible

When you write your evidence, use the words from the section you are talking about.

- Change **(you)** to **I** and **(your)** to **my**
- Write as if it happened in the past:
I reported ..., **I checked ...**

When you talk to the assessor, use the words from the item on the list as part of your answer. Make sure you understand the jargon.

K13 'It is important to help team members in their work because ...'

K14 'I read my job description to be clear about the limits of my job role.'

Sample page from the Embedded Learning Materials (Ca 1:23 p. 136).

Other examples of writing reports/assignments from the Embedded Learning Materials are: Ma 3:20 p. 263; Ma 3.22 p. 268; H+S 3:6 p. 72.



Be aware that the dyslexic learner . . .

- is likely to find this type of writing the most **challenging** of all
- is almost certain to have **underlying problems with some aspects of basic writing skills**, e.g. spelling, punctuation, grammar, handwriting
- finds it **difficult to know where to start**
- can **'freeze'** entirely
- tends to think that the task of **writing is so arduous** that to spend time planning only adds to the load
- **might avoid using long words** because of spelling problems and end up with work which does not always reflect his or her knowledge on the subject, **or** has a tendency to **use far too many long words and sentences** in their writing, making them far too complicated, confused and sometimes with grammatical errors, e.g. maintaining either past or present tense
- is often **full of ideas** which he or she finds difficult to control and shape into coherent thoughts on paper
- is often **imaginative and creative**, which may result in 'wandering off' the subject
- **can sometimes miss out small words like 'not' or doesn't'**, creating a positive sentence when it should be a negative
- finds it **challenging to structure and sequence writing** into chapters, paragraphs, headings, subheadings, etc.
- **is easily stressed** by the thought of writing a long report or assignment, meeting deadlines or being watched as he or she writes
- finds it very **difficult to proofread and edit** written work – sees only what they think they have written, not what they have actually written.
- **uses a spellchecker but fails to check meaning of words** selected – this often results in bizarre mistakes and misunderstandings.



Try this!

- Help the learner to understand that **time spent in planning** before he or she writes **saves time in the long run** and will also reduce the anxiety and stress they feel when they don't know what to say and where to begin
- Introduce **planning strategies** and try each one out together to see which ones seem to work for the learner – mind maps, spider diagrams, sticky notes and box plans (see examples on pages 48–49).
- Discuss how many **paragraphs** there are likely to be; the main point(s) of each paragraph; the order of each paragraph and how to link each one together to provide the reader with coherent, logical text to read.
- Provide some **linking phrases**, e.g.
 - in addition, also, similarly
 - however, on the other hand nevertheless
 - as a result of, consequently, in order to
 - previously, then, whenever, next
 - for example, for instance
 - surprisingly, fortunately.
- Work especially on the **opening paragraph** in which the intentions of the writing are clearly explained. (**This does not have to be done first** – some dyslexic learners feel that they have to start at the beginning and work through to the end. Sometimes by working on the bit where they have something to say helps them to get started. Word-processing is very helpful here as text can be inserted anywhere at any time.)
- Work together on the **last paragraph**, which will probably summarise and draw some conclusions or findings and reflect the intentions of the opening paragraph.
- Use learner's competent oral skills (if that is the case for particular learner) to aid writing by **dictating thoughts into a digital recorder** or **Dictaphone** and then typing up or copying onto paper.
- Encourage the dyslexic person to **use his or her imagination to visualise the 'story'**, as it were, with them in it, writing it all down confidently – this can help to break the mental block of not being able to put pen to paper.
- **Take lots of breaks** to refresh concentration and to 'tick off' each



small part of what has been done to keep motivation high. Beware, however, that the mind can just drift and nothing gets done!

- Work at **keeping sentences simple** – this does not mean simple thinking or using only simple words.
- Eliminate handwriting difficulties, reduce writers' block and stress by **using ICT as much as possible** (most adult dyslexic learners appreciate this and find it liberating). The technology available is extensive and developing all the time, and includes:
 - word processing facilities (spell check, grammar check, word prediction)
 - voice-activated software such as Dragon Dictate
 - screen readers such as TextHelp
 - electronic spell checkers such as Franklin
 - mind-mapping software such as Inspiration, Mind Manager.
- Help the learner to identify his or her errors by **reading written work aloud** to them.
- Use **peers or 'buddies'** to help by listening and discussing ideas and being prepared to 'tweak' written text electronically for the dyslexic person before it goes out externally.
- **Act as scribe** when the content is more important than the clerical skills of writing.
- **Encourage the learner to identify own errors** – do not correct actual errors, but use the margin and an agreed code to alert the learner to the type and number of errors made in any one line. For example:
 - If there are two spelling errors in one line of text, then in the margin next to that line it would be noted **sp x2**.
 - If there is a grammatical error it may say **gr x1**.
 - If it is a punctuation error it may say **punc x2**.
- Establish with learner the **language of the question** in order to make sure that the learner's writing will produce the style needed, e.g. argumentative, investigative, evaluative.
- If the learner has to proofread for spelling, encourage them to work from the bottom of the text to the top – backwards, as it were. This will stop them getting involved in the content and help them to 'see' the words for what they really are, not what they think they are.

6 Why is it a challenge for the dyslexic writer?

Because of its 'public' nature, written work causes particular angst for dyslexic adults, especially if they have poor handwriting. It is often cited by dyslexic adults as one of the most stressful things they face at work and at times in their daily lives. Failure to write competently can be particularly damaging to an adult's self-esteem and confidence.

Filling in forms and tables

Pre-structured formats such as forms, tables and charts are helpful to the dyslexic learner because limited writing is involved. They provide a sequence of prompts to obtain information. However, aspects of these formats still challenge the dyslexic writer.

Accuracy and clarity are essential in this kind of writing, which requires not only conventional spelling but also error-free data and neat handwriting, which many dyslexic adults find difficult. Even after careful reading and good knowledge of the information required, the dyslexic person may still be incapable of filling it in correctly. 'It's as if I have a compulsion to make a mistake.' In order to carry out the task successfully, extra care and meticulous checking are necessary.

Writing letters, e-mails and memos/messages

Each of these has a predetermined format/style which can be approached as a 'writing frame'. However, this type of writing still requires planning and a knowledge of detail required for the audience and purpose. Whilst the dyslexic person may have no difficulty in deciding the purpose for the writing, they frequently find presenting information logically and succinctly difficult. He or she can find it difficult to select and pare down information, which can result in a letter being written without a clear focus and key points identified, for example.

Taking notes

People who are dyslexic generally process language in a different way from their non-dyslexic counterparts. Some describe it as a sort of auditory delay – they are slower at processing spoken words. Essentially they find it almost impossible to listen and think at the same time. As speech is in 'real time' it is difficult to 'replay' what someone has just said.

Imagine how hard it is for a dyslexic person struggling to process and remember what they are listening to in a lecture/training or on the telephone

whilst trying to write notes at the same time. In the meantime the clerical skills of writing (spelling, grammar, punctuation, etc.) are causing more difficulties and stress. For many dyslexic people this is an impossible task and they describe it as reaching 'blank out' or 'overload'. 'It's as if I can't hear anything for while, and then it comes back in.'

Writing reports/assignments

This kind of writing can be the most challenging of all but is seldom done in the full glare of public scrutiny, so sometimes with adequate support it can be the most successful. However, the accurate, logical and structured thinking required can present considerable problems for the dyslexic writer. Procrastination and the lack of adequate planning strategies can result in rushed work that does not reflect the author's ability.

The dyslexic writer either 'freezes' and can hardly generate any text at all, or finds it difficult to curb and structure their thoughts into coherent, well-written sentences and paragraphs. Commonly the dyslexic person complains of it 'all being there in my head but I can't get it out and down on paper!'

The dyslexic person is often an 'out of the box'/'big picture' thinker and therefore finds it difficult to focus on what is relevant to a particular document. Getting information,

thoughts and opinions down on paper is a stressful, problematic process for most dyslexic people, although their understanding of what is required is generally not compromised.

In order to write fluently, the writer needs to allow his or her thoughts to flow freely and uninterrupted from the pen or keyboard. However, when thoughts are plentiful but possibly muddled, when spelling has to be thought about, when fine motor control (handwriting) is lacking, and when short-term memory is compromised, fluent writing is almost impossible. It's almost as if too much of the brain is taken up with the 'clerical' aspects and there is not enough left to deal with the actual content.

This is where assistive technologies supporting the clerical skills can so effective. They can help to free up the dyslexic person's thoughts by almost entirely taking over the mechanical side of the writing process.

Supporting speaking and listening

Contents

1 What are speaking and listening skills?	60
2 When do we use these skills in the workplace?	61
3 Speaking and listening and the Embedded Learning Materials	63
4 Speaking and listening and the dyslexic learner	63
5 Challenges and tips for the dyslexic learner	64
• Listening to and giving instructions	64
• Using the telephone	67
• Training, discussions and team meetings	70
• Giving and receiving information	74
6 Why is it a challenge for the dyslexic learner?	77

1 What are speaking and listening skills?



Interpreting language into thoughts

Holding information in short term memory

Listening

Listening involves hearing, accommodating a variety of tones and pitch used by speakers, making sense of what is heard and confirming understanding.

Ability to screen out distractions

Auditory discrimination – hearing and understanding different sources of sound and the individual sounds in words

Non-verbal communication

Facial expression and body language play a large part in successful communication.

Most successful interchanges rely on what is said, what is heard, the visual cues and the relationship between those taking part in the communication.

Relationships

The relationship between the speaker and the listener can affect communication, e.g. informal/formal choice of vocabulary. Communication is also affected by the situation, e.g. face-to-face, on the phone, with an individual or with a group.

Ordering thoughts

Putting thoughts into words

Speaking

Speaking involves vocabulary, pronunciation and grammar. Confidence and consideration of the listener affects choice of words and style of talking.

Recalling information from memory



2 When do we use these skills in the workplace?

Instructions

Listening

- Keeping track of what is said
- Remembering the sequence
- Picking out key information
- Filtering out background noise

Speaking

- Knowing what to say
- Understanding the audience
- Being clear and to the point
- Using appropriate pace
- Sequencing/ordering



Conversations

Listening

- Concentrating on what is said
- Interpreting body language and facial expressions
- Interpreting elliptical, idiomatic or colloquial expressions

Speaking

- Judging the degree of formality/informality required
- Adapting tone, pitch and intonation
- Contributing to and extending the subject
- Turn-taking

Using the telephone

Listening

- Adapting to the pace of caller
- Reacting to tone and pitch
- Identifying critical information
- Dealing with extraneous distractions
- Concentrating

Speaking

- Confirming/checking what has been heard
- Asking for additional information
- Discussing/turn-taking



Training, discussions and team meetings

Listening

- Note-taking at the same time as listening
- Keeping track of what is being said
- Interpreting specialist vocabulary

Speaking

- Keeping to the point
- Making relevant contributions
- Speaking spontaneously
- Asking and responding to questions
- Taking turns
- Interrupting appropriately



Reporting

Listening

- Identifying key details
- Identifying fact from opinion
- Using non-verbal cues to show understanding, e.g. nodding

Speaking

- Using appropriate language
- Speaking clearly
- Using appropriate pace
- Reporting details accurately
- Structuring responses
- Elaborating as necessary
- Checking and confirming facts



3 Speaking and listening skills and the Embedded Learning Materials

The Embedded Learning Materials recognise the importance of speaking and listening skills, both in everyday life and within the workplace and vocational settings, and there are examples in every pack. While the examples vary according to the situation, they do have much in

common. For this dyslexia support pack the skills have been categorised under the following headings:

- Listening to and giving instructions
- Using the telephone
- Training, discussions and team meetings
- Giving and receiving information.

4 Speaking and listening and the dyslexic learner

There are many dyslexic people who are extremely confident at expressing themselves orally. In fact, oral skills are commonly associated with dyslexic 'strengths'.

However, some dyslexic people experience particular difficulties when expressing themselves orally and listening effectively. These speaking

and listening challenges, along with some useful tips about how to minimise them, are profiled in the following pages under the headings listed in the previous section.

To understand more about why dyslexia can affect aspects of people's speaking and listening skills, go to page 77.

5 Challenges and tips for dyslexic learners

Listening to and giving instructions

Following spoken instructions

Focus



You will be given spoken instructions at work. There might be a lot to remember. Here are some key things to think about and listen out for.

- What sort of tasks am I being asked to do?
- How many things am I supposed to do?
- What order should I do things in?
- Are there any special instructions?

Before I forget, at the end of the day, I want you to **put** all the **waste** from this line **into the bin in** the **yard**. **Work on line 15** this morning with that **rush order** that's just come in, but first can you **help** **Steve** with getting the **parts to this machine**. This afternoon I want you to **show** the **new apprentice** how to **operate** the **bench drilling machine**.

Tip

Listen for the gist of the instructions – what can you remember about them? Think about the **words** that stand out to you.

- What sort of tasks am I being asked to do?

Before I forget, at the end of the day, I want you to **put** all the waste from this line into the bin in the yard. **Work** on line 15 this morning with that rush order that's just come in, but first can you **help** Steve with getting the parts to this machine. This afternoon I want you to **show** the new apprentice how to operate the bench drilling machine.

Tip

Use the **action words** to help you.

- How many things am I supposed to do?

Tip

- Listen for key words about **time**.
- Jot jobs down in number order to remind you.

Before I forget, **at the end of the day**, I want you to put all the waste from this line into the bin in the yard. Work on line 15 **this morning** with that rush order that's just come in, but **first** can you help Steve with getting the parts to this machine. **This afternoon** I want you to show the new apprentice how to operate the bench drilling machine.

- What order should I do things in?

Sample page from the Embedded Learning Materials (Ee 5:13 p. 392).

Other examples of listening to and giving instructions from the Embedded Learning Materials are: Ey 1:7 p. 102; Ma 2:12 p.160;

Ee 6:5–6:7 pp. 432–434.



For more information about the skills that underpin listening to and giving instructions and the challenges faced by the dyslexic learner, go to page 77.



Be aware that the dyslexic learner . . .

- reaches '**overload**' quite quickly because of their short-term-memory difficulties and will 'tune out', especially if instructions are lengthy and given very fast
- is a '**quick forgetter**' unless things are made memorable
- finds it **difficult to sequence tasks**, especially if giving instructions to someone else, and is likely to get sidetracked by irrelevant information
- finds **following or giving directions particularly difficult** – left/right confusion
- **understands better by watching and/or doing** than by listening
- is **easily distracted** by other noises or movement around them
- can become **stressed when put on the spot to listen**, retain and respond to unfamiliar information with others watching; and once they are stressed they find it harder to take in information – a vicious cycle!
- is sometimes **unaware that they have not understood**.



Try this!

- Reduce listeners' stress by building in some **preparation time** before launching straight into the instructions, e.g. give the 'big picture' overview of what will be the expected outcome from following the instructions; tell listeners how many instructions/steps you are going to give – 'There are four things that have to be done in this process, and the first is . . .'
- **Reduce the listening load** for the dyslexic person. For example, if it is a group listening to instructions, warn them that you will highlight each individual's task by saying their name clearly at the start of their particular part of the instructions.
- Encourage the use of appropriate **audio equipment**, such as a Dictaphone or a mobile phone with recording facilities.



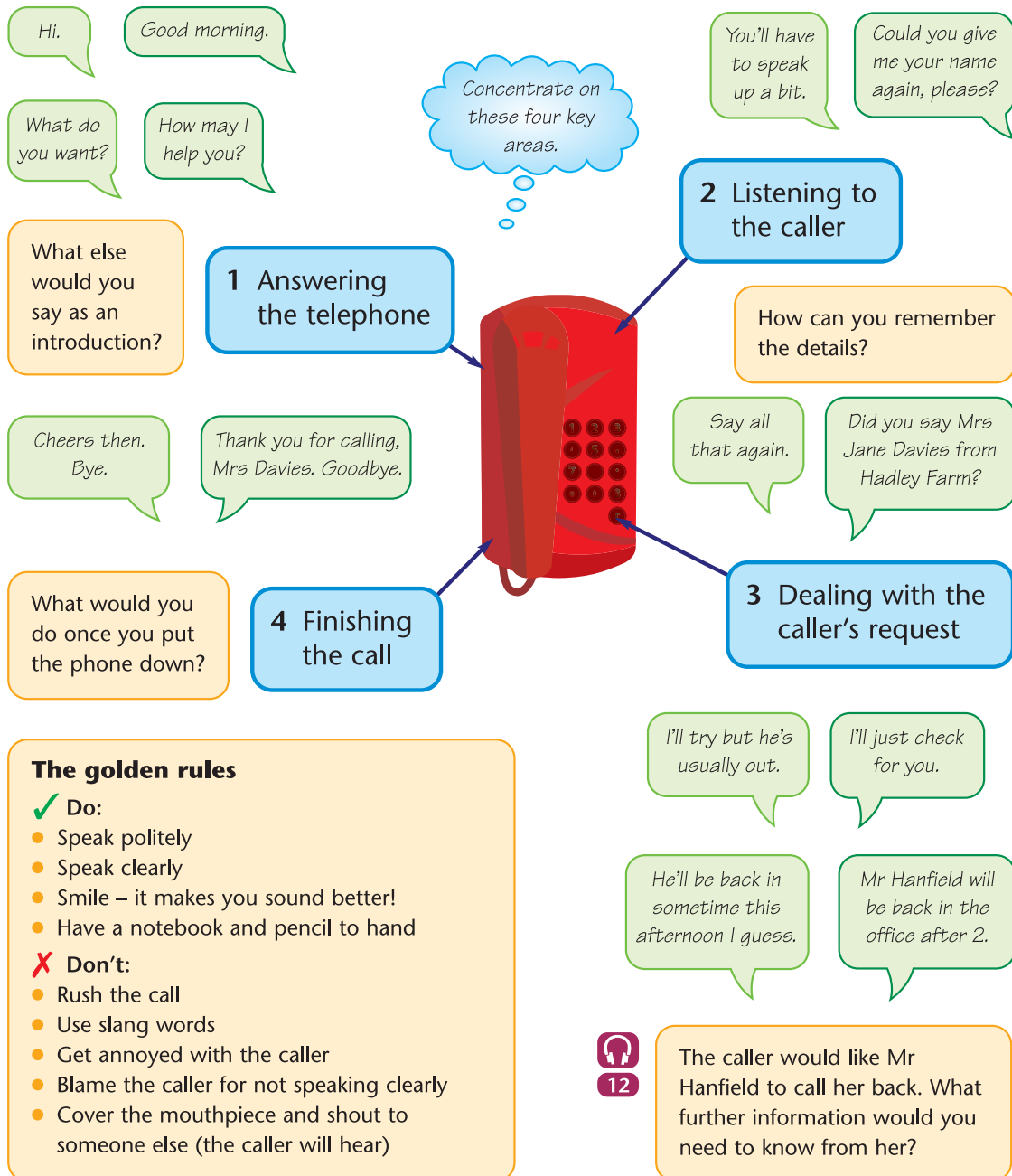
- Help the dyslexic person to use a **small notebook** to record key words and/or summarise instructions in bullet or numbered form. This is the same if the person is required to give instructions - relieves the stress of worrying about forgetting important things and/or getting muddled.
- Encourage the dyslexic person to **use active listening** phrases, e.g. 'So if I've heard you correctly, I have to . . .' 'Did you say . . .?' 'Could you repeat the bit about . . .?'
- **Demonstrate** if possible or provide a simplified **task sheet/checklist** to help the learner keep tabs on where they are within a job – this is particularly helpful if instructions are carried out regularly.
- Check understanding by asking the dyslexic person in a one-to-one situation to **summarise what they have to do** and, if necessary for the job, what order they have to do it in.
- Give learners the opportunity to **role-play interrupting in appropriate ways** to request further information about the instructions.
- Give learners the opportunity to **role-play giving instructions** and confirming listeners' understanding in order to judge the effectiveness of their pace and clarity of speaking; this helps develop the ability to sequence information and avoid distracting listeners with irrelevant information.
- If appropriate, ask the dyslexic person to tell you what they must **NOT** do. In a notebook, summarise under headings '**MUST** do' and 'Must **NOT** do'.
- **Reduce distractions**, such as by withdrawing to a quiet area or a side room, before trying to give instructions.
- Talk to the dyslexic person about how you appreciate what a challenge it may be for him or her to listen and remember instructions. **Encourage them to take control** of their own oral interactions by feeling confident enough to ask for things to be explained further, repeated, said more slowly etc. Reinforce the fact that time spent at the beginning making sure that they have understood saves stress, time and possibly wasted effort in the long run. Get them to question their own perception of the task(s) to be done.

Using the telephone

Who's calling?

Focus

Speaking on the telephone is an important and daily part of office work. Your company will probably have guidelines to help you answer telephone calls.



Sample page from the Embedded Learning Materials (Ee 3:5 p. 236).

Other examples of using the telephone from the Embedded Learning Materials are: Ma 2:26 p. 189; Ha 1:3 p. 112; Hos 2:7 p. 170.



Be aware that the dyslexic learner . . .

- finds it particularly **difficult to keep track** of what people are saying at the same time as writing information down
- can **muddle numbers and dates**, particularly when stressed about being expected to listen and respond to information at a pace determined by the caller
- will have **problems spelling** people's names, places, products etc., and often their notes will be disorganised and difficult to decipher afterwards
- might **confuse** certain pieces of information, e.g. people's names
- might **struggle to retain content** of call and end it without asking for crucial information, while only having an inadequate/hazy understanding of all the details
- can **feel stressed** and pressurised if using the telephone forms a large part of their working life; conversely they may feel quite at home on their own mobile when they are in control of the situation.



Try this!

- Encourage the regular use of a **clearly formatted telephone message pad** that has as many visual prompts as possible – this will be useful for everyone, but it is essential for the dyslexic person. For the same reason, encourage the dyslexic person to prepare really well for making telephone calls – talking ‘off the top of their heads’ can be instinctive, but can lead to important information being forgotten.
- Encourage the person to be as **assertive as possible on the phone** – asking the caller to **slow down** because he/she is dyslexic and is finding it difficult to keep up; asking how to **spell their name** etc.
- Use role-play to **practise making phone calls** – encourage learners to read the message they have written down back to the ‘caller’ to check for accuracy.
- Fix times in the day when they have to phone you formally with a given scenario, and when you will phone them – feedback on performance is very important.
- **Devise abbreviations with the learner** that they feel will work for them, e.g. invs for invoices. (Common text messaging abbreviations could be a good place to start.)
- **Use audio tapes as practice** for extracting key information – start with short, simple scripts and build to longer, more complex information. ‘Scaffold’ the listening a lot in the beginning, e.g. checklists, multiple choice, graphics, in the same way that a good telephone message pad ‘scaffolds’ some of the listening and questions that need to be asked during a conversation on the phone.

For more information about the skills that underpin speaking and listening on the telephone and the challenges faced by the dyslexic learner, go to page 77.



Training, discussions and team meetings

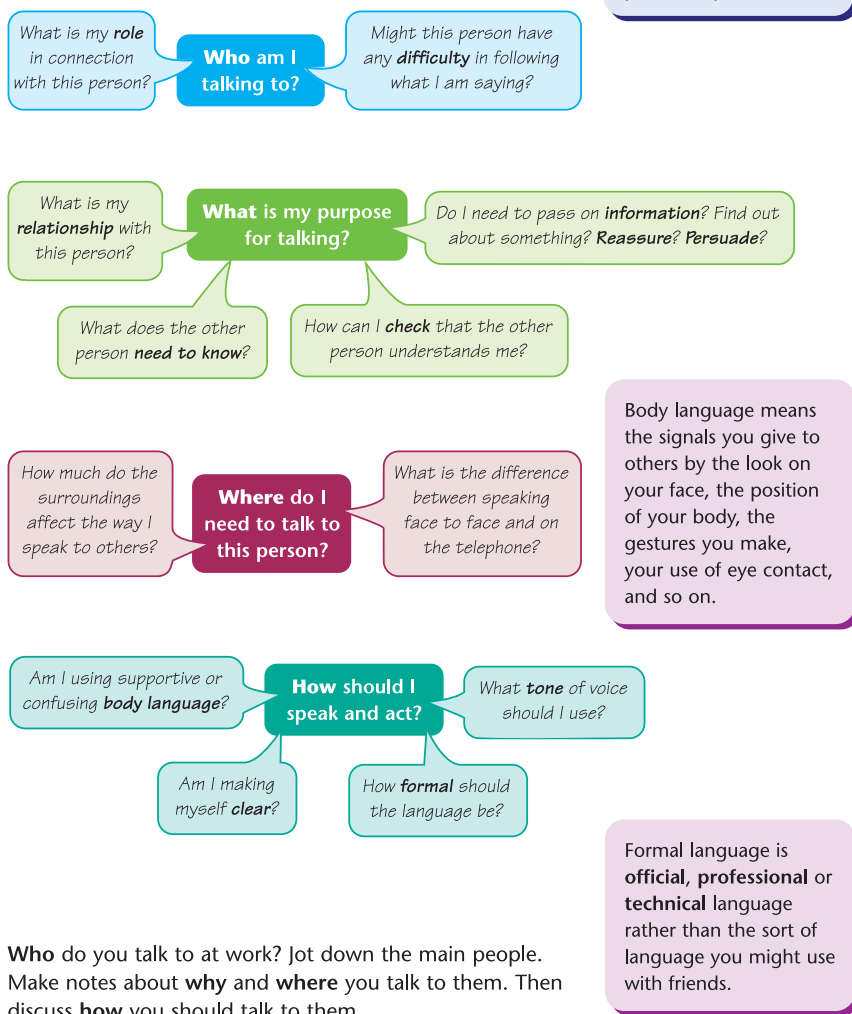
Talking to people

Focus

Talking is something that comes naturally to most people but there are ways to do it better. Think about the who, why, where and how of talking. Each of these has an impact on what you say.

REMEMBER!

What you say and how you say it will vary from person to person.



Sample page from the Embedded Learning Materials (Sc 1:5 p. 85). Other examples of training, discussions and team meetings from the Embedded Learning Materials are: Ma 1:12 p. 105; Ma 3:18 p. 258; Tr 5:3 p. 380.

For more information about the skills that underpin speaking and listening in training and discussions and the challenges faced by the dyslexic learner, go to pages 77.





Be aware that the dyslexic learner . . .

- finds it **hard to keep to the point** and focus upon main issues – although creative ‘out of the box’ thinking can sometimes be an asset to project planning!
- might **not always be able to keep up** with what is being said especially if the pace is fast and there are few or no visual aids
- sometimes **tries to guess** what the speaker may be about to say in an effort to make meaningful connections – begins to plan a reply before the speaker has finished, with the result that thoughts are diverted away from other issues emerging
- finds it **difficult to listen and make notes at the same time** – reaches ‘overload’ quite quickly and begins to ‘tune out’ – ‘It’s as if I only hear things now and again.’
- may sometimes **interpret things literally** and miss subtle clues and inferences.



Try this!

- If the dyslexic learner has to give a **talk or presentation** then it is essential that they are helped to plan it carefully beforehand:
 - **Plan the 'whole picture'** using something like a spider diagram.
 - **Cluster ideas** into linking groups.
 - **Identify key words and prompt words** and put them onto numbered cards using colour, bullet points, headings, underlining, highlighting, etc.
 - **Aim for a maximum of six key points/issues** to be covered by the talk.
 - Cards should 'flag up' when additional aids are needed, e.g. handout, PowerPoint slide.
 - **Practise the presentation aloud** to friends and/or colleagues – encourage the use of assertive language, not apologetic phrases like 'I'm probably wrong, but . . .'
 - **Rehearse in the mind** as well as out loud, paying particular attention to how to pronounce any tricky words.
 - **Use relaxation techniques** if possible, e.g. breathing slowly.
 - **Practise answering questions** without being impulsive and having the confidence to say something like 'That needs more thought, can I come back to you later with a reply?'
- Encourage the learner to disclose the challenges they face as a dyslexic person. As Diana Bartlett and Sylvia Moody point out in their book, *Dyslexia in the Workplace* (Whurr Publishers 2000): 'It may come down to a choice between being seen as dyslexic or being seen as incompetent.'



Try this!

- If a dyslexic learner is taking part in a discussion, meeting or training session, it helps if he or she:
 - is given the topic beforehand – a prepared summary sheet is most helpful
 - encouraged to think about their own opinions on the subject
 - works out likely points to raise
 - is reminded to confirm understanding by saying things like 'Do you mean . . .?'
 - is encouraged to ask for clarification, e.g. 'Can you go over that point again please?' 'Could you give me an example of what you mean when you say . . .?'
 - avoids overlong rambling sentences and sticks to short, clear sentences if possible (planning helps this a lot)
 - is in an environment with little or no conflicting background distractions
 - encouraged to maintain a level of eye contact to combat distractions
 - is given a clear overview at the beginning of the session
 - hears over-stressed words that announce new subjects/topics within the session/meeting – 'The **next** thing to think about is . . .' 'The **last** thing I'd like you to think about is . . .'
 - is given a summary sheet at the end
 - works with a 'buddy' to go over key points at the end and to share notes
 - is presented with illustrated information – pictures/diagrams etc
 - is given the opportunity to use audio equipment, particularly if writing is essential to the occasion and the follow-up.

Giving and receiving information

Announcements

Focus**Do** focus on your announcement.**Do** stick to the script.**Do** plan what you are going to say before you begin.**Do** keep the message short and concise.**Tip**

Think about the consequences of not making an announcement, making it at the wrong time or giving the wrong information.

Sample page from the Embedded Learning Materials (Tr 5:35 p. 442).

Other examples of giving and receiving information from the Embedded Learning Materials are: Ee 4:9 p. 314; Ey 2:22 p. 190; Hos 2:3 p. 159.



Be aware that the dyslexic learner . . .

- **can have a 'word-finding' difficulty**, i.e. is often able to describe the properties of something, but finds it hard to recall the actual name of it, e.g. 'you know, a house with no upstairs' (bungalow)
- **can find it tricky pronouncing certain words**, generally polysyllabic words, e.g. statistical, specific, anemone (even though they can often say it in their minds)
- **might use a lot of 'fillers'** such as 'uh', 'um', 'well', 'no' while searching for the right words and how to say them
- **sometimes substitutes words** without realising it, e. pacific instead of specific (potentially serious if it goes undetected in the workplace)
- **can find it difficult to translate thoughts into words** – a commonly expressed complaint from a frustrated dyslexic learner is: 'I know what I want to say, but it never comes out the right way!'; this can result either in very short oral contributions or in overlong, rambling sentences.
- **can find it difficult to sequence thoughts** logically
- **is easily distracted** and prone to giving **impulsive** answers.



Try this!

- **Help the learner to plan** what they intend to say – jotting down key points to help them keep focused and less likely to veer off the subject.
- Encourage the use of a **Dictaphone or mobile phone with recording facilities** to record prompt words and/or short notes for future reference and to help alleviate word-finding difficulties, pronunciation and some of the stress which often accompanies being in the 'spotlight'.
- Encourage the use of **visual aids** if appropriate.
- Suggest that the learner constructs a 'storyboard' in their mind to **mentally rehearse** what they need to say in a sequence (like the events in a story).
- If a polysyllabic word is causing pronunciation difficulties, **write the syllables underneath each other down the page** – the learner then just concentrates on one syllable at a time in sequence.



For more information about the speaking and listening skills that underpin giving and receiving spoken information and the challenges faced by the dyslexic learner, go to page 77.

6 Why is it a challenge for the dyslexic learner?

Listening and responding to instructions

Speech is in 'real time' and is therefore continuous and often rapid. Verbal instructions in particular require the listener to:

- process information quickly
- extract meaningless 'asides' if they occur
- make connections with previous knowledge
- create or hold information in a logical sequence (even if the speaker is not saying the instructions in a logical order).

People who are dyslexic commonly cite difficulty with their short-term memory. Much of what is involved in listening to instructions involves holding information in short-term memory in order to go away and act upon it. As the dyslexic listener concentrates on the oral aspect of the instructions in order to compensate for this difficulty, several things may happen:

- He or she may reach 'overload' fairly quickly and feel that they are 'running to catch up' as they try desperately to process and remember the first things said whilst conscious that more information

continues to come at them which also needs just as much of their attention.

- He or she may in fact switch off and become diverted from the task of listening, tired with the effort and the knowledge that much of what has been said is lost to them.
- Body language/non-verbal clues may be ignored in the effort of listening for the words.
- Stress mounts to such a point that he or she can no longer process verbal information.

Using the telephone

The listener is often unaware of the caller's agenda and therefore, with no prior information to help 'scaffold' his or her listening, has to listen very carefully in order to extract relevant information and respond appropriately.

This would be demanding enough on its own for the person who is dyslexic, but their short-term memory, spelling and (for some) fine motor difficulties (i.e. handwriting) are made worse if the call demands writing notes at the same time. The effort of listening for important, often unfamiliar information, trying to recall how to spell words for the notes, and writing with enough clarity to read the notes after the call – all of these can cause

enormous stress and it is not surprising that avoidance tactics are often employed.

Training, discussions and team meetings

Most jobs, and indeed life in general, involve daily interactions and discussions with friends, family and colleagues. If these interactions are taking place in the workplace then this is an opportunity for employees to show their enthusiasm, knowledge and abilities. Many dyslexic people are able to thrive at work and socially and show their verbal strengths to the full, but others have difficulties.

Listening and speaking in a group requires the ability to:

- listen and follow the thread of what is being said
- recognise and understand key information
- interrupt appropriately
- speak clearly
- contribute something pertinent to the discussion
- move the discussion forward
- screen out distractions
- sometimes make notes.

Short-term memory is at the heart of discussions – how else can a person get not only the gist of a conversation but understand and follow the key information sufficiently well to contribute to it? We have already highlighted the particular challenges

posed to many dyslexic learners by their short-term memory problems, but have not looked at other reasons for inefficiencies in areas of their received and spoken language. Some of these include:

- poor phonological awareness
- word-finding/naming difficulties
- halting speech
- pronunciation problems
- being easily distracted
- literal interpretations.

Phonological awareness (auditory discrimination) is the ability to identify and manipulate the differences between words, syllables and phonemes, e.g. glad/clad; lock/lot; spilt/split; in/for/ma/tion; shop – sh o p; plastic – p l a s t i c.

One of the most common dyslexic characteristics to be identified during assessment is poor phonological awareness (not to be confused with being 'hard of hearing', which has its own particular challenges). If there is a weakness in a person's phonological awareness and processing skills it is not surprising that difficulties may arise in the selection, use and production of words. Therefore we find that some dyslexic learners have word-finding/naming difficulties, halting speech (sometimes prone to spoonerisms, e.g. par cark instead of car park), and difficulty pronouncing certain words with more than three syllables.

It is also not surprising that, if a person is trying to cope with these particular challenges, they can misinterpret or miss altogether the more subtle clues of language such as tone, pitch, non-verbal cues (body language) and inference.

Giving and receiving information

As with giving and receiving instructions, this relies upon a person being very focused on what they need to say or expect to receive, being aware of their audience, holding information in their memory, and saying things clearly without embellishment or distracting information.

The challenge of holding accurate information in a logical sequence in their short-term memory means that passing on and receiving information will be flawed from the start for the dyslexic learner, unless they are encouraged to plan ahead and devise ways to remember and present their information more effectively.

Supporting numeracy

Contents

1 What are numeracy skills?	82
2 When do we use these skills in the workplace?	83
3 Numeracy skills and the Embedded Learning Materials	85
4 Numeracy skills and the dyslexic learner	85
5 Challenges and tips for the dyslexic learner	86
• Making and recording calculations	86
• Handling numbers and codes	90
• Calculating and planning time	92
• Using charts and graphs	96
• Using maps and plans	99
6 Why are numeracy skills affected by dyslexia?	102

1 What are numeracy skills?

Organisation

- Thinking logically
- Moving from known to unknown
- Setting out calculations
- Identifying key steps within a 'problem'

Short-term memory

- Holding and manipulating numbers, facts, formulae
- Multi-stepped calculations

Symbol recognition and direction

- recognise digits
- recognise operations: $+$ $-$ \times \div $=$
- order of operations

Long-term memory

- Storing and recalling basic number facts, rules, etc.

Sequencing

- Start calculations in the right place
- Record digits in the correct order

Visual /spatial skills

- Ability to visualise a problem
- Imagine a structure
- See numbers mentally
- Gauge/estimate the 'size' of an answer

Problem-solving

- Ability to see the big picture
- Identify key steps involved

Language

- Reading and understanding the 'problem'
- Understanding alternative words that mean the same thing

Ability to abstract from concrete

- Recording on paper
- Understanding 2D/3D concept

Basic number concepts

- Zero as a place holder

Calculating

- Whole numbers
- Decimals
- Fractions
- Percentages
- Place value

Categorising and identifying relationships

- Numbers
- Shapes

2 When do we use numeracy skills in the workplace?

The numeracy skills required for the workplace can include measuring in anything from microns to kilometres, weighing in grams, interpreting plans and graphs, recording codes, and performing complex multi-step calculations.

FINISHED GOODS REPORT			No 833002	Page No: 1 of 1
Goods released at 12:28 on 05/05/05				
ID	ITEM	DATE	QTY	TOTAL
01	S27102	YP048228	300	300
02	S27112	YP032174	300	600
03	S27210	YP032274	300	900
04	S27212	YP048620	300	1200
05	S27510	YP048832	300	1500
06	S27722	YP033274	300	1800
07	S27543	YP075482	300	2100
08	S29734	YP048432	300	2400
09	S28873	YP048880	300	2700
10	S29977	YP083875	300	3000
11	S28889	YP000884	300	3300
12	S29999	YP083857	300	3600
12 Pallets			Total 3600	

Handling numbers and codes

Barcodes, product codes
delivery sheets, picking lists
stock checks

- Reading large numbers
- Sequencing
- Memory
- Visual tracking skills
- Accuracy
- Recognising patterns

Making and recording calculations

Using a till, giving change, tolerances, dilutions, area, volume

- Mental calculations
- Memory
- Using numerical operations + - ×
- Accuracy
- Speed

Original strength hydrogen peroxide	Strength required	Fraction of the original strength hydrogen peroxide	Fraction of distilled water
Hydrogen peroxide 40 vol.	10 vol.	$\frac{1}{4}$	$\frac{3}{4}$
Hydrogen peroxide 40 vol.	20 vol.		
Hydrogen peroxide 40 vol.	30 vol.		
Hydrogen peroxide 40 vol.	10 vol.		

EVENT PLANNER / CONTRACT		
TITLE: Strategy and Development Meeting		DATE: Monday
VENUE: Conference Room		CLIENT: V J C
ORGANISER: Sue Millwood		HOTEL: CONF
ADDRESS: Castle House, Coding Street, Salford SA1 1BX		
Time	Function	Room
08:45	Registration Tea, coffee and pastries served	Pre-function
09:00	Meeting commences	Conf. room
10:30	Mid-morning tea, coffee and biscuits	Pre-function
10:50	Meeting resumes	Conf. room
12:05	Luncheon served	Restaurant
13:30	Meeting resumes	Conf. room
15:30	Meeting concludes	Conf. room
	Rooms cleared	

Calculating and planning time

Calendars and appointment books, timetables, daybooks, machine downtime

- Visual skills
- Working memory
- Sequencing
- Digital/ analogue clocks
- 12-/24-hr time
- Calculating in base 7 (days) and base 60 (secs/mins)
- Prioritising
- Accuracy
- Estimating

Using and interpreting charts and graphs

Rotas and rosters, checklists, product information

- Tracking and visual discrimination
- Direction – horizontal and vertical
- Interpreting data
- Applying data
- Accuracy of data entry

The Wild Pheasant Restaurant Diary			
Day: Friday Date: 19th December			
Maximum covers: 150			
Time	Name	Phone	Covers
12:00	Grice	01955 542852	12
	De Silva	01958 342028	6
	Edwards	01858 309129	8
	Kidwell	01958 942509	2
12:30	Johnson	01955 558388	16
	Byatt	01455 499101	10
1:00	Dorrie	01882 545029	11
	Chandra	01858 463882	3
1:30	Abbott	01958 545020	4
	Jazzar	01858 351445	10
2:00			



Using and recording units of measurement

Recording temperature, weighing quantities, calculating distance, measuring volume, measuring length

- Reading from scales
- Metric/imperial measures
- Converting between units of measure
- Estimating
- Decimal numbers/fractions
- Accuracy
- Memory

3 Numeracy skills and the Embedded Learning Materials

The Embedded Learning Materials' examples of numeracy are based upon the requirements of individual workplaces/vocational areas; while they vary according to the situation, they do have much in common. For this dyslexia support pack the skills

have been categorised under the following headings:

- Making and recording calculations
- Handling numbers and codes
- Calculating and planning time
- Using charts and graphs
- Using maps and plans.

4 Numeracy skills and the dyslexic learner

Many dyslexic learners are good at the 'big picture' and can find solutions to problems without always getting tied up in the detail. They can be good at lateral thinking, and this can be an asset in the workplace if their creative solutions can be utilised and 'harnessed'.

Some dyslexic learners are very good at understanding the broader concepts of mathematics at higher levels, while

remaining uncertain and prone to inaccuracies at a functional numeracy level. Since it is the latter that we are concerned with in this support pack we shall look at the numeracy challenges that face many dyslexic people in the workplace, along with some useful tips about how to minimise them.

To understand more about why dyslexia can affect some people's numeracy skills, see page 101.

5 Challenges and tips for the dyslexic learner

Making and recording calculations

Ways to pay Focus

Panel 1: Would you like to take out a store card? You can save **10%** on anything you buy today, plus get credit of up to **£250**.
Not for me, thanks.
Yes, that sounds great!

Panel 2: Two weeks later.
I'm going to use my new store card to treat myself. Are you coming?
Yes, but I can't afford to buy much. I've been saving **£5** a week and I've only got **£10** so far.

Panel 3: Another two weeks later.
Wow, Jo, are you sure you can afford all that?
Yes, it's OK. This card lets you buy now and pay later.

Panel 4: Four more weeks pass.
Oh, I didn't realise that I'd reached my credit limit. Does that mean I'll have to put these back?
I'm afraid so, love.

Panel 5: Two weeks later.
I've saved up **£50** to spend in the sales. Are you coming, Jo?

Panel 6: At the sales.
Everything I bought is marked down by **50%**. I owe the credit card company **£250 plus 20% interest**.

Jo saved **10%** on an item that costs **£19.90**.
How much did she save? How much did she pay?

Jo has to pay the credit card company **£250 plus 20% interest**.
How much is the interest? How much must she pay back after one year?

Sample page from the Embedded Learning Materials (Ee 2:5 p. 141).

Other examples of making and recording calculations from the Embedded Learning Materials are: Pa 2:6 p. 124; Ee 2:9 p. 149; Ca 3:6 p. 175.



Be aware that the dyslexic learner . . .

- can get **'lost'** in the middle of doing a calculation, particularly if there are several stages to it (a multi-stepped calculation) such as, adding up the cost of several items and giving change; working out area/volume; working out running dimensions from a plan (short-term-memory problems)
- can **miss out step(s)** in a calculation, especially in a distracting environment and impulsively accept the answer found
- finds it really **difficult to learn and recall times tables**
- has **difficulty memorising** and recalling basic numeracy facts such as metric conversions (1000 mm / 1m), particularly under pressure
- sometimes **reverses digits in a number**, e.g. 12 becomes 21
- with a 'grasshopper' maths learning style will impulsively supply an answer without knowing the details – an **'I just know' feeling**; sometimes this intuitive approach pays off, but when a wrong answer is given then it is difficult to find out where it went wrong.
- **might not always spot details**, e.g. decimal point
- finds it **tricky to sequence/order** the parts of a calculation logically
- can be **diverted by the 'language' of maths**, e.g. 'what is the difference . . .' may not be interpreted as another way of saying subtraction
- finds it **difficult to set out a written calculation**, e.g. aligning decimal points.



Try this!

- Encourage learners to describe orally how they have arrived at an answer and to use mathematical language to do it, e.g. 'I multiplied the first two numbers together and then I . . .' Support by prompting them to think of the sequence of steps involved e.g. 'What was the very first thing you did?'
- Summarise the number of steps they have described in their calculation so they can begin to think in this way for future calculations – 'So there were three steps involved from what you say. Let's write them down so we can see what they look like as a written calculation. OK then, Step 1 was . . .'
- Create a reusable checklist if there are several stages to a calculation.
- Encourage the learner to make as many meaningful connections as they can – the dyslexic learner strives to make sense of things, so if they can 'picture' the calculation as a sort of storyboard, this will aid their short term memory and help them to sequence the steps needed to complete the calculation.
- Encourage the learner to say each digit aloud as they record their calculation to avoid missing any out or reversing them within a number.
- Alert learner to the possibility that they may be making reversals as a result of hearing a number spoken, e.g. in sixteen, the first thing heard is six, so this might be written impulsively as 61.

1	2	3	4	5	6	7	8	9	10
2	4	6	8	10	12	14	16	18	20
3	6	9	12	15	18	21	24	27	30
4	8	12	16	20	24	28	32	36	40
5	10	15	20	25	30	35	40	45	50
6	12	18	24	30	36	42	48	54	60
7	14	21	28	35	42	49	56	63	70
8	16	24	32	40	48	56	64	72	80
9	18	27	36	45	54	63	72	81	90
10	20	30	40	50	60	70	80	90	100

- Use a discrete pocket/wallet sized **multiplication 'square'** to aid quick calculations

- Devise 'cue cards' for procedures, e.g. finding area; adding decimals

Finding area

1. Find the length
2. Find the width
3. Multiply the two together:
 $l \times w = A$
Remember: answer is in square units.



- Use **conversion charts** for metric measures, 12-/24-hr etc.

Units of measurement	Abbreviation	Conversions
millimetres	mm	10 mm = 1 cm
1000 mm = 1 m		
centimetres	cm	1 cm = 10 mm 100 cm = 1 m
metres	m	1 m = 1 000 mm 1 m = 100 cm

- Give lots of practice **using a calculator**, but insist that the learner **estimates** the answer **first**. This will not only give you some insight into the learner's 'feel' for number, but will also encourage them to look more critically at the answers they are given on the calculator display – any extreme mismatch between their estimated answer and the one given will alert them to errors made inputting the data. (Note: The difference between the estimated and the calculator answer may be because the learner cannot estimate – this skill will need to be actively taught if the learner is to develop effective numeracy skills.)
- **Choose a calculator that gives visual support**, (e.g. coloured keys for digits, operator and function keys) and enables them to scroll back over previous entries to help them check procedures and answers.
- Applaud the methods of calculation chosen by the learner (remind them that no one method is better than another providing it works consistently and efficiently), however if the methods he or she uses consistently lead to errors, then **introduce other methods** they may like to try. (Do this one at a time and allow time to see if it helps before trying another method.)

For more information about the skills that underpin making and recording calculations and the challenges faced by the dyslexic learner, go to page 101.



Handling numbers and codes

Checking codes

Focus

Goods inward involves checking codes to make sure that the correct goods have been delivered. It is an essential part of retail and requires accurate reading and recording skills.

Take a look at the delivery note below.

The product identifier codes on the goods being delivered must be exactly the same as the codes on the delivery note.

Forms and delivery notes often use abbreviations to save space. Here 'Containers' has been reduced to 'Conts', and 'Pallets' to 'Plts'.

UNFINALIZED MANIFEST		Ship to: Store 4858 / Brassington Park				
Depot:8549 / Fair Oak		Shipment: 30285				
Trailer: 9549030285						
Product type	Product identifier	Warehouse area	Conts	Plts	Cages	Totes
SSTK Non Bat	835850	Ambient grocery	2	2	0	0
SSTK Non Bat	835980	Ambient grocery	0	0	0	0
SSTK Non Bat	849589	Ambient grocery	22	22		
TOTAL			24	24		
Seal number on arrival: 1500398		Arrive store: 13:35		Start unload: 13:55		
Seal number on departure: 1509384		Depart store: 14:30		Finish unload: 14:25		
Containers received: 22 only		Containers rejected/Detail: 2 x 849589 not received				

The trailer's seal number on arrival must be exactly the same as the one shown on the delivery note.

The trailer's seal number on departure must be recorded clearly and accurately.

Discrepancies and damaged goods have to be reported accurately using the correct code numbers.

Checking codes requires great care, especially when the codes are long.

Here are some tips to help you:

- First look at the code to see how many letters or numbers it should have.
- Split the code into smaller chunks, for example 849589 can be checked as 849 589.
- Work through the code slowly, checking a few numbers or letters at a time.
- Check the code a second time to make sure that you did not make any mistakes – be particularly careful when you find lots of zeros together!
- Use a line guide such as a piece of paper or a ruler to help you keep your place if you have a long list of codes.
- Say the digits aloud as you check.

Sample page from the Embedded Learning Materials (Re 3:1 p. 172).

Other examples of handling numbers and codes from the Embedded Learning Materials are: Wa 1:3 p. 57; Tr 5:28 p. 428; Cl 3:19 p. 222.

For more information about the skills that underpin handling numbers and codes and the challenges faced by the dyslexic writer, go to page 101.





Be aware that the dyslexic learner . . .

- can **reverse and/or invert digits** without realising it, e.g. 9/6 2/5
- can **make sequencing errors**, e.g. 16/61; 2052/2502 (This can happen sometimes when recording a number after hearing it spoken, e.g. in the spoken number sixteen, the six is heard first and therefore may end up being recorded as 61; when expressing the time we often say ten to a certain hour and this could end up as 10:12 rather than 11:50.)
- **needs longer to check** and input numbers and codes in order to ensure accuracy – efficiency and accuracy will be affected if the dyslexic person is put under pressure to handle codes quickly.



Try this!

- Encourage learners to **say the codes aloud** as they check them off or record them – better as individual digits to avoid the possible errors made when saying a number like 216 and writing it down as 261 (because the digit actually heard after the two hundred is six!).
- Encourage learner to **look for patterns** in codes – this will speed up the process of checking off those which belong together, e.g.
A3046789 A3045261 A30449027
- Divide the code into **manageable 'chunks'** and see which one works
20A0931T - 20A / 093 / 1T
Highlight each 'chunk' in a different colour
20A0931T – 20A 093 1T
Chunk and highlight the letters if they form part of the code
20A0931T – 20A 093 1T
- Say each 'chunk' aloud as it is checked off.
- Place data being entered or copied so that it can be seen easily – for example, use a paper-stand with position marker, which avoids the risk of errors being made by having to look up and down all the time.

Calculating and planning time

Right on time

Focus

It is important to manage your time at work. You need to be able to make and to keep appointments. To do this you need to understand the different ways in which dates and times can be written.

Dates may be written just in numbers. They are shown in the form of three pairs of numbers.

- The **first pair** of numbers shows the day.
- The **second pair** shows the month.
- The **third pair** shows the year.

12/03/02 is the same as the **twelfth** of **March** **2002**.

This date can be written as **14th September 2004** or **14/09/04**.

What does the number **09** stand for?

September 2004						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

How would you write these two dates using only numbers?

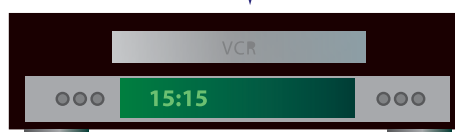
The video player also shows time in the 24-hour clock.

This clock has hands and is numbered up to 12. It shows time in the 12-hour clock system.



The clock shows the time as 3.15 or a quarter past 3. This time could be early in the morning or in the afternoon.

- If it is in the morning we should say it is 3.15 am.
- If it is in the afternoon we should say it as 3:15 pm.



The video player also shows the time as a quarter past 3 but it is definitely in the afternoon.

Why is 15:15 definitely a time in the afternoon and not a time in the morning?

Sample page from the Embedded Learning Materials (Ee 3:9 p. 245).

Other examples of calculating and planning time from the

Embedded Learning Materials are: Sc 4:3 p. 239; Hos 2:21 p. 201;

Pa 5:1 p. 259.



Be aware that the dyslexic learner . . .

- finds it very **difficult to manage time effectively**, e.g. is frequently late for appointments or misses deadlines; the dyslexic person sometimes over-compensates for being late by being unusually early – he or she finds it difficult to strike a balance.
- can **read a digital clock more easily** than an analogue clock because it displays the time immediately, with no distractions – though digits that are similar in shape, e.g. 2/5, might be confused
- can **calculate time more easily** if allowed the 'big picture' of the **analogue clock face**, which allows the viewer to visualise the passage of time
- has **difficulty sequencing** days of the week or months of the year, particularly if put on the spot, and is likely to have to start at the beginning (Monday/January) in order to get to where he or she wants to be in the sequence
- is **easily stressed** by time schedules and deadlines and often does not know where to start
- finds it **harder to calculate time** because it requires working in **different number bases** (60 seconds/minutes, 24 hours, 12 hours/months) – makes it tricky to use a calculator as this is in base 10
- has difficulty with the **abstract concept of time** – this is particularly problematic in mental calculations where the minutes go beyond the hour
- finds it **hard to hold one piece of information whilst dealing with another**, which is required when calculating time (short-term-memory difficulties), resulting in 'getting lost' within the calculation
- might **record time incorrectly** when hearing it spoken, e.g. ten to twelve can be written as 10:12
- might **find it tricky coping with different date formats and abbreviations**.



Try this!

- Use sticky notes to help the learner sequence and order activities or events.
- Record planned events, appointments etc. on a year planner so that things can be viewed as a whole –one thing in relation to another, what comes before and what comes after. The 'big picture' is very helpful for the dyslexic person who struggles to make meaningful connections.
- Help the learner to get into the habit of using a diary – week to view – and to use mobile phone facilities or computer diary as an 'alarm' to remind him or her of appointments, deadlines etc.
- Devise a discreet pocket-sized conversion chart to help read, calculate and convert between 12-hour and 24-hour times. This could be based on times relevant to the person's workplace or a generic one for all situations, as in these examples:

A conversion chart devised for a social care worker:

Time in words	12 hour time	24 hour time
Twenty – five past eight (evening)	8.25 p.m.	20:25 or 2025
Quarter to eleven (evening)	10.45 p.m.	22.45 or 2245
Ten to twelve (morning)	11.50 a.m.	11:50

A generic conversion chart:

Time in words	12 hour	24 hour
One o'clock (afternoon)	1.00 p.m.	13:00
Two o'clock	2.00 p.m.	14:00
Three o'clock	3.00 p.m.	15:00
Four o'clock	4.00 p.m.	16:00
Five o'clock	5.00 p.m.	17:00
Six o'clock (evening)	6.00 p.m.	18:00
Seven o'clock	7.00 p.m.	19:00
Eight o'clock	8.00 p.m.	20:00



- Use an **analogue clock marked with 12-hour and 24-hour time**. (Ensure that the numerals are clear and unambiguous.)
- Encourage learners to use their **fingers to 'count'** through dates and times.
- Encourage the learner to **read dates and times aloud** to hear what has been written
- **Create a chart** as a quick reminder for abbreviations commonly used, date formats, number of days in each month, etc. This can then be put up where time usually has to be calculated; or you could make a pocket-sized version for an individual.

Order	Month	Abbreviation	No. of days
01	January	Jan	31
02	February	Feb	28 / 29
03	March	Mar	31
04	April	Apr	30
05	May	May	31
06	June	Jun	30
07	July	Jul	31
08	August	Aug	31
09	September	Sep	30
10	October	Oct	31
11	November	Nov	30
12	December	Dec	31

For more information about the skills that underpin the calculation and planning of time and the challenges faced by the dyslexic learner, go to page 101.



Using charts and graphs

Getting fit

Focus

This has **got** to be the best all-round exercise. What do you reckon?



It's hard to say. Some types of exercise help build **stamina**. Others help build **strength**. In some sports you need to be **supple** and well **coordinated** too.

Health benefits of different exercises				
Activity	Stamina	Strength	Suppleness	Coordination
Slow walking	*	*	*	*
Fast walking	**	*	*	*
Gentle jogging	***	**	*	*
Fast jogging	****	***	**	*
Cycling	****	***	**	**
Tennis	***	**	***	****
Squash	****	**	***	****
Aerobics	****	***	****	****
Lane swimming	****	***	****	**
Wind surfing	****	***	**	***
Weight training	*	****	*	**
Skate boarding	***	**	***	****

Key Health benefits: *small **good *** very good **** excellent

Suppleness =

Stamina =

Coordination =

Strength =

muscle power

Sample page from the Embedded Learning Materials (Ee 2:35 p. 203).

Other examples of using charts and graphs from the Embedded Learning Materials are: Co 1:3 p. 79; Co 1:4 p. 80; To 5:13 p. 261.



Be aware that the dyslexic learner . . .

- generally **responds well to information presented pictorially, graphically** or in tabular form, but might go about extracting information in an **unsystematic** way
- might have **eye tracking and eye convergence problems** which makes it challenging for them to move across and down through rows and columns of particularly 'busy' charts and tables with ease – can very easily 'lose' their place or slip inadvertently onto the next row or into the next column
- might have **difficulty extracting and applying new information** if they are already trying to 'hold onto' a previous piece of information, e.g. using a key in a train timetable or a key on a graph, because of **short term memory difficulties**.



Try this!

- Ensure that charts are legible and have evenly spaced columns.
- Use colour to distinguish columns and rows, as in this example:

INVOICE		
To:	Date: 15 May 2007	
Silverwood Solutions Ltd. Unit 6 Riverside Business Park Cheltenham	Invoice Number: 5620	
Description	Unit price	Total price
16 x A-Z file dividers.....	0.35	5.60
22 x A4 recycled white	3.99	87.98
2 x C200 paperclips	0.75	1.50
6 x A4 100g copier paper teal.....	4.50	27.00
6 x A4 100g copier paper cloud.....	4.50	27.00
6 x A4 100g copier paper lemon.....	4.50	27.00
2 x A5 buff window envelopes (500).....	9.75	19.50
4 x CDR (100).....	10.99	43.96
2 x CD markers multi.....	2.25	4.50
18 x lever arch files.....	2.99	53.82
4 x glue sticks (large).....	0.99	3.96
Sub Total		301.82
VAT		52.81
Delivery and Packing		20.00
Total		374.63



- Encourage learners to **use a straight edge**, e.g. a ruler or a piece of card, to maintain focus on a line or row.
- Use an **L-shaped piece of card** to locate the cell or box where a particular row and column meet, e.g.

Ordering

Ultravue Transilluminator

Model	Description	Filter	Tube	Wavelength
No.		(cm)		(nm)
UTX 20M	HfO intensity	20 x 20	6 x BW	312
UVivue Transilluminators (standard size)				
SXT 20S	HfO intensity	20 x 20	6 x 15W	254
SXT 20M	HfO intensity	20 x 20	6 x 15W	312
SXT 20S	HfO intensity	21 x 26	6 x 15W	254
SXT 20M	HfO intensity	21 x 26	6 x 15W	312
SXT 35S	HfO intensity	20 x 35	6 x 15W	254
SXT 35M	HfO intensity	20 x 35	6 x 15W	312
SXT 35S	HfO intensity	20 x 35	6 x 15W	365
SXT 40S	HfO intensity	20 x 40	6 x 15W	254
SXT 40M	HfO intensity	20 x 40	6 x 15W	312
STS 20WS				
	Single intensity, dual wavelength	20 x 20	6 x BW	365
			2 x BW	white light
STS 20WS				
	Single intensity, dual wavelength	20 x 20	6 x BW	254
			2 x BW	white light
STS 20WSM				
	Single intensity, dual wavelength	20 x 20	6 x BW	312
			2 x BW	white light
STS 35WS				
	Single intensity	20 x 35	4 x BW	white light
STS 20WS				
	Single intensity	20 x 20	7 x BW	white light
BXT 20S				
	HfO intensity	20 x 20	6 x BW	254
BXT 20M	HfO intensity	20 x 20	6 x BW	312
BXT 20S	HfO intensity	20 x 20	6 x BW	365
BXT 20S	HfO intensity	21 x 26	6 x BW	254
BXT 20M	HfO intensity	21 x 26	6 x BW	312
BXT 20S				
	HfO intensity	20 x 20	6 x BW	254
BXT 20M	HfO intensity	20 x 20	6 x BW	312
BXT 20S	HfO intensity	20 x 20	6 x BW	365
BXT 20S	HfO intensity	21 x 26	6 x BW	254
BXT 20M	HfO intensity	21 x 26	6 x BW	312

- **Photocopy** charts, tables and graphs onto **pastel coloured paper** to reduce visual instability or distortion caused by a 'busy' chart with black text and figures on a white background.
- Use a **clear font** such as comic sans and lower case letters for text entries and headings.
- **Discuss** with the learner the **organisational features** that are used to clarify the content, e.g. meaning of column headings; use of alphabetical order.
- **Discuss** with the learner **how to navigate** the chart or graph. Model how to go about finding particular information – go through your thinking aloud as you do it: 'Umm, let me see . . . I'm going to look for the type of produce first, then look for the correct description. And then I'm going to find its identity number . . .'

For more information about the skills that underpin using charts and graphs and the challenges faced by the dyslexic writer, go to page 101.



Using maps and plans

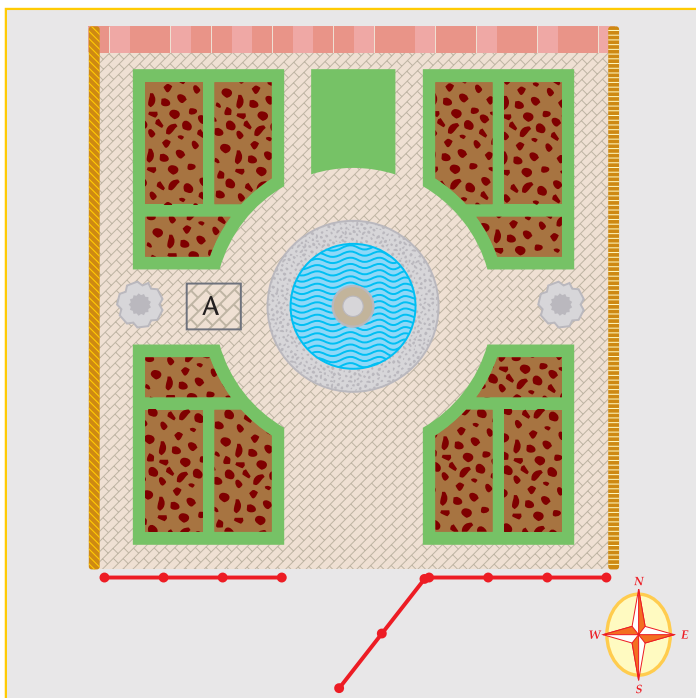
Using maps and plans

Focus

When you are working outdoors, it is important that you can find your way around. Being able to read maps and plans is essential to the job.

Maps and plans give you a 'bird's eye' view. It is like looking down from above.

Plan of garden



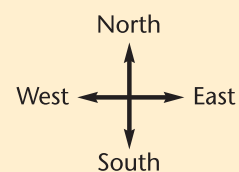
Key

Path	Fence	Water	Flower bed
Brick wall	Railings	Statue	Gravel
Beech hedge	Fountain	Grass	

This is a **plan** of a garden. It shows you **what** is there and **where** everything is.

This sign tells you which direction is **north**. You can use it to work out other directions.

Remember!



The **key** helps you to understand the plan. It tells you what the **symbols** used on the plan mean.

Try this

If you are at **point A** facing **west**, what will be in front of you?

If you are at **point A** facing **east**, what will be in front of you?

Sample page from the Embedded Learning Materials (Ee 6:16 p. 455).

Other examples of using maps and plans from the Embedded

Learning Materials are: Co 3:19 p. 199; Wa 1:15 p. 81; Ho 5:15 p. 274.

Be aware that the dyslexic learner . . .



- might have very good **spatial skills** and will respond to maps and plans using visualisation skills to orientate around them, **but** is challenged by tasks involving directions – in particular, finding it **difficult to respond quickly to left/right directions**
- because of **sequencing and short-term-memory difficulties**, finds instructions such as 'take the second exit at the first roundabout and then the first exit at the second roundabout' very challenging
- can have a **poor concept of scale** and find it difficult to judge the distance between junctions along a route and the nearness of features used as landmarks
- may find himself or herself **overburdened** by handling the additional information provided by **symbols or a key** – capacity in short-term memory to 'juggle' and apply information is limited
- can have **orientation problems**, e.g. reading a map 'upside down' (going South or West rather than North or East).



Try this!

- Capitalise on visual/spatial skills by **using landmarks** for directions rather than left/right oral directions.
- Use satellite navigation systems if possible. (Impress on learner how important it is to be accurate when entering details like postcodes.)
- **Use colour** to highlight important features on a plan or to mark out a route, highlight roundabouts etc.
- Use different colours to distinguish things such as front and rear walls and elevations on a plan – use this **colour coding** throughout so that strong links can be made with each feature.
- Encourage the learner to **turn the map around to match direction they are facing** to help with orientation.
- **Use a 3D model** of proposed plan if possible to help the learner understand the relationship between elevations and floors and his or her understanding of scale.
- Relate a known journey or route to distance and the time needed to complete it. **Relate this information to the learner's experience** in order to make it more meaningful and to help them plan more effectively: 'So if it's ten miles to . . . from here and it normally takes you about 20 minutes, this journey which we worked out is about 80 miles, is therefore 8 times further and should take about 8 times as long to do. So what are 8 lots of 20 minutes? And how much should we add on for things like traffic hold-ups?'

For more information about the skills that underpin using maps and plans and the challenges faced by the dyslexic learner, go to page 101.



6 Why are numeracy skills affected by dyslexia?

Dyscalculia is currently recognised as a specific difficulty which causes those with the condition to have enormous difficulty acquiring basic number skills. This section on numeracy and the dyslexic learner does not attempt to look at dyscalculia itself, but examines how the specific challenges cited by so many dyslexic learners which affect their literacy skills are the same ones which can affect their numeracy skills.

Making and recording calculations

Short-term memory is involved in remembering numbers and manipulating them in order to do a calculation or to find a solution. Many people who are dyslexic have a shorter 'memory shelf' as it were, so can hold fewer items in their memories than their peers. As many calculations require more than one straightforward calculation – they are 'multi-stepped' – then it is not surprising to find that dyslexic learners are prone to getting 'lost' within the steps of the calculation. Their inaccurate results do not always do them justice, as they are generally as cognitively able as their non-dyslexic peers.

Mathematical concepts per se are not generally the problem for dyslexic learners – it's the ability to keep track

of where they are within a 'problem' and the systematic recording of their findings and calculations that can cause the most problems.

Handling numbers and codes

Secure visual perception, symbol and number recognition and sequencing skills are all needed in order to read and record numbers and codes accurately. Many dyslexic learners have insecure visual representations of words and symbols in their memory and are easily distracted by shared characteristics, failing to 'see' the distinguishing features. Therefore they can mistake 'b' for 'd' or '2' for '5'.

On dyslexic 'bad' days they can become frustrated that this happens a lot; on a 'good' day they may make fewer errors and feel more in control.

Calculating and planning time

Dyslexia causes many learners to miss appointments and deadlines, lose track of tasks and confuse priorities. This leaves dyslexic learners feeling out of control and stressed, which makes their dyslexic difficulties even worse – a vicious cycle. Time pressure can exacerbate these difficulties, so it is important to build in more time so that the dyslexic person can plan effectively and calculate time accurately.

These ‘temporal’ difficulties often go unrecognised or are misunderstood by friends and colleagues, which makes it all the harder for the dyslexic person to tell them about the challenges he or she faces every day.

Using charts, tables and graphs

Visual distortion such as blurring or moving letters when reading text is sometimes a problem for dyslexic adults, as it can be for people who are not dyslexic. It can affect reading and extracting information from charts, tables and graphs where, although there is little text, data is often presented quite densely within ‘busy’ rows and columns. Use line guides to help the dyslexic person isolate specific data by helping them to focus upon specific data entries (convergence) and to track smoothly along a line (saccadic eye movement).

The extreme contrast of black ink on bright white paper can make this problem worse if the person has a condition known as scotopic sensitivity or Meares Irlen syndrome. People who have this condition can be very sensitive to white light and this leads to a variety of visual distortions, which can cause headaches and watery or sore eyes. It is advisable to make an appointment with an optometrist to check that there is no underlying eye condition causing these symptoms. But on a practical level, reducing the amount of bright white light (e.g.

white paper, white computer screen, bright overhead lights, white surfaces) will help enormously. Explore with learners which screen colour they find the most comfortable, move them away from a really bright window, use a transparent coloured overlay over text (research by John Stein suggests that blue or yellow are the most helpful colours), and photocopy materials onto pastel paper – use pale blue or lemon if available.

Using maps and plans

Many people, both dyslexic and non-dyslexic, have mixed laterality – that is, they do not have a strong preference for uniformly using either the left or right side of the body. For example they may write with their left hand but use a tennis racket in their right hand; may use their left ear as the lead ear, but their right eye as the leading eye and so on. Sometimes some dyslexic people will even swap sides within the same task. While this may have advantages, it can cause directional confusion, and many dyslexic people cite a difficulty knowing their left from their right.

Spatial skills are often a dyslexic strength, so the problem is not generally with interpreting maps and plans inwardly – it’s with telling others or following oral/written directions.

Supporting organisational skills

Contents

1 What are organisational skills?	106
2 When do we use these skills in the workplace?	107
3 Organisational skills and the Embedded Learning Materials	108
4 Organisational skills and the dyslexic learner	108
5 Challenges and tips for the dyslexic learner	109
• Storing and retrieving information	109
• Following procedures	112
• Time management	114
6 Why is it a challenge for the dyslexic learner?	117

1 What are organisational skills?

Storing and retrieving information

Workplaces have their own special way of storing and retrieving information. It may involve:

- reading and entering data, either electronically or on paper
- following written or oral instructions
- organising a personal system for recording and storing information.

At home more informal ways are often the norm, e.g. shoe box, drawer. They are not always efficient or effective, however!

Time management

Any job at work and in daily life requires time management. It includes:

- calculating time
- organising work into the time available (managing the workload)
- setting priorities
- logical planning
- setting targets
- developing a long term plan of action
- anticipating needs.

Proficient organisers generally use all these skills when organising themselves in the workplace or for daily life.

Following formal and informal procedures

There are a lot of procedures to follow at work. Knowing what to do in different situations is important. Procedures and instructions may be given:

- orally
- formally in written documents, e.g. induction materials.

2 When do we use these skills in the workplace?

Time management

I have to find out this customer's address so that we can write to her.

I need to fill in details about a new customer.

How much time should I spend on each job?

Will I have time to do all this?

Which job should I do first?

What could I leave until tomorrow if I can't get through it all?

Washrooms/showers

Tasks

Removal of waste

Remove waste
Wash waste receptacles

Hard floors

Sweep/full mop

Vertical and high level surfaces

Spot clean
Dust/damp wipe (including partitions, cubicle walls)

Sanitary surface/hand contact areas

Damp wipe/wash

Mirrors/dispensers

Damp wipe/wash

Furniture/fixtures/fittings

Damp wipe/wash

Consumables

Replenish toilet rolls, towels, soap, etc.

Following procedures

I won't have time to read all this in a fire. How will I remember what to do?

What order have I got to do things in?

Fire evacuation procedure

1. This person plays a key role in the safety of the building. They must be able to follow the evacuation procedure.
2. If you hear the fire alarm, follow the evacuation procedure.
3. When you hear the alarm, remain calm and follow the evacuation procedure.
4. Follow the evacuation procedure to the assembly point.
5. Stay at the assembly point until you are told to leave.
6. Do not use the lift or stairs to leave the building.
7. Follow the evacuation procedure to the assembly point.

3 Organisational skills and the Embedded Learning Materials

Organisational skills are essential in the workplace to keep everything running smoothly and to help meet any deadlines. The Embedded Learning Materials' examples of organisational skills are based upon the requirements of individual workplace/vocational areas and many everyday situations;

while they vary according to the situation, they do have much in common. For this support pack the skills have been categorised under the following headings:

- Storing and retrieving information
- Following procedures
- Time management.

4 Organisational skills and the dyslexic learner

Dealing with the organisational demands in the workplace and in daily life is an enormous challenge for most dyslexic people. Organisational difficulties are rarely acknowledged or recognised as part of the dyslexic profile, yet they have a huge impact on the way a person is perceived by others and how that person feels about him- or herself.

It is often not understood is that dyslexic people may have 'good 'and 'bad' days – to the onlooker this looks like puzzling inconsistencies and unpredictable behaviour. The dyslexic person is left wondering why organising things is never as 'automatic' for them as it seems to be for those around them.

The categories given above reflect the most commonly required

organisational skills at work, and they can pose particular challenges to dyslexic learners, partly because of the reading that is required to understand and follow information such as workplace procedures, but also because they rely to varying degrees on recalling, organising, sequencing and recording information – tasks challenging for many dyslexic people. Most aspects of time management are also problematic to dyslexic people: it is very common for them to miss appointments and deadlines, lose track of tasks and have difficulty prioritising.

These challenges, along with a few useful tips about how to help minimise them, are profiled on the following pages.

5 Challenges and tips for the dyslexic learner

Storing and retrieving information

Filing

Focus

Information is easy to find if it is filed in a sensible way.

Names of people and places are usually listed in alphabetical order.

Employee lists are in alphabetical order.
The last name (surname) is used in this kind of sorting.
Names beginning with **A** come before names beginning with **B** and so on ...

Working hours summary: am/pm										
Name	11/03		12/03		13/03		14/03		15/03	
Adams, Philip	3.5	4	4	3.5	4	4	3.5	3.5	4	2
Arnold, Jennie	4	4	4	3	4	4	2.5	4.5	4	3
Bartlett, Ruth	5	3	4.5	3	3	3	5	3	5	–
Bassett, Ellie	5	4	4	3	4	5	3	3	4	4
Bennett, John	3.5	5	3	4.5	4	3	5	3	4	–
Carlos, Ann	4	4	4	3	4	4	3.5	3.5	4	2
Cassetti, Lyn	3.5	5	3	3.5	5	2	4	3	5	1
Clarke, Brian	3.5	3	5	5	2	5	4.5	2.5	5	–
Codie, Edward	5	4	3	4.5	4	3	3.5	2.5	4	2
Cooke, Amy	–	4	–	3.5	–	4	–	3.5	–	2
Drake, Peter	3.5	–	4	–	4	–	3.5	–	–	–

Index of information	Page
Health and safety	4
Holiday entitlement	6
Maternity leave	13
Mission statement	3
Pensions – company	8
Pensions – stakeholder	9
Sick pay	7

The **index** at the back of a staff manual uses alphabetical sorting. This may also be used in other types of index or directory.

Files are often given a code so they can be stored sensibly and found again easily.
Sometimes the codes are simply numbers:

001301
001237
001239
001245



If two or more names begin with the same letter how do you decide on the order?

03/09/02
21/09/02
21/09/02
16/04/03
15/08/03
21/08/03
07/02/04
13/05/04

Information can be listed in date order.

When date order is used, look at the **year** first, then the **month** and finally the **day**.

Write these dates in order.

03/06/02 _____
21/04/01 _____
17/01/03 _____
16/10/01 _____
30/11/04 _____
11/08/04 _____
19/12/03 _____
03/09/02 _____

Sample page from the Embedded Learning Materials (Ee 3:7 p. 240).

Other examples of storing and retrieving information from the Embedded Learning Materials are: Ca 1:3 p. 90; Wa 2:3 p. 114; Re 3:7 p. 184.



Be aware that the dyslexic learner . . .

- can find any task involving **alphabetic sequencing** (e.g. filing, looking up indexes or directories) **difficult**
- can be inconsistent **when categorising** documents/details
- can store in a '**safe place**' and then **forget** where that is
- **puts things down** which then do not get to the correct location
- finds **multitasking difficult**
- **is easily distracted** and may not put things in the correct place
- **gets flustered and forgets** if under pressure
- might muddle **codes/names** when storing or retrieving information
- can often **look but not see** when looking for information
- can be **convinced of a fact or location** only to find it is incorrect – 'I'm sure it was there a moment ago!'
- **tends not to put things away** – likes to keep things handy
- can be very organised and then be completely '**thrown**' by an emergency.



Try this!

- Write out the alphabet on a large index card as a reminder

a	b	c	d	e
f	g	h	i	j
k	l	m	n	o
p	q	r	s	t
u	v	w	x	y/z

- **Label** contents of filing cabinets very clearly – for example, use all the letters that are in that drawer: **M N O P**, not **M–P**.
- Use **index stickers** in directories to mark where each letter of the alphabet begins.
- Keep a **list of workplace codes** – chunked into manageable ‘bits’.
- Create a **list of places to file** particular information, organised according to location, e.g. does the letter from the bank about chip and PIN cards go in the bank file, in the accounts file or under bank cards?
- **Use a spreadsheet or database** for sorting and storing names etc alphabetically.
- A **multi-sensory approach** to organisation will help – visualising, verbalising, using colour, having processes modelled, and using electronic devices.
- Name new files immediately and **include the filename and where it is stored in the footer**.
- Have a **list of people to ask**.
- **Colour-code** as much as possible.
- **Cross-reference** as much as possible.

For more information about the skills that underpin storing and retrieving information and the challenges faced by the dyslexic learner, go to page 117.



Following procedures

Dealing with problems

Focus

A mental checklist can help sort out what should be done in dealing with problems. **A B C** might help.

ASSESS the situation

- Look carefully.
- Ask appropriate questions.
- Consider the consequences.

BE AWARE of the possible solutions

- Find out what the correct procedure is.
- Ask a colleague to help.
- Always report to a team leader.
- Phone the emergency services if required.

Problem

You have just started your shift on Reception when you notice a large puddle of water on the step leading to the hotel from the main door.

ASSESS the situation

- Look carefully. What has happened?
- Is there any immediate danger?
- Can it be left as it is for a few minutes while you report it to someone else?

BE AWARE of the possible solutions

- Report the incident to your team leader.
- Record what you saw and did. You should always record any incident while it is still fresh in your mind.
- Ask a colleague to help you stop people treading in the water.
- Put up a warning sign to keep others away from the water.
- Follow instructions from the team leader.
- Wait for the cleaning staff to mop up the puddle.

CARRY OUT the actions you decide on

- What needs to be done immediately?
- What can wait?

CARRY OUT the actions you decide on

- Use your own knowledge and understanding of your job.
 - What needs to be done immediately?
 - What can wait?
- Take immediate action yourself.
- Call the emergency services.
- Fill in the incident report form.
- Read the procedures.
- Ask for help.
- Report the incident.

Think about how you speak and how you listen when you report the problem.

- Speak clearly.
- Give relevant details.
- Listen carefully to instructions.

Refer to your own workplace procedure or policy when deciding what to do.

Write a list of what should be done in this case. Put the items on the list in the correct order.

Sample page from the Embedded Learning Materials (Hos 1:13 p. 107). Other examples of following procedures from the Embedded Learning Materials are: Ey 1:9 p. 107; Ma 3:6 p. 223; Sc 2:11 p. 153.

For more information about the skills that underpin following formal and informal procedures and the challenges faced by the dyslexic learner, go to page 117.



Be aware that the dyslexic learner . . .



- is likely to have **short-term-memory problems** and therefore may find it difficult to follow set procedures or instructions consistently
- does **not always understand what is implied** but not stated
- might come up with **creative, alternative solutions** ('blue-sky' or lateral thinking can be a dyslexic strength), but they are not always appropriate to the situation
- is inclined to be **side-tracked and lose their place** when returning to the task
- finds it **difficult to keep track of several tasks** 'on the go'
- finds following **complex, multi-stepped instructions particularly challenging**, especially if they are being watched.

Try this!



- Explain why following set procedures (e.g. completing customer documentation; dealing with staff issues; method statements; health and safety rules) is important for consistency – **understanding why helps the dyslexic person** to start applying themselves to the task.
- Use a **digital recorder** to record important procedures and lesson the reading involved.
- **Create simple checklists** to prompt the learner.
- Capitalise upon the dyslexic learner's imagination and work at getting him or her to **visualise the procedure** as sort of 'storyboard'.
- **Provide models** of how procedures that require a formal response (e.g. reporting an accident at work) can be written.
- **Format documents** to make the sequence clearer.
- Provide a **list of words and phrases** for forms.
- Develop a **personal glossary**.
- Use **highlighter pens and/or colour coding**.

Time management

Every minute counts

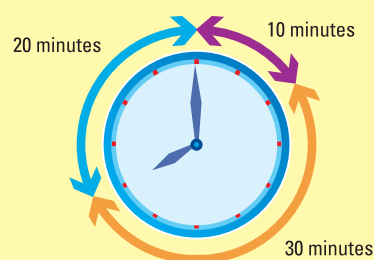
Focus

EVENT PLANNER / CONTRACT		DATE: Monday 5th September		
TITLE: Strategy and Development Meeting		CLIENT: V J Group		
VENUE: Conference Room				
ORGANISER: Sue Millwood		HOTEL CONTACT: Jay Wadhvani		
ADDRESS: Castle House, Codling Street, Salford SA1 1BG				
Time	Function	Room	Layout	Nos
08:45	Registration Tea, coffee and pastries served	Pre-function area 1	As set	84
09:00	Meeting commences	Conf. room 1	Theatre style	84
10:30	Mid-morning tea, coffee and biscuits	Pre-function area 1	As set	84
10:50	Meeting resumes	Conf. room 1	Theatre style	84
12:05	Luncheon served	Restaurant	Buffet	84
13:30	Meeting resumes	Conf. room 1	Cabaret style	84
15:30	Meeting concludes	Conf. room 1	Cabaret style	84
⬆	Rooms cleared			

Times are written using the **24-hour clock** to avoid confusion.

- The time starts at midnight – 00:00 – and continues through the 24 hours of the day to 23:59.
- The hours after midday are added on to 12:00, so 2 o'clock in the afternoon is shown as 14:00; 6 o'clock in the evening is shown as 18:00.

Detailed plans rely on knowing how long tasks take and being able to count accurately to find the time a job should start or finish.



Counting on time

08:00 + 10 minutes = 08:10
08:40 + 20 minutes = 09:00

Counting back time

09:00 – 20 minutes = 08:40
08:10 – 10 minutes = 08:00

Porter	Monday 5th September
08:00 – 09:00	09:00 – 10:00
08:00 Set out podium; final check – PFA 1 & 2	09:00 Deliver beverages & pastries – PFA 2
08:10 Delegate packs – CONF ROOM 1	09:10 Clear & set – PFA 1
08:20 _____	09:20 _____
08:30 Deliver beverages & pastries – PFA 1	09:30 Delegate packs – CONF ROOM 2
08:40 Set up video – LANC SUITE	09:40 _____
08:50 _____	09:50 Clear and set – PFA 2

Sample page from the Embedded Learning Materials (Hos 2:21 p. 201). Other examples of time management from the Embedded Learning Materials are: Ee 3:9 p. 245; Pa 5:1 p. 259; Ha 1:13 p. 137.

Be aware that the dyslexic learner . . .



- is greatly challenged by **managing his or her time effectively**
- is generally **good at seeing the 'big picture'** but finds it hard to **break things down into manageable chunks**
- tries hard to plan ahead but is easily **overwhelmed by too much detail**
- finds most things to be of equal importance, and therefore finds it very **tricky to prioritise**
- has to work very **hard to achieve deadlines** and more often than not misses them; is late for most things
- **can feel out of control** – daily life seems chaotic, lurching from one thing to another
- **underestimates just how long it takes to do things** like make a journey.



Try this!

- **Get an overview of the tasks** ahead – **use a year planner** to track and plan work, put in deadlines, important dates, appointments, etc.
- **Set targets** for completing work – it may be helpful to work backwards from a deadline to establish times for planning, research, organising, drafting etc. (Remember to make sure that the task is possible in the time available!)
- It may be helpful to **sub-divide these targets** still further into smaller, more manageable chunks.
- Implement a **traffic light system for planning and prioritising**, e.g.
Red dot: top priority – **STOP** everything else and complete this work; **Orange dot**: this can **WAIT** a bit, but start thinking about it; **Green dot**: no need to anything at the moment, **GO** out and enjoy yourself (This system must be reviewed every few days or at least weekly.)
- Implement a **diary or electronic organiser** and always enter appointments or deadlines straight away; check regularly; **use colour or symbols** to see at a glance what is coming up; use a 'week to view'; **set alarms** on watches/mobile phones; **write in pencil** so changes can be made; **use sticky notes** in a diary to list things to do and cross them out as they are completed.
- Build in **relaxation time!**

For more information about the skills that underpin organisation and time management and the challenges faced by the dyslexic learner, go to page 117.



6 Why is it a challenge for the dyslexic learner?

The effect that dyslexia can have upon a person's organisational skills is probably the least known or considered characteristic of the dyslexic profile. These difficulties are frequently not recognised by the dyslexic adult, yet they can cause additional emotional and social problems such as frustration and recrimination for being late to work, missing appointments, being late for deadlines, having a chaotic lifestyle. Poor organisational skills can affect so many areas of the dyslexic person's life, study and work. However, many dyslexic adults can develop some excellent coping strategies.

Storing and retrieving information

These tasks, apparently so simple, can be very difficult for dyslexic people. Sequencing, word- and letter-decoding and short-term-memory skills are all involved in storing or retrieving information – and these are the very things that pose a challenge for many people who are dyslexic.

Following procedures

Written instructions require a person not only to be able to read, but also to follow and retain information that can often be complex and unfamiliar.

A dyslexic person who struggles to read with ease and has short-term-memory problems will have many difficulties. But even if the procedures are explained orally, this still requires the use of short-term memory.

Time management

Effective time management relies upon a 'feel' for the passage of time. Many dyslexic people find this 'feel' elusive and so they have to rely upon other strategies to manage and allocate time to tasks – often getting it wrong in the process.

Diana Bartlett and Sylvia Moody, in their book *Dyslexia in the Workplace* (Whurr 2000), suggest that time can be managed effectively in the workplace if employees think of their job as four separate activities to be carried out one at a time:

- Build up an overview of the total workload.
- Break it down into smaller tasks and goals.
- Record tasks and goals.
- Monitor progress and update action lists.

This suggestion for managing time at work holds good for managing time in daily life as well.

Supporting spelling

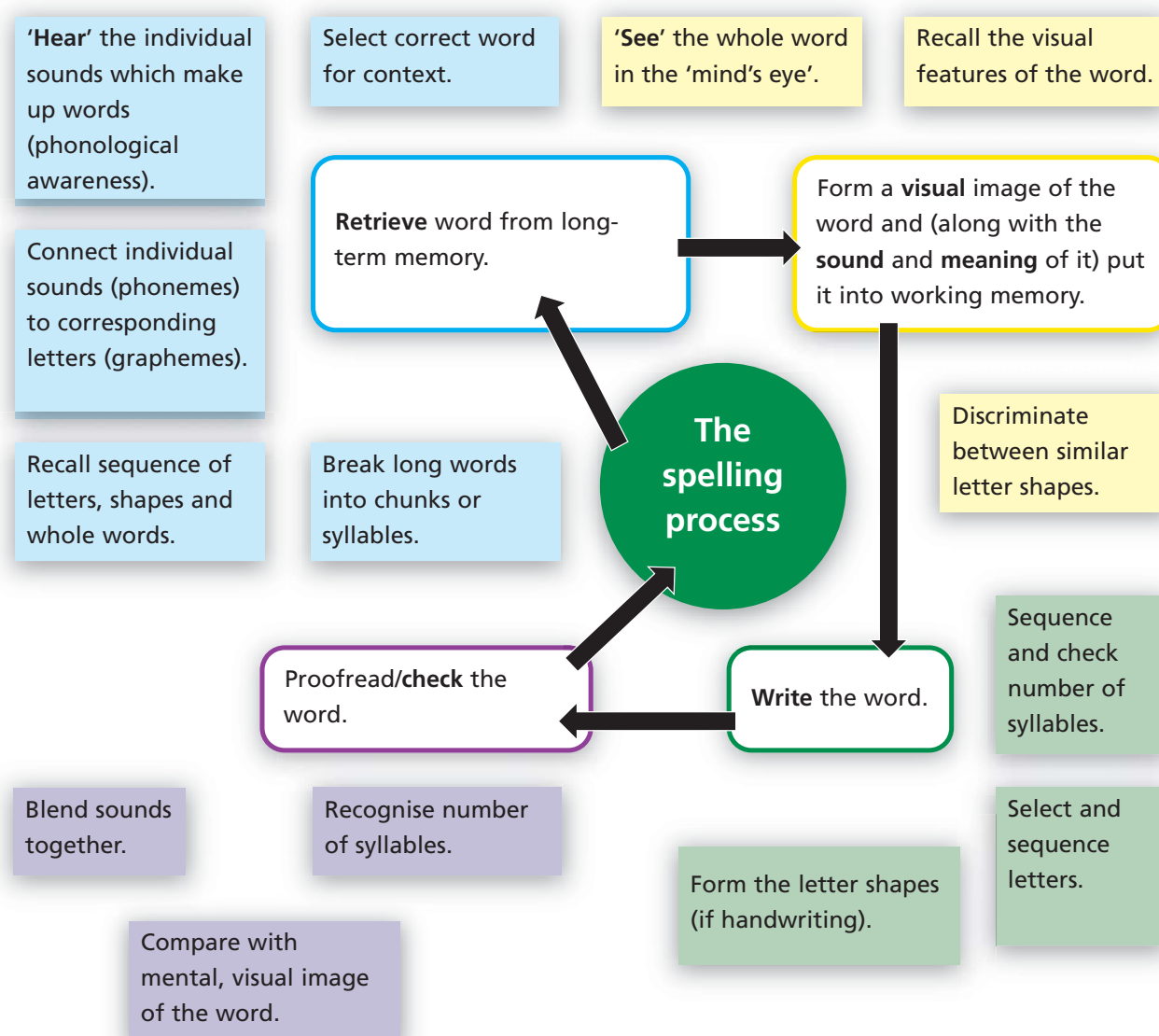
Contents

1 What is spelling?	120
2 When do we use these skills in the workplace?	121
3 Why bother?	122
4 Spelling and the dyslexic learner	123
5 Strategies and tips for the dyslexic speller	126
• Visual	
• Look, Say, Cover, Repeat, Write, Check	127
• 'Mind's eye' spelling	128
• Other visual support strategies	129
• Auditory	
• Sound to letter correspondence	131
• Pronunciation, word families and mnemonics	132
• Morphological patterns	133
• Kinaesthetic and tactile	134
• ICT and spelling	135

1 What is spelling?

‘Good spellers learn by visualising words and by a “rote memory process”. They have good phonetic awareness and can transfer knowledge of word families and spelling rules into recognised letter strings and use them automatically in their writing.’

Walter Bramley, *Developing Literacy for Study and Work*,
The Dyslexia Institute 1993.



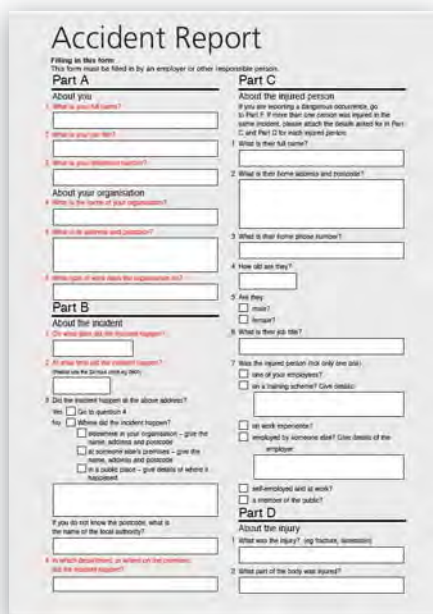
The illustration reveals shows that **spelling is a multi-sensory activity** – it requires us to use visual, auditory and kinaesthetic strategies in order to spell consistently and accurately. It makes

sense therefore wherever possible to use **multi-sensory strategies** to support learners to become more confident at spelling. For dyslexic learners it is **essential**.

2 When do we use these skills in the workplace?

We use spelling skills when handwriting or word-processing information that has to be read and understood by another person. Some workplace examples are given below. In our personal and social lives, emails,

blogs/chatrooms, text messages, notes, lists, forms, letters etc still require us to write and spell in a style that the reader will understand – this 'style' can often tolerate inaccuracies – unlike the workplace.



Accident Report

Filling in this form
This form must be filled in by an employer or other responsible person.

Part A
About you

1. What is your full name?
2. What is your job title?
3. What is your telephone number?

About your organisation

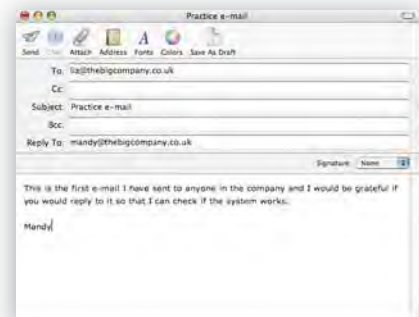
4. What is the name of your organisation?
5. What is its address and postcode?
6. What is its telephone number?

Part B
About the incident

7. On what date did the incident happen?
8. At what time did the incident happen?
9. Did the incident happen at the above address?
10. How did the incident happen?
11. What was the cause of the incident?
12. What was the result of the incident?

Part C
About the injured person

13. What is their full name?
14. What is their home address and postcode?
15. What is their home phone number?
16. How old are they?
17. Are they male? female?
18. What is their job title?
19. Was the injured person (tick only one box): one of your employees? an independent contractor? a member of the public?
20. Was the injured person (tick only one box): self-employed? employed by someone else? One of the company's employees?
21. What was the injury? (e.g. fracture, laceration)
22. What part of the body was injured?



Practice e-mail

Send Attach Address Fonts Colors Save As Draft

To: isa@thebigcompany.co.uk

Cc:

Subject: Practice e-mail

Re:

Reply To: mandy@thebigcompany.co.uk

Signature Name

This is the first e-mail I have sent to anyone in the company and I would be grateful if you would reply to it so that I can check if the system works.

Mandy



MEMORANDUM

To: _____

From: _____

Date: _____

File: _____



TELEPHONE MESSAGE

To: _____

From: _____

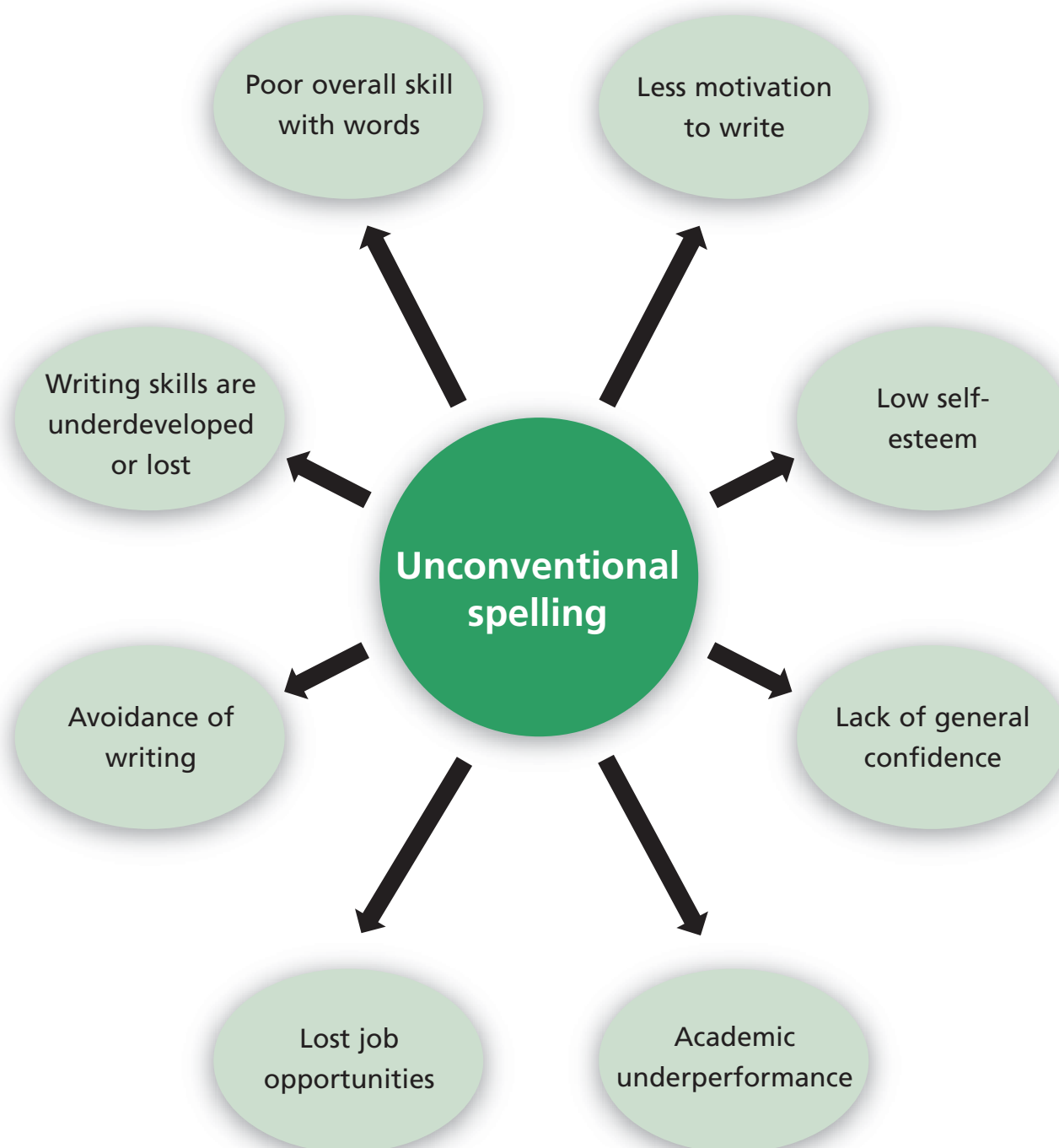
Date: _____

Message: _____

Spelling

3 Why bother?

Unconventional spelling is one of the more obvious signs of dyslexia and is often the area which causes the most embarrassment. It can lead to other problems which sometimes result in learners feeling that they are in a vicious cycle of underachievement.



4 Spelling and the dyslexic learner

One of the defining characteristics of a dyslexic profile has to be spelling. Even when other aspects of literacy have been modified and to some extent 'overcome', spelling seems to remain a residual challenge for most dyslexic adults.

Much can be done to help and on a 'good' day, with no pressures, a dyslexic adult may be able to spell adequately for his or her needs. However, when they are put under any sort of pressure and having a 'bad' day, spelling accurately, even recalling the most commonly used words, can sometimes prove difficult.

So what is it about spelling that is so challenging for the dyslexic person?

The starting point for spelling in English is the sound of the word: what you 'hear' in your head. There is increasing evidence to show that phonological awareness (the ability to detect, isolate and manipulate sounds within words) is a dyslexic learner's weakest area. Visual skills are also an important part of spelling (for seeing and recalling whole words), so a dyslexic person who has poor visual discrimination faces an additional obstacle. It is difficult to work out how to spell or read new words without some sort of phonic input – even just sounding the word out in their head.

However, because many dyslexic learners have auditory processing difficulties, visual approaches/strategies to spelling are going to be necessary. Learners using visual strategies focus on the features of words – shape of the word, cluster of letters, words within words, etc., and the meaning – rather than on the individual sounds.

Knowing the meaning of the word you want to spell can be important – how else could we choose to write **hear**, rather than **here** in a text about deafness, for example?

Having an understanding of the way words work and being able to see the patterns within regular words can help transfer knowledge of one word to another similar or related word.

English spelling has many conventions, rules and patterns. Knowing these allows an understanding of how words work and ultimately how to spell them.

Using morphology (how words are constructed) and the origins of words will help to bring meaning to the words causing the difficulties. Most dyslexic people like to know how things work, and therefore the more 'tools' in their 'toolbox', the better.

When exploring, identifying and using as many spelling strategies as possible, remember that there are now also

many technological aids to spelling. The adult dyslexic should be aware of all these aids to help them circumvent the often daily horror they face of having to spell.

The main spelling difficulties that might be experienced by dyslexic

learners are described below. Remember that every person approaches spelling in their own way, and it is unlikely that any individual will experience all the difficulties outlined in the list.

Be aware that the dyslexic learner . . .



- might **spell inconsistently** – even within the same piece of writing
- sometimes **reverses or inverts letters**, e.g. b/d m/w p/q
- can **mis-sequence letters to form new words** – usually happens with smaller words, e.g. no / on; was / saw; stop / spot
- has **‘good’ and ‘bad’ days**
- might **spell exactly as each word sounds** or as they pronounce them (good phonological awareness, but poor knowledge of which letters represent those sounds), e.g. said / sed; was / wos; when / wen; went / whent; build / bild; init/Isn’t it; meja/ media; fever/ feather
- finds it **difficult to apply or remember to apply a spelling ‘rule’**, e.g. dropping the ‘e’ off the end of a word when adding the suffix ‘-ing’ (as in write / writing); doubling the consonant when adding a suffix like ‘-ing’ (as in hop / hopping) or suffix ‘-ed’ (as in zip / zipped)
- can be **caught out by silent letters**, e.g. knife / nife
- might have all the correct **letters but some in the wrong order** – the shape and length of word is maintained, e.g. friend / freind; house / huoos; explain / expialn
- might **contract long words** by leaving out syllables, e.g. remember / rember
- sometimes **extends words with additional, unwanted letters**, e.g. beginning / beginnining
- sometimes **spells bizarrely** – word does not resemble the original in any way.



Try this!

- Ask the learner to explain how they go about spelling a word.
- Analyse a piece of the person's free writing for the types of spelling errors.
- Try using some of the strategies given in the following pages.
- Present all strategies – including auditory ones – in a multi-sensory way.

Note: Remember that if a dyslexic person knows the correct spelling, they will use it.

5 Strategies and tips for the dyslexic speller

Look, Say, Cover, Repeat, Write, Check (visual)





Try this!

- **LOOK:** The learner needs to find a way to look at a word they repeatedly spell incorrectly – they may only be able to 'see' the letters once they are chunked in a way that works for them, then say it in the chunks. The emphasis in this approach, which works particularly well with those tricky words which are sometimes described as 'irregular' (e.g. sure, said), is on looking at the word with intent to remember it – looking for a pattern, breaking it into chunks, highlighting parts of the word, finding a word within a word, making a mnemonic, looking at the shape of the word etc.
- **SAY:** Say the letters and then the whole word aloud.
- **COVER:** Cover the word so it cannot be seen.
- **REPEAT:** Repeat the word. Repeat the strategy for remembering the word. Visualise the word.
- **WRITE:** Write the word from memory, again saying it in the chunks, or letters, while writing.
- **CHECK:** Check carefully letter by letter while looking at both the original and the written version. If the word is wrong, cross out the whole word, go back and repeat the process.

This routine should be done in exactly the same way, until after three consecutive days the word is spelled correctly each time.



The words should be:

- **linked** where possible with similar words or grouped into word families, e.g. light, bright, sight
- **practised** over a period of a week
- **tested** within sentences
- **re-tested** in sentences the following week
- **reviewed** over time
- **used in writing** and self-corrected if written wrongly.

Learners could use a landscape A4 piece of paper folded several times to practise this technique (see graphic on page 126) or use a separate A4 notebook to keep a more permanent record.

Note: If the learner has difficulty remembering any words, it is important to look again at the strategy and explore why it isn't working and find a better strategy for remembering.

'Mind's eye' spelling (visual)



Try this!

- 1 Write the word both as a whole word in joined up writing and also split into chunks:
cirrhosis ci rr hosis
- 2 Say the whole word and then say the chunks:
cirrhosis 'c i double r hosis'
- 3 Without looking, say the word and the strategy (the chunks). While doing this, picture each little bit in your mind's eye. Take a photo of it in the mind's eye.
- 4 Look at the word in your mind's eye and answer some question about it:

What's the middle chunk?

What letter comes after the 'h'?

What letter comes before the 'h'?

What are the last three letters?

- 5 Spell it, saying the letter names, by reading it off from your mind's eye.
- 6 Spell it back wards by reading it off.
- 7 Write it as a whole word in joined up writing by saying each chunk as you write it.
- 8 Check, letter by letter, with the original.

Note: This an effective method for remembering the odd tricky word but not suitable as a general spelling strategy.

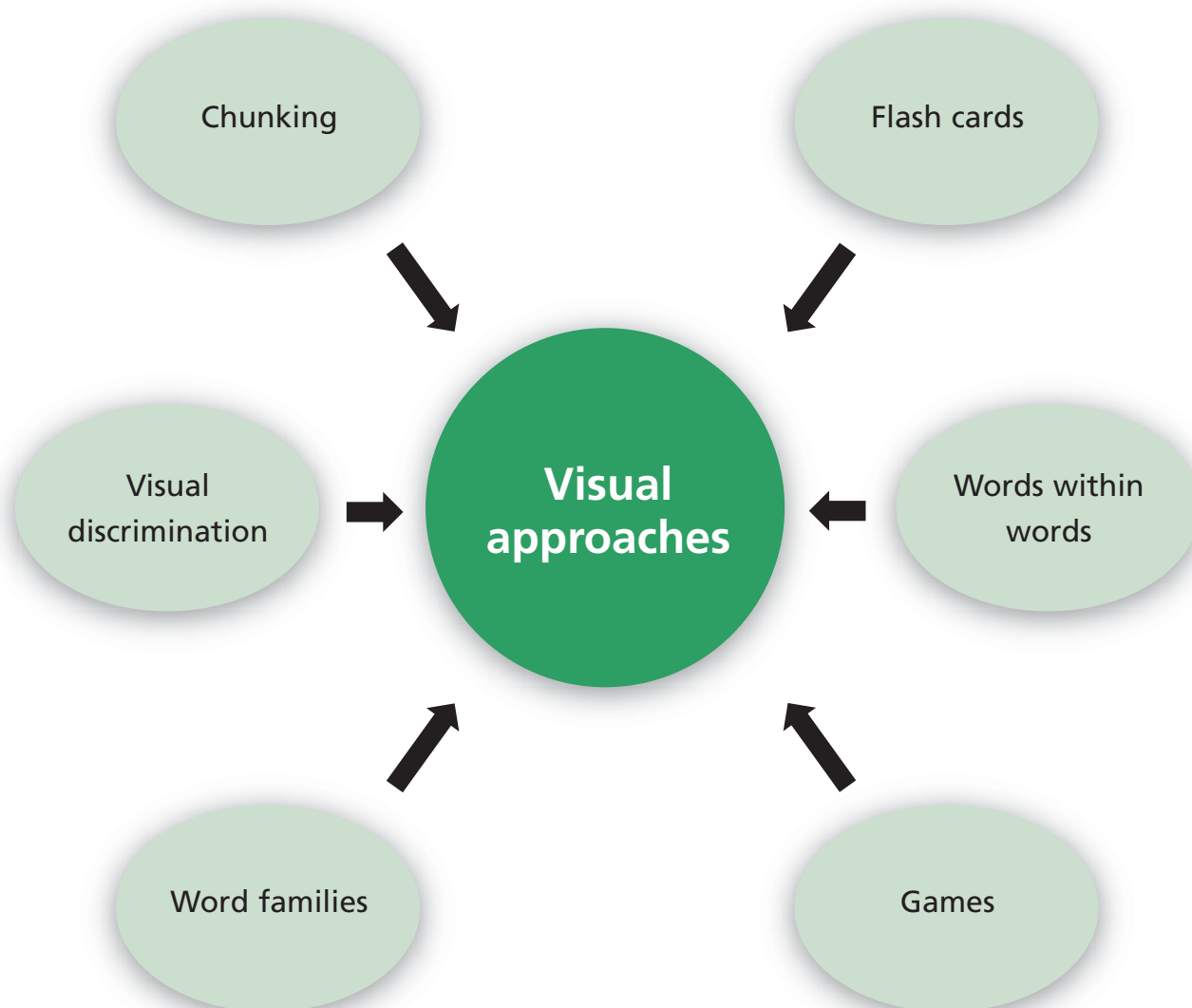


It may help learners to try and 'see' the letters or chunks in colours in their mind's eye (floating on a cloud may make it even more powerful!), e.g.
or

Chrysanthemum

Chrysanthemum ('come and meet . . . Chrys an the mum')

Other visual support strategies





Try this!

Flash cards

- Write the words clearly in lower case script on suitable sized cards.
- The word could be written on one side and the strategy for remembering it on the other..

Words within words

- Use highlighting or underlining to show how words are composed of units of meaning and how some words may contain other words, e.g. **Man**chester.
- Morphology – see page 133 for more information

Word families

- Identify word families, e.g. make, take, rake, lake etc

Visual discrimination

- Find the difference – for example, meet / meat
- Highlight the difference – **meet** / **meat**
- Explain the difference – **Me**et means to **see** someone, **mea**t that you can **ea**t.
- Use the word in sentences to show the differences:
 - I went to meet my friend.
 - The butcher sells different kinds of meat.

Chunking

- Looking at the word and discussing how the word might be broken down into chunks, then highlighting or underlining the chunks:
 - e.g. attention – at ten tion
 - sunshine – sun shine
 - matrix – ma trix.

Games

Word matching – provide parts of words which could fit together in different combinations. The learner makes the connections and then writes the word out in full. The parts could be in two lists to be connected by lines, or put onto small cards to be moved about and matched.

Sound to letter correspondence (auditory)



Try this!

- Spelling often reflects the pronunciation of the word and many words can be 'sounded out' very straightforwardly, for example stop – **s t o p**
- It is important to remember, however, that there are many sounds that are represented in writing by different combinations of letters rather than single letters, e.g. in **window** the 'o' sound at the end is made by putting o and w together – '**ow**', whereas the 'o' sound heard in the word **though** is represented by the letters **ough**. Compare also how the 'e' sound is written in **meet**, **meat**, **mete**, **me**, and the 'a' sound is written in **make**, **may**, **maid**, **they**, **eight**.
- The learner must make the all-important **connection** (correspondence) between **sounds heard** within words and their **representation as letters**.
- It is important when helping someone to sound out a word that the letter sounds are as 'pure' as you can make them, i.e. without the 'uh' sound attached to so many of them, e.g. 'b' sound is often pronounced rather loudly as a 'bu', which can confuse the learner into thinking that there is in fact an 'u' sound after the 'b', when there is not.



- Words are generally spelled much as they sound. However, poor phonological awareness (ability to identify sounds, 'beats' in a word (syllables), rhyme (gate, fate, wait, late, fete) etc.) appears to be a common characteristic within the dyslexic profile, and many dyslexic learners have difficulty identifying sounds within words accurately.
- Conversely, knowledge of the correct spelling can help with accurate pronunciation.
- These skills can be improved over time, particularly if help is given when the person is very young. In the workplace, however, where it is less likely that time will be given for intensive spelling programmes, it may be better to use other coping strategies.

Pronunciation, word families and mnemonics (auditory)



Try this!

Pronunciation

- **Sound out silent letters** to help the learner remember that they are there, e.g. knife – ‘k’ nife; knot – ‘k’ not.
- **Exaggerating sounds or syllables** within words. For example:
Wed-NES-day
Feb-RU-ary
bis-CU-it.

Word families

- Homophones sound the same but have different spellings (e.g. too, two, to; no, know; hear, here) so they should be avoided when using auditory word families; but it is helpful when you can make a lexical or semantic connection such as ‘you need an **ear** to ‘hear’ in ‘hear’, and you want to be able to **hear** your ‘heart’.
- Stick to words that have the same visual and auditory pattern, e.g. float, boat, coat, moat, gloat, stoat. This will reinforce the pattern and make it more memorable.

Mnemonics

- These are ways of remembering particular spelling patterns or spellings. For example:
- a continual problem with the ‘ight’ letter pattern may be helped by devising a mnemonic (memory aid) such as ‘**I** **G**o **H**ome **T**onight.’
- ‘Never se**para**te a **para** from his **para**chute.’

Note: Some dyslexic learners will prefer a mnemonic that creates a strong ‘picture’ rather than another word that they have to remember how to spell.



Many dyslexic people have short-term-memory difficulties, so use mnemonics sparingly: trying to remember the mnemonic that will help the person remember the word can overburden the memory. Save them for particularly difficult words that the learner struggles to spell.

Morphological patterns



Try this!

It can help if learners are encouraged to understand **how words are made up**. This involves enabling learners to see patterns within regular words, and to look for links between words and between letter patterns, and by considering the structure of regular words. This is most effective when applied to words that learners see as relevant to their needs.

Words can be linked both visually and auditorily as word families and as syllables.

Word families (common letter strings)

e.g. light, sight, fight, flight, might, bright

Syllables (word divided according to the number of 'beats' in the word)

e.g. table – ta-ble (2); computer – com-pu-ter (3); information – in-for-ma-tion (4)

Words also break down into meaningful bits (or **morphemes**). Words can be split into:

- base/root words
- prefixes
- suffixes.

For example: In a word like imported the **base or root** word is **port**, meaning to carry or move; the **suffix -ed** indicated the past tense (or the passive voice); and the **prefix im-** means inwards. Breaking up the word 'imported' into morphological parts helps to make the word more easily understood and spelled.

Imported = im port ed

We can apply the same rules to exported; transported; importing; exporting; exports, etc., but at the heart of each word remains the unchanged root port which means to carry or move.



Learners might be able to remember certain spellings better if they know a little about **the origin of many of the words and spellings**. For example, the sound 'f' written as 'ph' has come to us through the assimilation of Greek words into English. Words such as telephone, physics and philosophy have all come from Greek, and bring with them the use of 'ph'.

Tip: If a word you are trying to spell seems to be scientific or based on philosophy, then opt to use 'ph' rather than 'f' in the spelling.

Kinaesthetic and tactile



Try this!

Work on **cursive** (joined up) **script** can often help the learner with spelling for the following reasons:

- It helps the learner to focus on common letter combinations.
- It improves confidence about writing.
- It helps with motor memory – the hand has a memory for spelling.

Other kinaesthetic approaches can involve:

- **tracing words with a finger** while saying the letters aloud.
- using plastic letters/phoneme **cards to both build and dissect words**.
- having words on cards to **build and dissect as syllables**
- writing letters on palm/forearm
- steaming up a mirror and **writing in the steam**
- **tapping out or bouncing balls for syllables**
- **using a keyboard** and if possible learn to **touch type** – very powerful memory is triggered through the fingers!

Record words frequently used for work in small **personal dictionary**.



Many dyslexic learners are hands-on/kinaesthetic learners, so it may help them get spellings words into their long-term memory, if they are encouraged to build up visual and tactile images of the words they would like to spell.

However, time for learning is always limited when there is work to be completed. On the next few pages we explore how spelling can be supported through ICT.

ICT and spelling

How ICT can aid spelling:

- Learners get immediate **success and accuracy**.
 - Learners spelling is improved through **motivation and repeated use**.
 - Learners need only locate recognised letter shapes on the keyboard – they **do not have to form letters**, as they do when hand writing.
 - The learner only needs to get the first few letters correct and then the **spell checker and predictive text** takes over. (Remember, however, that the spell checker or predictive text will only provide a word that it spelled correctly: but it may not be the word that was intended.)
- Programs like **TextHelp** and **Write Out Loud** can read the spelling options from the spellchecker if the learner has problems distinguishing one word from another visually.
 - It enables learners to access individual support with spelling, e.g. **Franklin spell checker**.
 - It facilitates **independent working**.
 - It is **non-judgmental**.
 - In the workplace, **finding immediate ways around spelling difficulties** is probably more helpful and realistic.



The use of TextHelp and other reading software with voice recognition can enable learners to write ideas down quickly knowing that spelling and grammar can be sorted out later. As they develop their own writing and see words correctly spelled and spoken back to them, they begin to become familiar with the words they use and how they are spelled.

ICT allows writing to develop with limited intervention. Too much time spent on spelling can lead to reduced time spent on writing skills, which, it could be argued, is the more important skill.

There are structured, multi-sensory spelling software programs designed so that individuals can work at their own pace with immediate feedback built in, such as Dyslexia Action's **Units of Sound**.

Glossary

ADD	Attention deficit disorder. A complex condition in which there are impairments in the processes responsible for planning and regulating behaviour. This can be associated with difficulties in sustaining concentration, inhibiting inappropriate responses, selecting between alternatives or switching from one way of thinking to another. People with ADD are often creative and quick to see new possibilities.
Adjective	A word that describes a noun, e.g. a heavy, black bag.
Assessment	Testing to discover a learner's strengths and weaknesses. It has a more specific meaning than 'test', implying that the information gained can be used diagnostically for remediation.
Assistive technology	Usually software – technology that supports reading, writing, spelling, number, numeracy, organisation.
Acquired dyslexia	Dyslexia that occurs as a result of brain damage, due to disease, head injury or similar specific cause.
Affix	A morpheme that can be added to the beginning (<i>prefix</i>) or end (<i>suffix</i>) of a base word to change the meaning of a word or its usage in a sentence.
Analogy	<p>The perception of similarity between two things; relating to something new.</p> <p>In spelling, using known spellings to spell unknown words (e.g. night–knight–right–sight–light–fright).</p> <p>In reading, using knowledge of words to attempt previously unseen words.</p>
Auditory	To do with hearing.
Auditory discrimination	The ability to distinguish small differences or similarities in sound. See also Perception .
Auditory memory	One of the two main forms of working memory; this retains sounds for a few seconds.

Auditory perception	The recognition and understanding of information and stimuli received through the ears. See also Perception .
Aural	Stimulus received through the ears (i.e. heard).
Automaticity	Knowing or doing something automatically without having to give conscious attention to the task.
Base word	The simplest form of a word to which affixes may be added, e.g. <i>run, rerun, running</i> .
BDA	British Dyslexia Association.
Blend	To fuse individual sounds or syllables into meaningful units, e.g. p a t > pat; ban dit > bandit. See also Consonant blend .
Brainstorming	Collecting ideas.
Closed syllable	A syllable that ends in one or more consonants e.g. <i>hat, in, est</i> .
Cloze	A technique for measuring and developing reading comprehension. Words are removed from a reading passage, leaving blanks. The reader must read the passage and supply the missing word.
Coding	The preparation of data for transmission or storage. Speech may be coded into written form; print may be decoded into sound and then recoded into words in some other form
Cognition	All aspects of thinking. Cognition includes the processes of perception, memory, thinking, reasoning, language and some types of learning.
Cognitive process	Any mental process that a learner uses – thinking, remembering, perceiving etc.
Comprehension	Understanding, as in reading comprehension. Verbal comprehension is the understanding of the spoken word.
Concept	An idea or general understanding, e.g. the concept of numbers.

Concrete	In the field of numeracy, this is when actual materials are used to illustrate and reinforce learning, e.g. coins, weighing scales, tape measures.
Consonant	<p>A letter which represents a speech sound, e.g. b, c, m, t, that is distinct from a vowel (a, e, i, o, u).</p> <p>Phonetically, a consonant sound is one which is made by a partial or total closure of the vocal tract.</p>
Consonant blend	Two or more adjacent letters whose individual sounds blends together smoothly, e.g. <i>st</i> , <i>cr</i> , <i>spl</i> .
Cursive writing	A style of handwriting in which all the individual letters of each word, except if there is a capital letter at the beginning, are joined together smoothly.
Decoding	Reading and interpreting words using phonic knowledge.
Dyscalculia	A theoretical term for the specific disruption of numeracy skills. The term 'dysnumerate' is also used.
Dysgraphia	A term used to describe difficulties with handwriting. The difficulty is one with the mechanics of the writing process, rather than a difficulty with spelling. Often dysgraphia is seen alongside dyspraxia, dyslexia or ADD.
Dyslexia	Here we mean developmental dyslexia: a condition, usually with a genetic basis, that tends to cause difficulties in acquiring literacy skills. It is often associated with difficulties with short-term memory and subtle difficulties in expressive language. Many people with dyslexia have visual strengths and are creative thinkers.
Dysnumerate	See Dyscalculia .
Dysphasia	Partial loss of spoken language skills, usually as a result of brain damage. Developmental dysphasia is a rare congenital language difficulty.

Dyspraxia	Also called developmental coordination disorder. A complex condition that is associated with difficulties in the timing or coordinatinon of movements, usually resulting in a degree of clumsiness.
EFL	English as a foreign language.
ESOL	English for speakers of other languages.
Expressive language	Spoken language.
Fluency	Easy flow of reading, speech or writing.
Grapheme	The smallest unit in a writing system. The written letter representing a phoneme, e.g. t m sh.
Holistic	A term used to describe simultaneous cognitive processing, as in looking at a picture or recognising a face, as opposed to successive processing where the there are lots of steps or sequences. The 'big' picture.
Homograph	Words which are written in the same way but are pronounced differently and have different meanings, e.g. <i>wind</i> = <i>air</i> and <i>wind</i> = <i>turn</i> .
Homonym	Words that are spelled the same and sound the same but have different meanings, e.g. <i>post</i> = <i>mail</i> and <i>post</i> = <i>pole</i> .
Homophone	Words which sound the same but are different in spelling and meaning, e.g. sea, see.
Imagery	Mental pictures created by words or sentences. See also Metaphor, Simile .
Imaging	Consciously forming a strong mental picture in spoken or written language; a strategy for supporting memory.
Inclusive learning	'Redesigning the very process of learning, assessment and organisation so as to fit the objectives and learning styles of the students.' <i>Inclusive Learning</i> , FEFC, 1996
Intuitive	New information is 'seamlessly' linked to previously known and existing information.

Irregular word	A word that does not have phonetically regular spelling, e.g. <i>said</i> , <i>what</i> .
IT or ICT	Information and communication technology – includes computers, word processors, the Internet, telephone and text messaging.
Kernel sentence	A simple sentence, e.g. 'The man sat down on the bench.' Often used as the basis for literacy exercises to build up more complex sentences.
Key words	Important words that convey the meaning of a text, or an important word in specialist or curriculum areas.
Kinaesthetic	<p>The sense or awareness of movement. Speaking is oral kinaesthetic; handwriting is manual kinaesthetic.</p> <p>Kinaesthetic memory is sometimes called muscle memory – for example, many people are able to type in a phone number or PIN, but couldn't say what the numbers are until afterwards.</p>
Language	A system of communicating with others through words, tone, gestures, signs or symbols.
Language interference	Features of the individual's own language which can contribute to the difficulties in mastering language.
Laterality	<p>The sidedness of the body, e.g. a learner may prefer to use right hand, right foot, right eye and right ear.</p> <p>Cross laterality is, for example, when a learner prefers to use right hand and left eye; this is not uncommon.</p>
Lexicon	A person's vocabulary store.
Long-term memory	<p>Long-term memory contains the record of our knowledge and experience. This includes our knowledge of words and their meanings, our memory for events in our lives, and our knowledge of the procedures and strategies for carrying out actions or tasks.</p> <p>That part of the memory system where information is stored more permanently. See also Short-term memory and Working memory.</p>

Lower case	Letters of the alphabet written in the 'small' form such as b g h etc, as distinguished from capital, or upper case, letters.
Metacognition	Awareness of how one thinks and learns
Metaphor	A figure of speech; a word or phrase which is used for special effect, comparing one thing to another, e.g. <i>Her words stabbed at his heart</i> : the effect of the words is compared with the stabbing of a knife.
Mind mapping	A way of recording ideas and the links between them, developed by Tony Buzan.
Miscue	Errors relating to reading.
Mnemonic	A device to aid memory, for instance to learn a particular spelling: Sally Anne Is Dancing for <i>said</i> .
Modalities	Sensory input channels – visual, auditory and kinaesthetic/tactile – through which information enters the brain.
Morpheme	The smallest unit of meaning in a language, e.g. a base word, a suffix or a prefix.
Morphology	The study of word structure, including root words and affixes.
Motor integration	The process through which complicated sequences of muscular movement are ordered and automated. More specifically, it refers to the coordination of muscular control coordinated across the left and right hemispheres of the brain. Hand/eye coordination for handwriting is an example of a need for effective motor integration.
Multi-sensory learning	Using two or more of the senses simultaneously so that the stronger sense can support the weaker. In literacy work the visual, auditory and kinaesthetic senses are the most frequently used.
Non-verbal communication	Communication that uses gesture, body language, tone of voice or other signals, but not words, to convey the message.

Numerate	Competent with the basic principles of number.
OCR	Software: optical character recognition.
Open syllable	A syllable which ends with a vowel, e.g. <i>he</i> , <i>ba</i> .
Oral	Spoken. Not to be confused with aural.
Over-learning	Repeated and varied practice to ensure that information is learnt so well it becomes automatic.
Perception	<p>This is about gaining a sense of understanding or meaning which can only be done in relation to the learner's existing knowledge and experience.</p> <p>Perception is about the integration of information that comes through the senses with existing knowledge.</p>
Phoneme	<p>The smallest unit of spoken language that is capable of changing meaning. In writing, a phoneme may be represented as one or more letters, e.g. the phoneme /o/ in the words open, toe, show, though.</p> <p>(There are approximately 44 phonemes used in the English language.)</p>
Phoneme-grapheme correspondence	Sound-symbol relationship. The relationship between a speech sound and one or more symbols which represent it in written language.
Phonemic awareness	Being able to hear the distinctive sound units (phonemes) in a word, e.g. <i>drag</i> is /d/ /r/ /a/ /g/.
Phonemic segmentation	The ability to discriminate separate sounds in a word or syllable. See Phoneme and Phonological awareness .
Phonetically regular	Where each symbol or letter always represents the same sound. English spelling is not phonetically regular.
Phonetics	A branch of linguistics; the study of speech sounds.
Phonics	A method of teaching reading and spelling that is based on establishing the link between the sound and its graphical representation.
Phonogram	Letter or letters used to represent speech sounds. A less technical term than grapheme. It can be used for letter strings such as <i>ai</i> <i>igh</i> <i>tion</i> .

Phonological awareness	Awareness of sounds within words, including rhyming, alliteration, syllables and phonemic segmentation
Phonological processing	Phonology refers to the sound structure of language. Words can be divided into different units of sound including phonemes (the small sounds, which are often represented by a single letter) and syllables (the number of beats). Phonological skills include the ability to segment word sounds and the ability to blend sounds together.
Phonology	The study of speech sounds in context; the use of sounds in the language.
Phrase	A group of words, smaller than a clause, usually without a finite verb, e.g. <i>Sam loves reading detective novels</i> .
Polysyllabic	Words of more than one syllable, e.g. information has four syllables (in for ma tion).
Practical skills	This term is used to indicate the variety of abilities that many people have in understanding how things work, making or repairing things and solving practical problems. Many people with dyslexia demonstrate good practical skills, although they may have difficulty describing verbally what they do.
Processing speed	Simply the amount of time that it takes to think or carry out some other mental process. Sometimes people are described as 'slow processors', reflecting the fact that they need more time to think and to respond; they are capable of understanding and reasoning effectively, but need a little more time to do so.
Pronunciation	The way a certain sound or sounds are produced.
Proofreading	Checking written work for mistakes.
Prefix	A letter or letters added to the beginning of a base word to change its meaning, e.g. dis appear.

Print instability	When print seems to move on the page or appear distorted in some way, for example blurred, faint or wobbly.
Psychological	An adjective referring to the mental and emotional state of a person or to the study of psychology
Psychologist	Someone trained in the application of methods derived from studies about the mind and human behaviour.
Readability	The reading 'level' of text – an attempt to match the reading level of written material to the 'reading with understanding' level of the reader. A formula is applied to calculate the 'level'. Legibility, vocabulary, word length and sentence length, conceptual difficulty, syntax and organisation may all be involved.
Receptive language	Language comprehension, understanding the spoken word.
Regular final syllable	In reading terms, a group of letters which commonly form a syllable at the end of a word, e.g. picture , station , bible .
Retrieval	The process by which information from long-term memory is accessed and made available for use.
Rhyme	Similarity in the sound of word endings. The spelling may or may not be similar, e.g. <i>fat</i> , <i>cat</i> ; <i>white</i> , <i>fright</i> . Strictly speaking the rhyming sounds extend from the last stressed vowels to the end of the words, e.g. <i>investigation station</i> .
Rime	The part of a syllable from the vowel to the end, e.g. string , hot , she (the part of the word that rhymes).
Root	The essential element of a word without affixes. The root words may or may not be a full English word and is often of Latin or Greek origin. It is therefore often more difficult to identify than a base word, e.g. <i>submit</i> .

See also **Base word** and **Stem**.

Scaffolding	Providing support while a learner practises and develops skills. This might be done by working collaboratively with a teacher or with another learner so that some of the difficult aspects of the task can be supported or modelled; in time the support can be withdrawn to enable independent working.
Scan, scanning	The technique of running the eye quickly down the page to locate specific details, e.g. a name or date.
Scotopic sensitivity	Print seems to become distorted during reading. People with scotopic sensitivity show a marked and immediate improvement in reading by overlaying text with coloured plastic sheets.
Screening	Surveying a large group to identify those with particular characteristics who are 'at risk'.
Segmentation	The division of words into syllables, phonemes or morphemes.
Self-esteem	How a person rates himself/herself against others.
Semantics	The study of the meaning of words and sentences.
Sequence	An accepted order of things or events, e.g. the alphabet, time, routines.
Sequencing	This is about the order of actions or events and the 'way round' that they are. Those with sequencing difficulties might confuse left and right or switch round the digits in the a telephone number.
Sequential	Proceeding progressively in a prescribed order.
Short-term memory	An earlier, everyday term for working memory. See Working memory .
Sight vocabulary	Words that should be recognised instantly (that is, without having to apply any decoding skills). It is often applied to high-frequency words such as <i>was</i> , <i>said</i> , <i>the</i> .
Simile	A figurative expression that makes an explicit comparison, e.g. <i>as tall as a tree</i> , <i>he fought like a tiger</i> .

Skim, skimming	Reading of heading, beginnings of paragraphs, etc. for an overview of a text – getting the gist.
Spatial awareness/ spatial orientation	This is involved in our ‘sense of direction’ and in spatial memory – remembering where something is or how to get somewhere. Those with good spatial awareness can usually see easily how shapes or pieces fit together and can break down a complex pattern into individual elements.
Speech recognition	Software – the software records the learner’s voice and translates it into digital text.
SpLD	Specific learning difficulty. Formerly, it was frequently used as an alternative term to dyslexia, now an umbrella term that includes dyslexia, dyspraxia and ADHD.
Spoken language	This term is used to refer to the various aspects of language such as phonology, semantics, syntax, but excluding those that are concerned with the written word.
Stem	The part of a word to which inflections can be added. See also Base word and Root .
Strategy	A tactic or plan.
Study skills	Strategies which enable a learner to study or learn more effectively. It particularly involves planning, advanced reading skills, improving written work and examination skills.
Substitution	The replacement of one element with another in reading, producing errors, such as <i>home</i> for <i>house</i> or <i>supper</i> for <i>surprise</i> .
Suffix	A letter or letters added to the end of a base word or root to change or expand its meaning or use, e.g. <i>hats</i> , <i>illness</i> .
Syllable	A word or part of a word spoken with a single emphasis of sound and heard as a single beat. Every syllable has a vowel sound. See also Closed syllable , Open syllable .

Syllable division	Word attack skill which involves breaking multi-syllable words into separate syllables. For spelling: the learner says the word and then breaks it into syllables orally and spells it syllable by syllable. Fortunately, long words tend to be more phonically reliable.
Syntax	How words in a phrase or a sentence relate to each other grammatically.
Tactile	To touch or feel things/objects.
Task analysis	The breakdown of an action or piece of work into its constituent parts.
Text to Speech	Software that enables text to be read back to the learner.
Transposition	When the position of symbols, letters or numbers in a sequence is altered, e.g. <i>1936</i> for <i>1963</i> , or <i>grill</i> for <i>girl</i> .
Upper case	Capital letters: B G H etc.
Verbal	To do with oral language.
Verbal rehearsal	Repeating words, messages, etc. aloud; a strategy for supporting memory.
Verbal thinking	This term is used to summarise the kinds of knowledge and skills that are involved in reasoning using words. These include knowledge of word meanings (semantics) as well as the ability to make verbal connections and the ability to use words effectively to express an idea or point of view.
Visual discrimination	Visual ability to judge similarities and differences between objects or symbols such as letters and words.
Visualising	Consciously forming a series of strong mental images – ‘making a mental movie’; a strategy for supporting memory.
Visual discomfort	Print seems to become distorted during reading. See also Scotopic sensitivity .
Visual perception	Analysis and interpretation of information received and processed through the visual system.

Visual skills	This term is used to summarise the many and complex processes that are involved in interpreting what we see. It is often used to refer to those people who have a good visual memory and who find it easy to recall details of shape, colour and location.
Vowels	<p>The letters a e i o u and sometimes y.</p> <p>Phonetically, a vowel is made by an unobstructed, even, voiced airflow over the tongue. Different vowel sounds are made by changes in tongue shape and lip shape.</p>
Vowel digraph	Two vowel letters representing one sound, e.g. <i>ai</i> , <i>ee</i> , <i>oo</i> .
Word-finding difficulties	Inability to retrieve a word from long-term memory with ease in order to say it. Sometimes a word is described as being on the 'tip of the tongue'.
Working memory	The mental space in which we hold information for a relatively short time while we do something with that information. The term makes it clear that there is <i>active</i> processing taking place, such as the execution of instructions or the addition of numbers.