


Functional Skills
for Adults

LSIS LEARNING
AND SKILLS
IMPROVEMENT
SERVICE



Preparing
to deliver
functional
mathematics

Contents

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Preface

This publication is the fourth of a series of five guides written for non-pilot centres preparing to deliver functional skills to adults.

Functional skills are:

‘...those core elements of English, mathematics and ICT that provide an individual with the essential knowledge, skills and understanding that will enable them to operate confidently, effectively and independently in life and at work’

(14–19 education and skills: implementation plan, Department for Education and Skills, 2005)

‘...practical skills in English, mathematics and ICT that help learners gain the most out of work, education and everyday life.’

(Functional skills: essential for life, learning and work, QCA, 2008)

Learners who are ‘functionally skilled’ are able to use and apply the English, mathematics and ICT they know to tackle problems that arise in their life and work. Functional skills are important to adult learners because they:

- provide a single set of qualifications with a clear ladder of progression
- are suitable for learners of all ages and crucial to their personal development
- are fundamental to tackling the skills gap in England.

Key dates

| Date | Activity |
|-----------------|---|
| September 2007 | Start of three-year certificated pilot of functional English, mathematics and ICT in over 1,000 centres in the first year, growing to 3,000 centres by year 3 |
| September 2008 | All three functional skills become a mandatory part of the first tranche of Diplomas |
| End August 2010 | Last registration for the Communication, Application of Number and ICT key skills |
| September 2010 | Functional English, mathematics and ICT available nationally |
| September 2010 | First teaching of revised GCSEs in English, mathematics and ICT (for examination in 2012) |
| End August 2012 | Last accreditation for the Communication, Application of Number and ICT key skills |

Introduction

This publication is aimed at co-ordinators, managers and practitioners in a range of adult settings, such as adult learning, work-based learning and the secure estate, who are preparing to deliver functional mathematics to adults.

It will be helpful to centres that have been delivering key skills or skills for life qualifications, as well as to centres with no experience of these qualifications.

This publication will help you to:

- prepare for the implementation of functional mathematics with adult learners
- plan a functional mathematics teaching programme for adult learners
- explore and develop the use of active learning strategies in your teaching of functional mathematics.

This booklet builds on the first two publications in this series, *Where are you now? A diagnosis of centre needs* (LSIS, 2009), and *Preparing to co-ordinate and manage functional skills* (LSIS, 2009), which examine the broader issues in introducing functional skills.

The publication includes practical advice and information that will help you to understand functional mathematics and enable you to make informed decisions about its planning and delivery. As you read through this booklet, you will find activities and questions that are designed to help you to reflect on the information and set it in contexts and situations that are relevant to your own work and organisation.

At the end of the publication there is information about where to find resources for teaching functional mathematics and sources of further help and support.

Planning to deliver functional mathematics

The Introduction to *Functional skills standards: mathematics* states that:

¶ **The term “functional” should be considered in the broad sense of providing learners with the skills and abilities they need to take a responsible role in their communities, in their everyday life, workplace and in educational settings. Functional mathematics requires learners to be able to use mathematics in ways that make them effective and involved as citizens, able to operate confidently in life and to work in a wide range of contexts.**

The aim of the mathematics standards is to encourage people to demonstrate their mathematical skills in a range of contexts and for various purposes. They are essentially concerned with developing and recognising the ability of learners to apply and transfer skills in ways that are appropriate to their situation. ¶

(QCA, 2007)

This means that helping learners to become functional in mathematics means enabling them 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
- communicate results and conclusions.

Teachers will need to plan sessions and activities that give learners the scope to explore and develop these skills. This requires a move away from an approach that focuses on learning topics and practising skills towards an approach that is built around ‘problem-solving’. You will find more about problem-solving approaches on pages 9 and 10.

The importance of teamwork

Teaching sessions and activities need to be purposeful and set in realistic contexts. The implication is that functional mathematics should be taught, where possible, as part of a vocational or work-based programme. At the same time, the underpinning mathematical skills need to be developed coherently, so that they are firmly based and clearly understood.

A team approach to the planning and delivery of functional mathematics can help to address these issues. You will find more about embedding the mathematics and the importance of teamwork on pages 10–12.

Getting to know the functional mathematics standards

The functional mathematics standards are in two parts:

- process skills
- performance, coverage and range.

Process skills

If learners are to demonstrate that they can use their mathematics effectively in life and work, it is fundamental that they are able to:

- understand a situation
- choose an approach to tackle the problem
- formulate a model using mathematics
- use mathematics to provide answers
- interpret and check the results
- evaluate the model and approach
- explain the analysis and results
- apply and adapt this experience in other situations as they arise.

These skills are called ‘process skills’ and form the basis of the functional skills standards for mathematics. They set out what learners have to do to demonstrate that they are functional in mathematics at all levels.

Here is an extract from the mathematics standards showing the different process skills.

| Representing | Analysing | Interpreting |
|---|--|--|
| Making sense of situations and representing them | Processing and using mathematics | Interpreting and communicating the results of the analysis |
| <p>A learner can:</p> <ul style="list-style-type: none"> ● recognise that a situation has aspects that can be represented using mathematics ● make an initial model of a situation using suitable forms of representation ● decide on the methods, operations and tools, including ICT, to use in a situation ● select the mathematical information to use. | <p>A learner can:</p> <ul style="list-style-type: none"> ● use appropriate mathematical procedures ● examine patterns and relationships ● change values and assumptions or adjust relationships to see the effects on answers in the model ● find results and solutions. | <p>A learner can:</p> <ul style="list-style-type: none"> ● interpret results and solutions ● draw conclusions in light of the situation ● consider the appropriateness and accuracy of the results and conclusions ● choose appropriate language and forms of presentation to communicate results and conclusions. |

Activity A sample functional mathematics problem

This could be set in a manufacturing or product design context.

You have been asked by Prestige Hotels to design a cardboard box for a complimentary shower gel bottle for guests. Design three different boxes to give management a choice, considering cost, efficiency of transporting the boxes, ease of manufacture, storage and attractiveness of design.

You might like to consider what a learner might have to do in relation to the process skills in the table on page 4.

Level differentiation

The functional mathematics standards are presented at five levels: Entry Levels 1, 2 and 3, and Levels 1 and 2. The standards describe the different requirements of the levels. There are four features that help to define the level. They are the :

- **complexity** of a situation or problem
- **familiarity** to the learner of the situation or problem
- **technical demand** of the mathematics required
- **independence** of the learner in tackling the situation or problem.

Activity Judging the levels

When choosing problems for your learners to work on, you need to consider how these four features affect the level and the demand it places on them.

How complex is the activity? Complexity involves moving from simple, straightforward, routine activities to more difficult, wide-ranging, non-routine situations. More complex problems might require the application of a number of different areas of knowledge.

How familiar is the context to the learner? Unfamiliar situations will require the learner to apply understanding and skills that have developed in other contexts. They also indicate a higher level of performance.

What is the technical demand of the activity? As the learner moves up the levels, the concepts and skills required become more technically demanding.

How independent will learners be in completing the activity? Learners using functional mathematics skills while working autonomously are demonstrating a higher level of performance. The level is also determined by the amount of help that is needed.

Performance, coverage and range

The second part of the functional mathematics standards gives an indication of the **performance** that might be expected of a learner at each level along with the **mathematical content and skills** that might be required. It is important to remember that the performance is indicative.

The table below shows the performance, coverage and range for Entry Level 1.

| Performance | Coverage and range |
|---|--|
| | <i>Content and skills are equivalent to national curriculum mathematics level 1 and the adult numeracy standards at Entry 1</i> |
| <p>Learners can:</p> <ul style="list-style-type: none"> ● understand simple mathematical information in familiar and accessible contexts and situations ● use given methods and standard models to obtain answers to simple given practical problems that are clear and routine ● generate results that make sense in relation to a specified task ● describe solutions to simple given practical problems in familiar contexts and situations. | <p>Learners can:</p> <ul style="list-style-type: none"> ● understand and use numbers up to 10 ● use everyday language to describe the properties of size and measurements including length, width, height and weight, and make simple comparisons ● use everyday language to describe position ● recognise and name common 2D and 3D shapes ● sort and classify objects using a single criterion ● show an awareness of uncertainty. |

You can find the information about all the levels in *Functional skills standards* (QCA, 2007). See also the *Functional skills guidance: Amplification of the standards* (QCA, 2008) for more information.

Assessment

The assessment of functional mathematics will differ from current assessment arrangements for both key skills and Skills for Life. The assessment must be designed to measure application of skills for a purpose within a 'real-life' context. The assessment can be entirely task-based, or a combination of task(s) with test-style items. The QCA guidance states that standards assessed through tests should contribute no more than 25% of the total marks available.

For further information, see *Design principles for the assessment of functional skills* (QCA, 2009). Details of awarding bodies piloting the functional skills qualifications are also available on the QCA website.

Teaching and learning functional mathematics

The process that learners need to go through in learning functional mathematics is no different from learning any other skill. They will:

- **build the skills** – learning particular functional mathematical skills
- **practise the skills** – in different contexts
- **apply the skills** – demonstrating mastery across a range of contexts – including choosing the correct skill for the task and context.

You will need to plan opportunities for learners to move through this process in contexts that are real and meaningful for them. The process does not, however, represent distinct stages. All three aspects are likely to occur in all learning situations to different extents for different learners. The challenge is to constantly assess where individual learners need to build skills and gain the confidence to combine and apply them to real situations.

The four bullets in the ‘representing’ column in the table on page 4 expand the process by breaking it down into:

- recognising a suitable situation, i.e. one that can be represented using mathematics
- making a model
- deciding on methods and operations
- selecting mathematical information.

Making sense of situations and representing them

This process skill might require a teacher to present learners with a series of problems and situations, asking the learners to identify how the problem can be solved using mathematics and writing down the mathematics that is needed to solve the problem.

At first the situations might be straightforward and help might be given; as the learner progresses, so the complexity might increase and there will be an expectation that the learner will start to work more independently.

An equivalent approach will be needed for the other process skills of analysing and interpreting.

Meeting the needs of all learners

The level differentiators of complexity, familiarity, technical demand and independence (see page 5) will help you design problems and activities that challenge and support learners appropriately across the range of attainment.

It is also important to remember that adult learners bring with them a diverse range of previous knowledge, experience, interests, aims and aspirations – so it is crucial to use personalised approaches to build on these, and to promote motivation, independent learning and achievement.

Finding out what your learners know and can do

Just as learners will be at different stages of development as far as their calculation skills are concerned, they will have different abilities in their mathematical process skills. It is important that teachers (and learners) establish early on what they already know and have mastery of, and which skills need to be worked on.

Initial assessment will help you find out where your learners are at the outset. However, bear in mind that initial assessment tests usually concentrate on mathematical skills and knowledge – the detail that is included in the coverage and range sections of the functional mathematics standards. It is also vital that you find out where your learners are with their process skills. One possible strategy to address this might be to set problem-solving tasks and activities early in the course, to identify areas of strength and areas where more work is needed.

The learner's own aims and aspirations for mathematics must also be taken into account at this stage. Talk to learners on an individual basis, to identify which functional mathematics skill they want to develop and to agree learning objectives. This is essential to the personalised approach that is central to the teaching of functional mathematics.

Assessment for learning

You will be assessing learning throughout the course and using this information to inform your choices of teaching strategies and activities for the learners. The Assessment Reform Group (*Assessment for Learning: 10 principles*, 2002) has defined assessment for learning as:

‘the process of seeking and interpreting information for use by learners and their teachers to decide where the learners are in their learning, where they need to go and how best to get there.’

The key characteristics of assessment for learning are that it:

- is embedded in teaching and learning
- provides skills and strategies for taking the next steps
- involves sharing the learning goals with the learners
- helps learners identify the standards that they are aiming for
- aims to help learners become more responsible for their own learning
- encourages critical and constructive review and self-review
- provides clear feedback on the quality of the work and what needs to be done to improve.

Learners should understand the processes that they are using in solving problems and should become more autonomous learners. Assessment for learning strategies are invaluable in helping learners to achieve this.

For more detail, see *Assessment for Learning* (QIA, 2008) in the ‘Guidance for assessment and learning’ series from the Skills for Life Improvement Programme.

Problem-solving approaches

To become functional in mathematics, learners will need opportunities to develop the process skills of representing, analysing and interpreting. A problem-solving approach is a good way of helping learners to build, practise and apply these skills.

The problems and tasks that you can use will range in length, context, technical difficulty, and complexity. They might be short 'mathematical puzzle' type questions that develop a particular calculation skill, or a more complex modelling problem within a vocational context, but always the central aim will be to provide an opportunity for learners to develop strategies to solve problems and develop their process skills.

At the beginning of a course, a teacher might choose shorter, more straightforward problems and provide substantial help and guidance. Later on, as learners develop their process skills, the problems will become more challenging mathematically, more complex and set in less familiar contexts. The teacher will also be encouraging learners to be more independent in their problem-solving. However, it is really hard to generalise, because all learners are different. There will be some learners who work best with a challenge and might well be ready for a complex task straightaway, while others will need a much more careful 'graded' approach.

Activities **Developing functional mathematics skills**

Here are some examples of problems that might be used to help learners develop their functional mathematics skills.

- Find out what customers think about the service your retail, catering or hairdressing business provides.
- Design a balanced meal for four people for under £10. You must include two portions of vegetables per person, a starter and a dessert.
- Write a consumer report on washing detergents. You will need to visit a local supermarket to find out about quantities and cost, and you might want to devise and carry out a survey to find out how effective the detergents are.
- Draw an accurate plan of a room and work out how much carpet will be needed.
- Design a kitchen to fit into a 3m by 3m room.

Activity **Thinking through the process skills**

Choose one of the problems above. Using the functional mathematics process skills (see the table on page 4), what might you expect from a learner in terms of:

- making sense of situations and representing them?
- processing and using mathematics?
- interpreting and communicating the results of the analysis?

Activity Getting the level right

Choose one of the problems on page 9 and decide which level you think this problem most naturally addresses.

- What might you expect from a learner working at that level?
- How would you adapt the problem to challenge learners working at a higher level? (Think about those four differentiators on page 5).
- How would you adapt the problem for learners working at a lower level?
- How might the problem be adapted to put it into a context associated with your own specialism?

You will find lots more on taking a problem-solving approach to functional mathematics in *Teaching and learning functional mathematics*, (FSSP, 2008).

Active and collaborative learning

Active learning is equally important as problem-solving approaches, as it enables deep understanding and mastery of a topic.

An active learning programme is:

- interesting, imaginative and highly participative
- experiential
- one that offers opportunities for discovery, challenge and debate.

It is also likely to involve collaborative learning, with learners working as pairs or small groups to carry out activities.

Putting the mathematics in context

Mathematics is crucially important in both work and everyday life. For individuals to be truly functional with mathematics, they need to be able to apply their mathematical skills to a range of different situations and contexts. Learners need to encounter mathematics throughout their course and not see it as something that is separated from their main learning programme.

Most adult and work-based programmes provide opportunities to develop functional mathematics. Mathematics skills can be developed through vocational qualifications, apprenticeships, the new Diplomas and the Foundation Learning Tier. Setting some mathematics teaching within these contexts can help learners to recognise the relevance of mathematics and capitalise on their motivation and understanding.

We also need to help learners to develop their mathematics so that they can operate effectively and transfer skills in a complex and mathematically challenging world.

There is also another powerful reason for including everyday problems in the work that your learners do. The assessment is likely to be generic, so many of the tasks set will have to be drawn from everyday life situations. Giving your learners practice in these situations can only help.

You will find much more on this aspect of functional mathematics in chapter 3 of *Teaching and learning functional mathematics* (FSSP, 2008).

Implications for your organisation

Models of delivering functional mathematics

There are many different models for delivering functional mathematics. Each has particular strengths but also offers challenges.

- Functional mathematics might be **embedded** within vocational learning so that there are no separate mathematics teaching sessions – mathematics is included when and where it fits and is often taught by a vocational teacher. This has a number of clear advantages: the mathematics is, almost by definition, relevant and contextualised; mathematics is not seen as being a separate subject that is somehow less important than the main course of study; co-ordinating mathematics with the rest of the course becomes natural.

The challenges are that often the teachers have less experience of mathematics pedagogy; sometimes they are not confident in their own mathematics and can struggle to teach mathematics as a generic tool that can be applied in a whole range of contexts outside their own specialisms.

- In some contexts, functional mathematics is taught as a **stand-alone** subject alongside the main learning programme. Usually it is taught by a mathematics specialist. This approach allows the teacher to devise a scheme of work that helps the learners to build up their mathematical skills coherently. The teacher has some expertise of the pedagogy of mathematics teaching, helping them to identify mathematical misconceptions and show alternative calculation methods. Furthermore, that deeper knowledge of mathematics often helps in explaining mathematical concepts.

The challenges are that there is a danger that mathematics becomes a separate subject, divorced from the rest of the programme and without the contextual focus that can often bring mathematics alive for learners. There is also a risk of becoming focused on the coverage and range.

- Functional mathematics may also be **contextualised** so that it is applied and related to the main programme of study, even if it is taught separately.

Many centres are using a mix of the models described above, trying to get the best out of both. Some are adopting a fully embedded model but using a mathematics teacher as a ‘critical friend’ to advise and help with the planning and design of the curriculum. Another approach is for a mathematics teacher to teach aspects of the vocational course, or to team-teach with vocational teachers.

Working together

Whatever model is adopted, it is very clear that one of the essential features of a successful functional mathematics programme is teamwork. A report by the National Research and Development Centre for Adult Literacy and Numeracy, (*Embedding literacy, language and numeracy in post-16 vocational programmes – the impact on learning and achievement*, 2006) identified the following as being successful features of embedding in vocational programmes:

- teamwork between mathematics teachers and vocational teachers
- shared staff understandings and beliefs
- teaching and learning approaches that connect mathematics to vocational content
- policies and organisational features at institutional level.

All of the successful features listed on page 11 are about breaking down barriers, making connections and working together. They initially take time and management support, but are vital if functional mathematics is to be successful. Strategies such as team-teaching, sharing schemes of work and planning together, peer observation of teaching, and regular meetings can all help to build an effective and successful team approach. These issues become even more crucial if you work in a consortium.

Building on success

Although functional mathematics is a new qualification which presents us with new challenges, it is built on experience gained across a wide range of courses and initiatives. These include GCSE Mathematics, the National Curriculum, the key skill Application of Number, and adult numeracy.

You might well find that there are already some cross-curricula assignments in your institution that could be easily adapted for use in functional mathematics. Some of the key skills assignments will also be helpful source material, as will the Skills for Life work that you might have been using with adult students. It is likely that the biggest differences will be around the level differentiators and incorporating process skills, but you may well not have to start from scratch.

If you don't have very much direct experience of these courses and programmes, don't worry. Take a look at some of the work other people have done in these areas as sources of help for you in your planning.

‘The management of functional skills across the college has been developed from the ‘Skills for Life whole organisation approaches’ with the proactive engagement of senior management critical to its success. The pilot has also highlighted the importance of collaboration between different departments and the positive impact of initial assessment.’

FE college manager

Taking it forward

Having read this booklet, you might now like to consider the following questions:

- What delivery model do you think would best suit your organisation and, more importantly, your learners?
- Who could you discuss this with? Who might you need to influence?
- What other information do you need to help with your planning?

You will find the first publication in this series, *Where are you now? A diagnosis of centre needs* (LSN, 2009) very useful in designing a model of delivery.

Materials for teaching functional mathematics

Part of your strategy for delivering functional mathematics should include identifying and selecting appropriate teaching and learning materials available.

Where to find materials

There are a number of routes open to building a library of relevant materials:

- draw on existing resources and map them to the functional mathematics standards
- adapt existing resources from key skills, Skills for Life, vocational programmes and other programmes, such as the Teaching and Learning Programme
- source the materials being developed by the Functional Skills for Adults Support Programme and those by the Functional Skills Support Programme (FSSP)
- access materials provided to centres by awarding bodies
- review materials being developed for the Diplomas
- develop new materials, specifically for your learners and their context.

Adapting existing materials

Using some existing resources and refocusing them to functional mathematics can be a positive place to start, since you can use the idea, context and activity. This can seem less daunting than starting from scratch.

A key resource will be the FSSP *Teaching and learning functional mathematics* (2007). The teaching and learning resources from the work-based learning Key Skills Support Programme (KSSP) and the Teaching and Learning Programme can provide innovative teaching ideas in a range of contexts. See also page 15 of this publication for a list of other relevant resources and programmes.

The KSSP guide *Using and adapting resources for key skills and Skills for Life: Guide to good practice* (2007) provides helpful ideas for adapting resources, including a checklist to evaluate resources. You can download it from www.lseducation.org.uk/user/order.aspx?code=060004

Embedding functional mathematics in assignments

Many of your learners will be doing assignment work as part of their main programme of study. There will be lots of opportunities for practising their mathematics within these assignments. For example, many programmes will have assignments that include a survey, which will involve the learner directly in the functional mathematics process skills of representing, analysing and interpreting.

There are opportunities everywhere – it is just a question of identifying them. For example:

- budgeting is central to both life and work – from travel and tourism to construction and from retail to administration
- design problems are often a feature of assignments in business studies
- design and technology and art and design both often require learners to consider a problem that may involve costings, measuring, volumes, weights and areas
- estimation and approximation are used in many areas, including construction, engineering and catering
- mathematical work involving algebra occurs throughout engineering, science and surveying.

Contextualising mathematics assignments

You may need to design specific functional mathematics assignments for a variety of reasons. Your learners may need to practise a particular process skill, such as interpreting results from a study or survey. Or they may need to concentrate on a technique from the coverage/ range part of the specifications, such as the use of metric and imperial units. In both cases, the solution may well be a short mathematics assignment or problem.

Such assignments will work best if they are set within the context of the learner's work, life or learning programme.

Planning assignments to develop skills

When planning an assignment for media learners that concentrates on interpreting results from a survey, it might be a good idea to use some national statistics about TV viewing habits or newspaper readership figures.

An assignment for a care apprentice could ask them to monitor a client's weight. This could include metric and imperial units, as the organisation may record such data using metric units but the client may be more used to imperial units.

Activity Identifying existing opportunities

Choose a vocational assignment that is already used in your organisation. Identify the functional mathematics opportunities in the assignment, concentrating particularly on the process skills listed on page 4. How might you need to change the assignment? Would additional teaching be needed?

Sources of further information

QCA

The functional skills standards can be found at: www.qca.org.uk/functionalskills. This website contains up-to-date information about functional skills developments. There are a number of documents to download, including:

- *'Functional' skills – Your questions answered* (DfES, 2006)
- *Functional skills: essential for life, learning and work* (QCA, 2008)
- *Functional skills guidance: Amplification of the standards* (QCA, 2008).

The Excellence Gateway

The QIA Excellence Gateway (<http://excellence.qia.org.uk>) contains resources produced by the Functional Skills Support Programme (FSSP) and the former Key Skills Support Programme (KSSP). KSSP publications are also accessible from www.ksspforwork.net and from LSN at www.lsneducation.org.uk/pubs

Resources include:

- *Teaching and learning functional mathematics* (FSSP, 2007)
- *Functional skills in work-based learning* (Learning for Work/KSSP, 2007)
- *Managing key skills and Skills for Life in work-based learning – A handbook for training providers* (KSSP, 2006)
- *Managing delivery of functional skills* (FSSP, 2007, updated 2008)
- *Effective practice in teaching and learning: problem solving* (KSSP, 2008).

NCETM

You will find lots of help and support on the teaching of mathematics on the National Centre for Excellence in the Teaching of Mathematics (NCETM) portal at www.ncetm.org.uk. In particular, you will find some professional development resources that are helpful in supporting you in exploring more active and engaging approaches to the teaching of mathematics, such as:

- *Improving learning in mathematics: challenges and strategies* (2005) (also available at <http://teachingandlearning.qia.org.uk/teachingandlearning/downloads/default.aspx#math>)
- *Thinking through mathematics* (2008)
- *Mathematics matters: What constitutes the effective learning of mathematics?* (2007).

Skills for Life

The Skills for Life Improvement Programme aims to help practitioners and organisations improve learner success through a whole-organisation approach to embedding literacy, language and numeracy: www.sflip.org.uk

Teaching and Learning Programme

This programme provides teaching and learning resources created with teachers, trainers and learners, available at <http://teachingandlearning.qia.org.uk/teachingandlearning>

The Functional Skills for Adults programme

This resource has been prepared by the Functional Skills for Adults programme on behalf of the Learning and Skills Improvement Service (LSIS). The programme supports non-pilot centres preparing to deliver functional skills to adults. These centres include colleges, schools with sixth forms, sixth form colleges, training providers, work-based learning, adult and community learning, and secure contexts.

Publications

This resource is one of a series of five publications designed to help readers to move forward with the introduction of functional skills. The titles are:

- *Where are you now? A diagnosis of centre needs* (LSIS, 2009)
- *Preparing to co-ordinate and manage functional skills* (LSIS, 2009)
- *Preparing to deliver functional English* (LSIS, 2009)
- *Preparing to deliver functional mathematics* (LSIS, 2009)
- *Preparing to deliver functional ICT* (LSIS, 2009).

Training modules

The Functional Skills for Adults programme is also offering a series of half-day, in-house briefing and training sessions delivered on demand to non-pilot centres. These training modules are as follows:

- Introduction to functional skills for adults
- Preparing for the transition from key skills to functional skills
- Preparing for functional skills: a workshop for SfL providers
- Using ICT to prepare for the introduction of functional skills to adults
- Transferring whole organisation approaches to the management of functional skills
- Preparing to implement functional English with adult learners
- Preparing to implement functional mathematics with adult learners
- Preparing to implement functional ICT with adult learners.

Functional Skills Co-ordinators

A functional skills co-ordinator has been allocated to each region in England to facilitate the introduction of functional skills in pilot and non-pilot centres. Please contact them if you need any further information:

| | | |
|-----------------------------------|-----------------|--|
| East | Jane Williams | FunctionalSkills.East@fsmail.net |
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About this guide

This guide is for managers, co-ordinators and practitioners who are preparing to deliver functional mathematics to adults. It aims to: prepare for the implementation of functional mathematics with adult learners; plan a functional mathematics teaching programme for adult learners; explore and develop the use of active learning strategies in your teaching of functional mathematics.

About this series

This guide is one of a series of five publications designed to help readers move forward with the introduction of functional skills.