



## Experiential learning

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**This approach involves engaging learners in an authentic, first-hand experience that allows them to make discoveries and experiment, construct meaning and develop understanding. It is sometimes referred to more loosely as 'learning by doing' or 'active learning'.**

Experiential learning is based on a constructivist theory of learning. The learner develops a model of how the world works by relating new knowledge to existing knowledge. The theory explains how mistakes lead to learning. Mistakes arise when we encounter a new experience that does not fit with previous experience. This makes us check and refine our understanding. The result is deep learning, rather than the shallow learning that results when we learn by rote.

Experiential learning leads to affective (feeling) as well as cognitive (thinking) learning. It can be a powerful approach for developing empathy and changing attitudes.

**Techniques:** encouraging learners to regard mistakes as learning opportunities and reflect on experience, experiments, practical tasks, role play, real-life projects, work experience, practice-theory-practice and plan-do-review cycles, activities that use learners' experiences as a starting point, co-operative learning.



## Multi-sensory learning

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**All learning environments are to varying extents multi-sensory. Seeing, listening, touching things and moving are a natural part of learning. So do we need to focus on making learning multi-sensory? Educators have advocated multi-sensory teaching techniques since the earliest teaching guides were written. By designing learning so that learners use more than one of their senses, we make it richer and more motivating. The learner is more likely to remember after a multi-sensory experience.**

Teachers working with dyslexic learners have found multi-sensory approaches particularly helpful.

But we stray into a minefield if we try to classify learners into fixed visual, auditory or kinaesthetic stereotypes. Although we may have a dominant modality, most argue that we benefit from developing all of our senses to the full.

**A kit to support multi-sensory learning might include:** digital camera ► audio recorder ► mind-mapping software ► sticky notes ► coloured pens ► mini whiteboards ► solid numbers ► letters and symbols ► real items from the subject area such as computer components in IT.



## Co-operative learning

# Co-operative learning



**Co-operative learning is a structured form of group learning. It is particularly useful as a framework for team project work. It ensures that individual learners understand that their contribution is vital to the team.**

A fully developed co-operative learning approach contains these five elements

- positive interdependence – ‘we sink or swim together’
- individual and group accountability
- face-to-face interaction – or its electronic equivalent
- explicit learning of interpersonal and team work skills
- group processing – to evaluate team functioning and agree which behaviours to change.

The use of co-operative learning has been extensively studied. It has been found to improve information acquisition, higher-level thinking skills, interpersonal and communication skills.

It can also encourage active citizenship and promote equality and diversity, for instance by breaking down barriers between learners.

**Techniques:** careful grouping of learners ► ground rules ► role allocation ► individual and team targets ► group investigations ► team discussions ► peer coaching and assessment ► presentations by teams ► reflection on team dynamics.



## Learning conversations

# Learning conversations



**This approach is based on a belief that the learner should be in the driving seat. It provides a model for working in situations such as reviews, where it helps learners to reflect on their progress and decide what to do next. It can also provide a framework for dialogue between teacher and learner during the learning itself.**

The purpose of the learning conversation is to:

- challenge and motivate learners
- keep the learner at the centre and to work with their needs and priorities
- engage the learner in setting and reviewing targets
- enable the individual to become an expert learner
- encourage the learner to reflect and to transfer skills.

Motivational dialogue is a particular form of the learning conversation, aimed at facilitating change with learners who face major barriers.

**The approach demands:** active listening ► skilled, open questioning  
► positive body language.

**Teachers, tutors and trainers need:** empathy ► objectivity ► non-judgemental attitudes.



## Differentiation

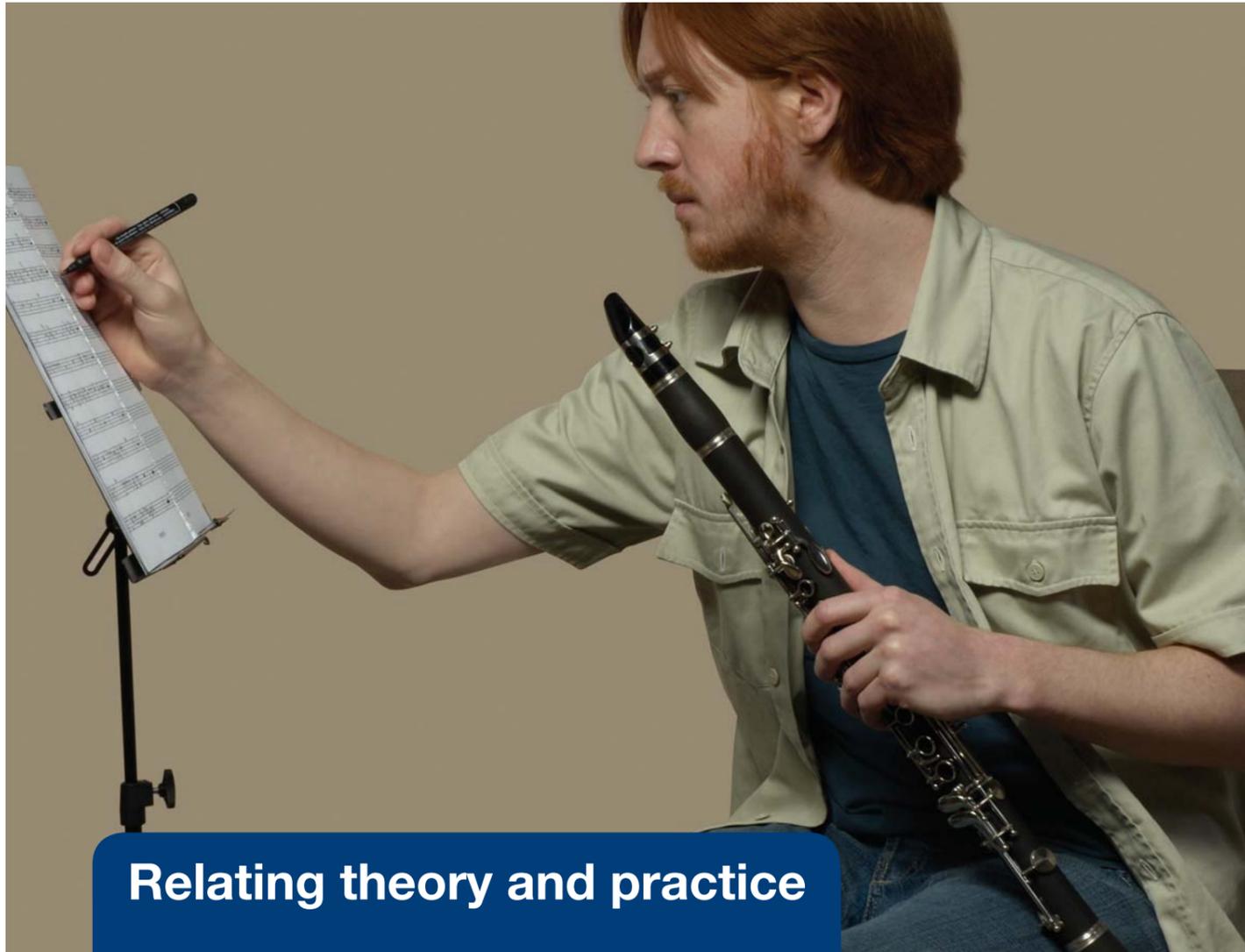


**There is no single definition of differentiation, but all definitions are underpinned by a view of learners as individuals. Some approaches concentrate on planning sessions so that individual learner's needs are accommodated. Others see differentiation as a philosophy guiding the whole of the learning journey, including guidance and support.**

Active learning approaches, especially experiential and co-operative learning, provide excellent opportunities for differentiation. Indeed, one could argue that all learner-centred strategies, by definition, facilitate differentiation.

Many models also make reference to accommodating the learning styles of learners. This is subject to controversy, because current research throws into doubt many of the instruments used to identify learning styles. It could also be argued that the expert learner is one who adopts a learning style that suits the task at hand.

**Techniques:** differentiation by outcome, task, text/resources, level, interest, variety of teaching methods, support ► use of flexible, culturally diverse resources  
► initial assessment ► individual action plans ► individual feedback.



## Relating theory and practice



**There are two main ways to relate theory and practice. Both methods require learners to reflect on their learning experience to be successful.**

**Practice to theory:** In active learning, learners form concepts through inductive reasoning. A real-life problem leads them into in-depth exploration, experimentation and fact-finding. They try to make sense out of their findings and construct a concept. They then test their understanding of the concept, or theory, to check they are using it correctly and that it still makes sense in new situations. These are high-level cognitive tasks that lead to deep understanding of the underpinning concepts.

**Theory to practice:** In a traditional, deductive approach to learning, the teacher defines and explains a theory, illustrating it with examples. They then ask learners to apply the theory in practical situations. This deductive approach moves from abstract knowledge to concrete examples. It has a particular application in a subject that requires some knowledge of the theory in order to solve problems.

Many teachers, tutors and trainers use a mixture of the two approaches.

**Techniques:** setting learners challenging goals ► practice-theory-practice cycles  
► integrated work experience ► models and analogies ► promotion of thinking skills and research skills.



## Using e-learning and technology



**Technology offers learners exciting, innovative tools for active learning. These tools can be used in the same way as they are used outside education: to research, to communicate, to collaborate and to create.**

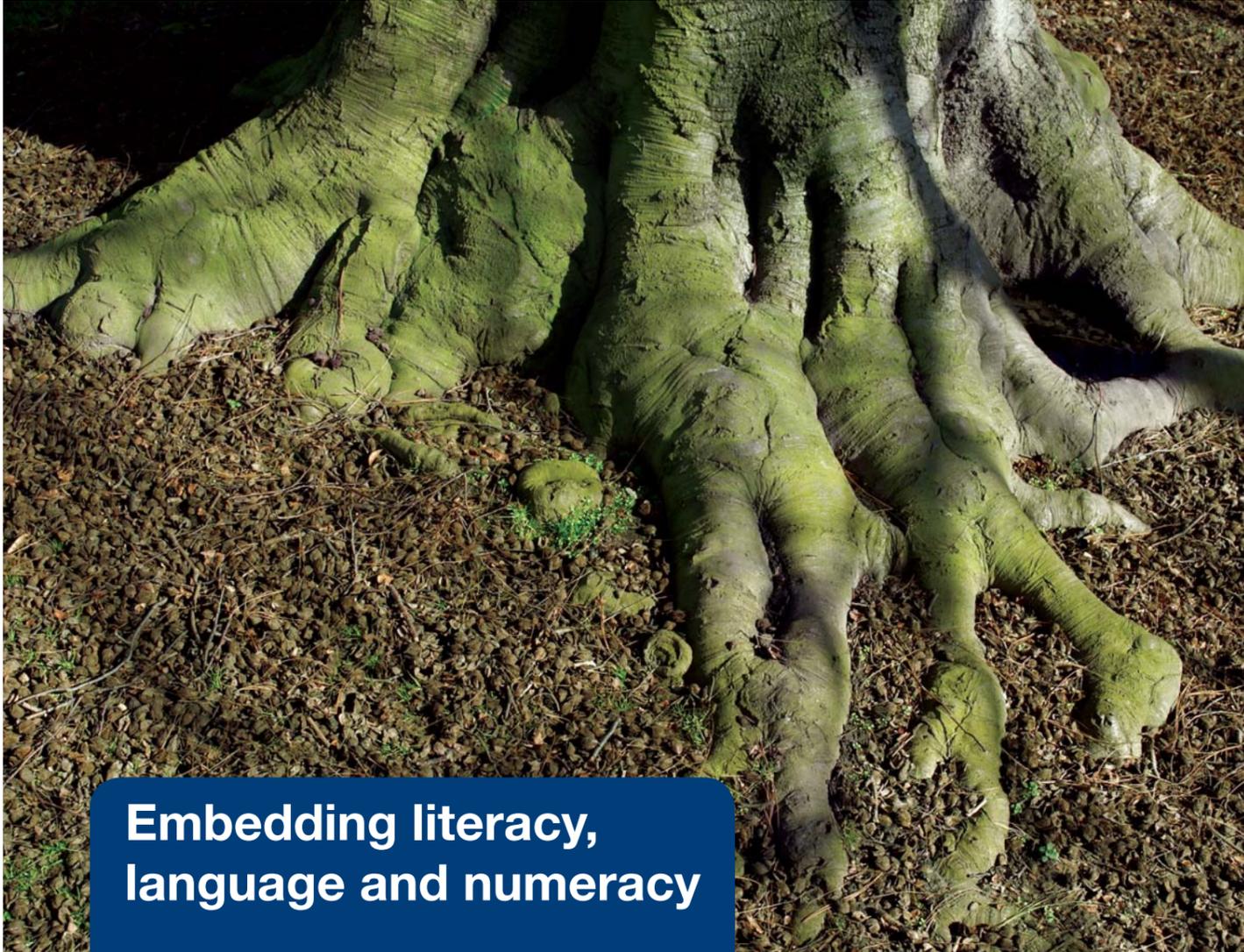
The use of the Internet, in particular, has the potential to allow the learner to take the driving seat, searching out information and finding their own tools to facilitate learning.

Mobile technologies open up opportunities for learning outside the classroom.

Some educators make the case for harnessing the techniques of computer gaming to engage and motivate learners. Others are concerned about overloading learners or encouraging them to spend too much time individually in front of a screen.

More traditional forms of e-learning in which learners complete electronic worksheets, or where an interactive whiteboard offers just another form of 'chalk and talk', are increasingly seen as outmoded.

**Technologies and equipment might include:** the Internet ► computers  
► data projectors ► interactive whiteboards (IWBs) ► virtual learning environments (VLEs) ► video conferencing equipment ► video cameras and digital cameras  
► MP3 players ► mobile phones ► personal digital assistants (PDAs).



## Embedding literacy, language and numeracy

# Embedding literacy, language and numeracy (LLN)



**The Skills for Life Strategy Unit provides the following definition:**  
**‘Embedded teaching and learning combines the development of literacy, language and numeracy with vocational and other skills. The skills acquired provide learners with the confidence, competence and motivation necessary for them to succeed in qualifications, in life and in work.’**  
**DfES 2003**

Recent research found that embedded programmes led to a 15 per cent improvement in retention and achievement of vocational qualifications.

Current initiatives recognise the importance of a whole organisation approach to embedding LLN, so that teachers, tutors and trainers are supported by a framework of values, policies and resources that enable them to embed these skills.

Vocationally relevant resources that embed LLN are increasingly available, and vocational specialists often collaborate and team teach with LLN specialists.

**Elements of an embedded approach might include:** vocational and LLN staff working together ► mapping the LLN content of programmes ► planning of individual learning to ensure vocational and LLN objectives are integrated ► use of vocational resources that explicitly embed LLN ► extra training and support for vocational staff.



## Assessment for learning

# Assessment for learning



**Assessment for learning is built into all successful learning activities. It involves checking learning and generating feedback that informs subsequent learning.**

Constructive feedback has a profound influence on learners' motivation and self-esteem, and helps learners understand how to learn more effectively.

At its most basic level, assessment for learning gives learners feedback on their errors and provides opportunities for them to improve their work. This in itself has a significant effect.

Assessment for learning becomes even richer when the learner and the teacher, tutor or trainer are involved in a learning conversation that enables the learner to identify where and how to focus their efforts, while it helps the teacher, tutor or trainer to review the effectiveness of the learning.

**Techniques:** activities with checks on learning built in ► peer and self-assessment ► individual reviews ► effective questioning ► observation and listening by teacher, tutor or trainer during learning activities ► instant feedback techniques using mini whiteboards, red-green-amber cards.



## Modelling



**Modelling places the learner in a situation where they are exposed to both subject content and underpinning thinking, working under the guidance of an expert.**

The role of the expert is to:

- 'walk' learners through the processes that our minds automatically go through as 'experts', modelling the process and making thinking explicit
- diagnose accurately the current skill level and task difficulty for learners, breaking down the task into intermediate steps and allowing the learner to become increasingly independent
- introduce learners to 'rules of thumb' used by experts in the profession
- stimulate reflection on the process that the learner has experienced.

Teachers, tutors and trainers are also involved in modelling behaviours that they want learners to adopt, for instance, through their own use of language and ways of relating to others.

**Techniques:** diagnosis of learners' current skills ► practical activities broken down into steps ► learners as teachers ► on-the-job coaching ► problem-solving ► learning tricks of the trade and rules of thumb ► modelling positive behaviours.