

National Open College Network

Embedding Skills for Life in NOCN courses and qualifications

Version 2
January 2008



Embedding Skills for Life in NOCN courses and qualifications

What is embedded learning?

'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

NOCN has taken part in the DfES Skills for Life Strategy Unit Embedding Skills for Life Project for Awarding Bodies. During 2005/2006 NOCN developed models for embedding Skills for Life so that learners can develop their literacy and/or numeracy skills alongside other NOCN courses and qualifications.

NOCN's previous Awarding Body practice had been to map units to the Adult Literacy Core Curriculum and Adult Numeracy Core Curriculum at Entry Level. The new models and templates provide more support and guidance for deliverers of programmes and show how learners can work toward units of Entry Level literacy and numeracy qualifications as well as gain achievement in the "context" qualification.

Aims of the models

The aims of the models are to:

- link together NOCN general and vocationally related units and qualifications with NOCN literacy and numeracy units at Entry 1, Entry 2 and Entry 3 to illustrate how a learner can achieve a National Qualification and, in this context, develop their literacy and/or numeracy skills and gain recognition for this achievement by working towards and accumulating credit based units at Entry sub levels;
- show how to draw out explicit literacy and numeracy skills at Entry sub levels through qualification units so that learners can be encouraged to develop those literacy and/or numeracy skills that they require to work in particular contexts such as those needed in vocational settings that may be described through relevant National Occupational Standards;
- show how spiky profiles of learners in literacy and numeracy at Entry level can be catered for where these may be at or below the level of the "context" qualification;
- provide templates for those working with learners to enable models to be developed to meet individual learning needs;

¹ DfES, 2005 <http://www.dfes.gov.uk/readwriteplus/embeddedlearning/search.cfm>

- support progression opportunities for learners in developing their literacy and/or numeracy skills.

The models do not aim to be prescriptive. The templates developed for the models can be used flexibly and can be developed according to the needs of individual learners. The models can be used to identify skills gaps and to focus on learner needs whilst achieving a national qualification. For each unit, the models have been worked out at Entry 1, Entry 2, and Entry 3 to show how templates can be developed for learners 'spiky skills profiles'.

The templates can be developed with the guidance and support of Skills for Life specialists and could be delivered by non-Skills for Life specialists, although specialist support should be available to support delivery if required.

NB The embedding approach and models provided, although at Entry Level, could be developed to support teachers using *Access for All* to make the Adult Core Curricula for learners with learning difficulties and disabilities accessible. The approach could also be used at Levels 1 and 2 to encourage learners to develop their skills and progress to National Tests in Literacy or Numeracy at Levels 1 or 2 as appropriate. For more information on Access for All, please see the Teaching and Supporting Skills for Life Learners section of the NOCN Skills for Life Guide on the NOCN website www.nocn.org.uk.

How the Models Work

The models use the NOCN Qualifications for Progression to show how templates can be developed. Entry 3 units are chosen to demonstrate how literacy can be embedded are core units from the qualification:

- Introduction to Teamwork Skills
- Introduction to Developing a Personal Learning Programme
- Introduction to Understanding and Achieving Personal Learning Goals

An optional Qualification for Progression unit from Construction, Planning and the Built Environment at Level 1 has also been chosen to embed numeracy:

- Developing Wallpapering Skills

The models for the Developing Wallpapering Skills unit are included here to show how the templates work. These can be examined alongside the learning outcomes and assessment criteria required to achieve Entry Level numeracy units at Entry 3.

Example

While completing the assessment criteria for 'Developing Wallpapering Skills', the learner can complete the suggested activities, which would lead to the completion of assessment criteria for Entry Level numeracy units. For example, while a learner is undertaking a wallpapering activity in the Qualification for Progression unit which involves mixing adhesive, it is envisaged that there will be underpinning activities involving experimenting with liquids and containers to aid understanding of capacity and weight thus enabling achievement of the relevant learning outcome for Measures and Shape in the Entry Level Numeracy unit, at the appropriate sub level.

Tutors may also wish to develop a centre devised assessment for the relevant Entry Level literacy or numeracy unit, in addition to working up embedded unit information that enable learners to develop their skills. These would need to be benchmarked against the published exemplars in the literacy and numeracy qualification guides and would need to be scrutinised and confirmed through quality assurance arrangements and standardisation activities.

Please note that the development of assessment sheets is not a mandatory part of the models but they are offered here as examples of how they could be produced.

The models and templates that have been developed for the Qualification for Progression units listed below are available in the Embedding Skills for Life Learning Resource Pack in the Skills for Life section on the NOCN website:

- Developing Wallpapering Skills (models worked at Entry 1 and Entry 2)
- Introduction to Teamwork Skills
- Introduction to Developing a Personal Learning Programme
- Introduction to Understanding and Achieving Personal Learning Goals

Blank templates are also included in the Embedding Skills for Life Learning Resource Pack and as a separate downloadable Word document for your use, so that you may develop these as required.

A Learning Materials Pack has been produced to show how learning resources could be developed to support delivery of NOCN units and qualifications. The Learning Materials Pack 'Developing Wallpapering Skills' has been produced to support delivery of NOCN units and qualifications and is also available in the Skills for Life section on the NOCN website.

Suggested activities which could provide the underpinning knowledge needed to complete the Learning Outcomes and assessments to progress or achieve Entry Level Literacy or Numeracy Units

**NOCN
Qualification
Details**

**Entry Level
Literacy/Numeracy
Unit(s) details**

Learning Outcomes		Assessment Criteria	Suggested Skills for Life Activities and Assessments	Entry Level Literacy/ Numeracy unit(s) details; Learning Outcomes and Assessment Criteria	Tutor Information	
The learner will:	The learner can:				Optional Tutor Tracking for Skills for Life: Date achieved, Tutor Signature	Optional Portfolio Reference
1. Be familiar with equipment and materials.		1.1 Select an appropriate range of tools and materials for the job, for example, plumb line, tape measure, paste brush and table, smoothing brush, paste, paper.	MSS1/E3.3,4, 1.1 In groups or pairs, imagine that you have your own Painting and Decorating company. Using a variety of sources (phone book, A-Z, Internet) locate local hardware stores. Estimate how far away they are from your base, in kilometres and miles. Find out how far away they are accurately. Compare and record findings. Find the opening and closing times of each store. Decide which store you are going to use and what tools you may need to buy.	(All criteria) 1.1 Identify the units for measuring longer distances (kilometres and miles). 1.2 Read and record distances on road signs. 1.3 Discuss the use of miles in UK and kilometres in other countries. 1.4 Estimate distance in miles when following and giving directions. (All criteria) 6.1 Tell the time in five minute intervals on analogue clocks. 6.2 Tell the time in five minutes intervals on 12 hour digital clocks. 6.3 Tell the time in five		

Records for tutors/assessors to use, if they wish, to track the achievement of the assessment criteria within the relevant Entry Level Skills for Life unit; when it was achieved; who witnessed the achievement and where the evidence can be found in the learner's portfolio

Sheet can be developed to provide an overview of Assessment Information linking an NOCN qualification unit to Entry Level Literacy/Numeracy qualification assessment opportunities as appropriate



Qualification Title: NOCN Qualification for Progression Unit: Developing Wallpapering Skills Level: One	Entry Level Literacy / Numeracy Unit (s) Details: Measures, Shape and Time
Assessment Activities from the Assessment Grid	Benchmark Assessment Tasks
<ul style="list-style-type: none"> • Written question & answer/test/exam (optional) • Oral question & answer (optional) • Project (optional) • Practical demonstration (prescribed) 	See Description Below

+ **Entry 3 Numeracy Unit(s)**

The Benchmark Assessment is a tool to support standardisation and to exemplify the standards required of internally set and marked assessments.

This unit aims to assess the ability to wallpaper a given surface using correct procedures. This unit also aims to assess the ability to use measure, shape and time using appropriate units, equipment and vocabulary in context at Entry 3. Note that the assessment criteria can also be used for Speaking and Listening (see Certificate in Adult Literacy).

Task components

To put a first drop of wallpaper onto a wall.

- Discuss what tools are appropriate for the decorating procedure. Identify where and when to purchase tools, in terms of distance of retail outlets, times of opening/closing. Identify the units for measuring longer distances (Kilometres, miles). Estimate distance in miles when following and giving directions.
- Estimate the time taken for performing the task, using analogue and digital timings. Use a calendar to arrange a suitable day for doing the task on a Monday giving actual date and time on a given Monday.
- Identify the correct tools and materials.
- Identify any defects in the surface.
- Estimate length and width of the room, height of the door and windows. Select appropriate instruments and units of measurements to measure the room accurately.
- Measure the length and width of the wall reading and recording lengths in decimal notation using metric measurements.
- Set up a workstation.

Centre devised assessment for Entry Level Literacy and Numeracy qualifications need to be benchmarked against the published benchmark in the qualifications. They need to be scrutinised and confirmed through quality assurance arrangements and standardisation activities.

<p>Qualification Title: NOCN Qualification for Progression</p> <p>Unit: Developing Wallpapering Skills</p> <p>Level: One</p>	<p>Entry Level Literacy /Numeracy Unit (s) Details: Measures, Shape and Time</p>
<p>Assessment Activities from the Assessment Grid</p>	<p>Benchmark Assessment Tasks</p>
<ul style="list-style-type: none"> • Written question & answer/test/exam (optional) • Oral question & answer (optional) • Project (optional) • Practical demonstration (prescribed) 	<p style="text-align: center;"><u>See Description Below</u></p>

Entry 3 Numeracy Unit(s)

The Benchmark Assessment is a tool to support standardisation and to exemplify the standards required of internally set and marked assessments.

This unit aims to assess the ability to wallpaper a given surface using correct procedures. This unit also aims to assess the ability to use measure, shape and time using appropriate units, equipment and vocabulary in context at Entry 3. Note that the assessment criteria can also be used for Speaking and Listening (see Certificate in Adult Literacy).

Task components

To put a first drop of wallpaper onto a wall.

- Discuss what tools are appropriate for the decorating procedure. Identify where and when to purchase tools, in terms of distance of retail outlets, times of opening/closing. Identify the units for measuring longer distances (Kilometres, miles). Estimate distance in miles when following and giving directions.
- Estimate the time taken for performing the task, using analogue and digital timings. Use a calendar to arrange a suitable day for doing the task on a Monday giving actual date and time on a given Monday.
- Identify the correct tools and materials.
- Identify any defects in the surface.
- Estimate length and width of the room, height of the door and windows. Select appropriate instruments and units of measurements to measure the room accurately.

- Measure the length and width of the wall reading and recording lengths in decimal notation using metric measurements.
- Set up a workstation.
- Mix adhesive. Select appropriate units of capacity and weight. Estimate, using a variety of weights and containers the capacity and weight of adhesive/water needed. Measure accurately the amounts required. Record and compare the estimations with the actual measurements.
- Identify a way that the paper can be measured. Record answers for length in metres, centimetres, millimetres.
- Apply cut paper using the correct folding procedures. Complete a table to show the number of sides, angles, lines of symmetry and tessellation properties of wallpaper pieces.
- Use a plumb line for the first drop. Investigate angles.
- Correctly trim the paper.
- Butt the paper correctly.
- Clean all tools and tidy up. Time how long the job has taken.

Qualification Title: NOCN Qualification for Progression Unit: Developing Wallpapering Skills Level: One		Suggested Skills for Life Activities and Assessments	Entry Level Literacy/ Numeracy unit(s) details; Learning Outcomes and Assessment Criteria	Tutor Information	
Learning Outcomes The learner will:	Assessment Criteria The learner can:		Entry 3 Measures, Shape and Time	Optional Tutor Tracking for Skills for Life: Date achieved. Tutor Signature	Optional Portfolio Reference
1. Be familiar with equipment and materials.	1.1 Select an appropriate range of tools and materials for the job, for example, plumb line, tape measure, paste brush and table, smoothing brush, paste, paper.	MSS1/E3.3,4, 1.1 In groups or pairs, imagine that you have your own Painting and Decorating company. Using a variety of sources (phone book, A-Z, Internet) locate local hardware stores. Estimate how far away they are from your base, in kilometres and miles. Find out how far away they are accurately. Compare and record findings. Find the opening and closing times of each store. Decide which store you are going to use and what tools you may need to buy.	(All criteria) 1.1 Identify the units for measuring longer distances (kilometers and miles). 1.2 Read and record distances on road signs. 1.3 Discuss the use of miles in UK and kilometers in other countries. 1.4 Estimate distance in miles when following and giving directions. (All criteria) 6.1 Tell the time in five minute intervals on analogue clocks. 6.2 Tell the time in five minutes intervals on 12 hour digital clocks.		

Qualification Title: NOCN Qualification for Progression Unit: Developing Wallpapering Skills Level: One		Suggested Skills for Life Activities and Assessments	Entry Level Literacy/ Numeracy unit(s) details; Learning Outcomes and Assessment Criteria		Tutor Information	
Learning Outcomes The learner will:	Assessment Criteria The learner can:		Entry 3 Measures, Shape and Time	Optional Tutor Tracking for Skills for Life: Date achieved. Tutor Signature	Optional Portfolio Reference	
			6.3 Tell the time in five minute intervals using am and pm. 6.4 Record the time in five minute intervals using am and pm.			

Qualification Title: NOCN Qualification for Progression Unit: Developing Wallpapering Skills Level: One		Suggested Skills for Life Activities and Assessments	Entry Level Literacy/ Numeracy unit(s) details; Learning Outcomes and Assessment Criteria	Tutor Information	
Learning Outcomes The learner will:	Assessment Criteria The learner can:			Entry 3 Measures, Shape and Time Optional Tutor Tracking for Skills for Life: Date achieved. Tutor Signature	Optional Portfolio Reference
2. Plan and prepare for the project.	2.1 Identify obvious defects in the surface to be papered. 2.2 Estimate the number of complete drops needed to cover the surface area.	MSS1/E3.3,5-9, 2.1 From a range of given tools, select the appropriate ones for the task. 2.2, 2.5 Estimate the size of the surface to be measured and estimate how many drops will be needed. Measure the area accurately using a variety of instruments. Compare and record results. Estimate how long the job will take. Use a calendar to plan the process of buying tools, finishing the job and cleaning tools. Give estimated timings of how long each activity will take.	(All criteria) 2.1 – 2.8 Estimate, measure and compare length using appropriate units and instruments. (All criteria) 6.1 - 6.4, Read and record the time in five minute intervals using am and pm. (All criteria) 7.1 Recognise day, month and year in common date formats 7.2 Read the date from a calendar. 7.3 Record the date in common format.		

Qualification Title: NOCN Qualification for Progression Unit: Developing Wallpapering Skills Level: One		Suggested Skills for Life Activities and Assessments	Entry Level Literacy/ Numeracy unit(s) details; Learning Outcomes and Assessment Criteria	Tutor Information	
Learning Outcomes The learner will:	Assessment Criteria The learner can:			Entry 3 Measures, Shape and Time	Optional Tutor Tracking for Skills for Life: Date achieved. Tutor Signature
	<p>2.3 Set up a workstation in a given position.</p> <p>2.4 Mix adhesive as directed.</p> <p>2.5 Measure straight drop, making an allowance for trimming and cut paper.</p> <p>2.6 Mark a plumb line from a given starting point.</p>	<p>2.3 Follow instructions to set up the workstation.</p> <p>2.4 Estimate the amount of adhesive required. Compare the different sizes and weights of adhesive packs. From loose adhesive weigh the amount estimated. Identify which containers will be needed to mix the adhesive in. Measure the amount of water required with a measuring jug.</p>	<p>(All criteria) 8.1 Use time and date in at least two different everyday situation.</p> <p>(All criteria) 3.1 - 3.8, Estimate, measure and compare weight using appropriate units and instruments.</p> <p>(All criteria) 4.1 - 4.7, Estimate, measure and compare capacity using appropriate units and instruments.</p>		

Qualification Title: NOCN Qualification for Progression Unit: Developing Wallpapering Skills Level: One		Suggested Skills for Life Activities and Assessments	Entry Level Literacy/ Numeracy unit(s) details; Learning Outcomes and Assessment Criteria	Tutor Information	
Learning Outcomes The learner will:	Assessment Criteria The learner can:			Entry 3 Measures, Shape and Time	Optional Tutor Tracking for Skills for Life: Date achieved. Tutor Signature
3 Apply a plain wallpaper.	<p>3.1 Apply adhesive to the paper, ensuring even and complete coverage.</p> <p>3.2 Fold paper appropriately before applying to wall.</p> <p>3.3 Apply first drop to the plumb line and ensure subsequent drops are butted.</p> <p>3.4 Smooth paper to minimise creases.</p> <p>3.5 Ensure internal and external angles are correctly finished.</p> <p>3.6 Trim excess paper and remove excess paste.</p>	<p>MSS2/E3.1</p> <p>3.1-3.6 Wallpaper the required area. Apply adhesive. Fold wallpaper appropriately. Apply the first drop to the plumb line and ensure subsequent drops are butted. Smooth paper. Ensure internal and external angles are correctly finished. Trim excess paper and remove excess paste.</p> <p>Record how long the job has taken. Estimate a price for the job.</p>	<p>9.1 Use appropriate vocabulary related to shape e.g. side, length, angle, line of symmetry.</p> <p>9.2 Identify right angles on everyday items.</p> <p>9.7 Identify which 2D shapes fit together without leaving gaps.</p>		

Qualification Title: NOCN Qualification for Progression Unit: Developing Wallpapering Skills Level: One		Suggested Skills for Life Activities and Assessments	Entry Level Literacy/ Numeracy unit(s) details; Learning Outcomes and Assessment Criteria	Tutor Information	
Learning Outcomes The learner will:	Assessment Criteria The learner can:			Entry 3 Measures, Shape and Time	Optional Tutor Tracking for Skills for Life: Date achieved. Tutor Signature
4. Maintain tools and the working area.	4.1 Clean all tools and make good the working area.	MSS2/E3.1 4.1 Find a suitable box to store excess wallpaper. Flat pack any left over boxes. Discuss best way to pack the van or store room e.g. stacking different size buckets to save space.	9.8 Investigate ways of stacking 3D shapes of the same size.		

Delivering embedded learning – teacher collaboration

Research carried out by the National Research and Development Centre for Adult Literacy and Numeracy (NRDC) has shown the success of embedding. Case studies have shown how literacy and numeracy work can be built into vocational courses as diverse as Indian head massage, nursing and horticulture.²

The research has produced striking findings:

- 93% of literacy learners in the sample gained qualifications on fully embedded courses compared with only 50% where the literacy component was taught in a separate and unconnected way.
- The figures for numeracy were 93% and 69% respectively.
- The embedded courses that the NRDC surveyed also had better retention rates (78% compared with only 63% for non-embedded courses).

NRDC have explored what an embedded approach means for the staff concerned. In an article published in the TES on 19 May 2006, Helen Casey an associate director of the NRDC, based at the Institute of Education, University of London: www.nrdc.org.uk states:

'It means numeracy, literacy and vocational teachers working together to ensure that learners' different needs are catered for. It means teachers planning "behind the scenes" so that the numeracy concepts implicit in a vocational task are introduced at an appropriate stage of the course.

In essence, the challenge is for teachers to find new ways of co-operating with one another. Teachers from different backgrounds have to be prepared to learn from each other, which is not necessarily easy.

NRDC research is, however, showing that collaboration is happening, even though it sometimes requires teachers to change long-established practices and attitudes. To be effective, teams of teachers need time together, which means they must be timetabled to be in the same place at the same time. If teachers work in different subject areas, this can often require a whole-organisation commitment to embedding.

There is no single best model. Each organisation needs to devise approaches that suit its own context, the skills of individual teachers and the learners themselves. The fact is, that well-developed teaching skills and good relationships between teachers are more important than almost any model of embedding.'

² "You wouldn't expect a maths teacher to teach plastering..." *Embedding literacy, language and numeracy in post-16 vocational programmes – the impact on learning and achievement* NRDC 2006