

Introduction

“In the 21st century, our natural resource is our people – and their potential is both untapped and vast. Skills will unlock that potential. The prize for our country will be enormous – higher productivity, the creation of wealth and social justice.”

The Leitch Report, 2006

Functional skills in Apprenticeships

Functional skills are practical skills in English, mathematics and ICT that allow individuals to operate confidently, effectively and independently in life and in work. The intention is that functional skills will replace the key skills of communication, application of number and ICT in Apprenticeship frameworks.

Functional skills in Apprenticeships give learners the opportunity to develop, practise and apply skills in meaningful workplace contexts, thereby improving their employability and career opportunities. They will also help meet the needs of business for an increasingly skilled workforce.

The business case for functional skills

Functional skills are relevant to all jobs and industries. They run alongside the specific skills of the job and make people more effective, all-round employees. They help businesses become more efficient and competitive.

- **Functional English:** apprentices will be able to communicate more effectively and accurately (both verbally and in writing) with colleagues and customers. They will be able to ask the right questions, and get the right messages across.
- **Functional mathematics:** apprentices will be able to use mathematics in practical situations that are relevant for work. They will have the skills to tackle tasks like calculating discounts or VAT, or working out how much material they will need for a job.
- **Functional ICT:** apprentices will be able to find information on the internet or a database, send emails, enter information onto a computer, and present information using word-processing or graphics programs. They will be able to keep pace with changes in technology.

One of the main reasons why functional skills are important in the workplace is that they are applied skills. They are used in real tasks to solve real problems. It will be important for apprentices to use and apply them at work.

Right from the start, apprentices and employers need to know why functional skills are important, what support is available, and how they will be assessed. It will also be important to encourage teamwork between vocational and functional skills specialists. See page 9.

You need to check with your Sector Skills Council which functional skills are specified at which levels in your frameworks and to brief employers about these, so that they help apprentices to use skills at the appropriate level.

It will be helpful to give the employers you work with specific examples of how functional skills can help increase business efficiency in their sector.

Comparing functional skills with key skills

Standards

The *Functional skills standards* (QCA/07/3472) describe the functional skills from Entry 1 to Level 2. The entry levels will be familiar to people with Skills for Life experience. There are also clear links between the functional and key skills at levels 1 and 2, and you will be able to build on good practice in key skills. However, there are also some important differences. You need to examine the detail of the functional skills standards to identify these differences. For example:

- In **Functional English**, learners need to: ‘take a range of roles’ during discussions and help move the discussions forward ‘to reach decisions’ (Speaking and listening, Level 2); ‘detect point of view, implicit meaning and/or bias’ (Reading, Level 2); ‘take appropriate action’ as a result of reading the text (Reading, Level 1); produce ‘a wide range of documents on paper and on screen’ (Writing, Level 2).
- In **Functional mathematics**, it is essential to focus on helping learners to become functional in their mathematics, rather than just helping them develop specific mathematical techniques. In particular, there is an emphasis on the process skills of representing, analysing and interpreting, and on adopting a problem-solving approach.
- In **Functional ICT**, there is a similar emphasis on using ICT for a purpose – selecting and combining ICT skills and techniques and applying them to a wide range of practical tasks. A key implication of this is that ICT skills should be learned alongside other skills.

Assessment

The summative assessment of functional skills will differ from current assessment arrangements for key skills. Instead of a portfolio for summative assessment, the assessments will be externally set and marked to measure application of skills for a purpose in a ‘real-life’ context. An assessment can be entirely task-based, or a combination of task(s) with test-style items. The QCA guidance states that: ‘standards assessed through test-style items should contribute no more than 25% of the total marks available’. This has important implications:

- As with key skills, staff will need to get to know the standards really well. The move away from the portfolio means that you will need to shift the focus from assessing skills to **enabling** learners to develop skills, and you will need to devote more time to teaching and learning and formative assessment – see page 9.
- You will need to review your key skills assessment procedures against the functional skills standards, and modify them as necessary. For example, key skills initial assessment tests usually concentrate on detailed mathematical skills and knowledge – you will need a more holistic approach which also focuses on process skills. Awarding bodies will be able to advise centres about summative assessment models, and provide examples of external assessments.

Teaching and learning functional skills

You will need to provide versatile and effective learning opportunities to help learners to develop the functional skills. While you will be able to build on key skills experience, you will almost certainly need to rethink aspects of what you do – for example, by teaching learners how to problem-solve. All teaching and learning should provide opportunities for learners to:

- **Build the full range of functional skills.** You can help learners to build skills and knowledge by raising their awareness of the skills and their importance at work, by teaching and modelling the skills, and by using a range of activities, such as discussion, questioning and learner research. There is often a particular role for functional skills specialists.
- **Practise applying those skills in a range of contexts.** Learners need to practise their skills in a safe situation if they are to develop speed, fluidity and confidence and to learn about some of the pitfalls and potential difficulties. Apprenticeship programmes provide ideal opportunities for practice and application and for using a problem-solving approach. Coaching, team-working and shadowing can be very helpful with this, so workplace supervisors are also important here.
- **Demonstrate mastery in a range of contexts.** Learners need to apply their skills, knowledge and understanding in real activities in an increasing variety of contexts to build versatility and confidence. To demonstrate mastery, learners need to be able to select and apply their skills in other, less familiar situations and contexts. You will need to plan how to provide these opportunities for your learners.

It is only by **applying** skills in a variety of contexts and to a variety of problems that learners will recognise that the skills can be **transferred**, combined and applied in, as yet, unimagined situations. That's **mastery**.

An example of mastery from work-based learning

A promotion company asked their administrative apprentice to contact local businesses to promote a youth discount card. The apprentice was able to draw on her English skills to research appropriate businesses, telephone and email managers, and produce a short summary report for her supervisor.

The build–practise–apply process does not, however, represent distinct stages. All three aspects are likely to occur in all learning situations to different extents for different learners. Learners will be at different stages with different aspects of functional skills. 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.

When planning the teaching and learning of functional skills, you will need to plan opportunities for learners to build and practise skills in contexts that are real and meaningful for them. Functional skills show their true value in meaningful contexts, tasks and problems in the workplace; this helps to add credibility for learners.

Delivering functional skills in Apprenticeships

An apprentice's individual programme offers a whole range of situations in which functional skills can be built, practised and demonstrated. However, you cannot rely on functional skills simply being picked up 'as and when' in the Apprenticeship. You need to plan the learning off-, on- or near the job, and to track and monitor each learner's progress.

Where the learning happens

Off-job Some functional skills teaching may take place away from the workplace in a training centre or college. Where this is the case, it will be important to make the learning relevant to learners and their workplace.

To make the most of off-job learning, you might:

- tailor learning to the work context of learners. Build relevant examples and 'tweak' activities to make them more meaningful for specific learners. Their improved attention and motivation will help their learning
- sequence learning to take advantage of opportunities for practice and application in the workplace.

Off-job trainers need to be aware that functional skills show their true value in meaningful contexts, task-based scenarios and problem-solving situations.

On-job In many work-based contexts, much learning takes place on the job. Where this is the case, there is a risk that learning will be poorly structured, learning opportunities may be missed, or support may not be available.

To make the most of on-job learning, you might:

- help workplace supervisors to identify opportunities where apprentices can practise skills in real work tasks
- meet with the apprentice and supervisor on a regular basis to review learning.

Workplace staff are more likely to take an active part in the on-job development of functional skills when they are aware of the other learning contexts.

Near-job Near-job learning also takes place in the workplace, but away from the learner's normal work activity. It may involve coaching sessions where teacher and learner review progress, or project work that allows learners to apply their skills in different contexts.

To make the most of near-job learning, you might:

- collaborate with the employer to identify and set up a one-off project (eg to research and analyse customers' buying habits)
- offer workplace supervisors training in giving near-job coaching support.

Projects can be useful to the employer and can help to highlight the practical value of the functional skills, because they deal with real issues and have benefit for the employer.

Different approaches to delivery

Different Apprenticeship programmes will use different blends of off-job, on-job and near-job learning. No single approach will suit every learning need. You will need to seek your own blend of approaches to:

- identify the best learning opportunities whenever and wherever they occur: off-job, on-job or near-job
- maximise the role of workplace supervisors in identifying learning opportunities in the workplace and supporting apprentices
- provide contextualised teaching and resources
- offer regular reviews, feedback and assessment for learning
- create opportunities to apply and transfer skills to new problems and contexts (which may need to be wider than the workplace can provide), to ensure that learners can demonstrate mastery of the functional skills
- encourage collaborative learning across different Apprenticeship frameworks.

Examples from a range of contexts

Construction

In many construction operations it is quite common for the early stages of learning functional skills to take place off-job where specialist support and teaching resources are at hand. In this case it is important to contextualise the teaching and resources. As the learner progresses, more opportunities are likely to arise on-job or near-job which relate directly to practical contexts and make the learning all the more relevant to the learner.

Retail

Retail work often has busy times and quieter times during the course of the day. With the cooperation of the employer, it may be possible to negotiate a time when a teacher might visit the workplace to provide near-job learning or the learner can be released for self-study time off the shop floor.

Care

Apprentices working in care establishments could collaborate to develop a programme of therapeutic activities for residents, complete with timings and resource implications. The project provides practice in functional skills, and the apprentices will be able to prompt each other to apply the skills to achieve the required results.

Land-based

In land-based Apprenticeships, it is possible to create a highly personalised approach using near-job learning. For example, an equine studies apprentice is likely to be based in a relatively small establishment, so tutors may make regular visits to the workplace and set individual targets with each learner, capitalising on the opportunities to develop and apply functional skills in the workplace. During visits there are also opportunities to support the apprentice at work – for example, using a weight tape to estimate a horse's weight and to plan an appropriate ration.

Engineering

An engineering apprentice is likely to experience placements in several different teams, for example quality, field support or component engineering. This provides excellent opportunities for apprentices to transfer their functional skills from one context to another. It also highlights the need for ongoing support. A functional skills specialist may be able to provide off- or near-job sessions to ensure that apprentices can cope with the new functional skills challenges they face in each placement.

Contextualising learning

As we have seen, functional skills show their true value and transferability when they are applied to real-life situations. And, in most Apprenticeship frameworks, there are ample opportunities to relate the skills to real work.

However, not all sectors have the same profile of need or opportunities for all the functional skills. Indeed, in some cases meaningful delivery in the workplace can be quite challenging, for a variety of reasons.

Where this is the case, you will need to find other ways of contextualising functional skills learning to maximise relevance to the workplace and vocational area and increase learner motivation.

Below are three examples of areas where difficulties might be overcome.

Mathematics in administration

An administrator's main functions may involve speaking with people on the telephone, dealing with incoming correspondence and preparing mail for despatch. There may be less scope for functional mathematics. However, it may be possible to create opportunities – for example, the apprentice could compare different postal and courier services to identify the cheapest or quickest way to send a parcel.

English in engineering

Engineering apprentices often have a significant mathematics component in their everyday work but may have few opportunities for applying functional English. In this case, an apprentice may be able to collaborate with a workplace colleague to prepare maintenance reports and analyses of reported faults, or to help with shift handover reports.

Alternatively, as part of their work on a project, the apprentice may need to find the sources of the materials used. To do this, they could telephone or write to suppliers, and present their findings to their supervisor.

ICT in health and social care

Care apprentices may not be able to access ICT in the course of their work. Where this is the case, it may be necessary to create opportunities using near-job or off-job learning, while keeping the activities relevant and purposeful. For example, an apprentice could use ICT to monitor, record and report sources and costs of wastage in a care home kitchen, to identify potential savings and efficiencies. In doing so, they would be supporting the business as well as linking their ICT learning to the other functional skills.

All three examples underline how important it is to plan learning and identify the most appropriate settings, **on-job, off-job** or **near-job**. You will need to identify aspects of functional skills that may be difficult for your apprentices, and plan how to tackle them. Carefully designed and work-related projects are a good way of addressing any 'gaps' in opportunities to develop particular skills.

Learner progression

Employers and educators have identified these skills as vital for enabling young people and adults to have the practical skills to succeed in further learning, employment and life in modern society.

'Functional' skills – Your questions answered (DfES, 2006)

As apprentices progress with their functional skills, they will learn how to deal with situations that are less **familiar**, more **complex** and that call for greater **technical demand**. They will learn how to work with more **autonomy**, and will be able to select and use a wide range of knowledge, skills and techniques.

Below is a summary of the level differentiation factors, with practical examples of apprentices working at the higher levels of functional skills. You may find it useful to identify examples from your Apprenticeships.

	Level differentiation	Apprentice example (at Level 2 functional skills)	Your example – at your level
F	The familiarity to the apprentice of the situation.	A retail apprentice on a customer service desk who deals with a range of complaints and problems is using English skills with external (unfamiliar) customers.	
A	The autonomy (or independence) demonstrated by an apprentice when tackling a problem or completing an activity.	A motor vehicle apprentice independently takes a problem-solving approach when using mathematics at work, eg when recommending repairs to a customer.	
C	Complexity: situations at work are often quite complex, with a number of different components.	A construction apprentice designs and undertakes a risk assessment of all areas of the workshop and prepares a report for management recommending changes.	
T	Technical demand of the skill, when apprentices have to use a range of techniques to solve a problem.	An administration apprentice sets up a database and creates a mailing list to remind customers when accounts are overdue.	

If learners are capable of achievement beyond the level specified in their Apprenticeship framework, you should support them in this, as the qualification will improve their employability.

Functional skills will also prepare apprentices for successful progression into other programmes of learning or into higher education, by building the skills that will help them to tackle their areas of study more confidently.

Enabling learning

As we saw on page 3, the move from key skills to functional skills means a shift away from helping generate, collect and assess evidence for assessment portfolios towards supporting and enabling learning.

Most providers and colleges will have people working in the following roles. There will need to be subtle but important shifts in these roles, if you are to identify, create and make best use of opportunities for functional skills learning. In some cases, it will entail significant change.

- **Functional skills specialists** will be able to help learners build their functional skills. However, the applied nature of functional skills means that learners must be aware of how and where the functional skills are essential to success in specific workplace tasks, as well as how they can be transferred to other contexts. It can be very helpful to create opportunities for functional skills specialists to meet with vocational specialists and to visit apprentices' workplaces to discuss and plan how teaching might be contextualised to increase relevance for learners. Furthermore, functional skills specialists can gain access to real examples, which are likely to be more meaningful to learners.
- **Vocational specialists** will need to be able to support both the technical skills and the functional skills. They will be able to provide continuous review, feedback and targeted support. If they can recognise the functional skill content in specific tasks, they can advocate the value of the functional skills and create opportunities for practice and demonstration.
- **Workplace supervisors** are experienced practitioners in their industry and apply functional skills throughout their work. They need to be aware of these skills and how they can support learners.
- **Advisors** need to be aware of the relevant industries and the place of functional skills in workplace activities, if they are to make functional skills 'real' for learners and to promote the value of functional skills to employers.

Above all, it is important to create opportunities for teamwork between all staff working with apprentices. In a team approach, functional skills specialists liaise very closely with colleagues, often acting as a resource to advise teachers in other areas on how they can integrate functional skills into their schemes of work and session plans in ways that are meaningful and appropriate.

An example: mathematics in hairdressing

In a provider working with hairdressing apprentices, a mathematics specialist works closely with the salon-based staff. The mathematics specialist can help with skills development and provide individual support as appropriate. Learners practise the skills in context, through a range of salon-based activities, such as working out average profit per customer and making recommendations as to how this could be increased. By doing this, learners **interpret** the results of their analysis, a key aspect of functional mathematics. They will achieve mastery through the successful completion of their work on the salon-based activities and related tasks.

Planning for functional skills in Apprenticeships

Consider the following questions and make notes about the actions you will need to take.

Points to consider when you transfer from key skills to functional skills	
Marketing	<p>How will you promote functional skills effectively to apprentices and employers?</p> <p>How will you ensure that all staff give informed messages about functional skills, and promote them as an essential part of the Apprenticeship framework?</p>
Initial assessment and personalised learning	<p>How will you develop a robust initial assessment process to determine apprentices' starting points?</p> <p>How will you deliver skills development based on apprentices' starting points and individual needs?</p> <p>Do staff listen to what learners are saying? Does their feedback encourage and motivate?</p> <p>Are individual learning plans robust and effective? Are they used to plan, deliver and review learning?</p>
The teaching and learning programme	<p>How will you transfer experience of embedding key skills learning in vocational contexts to functional skills?</p> <p>Do staff have the skills and mindset to move from 'assessment' to 'enabling learning'?</p> <p>How will your functional skills specialists and vocational specialists work together to plan and deliver the learning programme?</p> <p>Can you allocate time to reviewing and adapting your existing key skills resources?</p> <p>Does your staff development strategy include functional skills development?</p>
Support in the workplace	<p>How will you give supervisors information about functional skills?</p> <p>How will you prepare supervisors so they are able to provide structured support in the workplace?</p> <p>Will employers release apprentices when necessary?</p> <p>Will employers give apprentices the opportunity to practise and apply functional skills in a range of contexts at work, so they can demonstrate mastery?</p>
Summative assessment	<p>Have you contacted your Sector Skills Council about their plans for functional skills?</p> <p>Are you registered with an awarding body, and do you receive the latest information about assessment?</p> <p>How will you give informed and positive messages to apprentices and employers about how and when summative assessment of functional skills will happen?</p> <p>Can you build in opportunities for practice, ensuring that apprentices are well prepared and are entered for the assessment only when they are ready?</p>

Resources and links

QCA

The functional skills standards (QCA/07/3472) can be accessed at www.qca.org.uk/qca_6066.aspx

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

- *Functional skills: essential for life, learning and work* (DfES, 2006)
- *Functional skills guidance: Amplification of the standards* (QCA, 2008)
- *Assessment arrangements and principles for pilot 2008–2009*
- *Functional skills bulletin*.

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):

- *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)
- *Teaching and learning functional English* (FSSP, 2007)
- *Teaching and learning functional mathematics* (FSSP, 2007)
- *Teaching and learning functional ICT* (FSSP, 2007)
- *Good practice guide: Leading from the middle* (KSSP, 2007)
- *Teaching and learning packs* (KSSP, 2007) for care, child care, hospitality and catering, motor vehicle, retail, travel, wood occupations, and administration; aimed at apprentices, mainly working towards Level 2.
- *Effective practice in teaching and learning: communication, Effective practice in teaching and learning: applications of number, Effective practice in teaching and learning: ICT* (KSSP, 2008) – good practice guides that are relevant to functional skills.

Other resources

- The **CBI** publication *Working on the Three Rs: Employers' Priorities for Functional Skills in Maths and English* (2006) is available at www.cbi.org.uk/pdf/functionalskills0906.pdf
- **Lifelong Learning UK** (LLUK) provides staff skills audit tools (www.lluk.org).
- **Awarding bodies** provide information on how to take part in a pilot, sample assessment materials, and resources and training.
- The **Skills for Life Improvement Programme** (www.sflip.org.uk) has resources that include *Materials for embedded learning* – these develop subject/vocational skills and literacy, language and numeracy skills simultaneously and cover a wide range of sectors and subjects.
- The **Teaching and Learning Programme** provides teaching and learning resources at <http://teachingandlearning.qia.org.uk/teachingandlearning>
- The **QIA** resource *Focus on Progression: Talking teaching, training and learning* is obtainable from <http://teachingandlearning.qia.org.uk/tlp/pedagogy>




About this guide

This publication is for practitioners who support and enable the learning of functional skills in Apprenticeships. It will be relevant to functional skills specialists, vocational specialists and coordinators in work-based learning providers and colleges that offer Apprenticeship training.

It will help you to consider the practicalities of delivering functional skills in Apprenticeships, how you can highlight their relevance to the workplace, and how you can make learning relevant and rewarding for learners and employers.

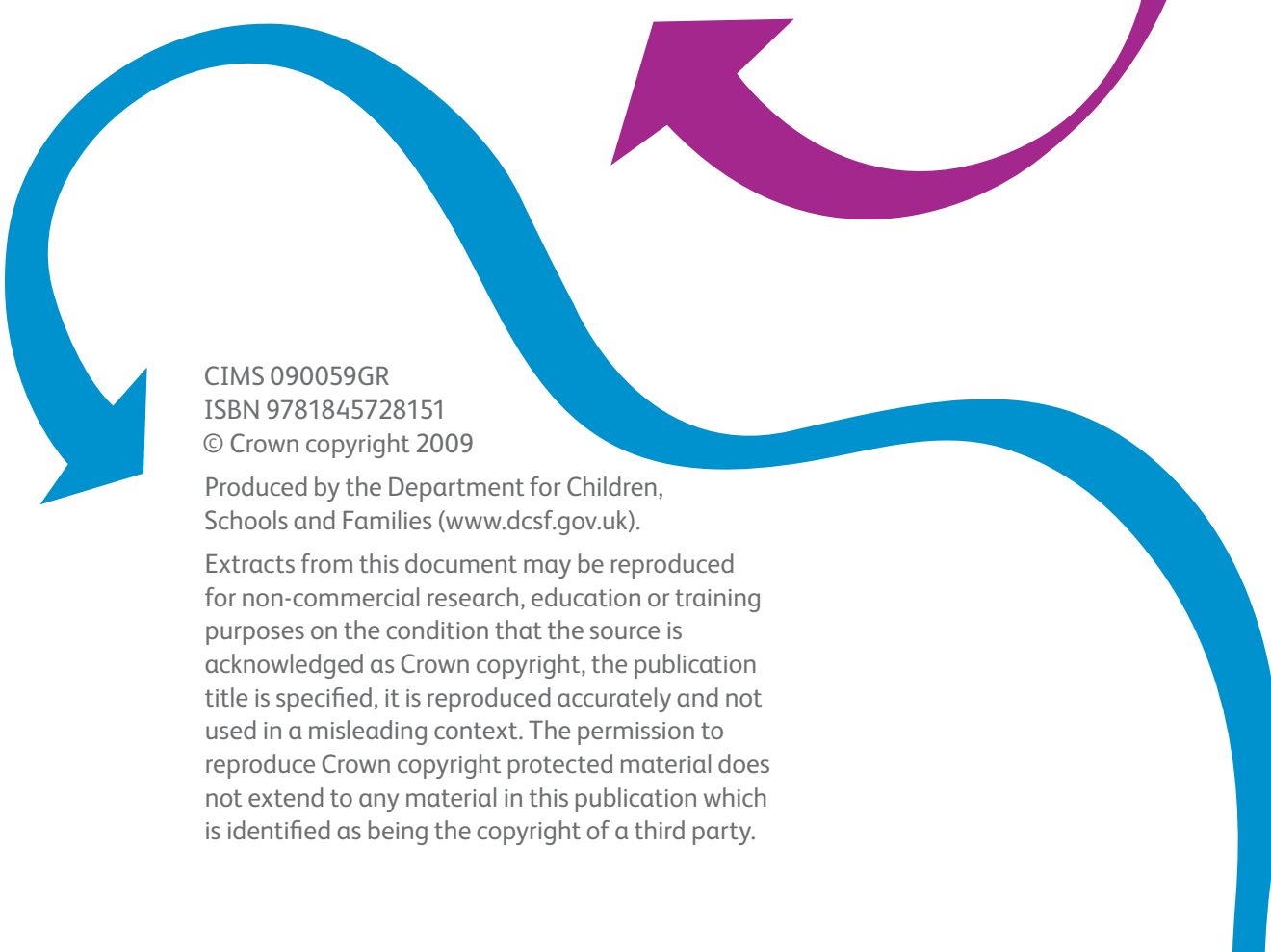
About the Functional Skills Support Programme (FSSP)

The FSSP is jointly managed by the Learning and Skills Improvement Service (LSIS) and the National Strategies (Secondary), on behalf of the Department for Children, Schools and Families (DCSF). The Programme provides materials, training and advice for staff in centres involved in the functional skills pilot. For further information, please contact the functional skills helpline on 0870 872 8081 or helpline@lsneducation.org.uk



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