

Skills for Life

The national strategy for improving adult literacy and numeracy skills

Materials for
Embedded Learning

Horticulture

learner materials in colour and black-and-white ● teacher notes
referencing to Adult Core Curricula, National Tests and Key Skills Standards
referencing to National Occupational Standards ● integrated assignments
audio CD ● CD-ROM with Word and PDF files, and interactive practice materials



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Skills for Life: the national strategy for improving adult literacy and numeracy skills

Many millions of adults in England need help to improve their literacy, language and numeracy skills. *Skills for Life*, launched by the Prime Minister in 2001, sets out the Government's strategy for meeting these needs.

Since the launch of *Skills for Life*, we have gained an even greater insight into the effect low levels of literacy, language and numeracy skills have on individuals, their families, on the economy and on society. For example, adults with poor literacy, language and numeracy skills could earn up to £50,000 less over their lifetime and are more likely to have health problems, live in a disadvantaged area or be unemployed. They and their children risk being cut off from the benefits of a world increasingly linked through information technology. Additionally, poor literacy, language and numeracy skills have been estimated to cost the country in excess of £10 billion a year.

Skills for Life is not just an education-only strategy, nor is it just the Government's response to address discrete Literacy, Language and Numeracy (LLN) needs. It covers all post-16 learners on learning programmes at levels from Pre-Entry up to and including Level 2. These courses range from discrete and embedded, classroom and community provision to voluntary and work based learning. *Skills for Life* achievement and progress is recognised through Key Skills, GCSE Maths and English and adult literacy, language and numeracy skills certification. So it is crucial that the strategy supports and reflects the successful implementation of other post-16 strategies. These include *Success for All*, the strategy for reforming post-16 further education and the *Skills Strategy*, which aims to ensure that the skills we develop are valuable to young people and valued by employers. Our goal to improve the skills of young people is also central to the *Opportunity and Excellence 14–19* strategy.

Every organisation and individual has a contribution to make. We believe that partnership working and the ownership of *Skills for Life* by all

our key stakeholders are the most important elements for successful delivery.

Government departments, the Learning and Skills Council (LSC), Jobcentre Plus, the Prison and Probation Services, development and learning providers in the post-16 learning sector, businesses, the CBI, TUC and many others are working together to improve the literacy, language and numeracy skills of adults through:

- **Boosting demand** for learning via a high profile promotional campaign and by engaging all partners across Government and employers in identifying and addressing the literacy, language and numeracy needs of their clients and employees.
- **Ensuring capacity** of provision by securing sufficient funding and co-ordinating planning and delivery to meet learners' needs.
- **Improving the standards** of teaching and learning in literacy, numeracy and English for Speakers of Other Languages (ESOL) provision.
- **Raising learner achievement** through the new national learning, teaching and assessment infrastructure and reducing barriers to learning.

Skills for Life Materials for Embedded Learning

Generic *Skills for Life* learning materials were first published in 2003 as part of the new national learning infrastructure. These learning materials and teachers' guides are high quality literacy, numeracy and ESOL resources closely mapped to the Adult Core Curricula at all levels from Pre-Entry up to and including Level 2. The materials are generic, but relate to real-life contexts.

To further broaden participation and encourage the effective acquisition of literacy, language and numeracy skills by a wider range of learners, these new Materials for Embedded Learning have been commissioned. These materials make clear the extent to which literacy, language and numeracy

skills underpin success both at work and in the community, and provide teachers and learners with the means to improve both literacy, language and numeracy and vocational/community skills. Crucially, they are referenced both to the Adult Core Curricula and to the National Occupational Standards wherever relevant.

These materials have been developed and quality assured by specialists in literacy, language and numeracy and specialists in the relevant vocational and community contexts. They have been trialled by practitioners in a range of programmes and revised in the light of their feedback.

The *Skills for Life Materials for Embedded Learning* are intended to give learners the confidence to

make progress and achieve qualifications in literacy, language and numeracy and in their vocational or other learning programme. I believe their introduction will make an important contribution both to the *Skills for Life* and *Success for All* strategies and the *Skills Strategy*.

I commend the materials to you, and hope that their use will enhance the learning experiences of the diverse range of adults who need to improve their literacy, language and numeracy skills to realise their potential.



Susan Pember
Director, Adult Basic Skills Strategy Unit

Introduction to the *Skills for Life Materials for Embedded Learning* project

Welcome!

First, the definition of ‘embedded learning’ that the project has used. 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 succeed in qualifications, in life and at work.

The twenty files that constitute this project (of which this is one) set out to explore this idea in a variety of contexts and media.

The resources contained in this project will assist those who are preparing learners for national qualifications in work-, college-, and community-based settings. The aim is to bridge between content territory 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 literacy, language and numeracy confidence. Thus, literacy, language and numeracy ‘barriers’ stand in the way of successful vocational attainment. By setting literacy, language and numeracy learning in realistic context-based settings, the hope is that the obvious value of enhancing literacy, language and numeracy skill will be self-apparent to learners. By careful matching of vocational and literacy, language and numeracy content to the National Occupational Standards and the Adult Core Curricula, it is hoped that the value to teachers will also be clear.

How the materials are presented: paper-, screen- and audio-based

The resources in this file are intended for use by teachers – coming both from vocational and literacy, language and numeracy backgrounds. The file contains extensive Teacher notes linked

to Learner materials that are mainly paper-based, but also include audio clips presented on an audio CD, bringing real-life situations into the learning environment. An additional CD presents PDF and Word® computer files from which the paper-based resources can be reproduced electronically. The printed versions of the Learner materials are presented in colour in the main teacher reference section of the file, with the relevant Teacher notes interwoven with them. A black-and-white version of the Learner materials, printed at an appropriate resolution that optimises the quality of reproduction when photocopied this way, is also offered as a separate section at the back of the file.

Screen-based materials: including generic interactive practice resources

Alongside the PDF and Word® versions of the paper-based resources, the project has also developed interactive, generic, screen-based literacy, language and numeracy practice materials. These too are presented on the second CD. These practice materials are ‘generic’ in that whilst all the resources are set in everyday recognisable settings, they have not been embedded into different vocational settings. Thus, the practice resources on the enclosed CD-ROM are identical to those in all the other files. The activities are written to ‘practise’ rather than to ‘teach’ key aspects of literacy, language and numeracy: aspects that are well-suited to being handled electronically. The best use of them is likely to be made if they are mediated by a teacher.

Availability of the paper- and screen-based materials via a Portal

The screen-based materials are available both via the CDs contained in this pack, and via a Web Portal which can be found at www.dfes.gov.uk/readwriteplus/embeddedlearning. This Portal offers access to the PDF and Word® versions of all the materials in the project, and also includes a search facility that enables teachers to find appropriate resources for their needs. The twenty files of the project are being developed over the period from Autumn 2004 to Summer

2006. As additional resources are developed, they are entered onto the Portal – progress on development of the project can be checked there.

The Portal will also give access to an interactive Advice and Guidance tool, *Skills for Work*, that enables advice and guidance workers and their clients to discuss the literacy, language and numeracy requirements of a wide range of occupations. This can be accessed at www.dfes.gov.uk/readwriteplus/skillsforwork

How it is anticipated the resources will be used

The materials are seen as a resource, not a course. From this file, it is anticipated that teachers will make copies (and if appropriate, via the PDF and Word® resources, amended versions) for their learners, interpreting them in the light of the Teacher notes' suggestions. Important note: some pages will need to be reproduced in colour (for example, the pages relating to health and safety signs), in order that learners can fully understand the information.

It is not the intention that every learner should address every page. The expectation is that by negotiation at the start of a topic, groups of learners will agree with their teacher the best subset of content to address, granted the amount of time available. This will be based on the Individual Learning Plans held by each learner.

Organisation of the file

This file contains two CDs, and a sequence of main sections. The first CD contains audio files; the second CD contains the PDF and Word® versions of the Learner materials and the generic practice materials.

The first main section outlines the intended coverage of the file, as well as detailed curriculum coverage grids.

The second section offers three different subsections that back up the overall content of the file:

- **Integrated assignments** The first subsection contains two *Integrated assignments*. These offer a way for the teacher to give learners the opportunity to 'show off' the skills that they have acquired whilst undertaking study within the content areas covered by the file.

- **Source material** The second is *Source material*: 'real-life' resources – forms to fill in, notices to read and so on – that will be utilised throughout the rest of the file.
- **Glossary** The third is a *glossary* for learners, explaining the technical terms used in the file.

The following sections contain the main substance of the file – the *modules* around which the resources are built:

- **Modules** This file contains four modules. These represent the main subdivisions of the content.
- **Themes** Each module is presented as a sequence of *themes*; each theme starts with the specific Teacher notes that introduce it.
- **Focus and task pages** The themes in turn are presented as a sequence of *focus* and *task* pages that introduce and then explore the detailed content. The key on the next two pages offers an explanation of the main features of the *focus* and *task* pages in the Learner materials.
- **Audio scripts and answers** Audio scripts and answers for the module are collected together at the end of the module.

The final section contains the black-and-white versions of the Learner materials. These have been screened at a dot size that optimises their clarity when photocopied. The black-and-white versions include all the Source material and Learner materials, but not a repeat of the Audio scripts or answers. If these are required, they should be copied from the section at the end of each module. The more detailed Introduction that follows gives more of the background to the specific content of this file.

In summary ...

The intention for this introduction is to offer an overview of the broad objectives and organisation of the file, setting it in the context of the overall project. The next section, *Introduction to Horticulture*, offers more detail on the purpose and structure of the content that follows it.

The project team has put a lot of effort into creating this wide range of resources, and has done so with a huge amount of help from a wide variety of people, to whom the team are greatly indebted. The team hope in turn that users will find the resources of value.

Guide to focus page layout

This is the Horticulture file.

There are four modules in this file.

This is the module title.

This is the module number and page number within the module.

Ho Module 1 The work environment
Ho 1:1


The title indicates the main content for the theme.

Health and safety (1)

Signs and symbols


Safety signs at work give vital information to keep you and others safe while you are working. They use a standard colour and shape system to make them instantly recognisable, even from a distance.

Signs




Warning

- Risk of danger or hazard




Prohibition

- Stop
- Do not
- Must not
- No



Mandatory





- Must obey




Safe condition

- Information about safe conditions

Safety signs use **symbols**.
What do these symbols mean to you?

Match the symbols to the signs.




Some signs just use symbols, but others include an explanation of the sign, often written in capital letters.

WASH HANDS

Symbols

COSHH symbols are found on labels of hazardous substances. They warn you about a particular type of hazard.

The symbols are usually on an orange square but can be on a diamond shape.



IRRITANT

The word below the symbol indicates the type of hazard.

Here are the other words you might come across on labels:

CORROSIVE



TOXIC

FLAMMABLE

HARMFUL

EXPLOSIVE

OXIDISING

Can you identify which words go with these symbols?

Think of some more examples of **signs** and **symbols** from your place of work.

This indicates that this is a discussion-based focus page.

Most pages contain boxes that feature explanations or tips.

Guide to task page layout

This indicates that this is an activity-based task page.

The tasks are numbered consecutively within a theme.

This audio icon indicates that an audio clip accompanies this task. The number is the track number on the accompanying audio CD.

Ho **Module 1** The work environment
Ho **1:6**

Health and safety (3)

When reporting or recording an accident, you must stick to the facts and keep them in the correct order.

Task 1

Listen to this description of an accident. Cross out any information that is **not** needed.

Poor bloke. They put him in one of those stretcher things and they took him off to Townsend General. They say he's done something to his eyes – not sure.

We'd only been talking a couple of minutes earlier. He was telling me about the match at the weekend. He's an addict he is – never misses a match.

We were spraying in greenhouse 6. Fred was measuring out the concentrate. One minute he's just pouring it out, whistling away like he does – next minute some of the liquid has splashed into his face. Fred was yelling in pain and couldn't open his eyes. I thought he was going to faint, but he didn't. You could see he was in pain. Tom got the eye wash and used it on Fred's eyes. I phoned for an ambulance. It's a shame because we were doing great on this job. We had nearly finished. The odd thing was that the Manager had just reminded us about the safety procedures for diluting concentrates the day before.

He'll be really sorry if he can't get to the match next weekend.

Task 2

Check that you have the correct facts. Re-write them in order using these headings.


Before the accident: _____

The accident: _____

After the accident: _____

Task 3

Listen to Tom's description of the accident. Check that everything has been included. Add any information you want to. Re-write the full report onto Part G of the RIDDOR form.



Take out any information that is not about the accident or is just a matter of opinion.

You may have to change the wording to make it more suitable for a report.

Compare Tom's report with the first report to see what important information he has added.

70 Completing an accident report.
SLIr/L2.1; Rt/L2.3; Rt/L1.3; Wt/L1.3; Wt/L1.2

Task pages feature a brief explanation of objectives.

References to the adult curriculum are given.

Introduction to *Horticulture*

The purpose of these learning materials is to develop the specific literacy, language and numeracy skills that underpin Amenity and Production Horticulture NVQ Level 2. There is much evidence to suggest that specific literacy, language and numeracy skills are required in order to achieve this vocational qualification, as well as to operate effectively within the workplace. Good literacy, language and numeracy skills are also required in order to progress within the workplace and to access further training.

Facts

- A worker needs to be at Level 2 to qualify for most jobs.
- You need literacy, language and numeracy skills at least at Level 1 at the beginning of an NVQ Level 2 course to make best use of it.
- Much workplace health and safety information requires reading skills at least at Level 2. This also applies to work instructions, quality instructions and documents, information on new procedures and so on.

Source: *Basic Skills are Union Business*, Basic Skills Agency

Rather than set about the impossibly large task of developing the full range of literacy, language and numeracy skills as described in the Adult Core Curricula, this project prioritises those skills that have been identified as playing a key role in occupational requirements. This allows teachers to provide a clear rationale to learners for literacy, language and numeracy skills development within their vocational training.

In the same way that we cannot set out to cover all literacy, language and numeracy skills, it would not be realistic to set out to provide full coverage of all the training requirements of the NVQ, as described in the occupational standards. Instead, aspects of the training where there is a particular demand on literacy and/or numeracy skills have been prioritised. Again, this will confirm to learners that these particular literacy, language and numeracy skills are an absolute requirement in order to perform occupational tasks correctly.

Prioritisation of skills

The first step in identifying the specific literacy, language and numeracy skills to be developed in these materials was the mapping of the Adult Literacy, Language and Numeracy Standards to the National Occupational Standards for Amenity and Production Horticulture NVQ Level 2. The full version of this is available on www.dfes.gov.uk/readwriteplus/nosmapping and it shows broadly that literacy, language and numeracy skills are required to the following levels:

Literacy skills

- Reading – Level 2
- Speaking and listening – Level 2
- Writing – Level 1

Numeracy skills

- Number (some aspects) – Level 1
- Measure (some aspects) – Level 1
- Interpreting data (some aspects) – Level 1

The next step was to prioritise the aspects of the training where there was most perceived need for development of sound literacy, language and numeracy skills. This was done in consultation with a range of representatives from the sector, including the Sector Skills Council [TOPPS], deliverers of training, sector experts and employers.

The coverage that results shows the priorities identified, giving a good basis for sound development of a range of occupational skills as well as transferable literacy, language and numeracy skills. It should be stressed again that the materials do not aim to provide full coverage of either the NVQ or the Adult Literacy, Language and Numeracy Core Curricula. These learning materials are designed to supplement existing vocational learning materials, either commercially available or centre-designed. For guidance on how to use the materials, see 'How to use the materials' on page 15.

What's in the materials

The materials are presented in four modules, in order to provide flexibility and coherence. The module titles and content have been chosen to reflect vocational topic areas (e.g. pesticides) and learning priorities (e.g. developing number calculation skills). Each module contains 20–30 sides of Learner material.

The materials are in two main parts:

- **Teacher notes**, based on the focus pages and task pages in the Learner material
- **Learner materials**, consisting of focus pages and task pages, Source material and additional materials.

Teacher notes

Teacher notes are provided for both the focus and task pages. These give a wide range of information, advice and guidance on the materials and how to present them. These notes form a critical part of the interpretation of the materials.

Focus page Teacher notes

Information is provided on the following:

Occupational setting	A description of the vocational setting for the focus page, giving NVQ Unit references, if applicable, and indicating the literacy and/or numeracy skills development priorities.
Materials	An indication of any materials, usually from the learner's workplace, required for delivering the teaching in this set of focus and task pages.
Learning outcomes	literacy, language and numeracy objectives for this set of focus/task pages.
Suggested teaching activities: Introduction	These teaching activities introduce the vocational topic described on the focus page. Most activities are based on group teaching.
Suggested teaching activities: focus page	These teaching activities cover the material shown on the focus page, which will cover both vocational and literacy/numeracy skills development.
References	<i>Curriculum references:</i> Adult Literacy or Numeracy Core Curriculum references, showing the specific literacy or numeracy skills developed. <i>NOS:</i> National Occupational Standard or NVQ Unit references, showing the specific vocational skills being developed. <i>Key Skills:</i> Key Skills references for Communication Skills or Application of Number.

Task page Teacher notes

Information is provided on the following:

Task introduction and curriculum reference	A brief description of the literacy or numeracy skill in the task and its curriculum reference number.
Task bullet points	A step-by-step guide to teaching the skill involved in the task.
If the learner has difficulty	Specific guidance and suggestions for supporting learners who are showing evidence of struggling with some aspect of the literacy, language and numeracy skills development.
Extension	Suggestions for further activities to give additional practice or extend literacy, language and numeracy skills to the next level.
Theme assessment	Suggestions for activities that will allow learners to show evidence of competence in the vocational and literacy, language and numeracy skills in this theme in the module.

Learner materials

Focus pages

Each module contains four to eight focus pages. Each of these is designed to provide a vocational teaching focus with embedded development of a particular literacy, language and numeracy skill or set of skills. It is intended that much of the teaching – both vocational and literacy, language and numeracy – is developed from the focus pages and that all aspects of the topic are considered in an integrated way. It is also intended that the focus page will act as a memory aid or focus for revision for learners.

Task pages

Each focus page has at least one page of tasks, where there is development and practice of specific literacy, language and numeracy skills as described in the focus page. These tasks are not designed for independent completion by learners, but as a vehicle for teaching and guided practice of skills.

Source material

The Source material contains a collection of authentic work-based resources that are used as a point of reference or focus of skills development. This can serve as the basis of a learning resource for adaptation or enhancement to reflect the needs of learners and the specific vocational setting.

Additional Learner materials

These include:

- skills checklist (for each module)
- a glossary of relevant vocational and literacy/numeracy terms (pages 52–55)
- ‘Check it’ skills tests (for each module), modelled on the national literacy, language and numeracy tests
- a full set of correct responses or model answers
- two Integrated assignments (pages 20–33).

The teacher and teaching methodologies

The material in this pack has been written to enable its use by vocational teachers, preferably with, but possibly without literacy, language and numeracy specialist support. The resources may also be used by literacy, language and numeracy specialists working alongside vocational specialists. Clearly, it is also assumed that vocational teachers using the materials will have been trained in literacy and/or numeracy support, ideally using the Certificate for Adult Literacy/Numeracy Subject Support Level 3 or its equivalent. This course should cover the following:

- knowledge and understanding of the Adult Literacy and Numeracy Core Curricula and the Adult ESOL Core Curriculum
- detailed knowledge of and familiarity with how the curriculum documents are organised and used
- knowledge and understanding of *Access for All*
- detailed knowledge of the literacy, language and numeracy demands of their vocational area and the impact this is likely to have on teaching vocational skills
- knowledge of the mapping of the National Standards for their occupational area
- an understanding of how the Adult Literacy and Numeracy Core Curricula support the development of Key Skills
- an understanding of personal and social barriers to learning and how to support learners
- knowledge of and ability to use a range of support strategies, materials and resources
- knowledge of a range of strategies to support learners with learning difficulties and disabilities
- knowledge of a range of strategies to support ESOL learners
- the ability to match teaching to learning styles and use a range of teaching styles
- knowledge of how to recognise and use good quality embedded learning materials
- knowledge of nationally recognised literacy, language and numeracy qualifications for learners.

It would also be useful to have the following:

- the ability to assess learners for literacy, language and numeracy needs, record this assessment in an ILP and refer learners for further assessment if required
- the ability to review learners’ progress against literacy, language and numeracy objectives and amend ILPs appropriately
- the ability to amend existing materials used in order to develop embedded materials.

In addition, it is assumed that teachers will be familiar with and able to employ a range of **teaching methodologies** and **teaching aids**, including the following:

- group teaching, where learners work as a single group or a number of small groups, encouraging all learners to participate fully, including those with known learning difficulties and ESOL needs
- one-to-one teaching, focused on an individual learner’s learning needs, aimed at accommodating ‘spiky’ learning profiles
- teaching that takes account of a range of learning styles, principally visual, auditory and kinaesthetic
- teaching of speaking and listening skills, where vocationally appropriate
- teaching of practical skills, i.e. specific vocational skills
- support for learners’ practising of newly acquired vocational skills, aiming to develop confidence and independence
- guided discussion relating to specific vocational issues and achieving a consensus of views on good practice
- use of audio-visual aids such as OHT, flipchart, whiteboard, interactive whiteboard, CD/audio tape, video
- use of ICT to enable learners to research and present work.

The learner

The material in this pack is intended to provide specific literacy or numeracy teaching for learners on programmes of learning leading to the NVQ qualification in Amenity and Production Horticulture Level 2. It is not intended to replace learning support. It is assumed that learners will have undergone some form of assessment prior to commencing this programme of learning:

- to identify vocational knowledge and skills
- to identify any specific issues or barriers that may impact on learning, e.g. transport, childcare
- to identify any specific learning needs that may impact on learning or that may require support
- to identify and describe specific support needs.

Programmes of learning are all required to have some capacity for incorporating support for learners with 'spiky' learning profiles, including those learners who:

- have more or less prior knowledge and experience of occupational skills
- may be dyslexic
- may have 'patchy' reading and writing skills
- may have more or less expertise in speaking and listening skills
- may have 'patchy' numeracy skills or more or less experience in the specific numeracy skills required
- have ESOL needs
- would benefit from activities that extend skills beyond the specific requirements of the learning programme.

It is the vocational teacher's responsibility to differentiate teaching to accommodate learners' needs, within reason. It is assumed that any learner whose needs cannot reasonably be accommodated within the main learning programme will be referred for and receive appropriate support. This support will need to be provided by staff with appropriate expertise.

Whilst the Teacher notes for these learning materials give suggestions for differentiating learning to accommodate learners with 'spiky' learning profiles, it is outside the scope of the materials to provide a fully differentiated programme. For instance, reading skills in these materials are developed mainly at Level 1 and

Level 2, to reflect vocational requirements.

Learners whose reading skills are at Entry 1 or Entry 2 will inevitably struggle with reading skills development at Level 1 and Level 2 and will require significant additional support in order to benefit from the learning programme. Learners whose reading skills are broadly at Entry 3 will also struggle with this material, but may be able to benefit from the learning programme with carefully targeted, in-class support.

Issues affecting learning

Dyslexia

Learners who are dyslexic may or may not *know* about it. Estimates suggest that as few as a quarter of dyslexic learners are officially identified during their years in statutory education, though this situation varies across the country. It is quite likely therefore that teachers will come across learners who are actually dyslexic though they have not been recognised as such or given specific support for their dyslexia. Suggestions for supporting dyslexic learners described in the Teacher notes are good practice for all learners and can safely be used with any learner experiencing the difficulties described, irrespective of whether they have been officially identified as being dyslexic. Any learner showing significant difficulties with the aspects of literacy or numeracy described in the Teacher notes (If the learner has difficulty), particularly where there is some suspicion of dyslexia, should be referred for specialist diagnosis and support.

ESOL

Learners whose first language is not English have diverse needs, reflecting literacy skills in their mother tongue, educational experience both in the UK and their country of origin, and length and quality of English language development. It is outside the scope of these learning materials to provide a full English language skills development programme and it is assumed that learners requiring significant support will receive this in addition to the main learning programme. However, the Teacher notes in the materials highlight particular English language issues that may cause difficulties for ESOL learners in this sector. These include technical and professional vocabulary, the use of idiomatic and colloquial language and sentence constructions (by colleagues and clients) and some cultural issues.

Other learning difficulties and disabilities

Sensory: learners may have visual or auditory skills difficulties that affect learning. Learners may need to develop strategies to perform occupational skills and meet the requirements of the workplace. You will need to take specialist advice about appropriate support in the learning programme and strategies for the workplace.

Physical: learners may have physical difficulties that affect learning, particularly of practical skills. Learners may need to develop strategies to perform occupational skills and meet the requirements of the workplace. You will need to take specialist advice about appropriate support in the learning programme and strategies for the workplace.

How to use the materials

These materials are designed to supplement existing teaching materials and learning programmes, and planning is required to identify appropriate opportunities within your scheme of work to focus on embedded learning. The curriculum coverage grids on the following pages will help you to identify where and when to incorporate these materials. They are laid out as shown in Figure 1 below.

Figure 2 offers a brief explanation of what the curriculum references mean.

A typical entry (for example, the objective 'Use a calculator to calculate efficiently using whole numbers, fractions, decimals and percentages') is N2/L1.11. The codes after the '/' indicate the level of the curriculum objective, which can range from Entry 1, 2 and 3 through to Level 1 and 2. The final number simply indicates the objective's position in the sequence.

A full explanation of the curricula and how they are organised is given in the Adult Literacy Core Curriculum and the Adult Numeracy Core Curriculum, both of which can be accessed via www.dfes.gov.uk/readwriteplus

Links to the National Tests in Adult Literacy and Numeracy

The highlighted curriculum objectives in the Curriculum coverage grids indicate the content objectives of the National Tests that are addressed within the scope of this file. It should be emphasised however that these are only indicative, and are subject to change. The chart that follows the main grids gives similar guidance on content areas covered by the National Tests that do *not* receive attention within the coverage of this file. If required, resources in a similar format to cover these objectives can be found in the generic *Skills for Life* learning materials. These can be accessed from www.dfes.gov.uk/readwriteplus

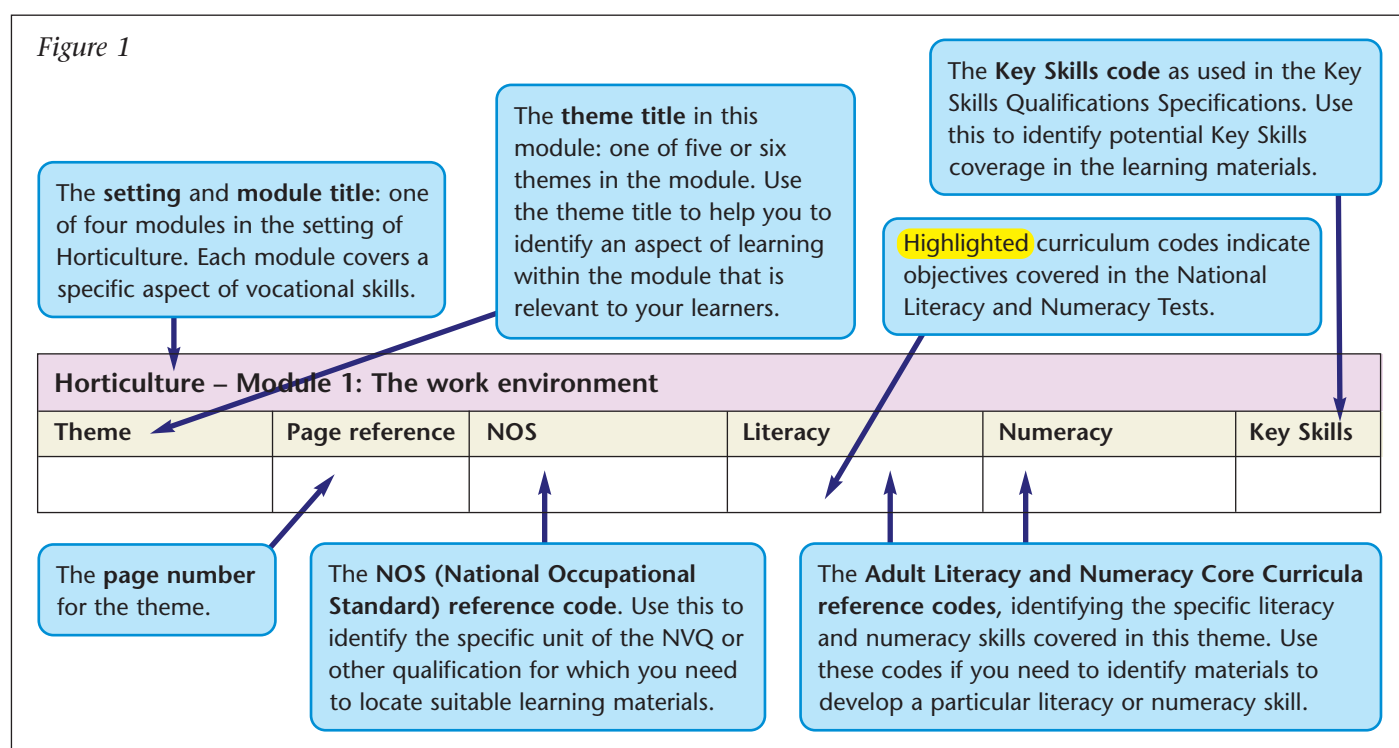


Figure 2

Curriculum area	Detailed element	Curriculum reference
Speaking and Listening	Listen and respond Speak to communicate Engage in discussion	SLlr SLc SLd
Reading and Writing (Text focus)	Reading comprehension Writing composition	Rt Wt
Reading and Writing (Sentence focus)	Grammar and punctuation Grammar and punctuation	Rs Ws
Reading and Writing (Word focus)	Vocabulary, word recognition and phonics Spelling and handwriting	Rw Ww
Number	Whole numbers Fractions, decimals and percentages	N1 N2
Measures, Shape and Space	Common measures Shape and space	MSS1 MSS2
Handling Data	Data and statistical measures Probability	HD1 HD2

Vocational qualifications in Horticulture

A wide variety of Awarding Bodies offer qualifications in Horticulture. The following is a list of the qualifications currently accredited by QCA at Level 1 and Level 2, and for which the content of this file should offer support. A full and current list can be found at www.openquals.org.uk.

Qualification	Type	Level	Awarding body
C&G Level 2 NVQ in Amenity Horticulture	NVQ	1	C&G
C&G Level One NVQ in Horticulture	NVQ	1	C&G
EDEXCEL Level Two BTEC First Diploma in Horticulture	VRQ	2	EDEXCEL
C&G Level Two National Certificate in Horticulture	VRQ	2	C&G
ASET Level One Certificate in Horticulture	VRQ	1	ASET
RHS Level Two Certificate in Horticulture	OQ	2	RHS
C&G Level Two NVQ in Production Horticulture	NVQ	2	C&G

The following qualifications for pesticide use are also available:
 NPTC Certificate of Competence in the Safe Use of Pesticides,
 Foundation Module PA1
 NPTC Certificate of Competence in the Safe Use of Pesticides,
 Module PA6

Curriculum coverage grids

Horticulture – Module 1: The work environment					
Theme	Page reference	NOS	Literacy	Numeracy	Key Skills
Health and safety	Ho 1:1–6	CU2	SLlr/L2.1; Rt/E3.9; Rt/L1.3; Rt/L1.4; Rt/L1.5; Rt/L2.3; Wt/L1.1; Wt/L1.2; Wt/L1.3; Wt/L1.5	HD1/E2.1	C1.2 C2.1a C2.2 C2.3
Induction	Ho 1:7–8	CU2; CU5	Rt/L1.3; Rt/L1.5; Rt/L2.7		C1.2
Working with others	Ho 1:9–12	CU5; 2.1	SLlr/E3.1; SLlr/L1.1; SLc/E3.2; SLc/L1.1		C1.1
Wages	Ho 1:13–14	CU2; CU5		MSS1/L1.1; MSS1/L1.2; MSS1/L1.3; HD1/L1.1	N1.2 abc
Appraisal	Ho 1:15–18	CU5	SLlr/L2.1; SLlr/L2.4; SLc/L1.1; SLc/L1.3; SLc/L2.1; SLc/L2.3; Rt/L1.1; Wt/L1.2; Wt/L1.4; Wt/L1.5		C2.1a

Horticulture – Module 2: Growing					
Theme	Page reference	NOS	Literacy	Numeracy	Key Skills
The planting plan	Ho 2:1–2	L1; L15; L28; CU19; CU21	SLlr/E3.2	MSS2/E2.3; MSS2/L2.1; HD1/E3.1	N2.1
Instructions	Ho 2:3–4	PH1	SLlr/L1.1; SLlr/L1.2; SLlr/L1.3; SLlr/L1.4; SLc/L1.2; SLc/L1.3		C1.1
Plant names	Ho 2:5–8		SLlr/L1.1; Rt/L1.4; Rt/L1.5; Rw/L1.2; Rw/L1.3; Wt/L2.1	HD1/E2.1	C1.2
Planting in batches	Ho 2:9–10	CU79; L2		N1/E3.1; N1/E3.4; N1/E3.5; N1/E3.6; N1/E3.7; N1/E3.9; HD1/E2.1	N1.2
Maintenance and care	Ho 2:11–12	CU76	SLlr/L1.3; SLlr/L2.2; SLc/L1.3; Wt/L1.1; Wt/L1.2; Wt/L1.3		C1.1
Speaking to the public	Ho 2:13–14		SLlr/L1.1; SLlr/L1.3; SLlr/L1.4; SLlr/L1.6; SLc/L1.1		C1.1

Horticulture – Module 3: Pesticides					
Theme	Page reference	NOS	Literacy	Numeracy	Key Skills
Finding the right product	Ho 3:1–2	CU78	Rt/E3.7; Rt/L1.4; Rw/E3.4	HD1/E2.1	C2.2
Understanding the law	Ho 3:3–5	CU78	SLlr/L1.1; SLc/L1.3; Rt/L1.1; Rt/L1.4; Rt/L2.8; Rw/L1.1; Rw/L1.2		C2.2
Reading the product label	Ho 3:6–9	CU78	Rt/L1.2; Rt/L1.3; Rt/L1.4; Rs/L1.1; Rw/L1.1; Rw/L1.2; Rw/L1.3		C1.2
Applying pesticides	Ho 3:10–19	CU78	Rt/L1.2; Rt/L1.3	N2/E3.4; N2/L1.7; N2/L1.11; N1/L2.4; MSS1/E3.3; MSS1/E3.5; MSS1/E3.7; MSS1/L1.4; MSS1/L1.5; MSS1/L1.7; MSS1/L1.9; HD1/L1.1; HD1/L1.3	N1.1 N1.2 N2.2 C1.2
Keeping records	Ho 3:20–21	CU78	Rt/L1.4; Wt/L1.2; Wt/L1.5; Wt/L1.6		C1.2 C1.3

Horticulture – Module 4: Machinery					
Theme	Page reference	NOS	Literacy	Numeracy	Key Skills
Operator manuals	Ho 4:1–4	CU2; CU11; CU27; L27	Rt/L1.4; Rt/L2.6; Rt/L2.7		C2.1
Pre-start checks	Ho 4:5–6	CU11; CU27.1; L27; PR05.1	SLlr/L1.2; Rt/E3.7; Rt/L1.4; Wt/L1.2	HD1/L1.1; HD1/L1.2	N1.1
Routine maintenance	Ho 4:7–10	CU11; CU27; L27; PR05	Rt/L1.1; Rt/L1.2; Rt/L1.3; Rt/L1.4; Rw/L1.2		C1.2
Fault finding	Ho 4:11–12	CU11; CU27; L27; PR05	Rt/L1.4; Rt/L1.5; Rw/L1.2	HD1/E2.1	N1.1 C1.2
Reporting faults	Ho 4:13–14	L27; PR05	Rt/L1.1; Wt/L1.2; Rw/E3.2		C1.3
Parts and diagrams	Ho 4:15–16	CU27; L27; PR05	Rt/L1.3; Rt/L1.4; Rt/L1.5	HD1/L1.1	C1.2 N1.1

Links to National Tests

The curriculum objectives highlighted in the chart on pages 17–18 indicate the content objectives of the National Tests that are addressed within the scope of this file. The chart below indicates content areas covered by the National Tests that do not receive attention within the coverage of this file.

National test references <i>not</i> featured in the Horticulture file		
Numeracy		Literacy
N1/L1.1	N2/L2.1	Ws/L1.1
N1/L1.3	N2/L2.2	Ws/L1.2
N1/L1.4	N2/L2.3	Ws/L1.3
N1/L1.7	N2/L2.8	Ww/L1.1
N1/L1.8	N2/L2.9	Rt/L2.2
N1/L1.9	MSS1/L2.3	Rt/L2.4
N2/L1.2	MSS1/L2.6	Wt/L2.3
N2/L1.3	MSS1/L2.7	Wt/L2.4
N2/L1.5	MSS1/L2.8	Wt/L2.5
N2/L1.8	MSS1/L2.9	Ws/L2.1
N2/L1.9	MSS1/L2.10	Ws/L2.2
MSS1/L1.10	HD1/L2.1	Ws/L2.3
HD1/L1.3	HD1/L2.2	Ws/L2.4
N1/L2.1	HD1/L2.3	
N1/L2.2	HD1/L2.4	
N1/L2.3		