

Trainer pack

Integrating English, maths and ICT into apprenticeship programmes

Module 5

Course information **Length of session:** 3–5 hours, depending on activities required by participants. Trainers can customise, shorten and lengthen the session to suit the audiences and settings. The session as it stands is intended to last 3.5 hours (not including breaks).

Audience **Job roles**

- Work-based learning assessors and managers working in work-based learning settings;
- Practitioners responsible for teaching and learning on vocational programmes; or
- Managers at all levels who wish to engage in and plan for a culture of embedding in their organisation.

Sector / setting: Applicable to all but with special relevance to work-based learning providers, offender institutions and all those engaged in employer-facing activity.

Note to trainer: terminology

Several terms are in current use for describing adult literacy, language and numeracy. These include basic skills (a term still used in some settings); adult literacy, language and numeracy – variously abbreviated to LLN, ALN, ALAN; and Skills for Life. The term ‘English, maths and ESOL’ will replace these terms, but expect participants to use terms with which they are familiar. Note that some sources of information used in this training employ previously current terminology. Note also that the term ‘English, maths and ICT skills’ is used widely in this training pack and is intended to include ESOL where this is relevant.

In addition, the term ‘integrated’ is used instead of ‘embedded’ in this CPD. They are interchangeable; use whichever term is most meaningful for participants.

Note to trainer: handouts

All handouts and resources are included at the end of this document, for ease of printing. A separate participant pack is also available.

Aim

To enable practitioners to raise learner achievement by integrating the development of English, maths and ICT skills into vocational teaching and learning, including apprenticeships

Outcomes

By the end of the session participants will be able to:

1. Understand and explain why English, maths and ICT development should be central to apprenticeship and vocational teaching and learning;
2. Identify the planning elements for an integrated or embedded programme;
3. Ensure the integration of English, maths and ICT expertise in the planning and delivery of apprenticeship / vocational teaching;
4. Recognise how to support individual learners through differentiated activity;
5. Access resources to support an integrate / embedded approach;
6. Confirm increased personal confidence in the techniques of integrating English, maths and ICT; and
7. Commit to specific actions to integrate English, maths and ICT into their own teaching and the organisation.

Module overview

Activity		Content
1	Ice breaker: raising achievement	Questionnaire and discussion: barriers to learner success.
2	Introduction	To each other and to the session.
3	How important are English, maths and ICT to vocational learning / apprenticeships?	What skills at what levels are needed for vocational / apprenticeship programmes? Examining the research.
4	Finding the expertise	Assessment of confidence. Strategies for locating and using required expertise and resources.
5	What is meant by an embedded / integrated approach?	Definitions of and reasons for integrating / embedding the teaching of English, maths and ESOL.
6	Practical embedding / integrating	What is involved in practice? Planning an integrated activity.
7	Supporting the individual learner	Support strategies, including initial assessment and review, resources and blended learning.
8	Planning an integrated programme	Card sort exercise to explore planning elements and prioritise action.

9	Action planning	Individual target-setting using a coaching approach.
10	Summary and review of the session	Revisit objectives and review session.

Trainers

Trainer experience or qualifications required

- At least three years' experience of teaching English, maths and / or ICT in the publicly-funded FE and skills sector; and a Certificate in Education or equivalent; or
- Specialist qualifications in teaching English, maths
 - and / or ICT
 - and / or working with learners with learning difficulties and / or disabilities
 - and / or at least three years' experience of training managers and practitioners across the sector in one or more of the following: Skills for Life, functional skills, working with learners with learning difficulties and / or disabilities, e-learning, active learning.

Experience of an embedded / integrated approach is also useful.

Reference material for trainers

Trainer notes

Resources

Resources for reference during the session

Trainer notes

Copy of *You wouldn't expect a maths teacher to teach plastering...* ; NRDC, 2006
http://www.nrdc.org.uk/publications_details.asp?ID=73

Copy of the *Embedding LLN Starter Kit*, available via the Excellence Gateway
<http://www.excellencegateway.org.uk/node/1154>

Copy of the *Whole organisation approach starter kit*, available from
<http://www.excellencegateway.org.uk/node/1151>

Functional skills starter kit, LSIS, 2012
 Available from

<http://www.excellencegateway.org.uk/node/20280>

Functional skills guide, AELP, 2012

Available from:

<http://www.aelp.org.uk/news/general/details/moving-from-key-skills-to-functional-skills-a-step/>

Removing Barriers to Literacy, Ofsted, 2011

Available from

<http://www.ofsted.gov.uk/resources/removing-barriers-literacy>

Functional skills subject criteria, Ofqual, September 2011

Available from

<http://www.ofqual.gov.uk/downloads/category/68-functional-skills-subject-criteria>

Adult literacy, language and numeracy core curriculum Online:

<http://www.excellencegateway.org.uk/sflcurriculum>

Print copies of samples of the embedded learning materials. You may be able to access a hard copy but if not all the materials are available online on <http://rwp.excellencegateway.org.uk/Embedded%20Learning/>

Ideally use a sample from a setting appropriate to the audience (e.g. catering); alternatively use one of the generic employability settings such as health and safety.

Apprenticeships for young people, Ofsted, 2012

This report presents some of the common factors that have led to high performance, explaining how providers have successfully recruited young people as apprentices: introducing them to the world of work; supporting them in developing vocational skills and completing their apprenticeship frameworks; and supporting their progression into employment and further study.

Available from

<http://www.ofsted.gov.uk/resources/apprenticeships-for-young-people>

Pre-course activity for participants

An internal preparatory session would be helpful, for non-specialists in English, maths or ICT, to familiarise the participants with the English, maths and ICT levels as defined in the Skills for Life and functional skills standards. (See Activity 3 differentiation notes).

Also, for managers attending the module, familiarisation with the implications of a whole organisation approach (WOA) to literacy, language and numeracy would be beneficial.

Refer to the WOA starter kit

<http://www.excellencegateway.org.uk/node/1151> and in particular to the literacy, language and numeracy health check

<http://archive.excellencegateway.org.uk/page.aspx?o=275847>

Useful websites

See handouts HO 4 and HO 8

Before the session the trainer needs to:

- Print a copy of R 1a and R 1b for your own use in TN 4. Prepare resource R 2 differentiation task for use as an alternative in this session.
- Prepare cards for TN 8 using resource R 3.
- Set out handouts on tables for TN 1 ice breaker (HO 1).
- Set up PowerPoint and prepare individual laptops if these are to be used.
- Set up flipcharts.
- Lay out sticky notes on tables.
- Provide an inspection copy of the NRDC research *You wouldn't expect a maths teacher to teach plastering...*
http://www.nrdc.org.uk/publications_details.asp?ID=73
- Acquire a printed copy of the *Embedding LLN Starter Kit*, available via the Excellence Gateway <http://www.excellencegateway.org.uk/node/1154>
- Prepare participant packs. Note that the participant pack has copies of all handouts plus PowerPoint notes. It does not have copies of the resources.

Session plan

Aim

To enable practitioners to raise learner achievement by integrating the development of English, maths and ICT skills into vocational teaching and learning, including apprenticeships

Outcomes

By the end of the session participants will be able to:

1. Understand and explain why English, maths and ICT development should be central to apprenticeship and vocational teaching and learning;
2. Identify the planning elements for an integrated or embedded programme;
3. Ensure the integration of English, maths and ICT expertise in the planning and delivery of apprenticeship / vocational teaching;
4. Recognise how to support individual learners through differentiated activity;
5. Access resources to support an integrated / embedded approach;
6. Confirm increased personal confidence in the techniques of integrating English, maths and ICT; and
7. Commit to specific actions to integrate English, maths and ICT into their own teaching and the organisation.

Suggested timings are for guidance purposes only. Trainers should adapt content to meet the needs and experience levels of the participants.

TN – trainer notes HO – handout R – resources PPT – PowerPoint slides

Time	Content	Resources		
		No.	Style	Title
10m	TN 1. Ice Breaker: Raising achievement (questionnaire)	PPT 1	Slide	Session title
	Show session title on screen (PPT 1).	HO 1	Handout	Raising achievement: questionnaire
<i>(Total 10m)</i>	Participants answer questionnaire, then in threes discuss and compare their			

Time	Content	Resources		
		No.	Style	Title
	replies, adding any ideas of their own and agreeing on three main barriers to learning.			
10m (Total 20m)	<p>TN 2. Introduction</p> <p>Outline the aims and objectives for the day.</p> <p>Ask participants to introduce themselves.</p> <p>Introduce the reflection process and ask participants to record 'light bulb ideas' and 'questions and issues' on appropriate sheets throughout the session.</p>	<p>PPT 2-3</p> <p>HO 2</p>	<p>Slides</p> <p>Handout</p>	<p>Aims and objectives</p> <p>Reflection</p>
15m (Total 35m)	<p>TN 3. How important are English, maths and ICT to vocational learning / apprenticeships?</p> <p>Participants feed back briefly from ice breaker and discuss how many barriers to learning may involve English, maths or ICT issues.</p> <p>Present PowerPoint slides showing levels of English, maths required for vocational subjects / apprenticeship frameworks, an extract from the BIS research review December 2011 and key points about functional skills.</p>	<p>PPT 4-9</p>	<p>Slides</p>	<p>Research evidence</p>
20 m (Total 55m)	<p>TN 4. Finding the expertise</p> <p>What does this mean for English, maths and ICT skills development mean for vocational staff? Participants assess their own confidence in supporting learners with a) English / ESOL, b) maths or c) ICT.</p> <p>What could be done to increase confidence?</p> <p>Give out handouts to show possible strategies to bring in</p>	<p>R 1a R 1b</p> <p>HO 3</p> <p>HO 4</p> <p>PPT 10-11</p>	<p>Resource</p> <p>Handout</p> <p>Handout</p> <p>Slides</p>	<p>Confidence building + possible solutions</p> <p>Strategies to incorporate expertise</p> <p>Resources</p> <p>Strategies to</p>

Time	Content	Resources		
		No.	Style	Title
	English, maths and ICT expertise and useful resources.	R 2 NRDC report: 'You wouldn't expect a maths teacher to teach plastering...' – see above for link	Resource	support embedding Confidence building (alternative)
20m (Total 1h 15m)	TN 5. What is an embedded / integrated approach? Role play in twos or threes.	PPT 12-13 PPT 14-15	Slides Slides	BIS research review Embedding - what and why
45m (Total 2h)	TN 6. Practical embedding / integrating In groups, participants plan an integrated (embedded) activity / session, including a) English / ESOL, b) maths or c) ICT.	HO 5 HO 6 HO 7 PPT 16	Handout Handout Handout Slide	The functional skills approach Planning an integrated approach 1 Planning an integrated approach 2 Activity instructions
25m (Total 2h 25m)	TN 7. Supporting the individual learner Pair work, whereby participants brainstorm support strategies, including: a) initial assessment and review, b) resources and c) blended learning.	PPT 17-20 HO 8 HO 9	Slides Handout Handout	Supporting the individual learner Resources for the learner My integrated approaches file
25m (Total 2h 50m)	TN 8. Planning an integrated programme Group card game, using a question and answer technique. Prioritisation task.	R 3 HO 10	Cards Handout	Aspects of planning Activity instructions

Time	Content	Resources		
		No.	Style	Title
25m <i>(Total 3h 15m)</i>	TN 9. Action planning Paired coaching. Ask participants to write on sticky notes three actions they will take away from today to begin or further develop the planning and delivery of embedded / integrated learning. Display the notes.	HO 11	Handout	Coaching questions
15m <i>(Total 3h 30m)</i>	TN 10. Summary and review of the session Revisit session objectives. Ask participants to share with the group any 'light bulb' ideas. Complete review notes and evaluation forms, if used.	PPT 21 HO 2	Slide Handout Centre evaluation form if used	Objectives revisited Reflection Evaluation form

Trainer notes

These notes are to support trainers to facilitate the different activities in the module. They are not meant to be prescriptive, and trainers can adapt the activities as needed to suit the participants. Some activities can be omitted, and others extended, according to the group.

Suggestions for **alternatives**, or for **differentiation** strategies (according to the background and experiences of participants) are given in boxes in the notes for each activity.

The instructions for the activities are given on the PowerPoint slides or on handouts. Trainers can decide to show the instructions on PowerPoint or to print off the 'instructions' slides and lay copies on tables instead, or in addition.

The total running time for the session as it stands is 3.5 hours, not including breaks. It would be good practice to include one break of 15 minutes.

TN 1

Trainer notes

Time	Content	Resources		
		No.	Style	Title
10m (Total 10m)	TN 1. Ice Breaker: Raising achievement (questionnaire) Show session title on screen (PPT 1). Participants answer questionnaire, then in threes discuss and compare their replies, adding any ideas of their own and agreeing on three main barriers to learning.	PPT 1 HO 1	Slide Handout	Session title Raising achievement: questionnaire

Purpose of this activity: this ice breaker activity serves as a warm-up while waiting for latecomers but also begins the session by focusing on the needs of the learners as the central starting point for an embedded / integrated approach. It can be laid out on tables to engage participants as soon as they enter the room.

Alternative

You may wish to do the introductions, aims and objectives first, before this activity.

The instructions are on the handout (**HO 1**) of the participant pack. The activity allows participants to focus on their learners' needs and to discuss their concerns with others. In particular it allows them to consider not only the importance of English, maths and ICT in their own subject area but also the way in which specific aspects of English, maths and ICT may form barriers and prevent their learners from achieving.

NB: the ice breaker may provide an opportunity for participants to offload negative feelings and frustration about their learners' achievement patterns. In this case, be prepared when they feed back in the activity in TN 3, to focus on the ways in which effective English, maths and ICT development can go far to improve learner confidence and achievement and turn the negative feelings into positive outcomes.

Differentiation

For participants who are vocational or apprenticeship specialists, the activity will encourage consideration of the impact of English, maths and ICT on learner success in different subject areas.

For English, maths and ICT specialists, the purpose of the exercise will be to open up collaborative opportunities with vocational / apprenticeship specialists, exploring the needs of vocational learners / apprentices and highlighting the way in which English, maths and ICT form the basis of all learning.

Extension

As an extension task, groups may discuss and agree three things they have done or could do differently to raise their learners' skill levels in English, maths and ICT.

Primarily this activity provides an opportunity for participants to focus on the session and to share perceptions. It should require little intervention by the trainer and will set the style of the day, whereby participants will work actively in groups.

TN 2

Trainer notes

Time	Content	Resources		
		No.	Style	Title
10m	TN 2. Introduction Outline the aims and objectives for the day. Ask participants to introduce themselves.	PPT 2-3 HO 2	Slides Handout	Aims and objectives Reflection
<i>(Total 20m)</i>	Introduce the reflection process and ask participants to record 'light bulb ideas' and 'questions and issues' on appropriate sheets throughout the session.			

Purpose of the activity: to confirm aim and outcomes and introduce the self-reflection process to be used.

Outline the aims and learning outcomes for the day, using **PPT 2** and **PPT 3**. This is a good opportunity to confirm with participants that the aim and outcomes are as expected. Be prepared to take questions clarifying the session, 'park' any particular concerns, to be dealt with during the session or by referring to other CPD. You may also want to confirm that the terms 'embedded' and 'integrated' mean the same thing, and that you will return to this later in the session.

Aim

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Outcomes

By the end of the session participants will be able to:

1. Understand and explain why English, maths and ICT development should be central to apprenticeship and vocational teaching and learning;
2. Identify the planning elements for an integrated or embedded programme;

3. Ensure the integration of English, maths and ICT expertise in the planning and delivery of apprenticeship / vocational teaching;
4. Recognise how to support individual learners through differentiated activity;
5. Access resources to support an integrated / embedded approach;
6. Confirm increased personal confidence in the techniques of integrating English, maths and ICT; and
7. Commit to specific actions to integrate English, maths and ICT into their own teaching and the organisation.

Ask participants to introduce themselves. It would be useful (if there is time) for everyone if they were able to give brief details of where they work and their experience of apprenticeships, vocational teaching and learning, embedding / integrating English, maths and ICT and functional skills.

Introduce the reflection process (**HO 2**) and ask participants to record in the 'Notes' column any 'light bulb ideas', questions and issues throughout the session, using the handout provided (**HO 2**) or preferably working on the computer from individual work stations.

Ask the participants to jot down any question they hope to have answered by the end of the session. There is a space for this on their reflection sheet.

Confirm with the group the importance of English, maths and ICT to all vocational and apprenticeship learning. Invite them to volunteer ways in which improved learner skills will raise success rates.

Remind them that functional skills form an integral part of apprenticeships and that, if learners are going to become functional in English, mathematics and ICT, they need to practise English, maths and ICT tasks in realistic contexts, such contexts being readily available and plentiful in their main vocational activities.

Reinforce these messages by:

- a) Introducing early research from the Basic Skills Agency in which over 40 occupational standards at Levels 1 and 2 were mapped to their underpinning literacy and numeracy skills. (PPT 4-7) Explain that, though the Basic Skills Agency research was carried out some time ago, the English and maths demands of National Occupational Standards have remained consistent. If anything, demands have increased (see PPT 8). In particular, demands for higher levels of maths have increased.
- b) Referring to the Ofsted report [Removing Barriers to Literacy, 2011](#) which found that learners were more likely to achieve when there were high teacher expectations of them.
- c) Displaying key points about the place of functional skills in apprenticeships. (PPT 9).

Differentiation

Some participants may be unfamiliar with the English, maths and ICT levels as defined in the adult literacy and numeracy curriculum and functional skills subject criteria. It is important to check this and to ask the participants to suggest how they can gain an overview of the levels. Steer them towards the LSIS Excellence Gateway www.excellencegateway.org.uk for the Skills for Life levels and Ofqual for the functional skills subject criteria. Demonstrate either by logging on yourself and displaying the [adult literacy and numeracy core curriculum](#) and [functional skills subject criteria](#) or by encouraging participants to log on from laptops and explore the sites.

If the training venue is without internet access, copies of the literacy and numeracy progression overviews (to be found on the core curriculum site) and the functional skills summaries of levels may be circulated.

Extension

As an extension task, participants could match specific underpinning English, maths skills for their vocational area to the appropriate levels, using the website details. Where possible, this could be carried out in pairs, including one English or maths and one vocational specialist.

Note that the differentiation tasks and extension tasks may lengthen the time spent on this activity. To stay comfortably within the three-hour limit for the module, simply ensure that all know how to access the LSIS Excellence Gateway and navigate to the required pages. It is important that vocational specialists recognise how an understanding of levels will help and support their work. Remind them that they should work in partnership with others wherever possible, and in particular with English, maths and ICT specialists.

Refer participants to their reflection log **HO 2**.

TN 4

Trainer notes

Time	Content	Resources		
		No.	Style	Title
20 m	TN 4. Finding the expertise	R 1a R 1b	Resource	Confidence building + possible solutions
(Total 55m)	What does this mean for English, maths and ICT skills development mean for vocational staff? Participants assess their own confidence in supporting learners with a) English / ESOL, b) maths or c) ICT.	HO 3	Handout	Strategies to incorporate expertise
	What could be done to increase confidence?	HO 4	Handout	Resources
	Give out handouts to show possible strategies to bring in English, maths and ICT expertise and useful resources.	PPT 10-11	Slides	Strategies to support embedding
		R 2 NRDC report: 'You wouldn't expect a maths teacher to teach plastering...' – see above for link	Resource	Confidence building (alternative)

Purpose of the activity: to explore participants' confidence levels in English, maths and ICT and to confirm that lack of confidence can be overcome, with appropriate support; to introduce the concept of a whole organisation approach.

It is important to remember that some vocational staff may feel reluctant to tackle English, maths and ICT skills development with their learners and need to establish support strategies. Begin by exploring confidence levels. Designate one end of the room as a 'no confidence' and the other end as a 'full confidence' area and ask the participants to arrange themselves at an appropriate place on the scale. Ensure there is sufficient space for this activity.

Begin with English / literacy. Give an example, such as those in **R 1a**:

If I asked you to help your learners *read and follow a set of instructions*, how confident would you feel?

You can substitute the words in italics for a question of your own, such as:

If I asked you to help your learners *construct and write an accurate sentence*, how confident would you feel?

If I asked you to help your learners *answer a customer's questions on the telephone*, how confident would you feel?

Ask one or two people, what would help them gain confidence. Then respond by posing a solution, for example

If you could learn one simple rule for constructing a good sentence, would you feel more confident?

Continue to offer solutions and as you do so, ask the participants to move to a higher confidence area if they feel this would resolve their problems.

Repeat the exercise for ICT and then mathematics / numeracy, using questions from the resource sheet **R 1a** or creating your own.

Ask one person who is declaring very little confidence in mathematics to volunteer as a guinea pig. Note of caution: be aware of the potential effects of 'maths anxiety'! Explore with this person what they are most uncertain about. Respond to each statement with a possible solution – see suggested solutions in **R 1b**. With each solution ask the volunteer to take one step forward. Keep offering further solutions until the volunteer reaches the high confidence end of the room.

Differentiation

Participants who are unable or unwilling to stand and walk around the room may prefer to use cards with movable markers, as shown on **R 2** below. The trainer will need to prepare the card and cut out the arrow, which can be made to slide using a butterfly clip.

The confidence exercise aims to demonstrate that, with specific practical help, staff can overcome their fears of engaging with English, maths and ICT.

Bring the participants back to their tables. Emphasise to them that it is usual and professionally appropriate for vocational staff to seek support from specialist people and resources to help them raise the skills levels of their learners. Refer to the NRDC research from 2006: 'You wouldn't expect a maths teacher to teach plastering...' which emphasises the importance of teamwork between English, maths and vocational specialists to provide the necessary professional expertise for learners. Explain that this research still provides us with the clearest messages about an embedded or integrated approach. Acknowledge that many practitioners (work-based assessors being a case in point) may find themselves bringing in the

essential expertise by developing their own English, maths and ICT teaching skills and also by directing learners to a variety of resources to help them.

Hand out details of resources for reference and self help (**HO 4**). Ask for examples of other resources participants have used and would recommend both for teachers and learners.

Put up a flip chart headed 'RESOURCES' and invite contributions throughout the session.

Stress the importance of planned strategies and partnerships to place English, maths and ICT at the centre of learning.

In twos or threes on their tables, ask participants to share with one another what they can do to ensure that they and their learners have access to the necessary expertise in English, maths and ICT. After two or three minutes, take suggestions and record and display them. Distribute handout **HO 3** and ask participants to check and add any strategies that might be missing from this mind map. There are two blank boxes for their ideas and any further suggestions can be added freehand by extending beyond the diagram.

Ask if there are any questions or issues. Take ideas about the meaning of 'a whole organisation approach' and demonstrate how to find the details of this on the LSIS website. Highlight the fact that many of these strategies will be most effective when they form part of a whole organisation approach and are led from the top of the organisation.

Show **PPT 10-11** to place the embedded / integrated approach and its strategies in the context of a whole organisation approach. **PPT 10** is the same diagram as **HO 3**. **PPT 11** is a list of key features of a whole organisation approach.

Confirm that English, maths and ICT skills:

- a) can be developed by learners and teachers through a variety of different methods and using a wealth of different resources;
- b) must be planned just as carefully as the vocational content of the programme;
- c) need specialists to work in teams and partnerships together;
- d) will be improved in learners when they are taken seriously by managers and practitioners across an organisation and when expectations are high;
- e) benefit from a whole organisation approach (see LSIS Excellence Gateway <http://www.excellencegateway.org.uk/node/1151>); and
- f) depend on a process of continuous development for staff and learners alike.

Confirm the desirability of specialist qualifications in English and maths and refer delegates to the Talent website: <http://www.talent.ac.uk/> for details.

Note: it is acknowledged that this is a busy session and that it may over-run the allotted time. In particular, the less experienced the audience, the more time you may need to spend, in order to be sure that all messages are conveyed.

Refer participants to their reflection log **HO 2**.

TN 5

Trainer notes

Time	Content	Resources		
		No.	Style	Title
20m	TN 5. What is embedding / integrating?	PPT 12-13	Slides	BIS research review
	Role play in twos or threes.	PPT 14-15	Slides	Embedding - what and why
(Total 1h 15m)				

The purpose of this activity. This is an activity where the participants can work together to practise an embedded / integrated approach. First they must be clear about what is meant by an embedded / integrated approach and why we do it.

Begin by asking them to role play a discussion with the person next to them. One of the pair will be the learner and one the teacher. The learner is reluctant to work on his or her maths. The teacher explains why the maths is essential to the vocational / apprenticeship task in hand and aims to motivate the learner.

This is a short exercise so allow no more than 5 minutes for the discussion. Then take feedback from one or two volunteers on how they felt as the learner and then from two more volunteers on how they, as the teacher, responded. Aim to draw out what prevents the learner from tackling maths and how the teacher responds from listening to the learner. You might hear from the learner that he / she:

- is bored, hostile or even frightened by maths;
- doesn't see the point;
- is haunted by past failure;
- avoids maths whenever possible;
- doesn't realise how central maths is to life and work;
- believes he / she doesn't have the 'right kind of brain';
- begins to have doubts even about the vocational course if it involves maths;
- or
- resists taking an initial assessment in maths.

You might hear from the teacher that he / she:

- reassures the learner by promising help and support;
- outlines the practical elements of maths involved in the programme; or
- explains the purpose of initial assessment and English, maths and ICT qualifications.

But also that he / she:

- observes that the learner needs strong motivation to tackle maths, as when wanting to complete a vocational task;
- recognises the need for the learner to regain confidence through regular, well chosen, achievable tasks, practice and repetition (individual, discrete sessions are not sufficient);
- needs to be a role model and provide constant support;
- needs to affirm the importance of maths at all times; and
- needs to find new and engaging ways of building the learner's skills level in maths.

Confirm the importance of the vocational / apprenticeship teacher in helping a learner overcome resistance to maths and ask the group to volunteer ways in which the same may be true for English and ICT. Draw out ideas about the use of positive language as a motivator to learners and find some examples. If time, show the Move On website with its teacher guidance on the Positive Language Approach. Go to <http://www.move-on.org.uk/>, click on the i-route and proceed to the 'Mind your language' section.

For embedding to be successful, it is essential that vocational / apprenticeship staff take ownership of this leadership role. They should not expect to teach all English, maths and ICT skills, unless they feel confident to do so, but should ensure that the learner practises and hones the skills that arise naturally through the vocational content, and those that need development for achievement in target qualifications. They should plan their embedded / integrated programmes in such a way that their learners:

1. are made fully aware of the range and level of skills they need to succeed in their vocational and English, maths and ICT qualifications;
2. understand how to perform the skills as well as possible; and
3. know how and where to access support if it is needed.

The publication in December 2011 by the Department for Business, Innovation and Skills (BIS): *Review of research and evaluation on improving adult literacy and numeracy skills* gives clear support to the centrality of English, maths and ICT in vocational teaching and learning. Show **PPT 12-13** to evidence this.

Once the group recognise the importance of their role, they are ready to explore embedding. Ask participants to jot down on sticky notes:

- a) a quick definition of embedding
- b) why it is essential for learners.

Let this be spontaneous – they do not need to think too long and hard about it. Then display slides **PPT 14-15** which give an early definition of embedding and the results of the NRDC research. Ask the participants how they might update and improve on the content of the slides; they may read out what they have written if they wish.

The aim is to move on from the original definitions of embedding to an understanding that the purpose of a vocational learning programme is to equip the learner with the skills necessary for successful progression into the world of work and life. Central to these skills are those of English, maths and ICT. At the end of this activity you may invite participants to write and display on a flip chart their own definitions of an embedded / integrated approach.

You might like to remind participants about the LSIS CPD module in initial and diagnostic assessment.

Refer participants to their reflection log **HO 2**.

TN 6

Trainer notes

45m	TN 6. Practical embedding / integrating	HO 5	Handout	The functional skills approach
	In groups, participants plan an integrated (embedded) activity / session, including a) English / ESOL, b) maths or c) ICT.	HO 6	Handout	Planning an integrated approach 1
<i>(Total 2h)</i>		HO 7	Handout	Planning an integrated approach 2
		PPT 16		Activity instructions

Purpose of this activity: to explore ways in which English, maths and ICT can be integrated with vocational / apprenticeship teaching and to promote collaborative working between teams planning delivery.

Move on to introduce the practical task. Remind participants that all work involving an integrated approach requires detailed planning as well as a continuous awareness on the part of the teacher of the learners' perspective.

Planning an integrated approach to English, maths and ICT usually involves session plans and schemes of work; it is built into initial, formative and summative assessment and may involve discrete English, maths or ICT learner qualifications, such as functional skills.

Check how many of the group already reference English, maths and ICT in their planning, how many are involved in functional skills and how many have learners who are or have been working towards Skills for Life or key skills qualifications. Note that last registrations for qualifications in key skills are at the end of September 2012 and for Skills for Life qualifications last registrations are at the end of August 2012.

Invite someone who is preparing for or already delivering functional skills to explain to the group how this is differentiated from adult literacy, language and numeracy, especially focusing on problem solving as a key principle of functional skills. Also confirm the potential for vocational tutors to use embedding as a way of highlighting for their learners how skills they have used in one context can be used in another. This awareness of the transferability of English, maths and ICT is particularly effective when learners are working towards functional skills assessments.

(Refer to the LSIS Excellence Gateway for further information and signpost LSIS CPD modules for further functional skills training.)

Give out handout **HO 5** which illustrates the functional skills approach. Ask participants to check this and to volunteer any way in which they might adapt the way they encourage learners to engage with English, maths and ICT. Expect to hear them focus on the problem solving skills of the learners and on the transferred ownership of the skills to the learners. Expect them to identify the need to add complexity to learning activities.

Connect to the LSIS Excellence Gateway. Draw attention to the Scientiam case study <http://www.excellencegateway.org.uk/node/16868>. Point out the examples of flashcards which require the learners to problem-solve using English, maths and ICT skills. Discuss with the group how this approach may be used to involve learners effectively in the embedding process. Emphasise how working out what to do and what skills are needed to complete a vocational task enhances the learning experience and empowers the learner. Note that the focus of LSIS's CPD Module 11 focuses on problem solving and demonstrates the use of self-assessment techniques.

The activity

Divide the participants into groups of three or four. It may be helpful to group people from the same or similar vocational areas and to include in each group both vocational and English, maths and ICT specialists if possible. Also, if the group contains work-based assessors, it may be helpful to group these with other practitioners who are responsible for session planning. This way they can work collaboratively to agree on the skills to be developed and how such skills will be assessed, the latter being entered in the 'focus' column in **HO 6** below.

Give out handout **HO 6** and ask the participants to read and agree together:

- 1) What is the activity?
- 2) What is the follow-up activity that adds complexity?
- 3) What skills are needed for completion of the activity?
- 4) What skills form the focus of the session?
- 5) Where can you find a reference to 'mapping'* on the handout and what does it mean?
- 6) What is meant by 'development strategies'?

Give only a few minutes for this discussion. Check outcomes and confirm the importance of mapping* to target qualifications. Invite questions or comments.

***Mapping**

It is important that participants understand the function of mapping. By locating the skills they are developing in the adult core curriculum and in the functional skills subject criteria, they can ensure that they are addressing the learners'

diagnosed development needs at the appropriate level. By consulting the core curriculum online, they can also find ideas to enhance the teaching and learning process.

Vocational tutors may already be aware that many of the vocational standards and specifications are already mapped to adult literacy, language and numeracy / key skills / functional skills.

For the next part of the activity give out handout **HO 7** – a blank planning template – and invite participants to work together to plan their own embedded activity, following the instructions on handout **HO 6**. Also display the instructions on **PPT 16**.

Work with the groups, as they select their activity, and, if possible, ask at least one group to focus primarily on English, one on maths and one on ICT. Give them a card to confirm this. This is the most detailed activity of the session and adequate time should be allowed. Expect to circulate, prompt ideas and take questions.

Where individual workstations and the internet are available, encourage each group to consult the adult core curriculum on the LSIS website and the most up to date functional skills criteria on the Ofqual website to map the skills. If not, make available hard copies. <http://www.ofqual.gov.uk/downloads/category/68-functional-skills-subject-criteria>

Note

The focus column in handouts HO 6 and HO 7

In any activity, learners will use a range of English, maths and ICT skills. However, a key function of session planning is to identify the primary learning outcomes. In the 'focus' column below, practitioners will identify the English, maths and ICT elements which will make up the planned outcomes of a particular session. These outcomes may include the development of new skills or the reinforcement or assessment of skills already practised.

When all are finished, invite each small group to feed back to the larger group and allow time for the participants to make notes on their reflection sheets. Take issues and questions.

Differentiation

Composition of the group may vary enormously especially in the proportion of:

1. English, maths or ICT specialists as opposed to vocational specialists;
2. teaching practitioners / managers;

3. people who are experienced / non-experienced in an embedded / integrated approach; or

4. assessors / programme planners.

If the group is predominantly composed of vocational staff who are not confident or are new to an embedded / integrated approach, longer time may be needed for the mapping process. They may need help with choosing an activity and with identifying whether the focus skill will be English, maths or ICT.

If some of the participants only see their learners 1:1 – for instance if they are work-place assessors – their main focus will differ from that shown in the example in **HO 6**. In this case, they will use the ‘focus’ column to identify the skills they will **reinforce** and **assess**. Then, in the ‘development strategies’ column, they will describe what they will do to **reinforce** and **assess** the chosen skills.

Further guidance on the mapping of skills may also be needed. However, the activity is only complete when each group has taken ownership of the skills matching and mapping process.

For a group with little experience, developing teaching and learning strategies for English, maths and ICT may appear challenging. However, the purpose of this exercise is to promote and practise the planning process. The range of responses offered in the feedback session will prove developmental for all.

Refer participants to their reflection log **HO 2**.

TN 7

Trainer notes

Time	Content	Resources		
		No.	Style	Title
25m	TN 7. Supporting the individual learner Pair work, whereby participants brainstorm support strategies, including: a) initial assessment and review, b) resources and c) blended learning.	PPT 17-20	Slides	Supporting the individual learner
(Total 2h 25m)		HO 8	Handout	Resources for the learner
		HO 9	Handout	My integrated approaches file...

Purpose of this activity: to focus participants on the needs of individual learners, the need for support and differentiation; to introduce participants to their own record of resources ('My integrated approaches file').

Having planned an integrated activity, participants need to consider the complexities of their plan. What if, for instance, one of their learners has little practice in multiplying 2-digit numbers? What if someone finds using a measuring tape challenging, finds using a computer threatening or doesn't know how to locate the right information in a catalogue? Individual needs and spiky profiles are the name of the game when it comes to English, maths and ICT. This activity explores a range of ways to support those learners whose skills veer away from the required level, who have gaps or who differ from the rest of the group in what they are able and confident to do. Responsiveness to individual needs is essential to embedding and is a key factor in the teacher's role.

In an ideal situation, of course, participants should understand that learners benefit from referral to specialist support from English, maths or ICT specialist teachers. This may be available in the same organisation or may be offered by a partner institution. Often, however, learners will need to access support from a variety of source; teachers and assessors should see this guidance and help as an important part of their role if English, maths and ICT are to be fully integrated in their programmes.

For the activity, ask the English, maths or ICT specialists to stand up and move if necessary to sit with a vocational / apprenticeship teacher: possibly someone with whom they have not yet worked. You may want to confirm that this mirrors the team working that is important when planning integrated learning.

If there are too few or too many English, maths or ICT specialists to form pairs with non-specialists, simply ask the participants to pair up with someone they haven't worked with so far. It may be useful to encourage everyone to get up and move to a different table in this process as an energiser.

When the pairs are formed, draw attention to slide **PPT 17** which asks the participants to:

1. Describe to each other **one** learner they know whose English, maths or ICT skills are a barrier to success.
2. Together think of as many strategies as possible for helping each learner.
3. Identify the issues that they encounter.
4. Make notes.

Take feedback.

From the **comments and questions** that emerge, expect to hear issues that focus on:

- lack of time;
- lack of expertise;
- learner reluctance;
- learner placed on the wrong programme;
- lack of adequate support policies in the organisation;
- low expectations of learner, teachers and organisation; or
- traditions of defeatism in learner, teachers, organisation.

From the **strategies** that emerge, group them together as:

1. the learning journey – initial and diagnostic assessment, ILPs, continuous monitoring and review, summative assessment
2. resources
3. blended learning.

Reinforce the points on strategies with slides **PPT 18-20**.

Invite participants to suggest how English, maths and ICT can be embedded at all stages of the learner journey and stress the importance of this. For instance, English, maths and ICT should be central to the recruitment, screening and initial assessment stages so that learners experience these skills as integral to their vocational / apprenticeship development and are placed on the appropriate programme and at the right level. In this IAG is crucial. Likewise English, maths and ICT should be fully evident in the ILP and in all formative and summative assessment.

Introduce the concept of blended learning as a support process. Take ideas from the floor about how blended learning could be introduced or further developed in an organisation. Display useful flipcharts from the exercise. This might be a good opportunity to signpost participants to LSIS Module 7 on blended learning approaches in apprenticeships.

Differentiation

If there are participants who find it difficult to engage with this activity, because they can't think of a sample learner or are unsure about possible strategies to help, redistribute them to groups which seem to be operating successfully and ask them to take turns as note-taker.

If a group finishes very quickly, they can spend more time checking out resources online and adding to the collective flipchart lists.

Distribute handout **HO 8** with recommended resources for the learner. Give a few minutes for participants to navigate their way to examples of online resources. Discuss how they can develop a resource bank on Moodle or other commercial VLEs, or how they can use blended learning platforms on the intranet or by using file-saving sites such as Edmodo or DropBox.

Introduce the idea of: 'My integrated approaches file' (**HO 9**) for vocational / apprenticeship teachers – a folder where they will store in one place and build on all the documents, records, strategies and resources that they will need to help raise their learners' skills levels in English, maths and ICT. Suggest that such a folder could be added to the VLE for all to access.

Differentiation

Managers present may take responsibility for adding such a folder on Moodle as part of a whole organisation strategy.

Refer participants to their reflection log **HO 2**.

TN 8

Trainer notes

Time	Content	Resources		
		No.	Style	Title
25m (Total 2h 50m)	TN 8. Planning an integrated programme Group card game, using a question and answer technique. Prioritisation task.	R 3 HO 10	Cards Handout	Aspects of planning elements Activity instructions

Purpose of this activity: for the participants to recognise the planning implications of an integrated approach and to begin to identify priority actions for themselves and others.

What has become clear through this session so far is that an integrated approach is not just tinkering at the edges. To impact significantly on learner success, it requires detailed planning and, for some practitioners, a whole new way of looking at teaching objectives, methods and style. Be aware that it can appear very daunting and that part of the function of this training must be to make the task achievable, with each person understanding what it will mean in practice.

This activity involves a question-answer game and a card sort.

1. The question-answer game

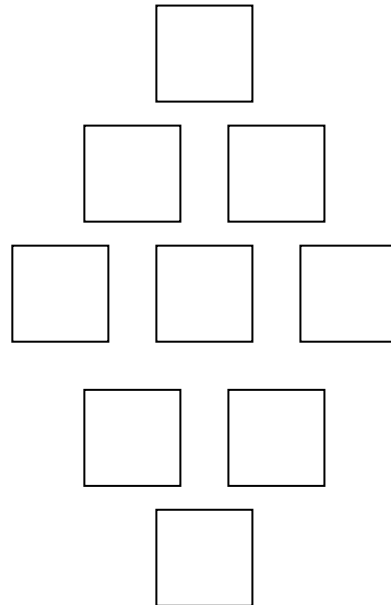
Bring the participants back into their original groups of three or four. Give each group a set of 14 cards face down (**R 3**). Appoint one person in each group as questioner and one as note-taker. On each card there is a question.

The questioner picks up a card and reads out the question. The rest of the group then quickly brainstorms answers until the questioner is satisfied that the answer is covered. The answer on the card gives guidance but if members of the group volunteer good alternative answers the questioner says 'note that down' and the note taker writes it on a flip chart. The questioner then proceeds to the next card, until all the cards are finished.

The exercise should be quick and should not involve silences or hesitation. If there is a pause and no one has an answer, the questioner should place the card to one side and move on. The first group to complete all the cards raise their hands and are declared the winners. They then prepare their feedback until all groups have finished. The winning group then present their suggestions, taking further suggestions from the floor as they are volunteered.

2. The card sort

Still in groups, the participants determine which elements of planning are high priority for them, using **HO 10**. The cards are laid face up on the table and each participant picks out three cards that represent areas of planning which they believe are a priority for them in their particular role, explaining their choice as they go. For instance, someone who is a manager may select the 'funding' card whereas a course tutor may select 'initial and diagnostic assessment'. When all have made a selection (and there will be overlap), the whole group choose nine cards from the ones already picked and lay them out in an agreed priority formation as follows:



The purpose of this activity is for the participants to recognise the planning implications of an integrated approach and to begin to identify priority actions for themselves and others. There is no right answer and prioritisation will depend on the roles and perspectives of the individual group members.

Differentiation

If the participants are not accustomed to a management approach to developing integrated learning ask them to focus on only a few questions each by sharing the cards between groups so each have only four or five to answer. Place yourself – and / or any experienced manager or facilitator present – as questioner with any group that needs more detailed guidance.

Refer participants to their reflection log **HO 2**.

TN 9

Trainer notes

Time	Content	Resources		
		No.	Style	Title
25m (Total 3h 15m)	TN 9. Action planning Paired coaching. Ask participants to write on sticky notes three actions they will take away from today to begin or further develop the planning and delivery of embedded / integrated learning. Display the notes.	HO 11	Handout	Coaching questions

Purpose of this activity: action planning.

The participants work in pairs with the person next to them. Each person writes down on sticky notes three actions they will take away from the training and implement. They then take turns (five minutes each only) to coach one another on the implications and practicalities of the actions, using prompt questions to help them – **HO 11.**

Remind the group that, in coaching, we help the coachee form realistic goals through questioning. The aim is to encourage the coachee to take ownership of the goals and to think through the implementation process. Usually a coach gives advice **ONLY** when it is specifically requested.

When the coaching is complete, ask the participants to display their sticky notes on the wall and read each other's. Then ask them to complete their action notes on their reflection sheets.

With the whole group, review and highlight areas of planning that may have been omitted in the participants' selections. You can do this by running through the elements listed on the cards and asking for a show of hands from those who have committed themselves to actions in each category.

As an example, you may find that there are no actions relating to funding. If this is so, ask the participants to consider a solution. For this, they may realise that they need to approach individuals not present at the training event. Aim to find volunteers from the group who will undertake to promote the action planning process to key individuals in the organisation.

By the end of this session, the participants should:

1. be clear about their actions and how they will implement them;

2. be prepared to share their experiences of the training with others in the organisation;
3. be confident to promote an integrated approach – and the planning that accompanies it – to others in the organisation; and
4. be confident that necessary change will occur in the organisation to place English, maths and ICT at the centre of teaching and learning.

TN 10

Trainer notes

Time	Content	Resources		
		No.	Style	Title
15m	TN 10. Summary and review of the session Revisit session objectives. Ask participants to share with the group any 'light bulb' ideas. Complete review notes and evaluation forms, if used.	PPT 21	Slide	Objectives revisited
(Total 3h 30m)		HO 2	Handout	Reflection
			Centre evaluation form	Evaluation form

Purpose of the activity: to summarise the achievements of the session.

Confirm that all are purposeful about their actions. Stress again the importance of a whole organisation approach to an embedded / integrated approach. If there are managers present, confirm how they in particular will be instrumental in taking an integrated approach strategy forward.

Ask the participants to check the questions they wrote at the beginning of the session and see if they have been answered. Pick up any unanswered questions and invite answers from the group OR signpost resources and further CPD modules from the LSIS suite.

Revisit the objectives of the session on **PPT 21**.

Complete evaluation forms, if used.

Module 5

Integrating English, maths and ICT into apprenticeship programmes

Handouts

- HO 1:** Raising achievement
- HO 2:** Reflection
- HO 3:** Strategies to incorporate expertise in English / literacy and ICT in vocational teaching and learning
- HO 4:** Resources for reference and self-help in embedding / integrating
- HO 5:** The functional skills approach
- HO 6:** Planning an integrated approach 1
- HO 7:** Planning an integrated approach 2
- HO 8:** resources and support strategies for the learner
- HO 9:** My integrated approaches file
- HO 10:** Aspect of planning – prioritisation
- HO 11:** Coaching questions

Resources

- R 1a:** Confidence building
- R 1b:** Confidence building – possible solutions
- R 2:** Alternative resource – confidence scale
- R 3 :** Aspects of planning – question cards

HO 1 Raising achievement


Score each of the following on a scale of 1 to 3 by circling the chosen number. Compare your responses with others in your group and together agree three main reasons for your learners not achieving as well as you would like.




What would help my learners achieve?


Reasons for learners not achieving	Low priority	Medium priority	High priority
Learners' ability to organise their time	1	2	3
If I had higher expectations of my learners...	1	2	3
Individual support for each learner	1	2	3
Effective assessment, monitoring and review	1	2	3
Learners' ability to concentrate	1	2	3
Learners' ability to read and follow instructions	1	2	3
Learners' ability to calculate numbers, dimensions, quantities, etc	1	2	3
Learners' ability to write legibly and accurately	1	2	3
Learners' ability to plan and write well-constructed reports, letters, explanations and other documents	1	2	3
Learners' ability to listen and act on what they have heard	1	2	3
Learners' ability to use basic ICT programmes	1	2	3
Learners' ability to search the internet	1	2	3
Learners' ability to speak and listen in formal and semi-formal situations, e.g. to a group, to customers, to managers, by phone	1	2	3
Learners' ability to work independently	1	2	3
Learners' ability to remember information and processes	1	2	3
Learners' ability to find information from written sources	1	2	3
Learners' ability to work with others in a group	1	2	3
Other	1	2	3

If you complete this activity, discuss and agree with your group three things you could do differently to raise your learner skills levels in English, maths and ICT.

HO 2**Reflection**

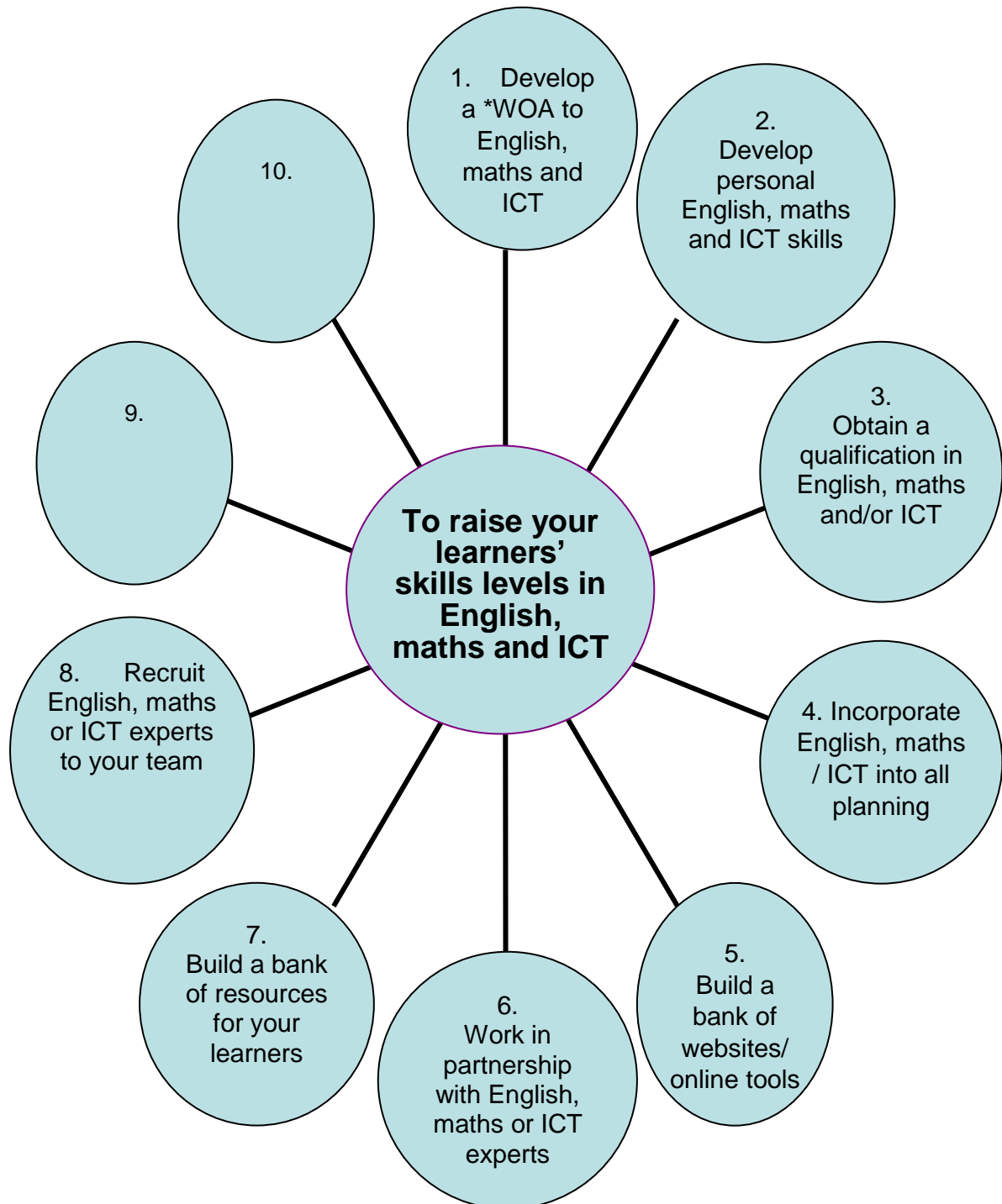
Activity	Notes	Actions	By when?
2. Introduction	My question for the day:		
3. How important are English, maths and ICT to vocational learning?	 ?		

4. Finding the expertise	 ?		
5. What is embedding?	 ?		
6. Practical embedding	 ?		

9. Action planning	 ?		
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HO 3

Strategies to incorporate expertise in English / literacy and ICT in vocational teaching and learning



*WOA = whole organisation approach

HO 4

Resources for reference and self-help in embedding / integrating

The LSIS Excellence Gateway

<http://www.excellencegateway.org.uk/>

This is the leading online service for the FE and skills sector in England. It offers resources, support and advice. Look especially for:

- the Embedding Literacy, Language and Numeracy (LLN) Starter kit, which offers guidance and support for all aspects of embedding including resources and CPD. <http://www.excellencegateway.org.uk/node/1154>
- the materials for embedded learning <http://rwp.excellencegateway.org.uk/>
- follow Support for improvement > teaching and learning > Skills for Life support which takes you to the Adult core curriculum, functional skills resources and foundation learning <http://www.excellencegateway.org.uk/node/18272>;
- Good Practice Evidence where you will find case studies in embedding English and maths <http://archive.excellencegateway.org.uk/page.aspx?o=319409>, good e-practice <http://www.excellencegateway.org.uk/casestudies> and 'Films for Effective Practice' http://tlp.excellencegateway.org.uk/tlp/fs/fs-resources/cpd_act_2.php;
- the 'Gold Dust' resources <http://tlp.excellencegateway.org.uk/tlp/cetts/goldust/index.html>;

Move On

<http://www.move-on.org.uk/>

English and Maths resources for teachers, learners and providers.

BBC Skillswise

<http://www.bbc.co.uk/skillswise/>

Online and paper-based resources aimed at learners working towards Level 1.

BBC RaW

<http://www.bbc.co.uk/raw/>

Skills for everyday life, including use of ICT, money and numbers.

Skilled to Go Toolkit

<http://www.ofst.gov.uk/about-the-ofst/partnership-working/partnership-working-info/consumer-education/resources/sthome/>

A range of everyday life scenarios that enhance literacy and numeracy skills.

Improving quality through a whole organisation (WOA) approach to Skills for Life

The WOA starter kit <http://www.excellencegateway.org.uk/node/1151> gives a thorough overview of the approach, with a range of tools and in particular to the literacy, language and numeracy health check

<http://archive.excellencegateway.org.uk/page.aspx?o=275847>

HO 5

The functional skills approach

To be **functional in mathematics** your learners need to:

- **recognise** situations in which mathematics can be used;
- **make sense** of these situations;
- **describe** the situations using mathematics;
- **analyse** the mathematics, obtaining results and solutions;
- **interpret** the mathematical outcomes in terms of the situation; and
- **communicate** results and conclusions.

Helping learners become **functional with ICT** means helping them to:

- **recognise** situations in which ICT can make a positive contribution;
- **apply** their ICT skills appropriately to a range of tasks and problems;
- **reflect** on the role that ICT has played in handling these situations; and
- **become** increasingly independent in their learning and in the application of their skills and knowledge.

To be **functional in English** your learners need to:

- **choose** the skills and communication methods needed;
- **make sure** their communication methods are fit for purpose;
- **communicate** in ways that meet the needs of the audience and situation;
- **apply English skills** in a range of contexts; and
- **become** increasingly independent in their learning.

HO 6

Planning an integrated approach 1

Practical embedding

Group task

The task of the teacher / trainer in all vocational / apprenticeship programmes is to guide the learner to success by combining curriculum delivery with skills development.

Look at the following activity plan. In groups discuss the questions:

1. What is the activity?
2. What additional question engages the learner?
3. What skills are needed?
4. What skills or assessment processes would you focus on?
5. Where can you find a reference to 'mapping' on the handout and what does it mean?
6. What is meant by 'development strategies'?

**Activity
Painting a room**

The activity	Skills	Focus	Development strategies
<p>What does the learner need to do? The learner may need to:</p> <ul style="list-style-type: none"> • measure the room and work out the amount of paint required • research and calculate costs • discuss colour, style and cost with the client • provide a quote • estimate time required for the job • order / buy materials • use software to construct a plan / visual image of the room. <p>What might be a typical problem for the learner to solve?</p> <p>What does the learner need to do if a supplier is offering a discount of 10% on certain end-of-line paints?</p> <p>The learner may need to:</p> <ul style="list-style-type: none"> • work out the cost of the job using the cheaper paint • discuss the options with the client • prepare an alternative quote. 	<p>What skills are required for the learner to complete the activity? The learner may need:</p> <ul style="list-style-type: none"> • maths / numeracy skills (calculation of dimension and cost) • English / literacy skills (reading a paint catalogue) (speaking and listening with the client and / or suppliers) (writing a quote) • ICT skills (researching on the internet) (using software to produce a scale drawing and / or visual image of the room). <p>What are the target English, maths and ICT qualifications for the learner?</p> <p>The learner may be working towards one or more of the following:</p> <ul style="list-style-type: none"> • functional skills (mathematics, English, ICT) • Skills for Life (literacy, numeracy) • key skills (maths, English, ICT). 	<p>What skill or skills development will you focus on in this activity?</p> <ul style="list-style-type: none"> • Calculation of dimension • Calculation of cost • Finding information on the internet. <p>How do these skills map to the target English, maths and ICT qualification?</p> <p>Refer to the functional skills subject criteria, the adult literacy, numeracy or ESOL core curriculum or the key skills standards, for example:</p> <p>Functional skills Level 1:</p> <ul style="list-style-type: none"> • solve problems requiring calculation, with common measures including money, time, length, weight, capacity and temperature • work out areas, perimeters and volumes in practical situations • access, navigate and search internet sources of information purposefully and effectively. 	<p>Learners discuss why they need to order the right amount of paint and what they need to do to calculate it.</p> <p>Learners look at different ways of finding areas by, for example, drawing a plan, counting squares on squared paper, using a 3-D model, using models on the internet.</p> <p>Learners work out areas of small shapes and agree on a formula for the calculation.</p> <p>Learners work out areas of a range of everyday items.</p> <p>Learners estimate whether the area of the room will be greater or less than the objects they have just calculated.</p> <p>Learners discuss in groups and agree how to reduce a number by 10%.</p>

Activity
Painting a room

The activity	Skills	Focus	Development strategies
	<p>Note that the last two are being phased out during 2012.</p>	<p>Adult numeracy core curriculum:</p> <ul style="list-style-type: none"> • Work out the area of rectangles MSS1/L1.9 • Add, subtract, multiply and divide sums of money and record MSS1/L1.1. 	

HO 7

Planning an integrated approach 2

In groups, choose a real activity from a vocational / apprenticeship programme. Using the following pro-forma to help you, discuss and agree:

1. What the learner needs to do.
2. What additional problem will engage and challenge the learner.
3. What skills the learner will need for the activity.
4. The specific skills that will inform the learning outcomes for this session.
5. The target English, maths and ICT qualifications.
6. The strategies you could use to develop the skills in the learner.

Mapping

Refer to the functional skills criteria on <http://www.ofqual.gov.uk/downloads/category/68-functional-skills-subject-criteria>. Check you have the most up to date version – this one is from September 2011.

Also refer to the adult core curriculum on <http://www.excellencegateway.org.uk/sflcurriculum>.

Identify and record on the proforma the references for three of the skills you have chosen, in order to inform the learning outcomes for the session.

Activity

.....

The activity	Skills	Focus	Development strategies
What does the learner need to do?	What skills are required for the learner to complete the activity?	What skill, skills development or assessment will you focus on in this activity?	

Activity

.....

The activity	Skills	Focus	Development strategies
What might be a typical problem for the learner to solve?	What are the target English, maths and ICT qualifications for the learner?	How do these skills map to the target English, maths and ICT qualification?	

HO 8

Resources and support strategies for the learner

1. Websites

Embedded learning materials

<http://rwp.excellencegateway.org.uk/Embedded%20Learning/>

Embedded learning materials supporting more than 25 vocational, community, employability and health-related topic areas. Full teacher notes and resources for learners

Move On

<http://www.move-on.org.uk/>

English and maths resources for learners and teachers

BBC Skillswise

<http://www.bbc.co.uk/skillswise/>

Online and paper-based resources for learners

BBC RaW

<http://www.bbc.co.uk/raw/>

Skills for everyday life, including money and numbers

Skills Workshop

<http://www.skillsworkshop.org/>

Free functional skills and adult literacy, language and numeracy resources

Edmodo

www.edmodo.com/

A secure networking website with a wealth of resources. Click on: *I'm a student*.

BBC Webwise

<http://www.bbc.co.uk/webwise/>

A beginner's guide to using the internet

2. Teaching and learning methods to support and develop learner English, maths and ICT skills

- **Learning and study centres**
Access banks of materials and support in your own learning centre or that of a partner organisation
- **Coaching and mentoring partnerships with other learners**
Enable pairs of learners to support and help each other acquire skills

- **Peer working groups**
Learners work in groups to access skills – online or in real time and space
- **Teacher-led learning support – face to face**
Timetabled teacher-led support sessions for English, maths, ICT
- **Resources available in workshops and teaching rooms**
Learning materials, games, quizzes, visual displays, posters
- **Self-help tools supplied by teacher**
Memory aids, crib sheets, handbooks, emails, texts
- **Online and electronic resources and support**
Social networking online, virtual learning environment (VLE), e.g. Moodle, Blackboard, smart phone communication and apps
- **The learning journey**
Initial and diagnostic assessment, individual learning plan with SMART targets, formative assessment and review, summative assessment and qualification achievement
- **Events**
Competitions, 'test your skill' events, dramatic presentations, public forum meetings, learner meetings and debates, focused one-off training events, visiting speakers, spelling games, number games, ICT games, writing projects, English and maths fun days, local radio events, film and audio recording projects

3. Website for teachers, trainers and assessors looking for teacher training courses and professional qualifications in English and maths

Talent website

<http://www.talent.ac.uk/>

Lists most the centres offering specialist literacy (English), language (ESOL) and numeracy (maths) teacher training courses

HO 9

My integrated approaches file

Create 'My integrated approaches file' in which you will store some or all of the following files and documents:

My action plan

A personal action plan which identifies what you will do and by when, starting from today's actions

Embedded schemes of work

At least one example of a scheme of work which identifies English, maths and ICT learning goals

Integrated session plans

At least one example of a session plan which identifies English, maths and ICT intended outcomes and the strategies for skills development

Integrated ILPs

At least one example of an ILP which identifies English, maths and ICT targets and actions to be taken, and which records progress

Learner targets: English, maths and ICT

Examples of the most common learner targets that reflect your learner and the programme needs in English, maths and ICT. Reference to learning materials and strategies that you have used or are recommended

Strategies for learner support

Begin with the strategies suggested today and gradually test them out and add to them

Skills worksheets and crib sheets

Teaching and learning materials that you have created or which you provide for learner use

Initial and diagnostic assessment tools

Examples of tools that assess English, maths and ICT needs

Useful resources and websites

Begin with the list you have compiled today and gradually build up a bank.

My personal training record

Details of relevant CPD undertaken with details of useful findings

Personal skills: English / literacy

Materials you are using to build your own skills and gain a qualification in English if applicable

Personal skills: maths / numeracy

Materials you are using to build your own skills and gain a qualification in maths if applicable

Personal skills: ICT

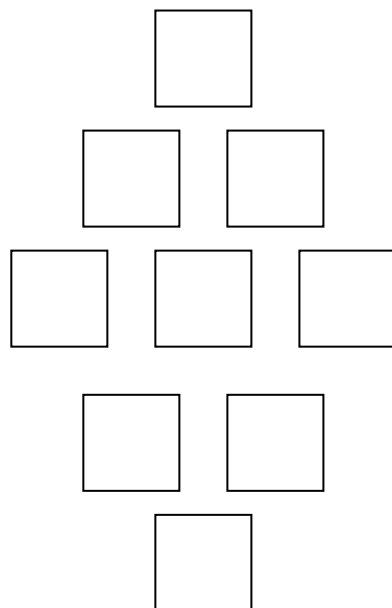
Materials you are using to build your own skills and gain a qualification in ICT if applicable

HO 10

Aspects of planning: prioritisation

1. Pick 3 cards each that represent your planning priorities.
2. In your group, agree together the 9 most important planning elements.
3. Prioritise your planning by placing the cards in the following 'diamond nine' formation.

High priority



Low priority

HO 11

Coaching questions

These questions can be used as a tool to help you coach and support each other in the action planning process.

What is your first objective?

- What do you want to achieve?
- What impact will this have on your learners, yourself, other staff, your organisation?
- When would you like to achieve this by?

Progress to date

- How far have you begun this process already?
- What have been your achievements so far?
- Are there any barriers hindering your progress?

Moving forward

- What action could you take?
- What else could you do?

Action

- What will you actually be able to do?
- How will you do this?
- By when?
- Who do you need to help you?

R 1a

Confidence building

For the trainer's use.

Questions to assess confidence in English / literacy

If I asked you to help your learners *read and follow a set of instructions*, how confident would you feel?

If I asked you to help your learners *construct and write an accurate sentence*, how confident would you feel?

If I asked you to help your learners *answer a customer's questions on the telephone*, how confident would you feel?

If I asked you to help your learners *use and spell a range of new work-related vocabulary*, how confident would you feel?

Questions to assess confidence in ICT

If I asked you to help your learners *complete a multiple-choice test online*, how confident would you feel?

If I asked you to help your learners *research a work-related topic online*, how confident would you feel?

If I asked you to help your learners *access and use your local intranet / Moodle*, how confident would you feel?

If I asked you to help your learners *use a spreadsheet to make a calculation*, how confident would you feel?

Questions to assess confidence in mathematics / numeracy

If I asked you to help your learners *add together a number of different prices to reach the total cost for a job*, how confident would you feel?

If I asked you to help your learners *measure and work out the area of a work space*, how confident would you feel?

If I asked you to help your learners *estimate the time it would take to complete a number of tasks*, how confident would you feel?

If I asked you to help your learners *work out how much they will save on a product which has been reduced by 15 per cent*, how confident would you feel?

R 1b

Confidence building – possible solutions

For the trainer's use.

English / literacy

If you could *keep with you a six-point list of what to look out for when reading instructions*, would you feel more confident?

If you could *access rules on a website for constructing a good sentence*, would you feel more confident?

If you *had access to a recording of someone answering questions on the telephone in a clear and courteous way*, would you feel more confident?

If you could work with colleagues to *compile a correctly spelled list of the most important words a learner would need*, would you feel more confident?

ICT

If you could *find time to practise working online*, would you feel more confident?

If you could *receive some one-to-one guidance on using the computer from a colleague*, would you feel more confident?

If you could *receive in-house training on the use of Moodle*, would you feel more confident?

If you could *attend a course on using Office applications*, would you feel more confident?

Mathematics / numeracy

If you could *practise several different ways of adding up money until you could perfect the method easiest for you*, would you feel more confident?

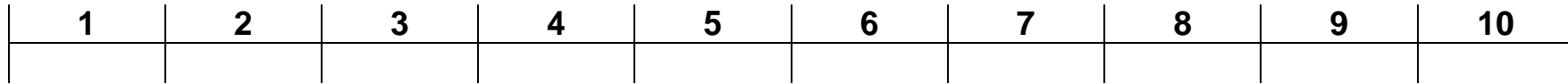
If you could *receive some one-to-one guidance on working out area from a colleague*, would you feel more confident?

If you could *find a website that gave you tips on how to estimate*, would you feel more confident?

If you could *attend a course that included working out percentages*, would you feel more confident?

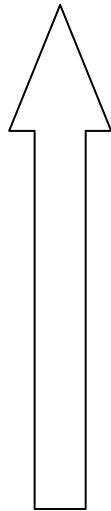
R 2

Alternative resource: Confidence scale



Not at all confident

Fully confident



Aspects of planning: question cards

Print and cut out the separate cards, for TN 8.

<p style="text-align: center;">Steering committee</p> <p>Q. How will your organisation bring together all the right people and resources to make an integrated approach work?</p> <p>A. Set up a steering committee at senior management level for English, maths and ICT.</p>	<p style="text-align: center;">Schemes of work</p> <p>Q. How will an integrated approach impact on your existing schemes of work?</p> <p>A. Consult with specialists. Review and revise schemes of work to give equal precedence to English, maths and ICT and vocational skills in the learning objectives, remembering that the vocational skills required often <i>are</i> also English and maths skills.</p>
<p style="text-align: center;">The learning environment</p> <p>Q. What can you do to your learning environment to make English, maths and ICT central to the learning experience?</p> <p>A. Use visual displays and quizzes to promote number, vocabulary, computing procedures, sentences and paragraphs; display relevant texts for learner use and supply necessary technology.</p>	<p style="text-align: center;">Resources</p> <p>Q. What resources do you need and how will you get them?</p> <p>A. Develop essential ICT equipment; texts and hard copy materials; include in departmental self-assessment and action planning.</p>
<p style="text-align: center;">Funding</p> <p>Q. How will you fund an integrated approach?</p> <p>A. Prepare business proposal; include in departmental self-assessment and action planning.</p>	<p style="text-align: center;">Learning centres</p> <p>Q. How will you work with learning / study centres to adopt an integrated approach?</p> <p>A. Work in partnership with your own or local learning / study centres to ascertain and negotiate essential support and resources.</p>

<p style="text-align: center;">Technology</p> <p>Q. How will you ensure you have the appropriate ICT equipment and the necessary skills to use it?</p> <p>A. Prepare business proposal; include in departmental self-assessment and action planning;</p>	<p style="text-align: center;">Session plans</p> <p>Q. How will an integrated approach impact on your existing session plans?</p> <p>A. Consult with specialists. Review and revise session plans to give equal precedence to English, maths, ICT and vocational skills in the learning objectives, remembering that the vocational skills required often <i>are</i> also English and maths skills.</p>
<p style="text-align: center;">Individual learning plans</p> <p>Q. How will an integrated approach impact on your individual learning plans?</p> <p>A. Consult with specialists. English, maths and ICT targets must form a central role. Review and revise ILPs to ensure English, maths and ICT targets are clear and specific.</p>	<p style="text-align: center;">Recruitment</p> <p>Q. How will an integrated approach impact on your staff recruitment policy?</p> <p>A. Review staffing needs and develop a recruitment proposal as part of your business plan and strategy to ensure effective coverage of English, maths and ICT.</p>
<p style="text-align: center;">Being a role model</p> <p>Q. How will you encourage your learners by example to develop their skills in English, maths and ICT?</p> <p>A. Work towards English, maths and ICT qualifications yourself and upgrade your own skills; include training in English, maths and ICT teaching in your CPD package; work in teams with colleagues who complement your skills; demonstrate the importance of English, maths and ICT at all times.</p>	<p style="text-align: center;">Staffing</p> <p>Q. How will you involve staff in your integrated programmes who have the necessary skills and qualifications?</p> <p>A. Develop a team working approach to an integrated approach in your organisation. Involve key staff at planning and review stages; review and revise staffing of the whole programme so that English, maths and ICT expertise is central to the delivery team.</p>

Partnerships

Q. What partnerships will help you to develop an integrated approach?

A. Look for skills or resources that will complement yours, your team's or those of your organisation; negotiate with others to work in your team or work with you to supply skills and services.

Whole organisation approach

Q. How can you begin to develop a whole organisation approach to integrating?

A. Start from senior management; develop a strategy, development plans and policies; integrate into all areas of your department such as finance, marketing and recruitment, HR, performance management, buildings and resources, staff development, the learning journey and delivery.