

Guidance

Curriculum, Examination
and Assessment

Key Stage 3 *National Strategy*

Access and engagement in ICT

*Teaching pupils for whom English
is an additional language*

Heads of ICT and
EMA teachers

Status: Recommended

Date of issue: 11/02

Ref: DfES 0611/2002



department for

education and skills

creating opportunity, releasing potential, achieving excellence

About this guidance

The guidance is in two parts.

Sections 1 to 4 are intended for subject leaders of ICT and ethnic minority achievement (EMA) in secondary schools. These sections are designed to support a departmental meeting focused on reviewing the attainment of pupils learning English as an additional language (EAL), and should be read in conjunction with the later sections.

Sections 5 to 8 are for all ICT teachers and their EMA colleagues. They aim to help teachers support pupils learning EAL in the classroom, particularly those working at levels 3 to 4 and who have been learning in English for a minimum of two years, in order to raise their attainment in ICT lessons.

Contents

For subject leaders

1 Introduction	page 2
2 Securing progress for pupils learning EAL	page 3
3 Pupils learning English: some considerations	page 6
4 Frequently asked questions	page 9

For all teachers

5 Supporting teaching and learning	page 11
6 Speaking and listening	page 16
7 Reading and writing	page 18
Resources and further reading	page 20

Acknowledgements

Chris Stevens, Lesley Waddell and Chris Smith at BECTa

Keith Parry and the staff and pupils of Hyde Technology School



The Key Stage 3 National Strategy is based on four important principles:

- **Expectations:** establishing high expectations for all pupils and setting challenging targets for them to achieve;
- **Progression:** strengthening the transition from Key Stage 2 to Key Stage 3 and ensuring progression in teaching and learning across Key Stage 3;
- **Engagement:** promoting approaches to teaching and learning that engage and motivate pupils and demand their active participation;
- **Transformation:** strengthening teaching and learning through a programme of professional development and practical support.

This guidance applies these principles to the teaching and learning of ICT for pupils learning EAL. It suggests strategies to help teachers support pupils at different points of learning English:

- to develop their understanding and use of the English language;
- to enhance their learning in ICT.

The *Framework for teaching ICT capability: Years 7, 8 and 9* (page 59) makes the point that:

It is easy to underestimate what pupils can achieve in ICT, simply because they are new learners of the English language. The expectation should be that they progress in their learning at the same rate as other pupils of their age.

The Ofsted report *Managing support for the attainment of pupils from ethnic minority groups* (October 2001) identifies factors that enable bilingual learners to develop their English successfully:

- joint planning between mainstream and specialist ethnic minority achievement (EMA) staff;
- a focus on the content of the lesson, ensuring appropriate cognitive challenge;
- a parallel focus on the language necessary to complete the task;
- activities that enable pupils to rehearse and explore the language they need;
- opportunities to use and build on their first-language skills, where appropriate;
- continuing support with writing through, for example, the use of matrices for organising information and writing frames for more extended contributions.

Acquisition of academic language can take considerably longer to develop than social language. This advanced level of proficiency in the language for learning is crucial to the attainment of pupils for whom English is an additional language in all subjects of the curriculum.

The report draws attention to the 'considerable evidence that once proficiency in English was achieved, the progress for pupils with EAL across the curriculum was rapid and their attainment on a par with or higher than that of their monolingual peers'.



The role of the subject leader

Success for pupils learning EAL depends on close monitoring of their academic and personal targets. Meeting their needs should be an integral part of a departmental development plan. The Key Stage 3 Strategy booklet *Securing improvement: the role of subject leaders* identifies three core roles for subject leaders in securing the progress of pupils:

- 1 Judging standards**, including:
 - analysing and interpreting data on pupils' attainment in ICT;
 - reviewing with teachers their assessments of progress for classes, identified groups and individuals;
 - sampling pupils' work;
 - discussing work, progress and attitudes with sample groups of pupils.
- 2 Evaluating teaching and learning:**
 - evaluating the Key Stage 3 schemes of work to ensure they focus on effective teaching and learning and take account of the programme of study for ICT and the Framework objectives;
 - observing teaching and giving feedback to colleagues;
 - reviewing teachers' planning.
- 3 Leading sustainable improvements:**
 - leading departmental discussions about priorities for the subject;
 - agreeing targets for raising pupils' attainment;
 - leading the improvement of teaching quality;
 - leading the review, construction and resourcing of the curriculum.

Part of the role of the subject leader for ICT is to ensure that there is an effective learning environment across the department – one which promotes an ethos where pupils learning EAL can feel secure and know that their contributions are valued.

A supportive learning environment

Pupils may be literate in one or more languages. All will have oral competency and a working knowledge of one or more languages that will be used in different contexts. Talk underpins thinking and understanding. It is vital in the development of ICT capability because all pupils need the skills and confidence to articulate, review and modify their ideas. It is especially important for the inclusion of pupils who are EAL learners.

In general, a supportive, inclusive learning environment will have the following features:

- an emphasis on short-term planning, which includes planning for input and support from other adults in the classroom, to ensure learning opportunities are maximised;
- structured lessons;
- clear and shared lesson objectives;
- planning for talk;
- motivating contexts;
- opportunities for pupils to share and build on prior experience;



- active and engaging tasks that are designed to support pupils' understanding and learning;
- collaborative activities with clear roles for individuals within groups;
- appropriate visual and written material;
- positive recognition of the range of pupils' languages, literacies and learning styles;
- subject-specific language skills and conventions of particular forms of writing, which are made explicit and demonstrated by the teacher;
- opportunities for pupils to give and receive feedback;
- a requirement that pupils apply learning, supported by group work, before moving to independent activity.

The use of first languages in ICT lessons

It is an advantage to be multilingual; teachers can acknowledge this in the way they encourage and respond to the use of first languages. Pupils learning EAL are likely to have a better understanding of grammars and the ways in which languages work because they have the advantage of being able to compare languages.

The appropriate use of pupils' first languages in ICT lessons can be crucial to their attainment. Engagement and access to ICT can be impeded if a pupil's first language is not appropriately supported. Here are some golden rules for first-language use in ICT lessons.

Pupils should be encouraged to use their first language in lessons when:

- the cognitive challenge is likely to be high:** problem solving and critical thinking are difficult in a second language, even when the target language has been learnt for several years;
- they are still developing proficiency in English:** this can be particularly supportive when pupils are trying out ideas in their first language before planning in English;
- oral rehearsal will help reflection:** for example, when describing features of an effective presentation.

It may not be appropriate for pupils to use their first language when:

- pupils need to be encouraged to practise English to improve fluency;
- pupils are being encouraged to take risks in their spoken English in order to build confidence;
- pupils need to practise expressing themselves quickly in English, for examination preparation;
- pupils are learning technical or subject-specific language.





discussion
points

Securing progress for pupils learning EAL

These questions could be used to begin a departmental review of how pupils learning EAL are currently supported.

- *Does the current marking policy support diagnostic marking and the identification of targets for pupils?*
- *Have language-learning targets for pupils learning EAL been clearly identified?*
- *Is technical language clearly identified?*
- *Where a teacher works with a EMA colleague do both teachers have a clearly defined and negotiated role in delivering the lesson?*
- *Are opportunities for planned talk maximised in group tasks and plenary sessions?*
- *Does planning allow all pupils to contribute or give feedback over the course of a half-term?*
- *What is the departmental policy on the effective use of pupils' first languages in lessons?*
- *How do teachers plan for the use of first languages to move pupils into proficient use of the target language in ICT lessons?*



Pupils for whom English is an additional language are not a homogenous group. Extra planning and support may be required to take their specific learning needs into account. Many pupils learning EAL will not reach their maximum attainment without planned intervention in their English language development. Consideration of their learning needs will be essential to maximise their inclusion in classroom activities.

This section focuses on the following:

- pupils' prior experience of learning English;
- composition of peer groups;
- pupils' prior experiences of learning;
- availability of classroom support.

Pupils' prior experience of learning English

Pupils learning EAL in your classes are likely to be at different points along a continuum of experience in learning English.

Pupils relatively new to learning in English

Beginner learners of English will have minimal or no reading and writing skills in English. They are likely to have been living in England for a very short period of time. Their speaking and listening skills in English may also be at an early stage of development. However, they will all be competent and fluent speakers of their own first languages.

Pupils becoming familiar with English

Typically pupils at this stage will have increased their fluency in spoken English. They are able to understand instructions and conversations and can participate in learning activities if the context is clear. They may appear to be superficially competent with oral language in English (social talk) but lack the development of English for formal academic purposes, both orally and in reading and writing activities in the classroom. The pupils' facility with 'playground' English sometimes misleads teachers into thinking that the pupils understand and can produce more than is the case. Key vocabulary for ICT can take longer to develop and will need to be carefully planned and explicitly taught.

Pupils growing in confidence as users of English

Pupils at this stage need continuing support to develop their skills as readers and writers. Pupils may decode text accurately when reading but not process all texts at the necessary level of understanding or speed. Errors in writing will still occur as a result of the different syntaxes of English and their first language.

Fluent English users

These pupils will be competent, knowledgeable and fluent users of English and other languages in most social and learning contexts. They will often be high attainers and literate in other languages. They will have gained explicit understanding of how more than one language is structured. This can put them at a considerable advantage as learners in English lessons.



Composition of peer groups

The classrooms in which pupils learning EAL will be taught will differ in terms of the languages and literacies prevalent in the peer group. In your school, pupils learning EAL may be in ICT classes with peer groups similar to the following.

A first language shared by a majority

The *majority* of pupils *share* a common home language and cultural identity other than English. This is common in many inner-city schools. The first language then becomes the *lingua franca* of the school and there is a particular onus on teachers who become the sole role models of spoken standard English for the pupils in their classes. Using their first language may be helpful for pupils in the early months of acquiring English. Clear expectations that *all* pupils rehearse and use English as the target language for learning in the classroom need to be established.

A first language in common

There are just *one or two* other pupils with a shared home language in common in the class. Such pupils may be able to support each other's understanding through use of their first language to explore concepts and ideas before moving into use of English.

A range of languages and cultures

There are other pupils learning EAL in the class but from *different language* and cultural groups. The teacher will be able to maximise discussions about how different languages work and for all pupils to use their knowledge to compare them in developing English.

'Isolated learners'

The pupil is the only learner of EAL in the class or a speaker of a language not represented elsewhere in the school – an 'isolated learner'. The pupil will be totally immersed in an English-speaking environment at school but may not feel included. It may be some time before the pupil builds the confidence to risk saying anything in English.

Pupils' prior experiences of learning

The rate at which pupils learning EAL are likely to make progress in ICT classrooms can be determined by their prior experiences of learning.

Little or no prior formal schooling

Pupils may be disadvantaged through their lack of knowledge and understanding about expectations of learning at school. They may not be literate in a standard first language so will be learning to read and write for the first time in an additional language. Some pupils entering Key Stage 3 classes may also be asylum seekers and have limited or interrupted experiences of schooling.

Some education in the UK or overseas, but with some significant gaps in formal schooling

Pupils may require considerable support to consolidate and transfer key English skills.

Experience of different education systems in two or more countries

Pupils may not be used to expectations that they play an active part in lessons.

Full primary schooling (six years or longer) in the UK

The pupils should be as literate and fluent in English as their peer group, although their spoken and written English may still show some non-native errors.

Full formal education abroad

Pupils who have received full education abroad are likely to be fluent and literate in a standard language. This advantage will support a speedy transfer into ICT lessons.



Availability of classroom support

Ensure that technical support is harnessed to support pupils learning EAL. For example, technicians could set up software to support pupils learning EAL by checking that appropriate options are selected. Electronic dictionaries could be enabled, toolbars customised and function keys programmed to enable shortcuts that reduce the need for detailed instructions.

ICT teachers *may* have the added bonus of additional support for EAL learners in their classes. The provision of support in terms of personnel and frequency will vary from school to school.

Support from an EMA-funded specialist teacher

Agree who are the targeted pupils for support. Plan jointly for a full partnership role for both teachers. Decide who will do what (e.g. modelling writing, explaining and modelling key vocabulary, devising resources, teaching the starter, guiding groups) during the course of the lesson. Share evaluation, marking and target setting.

Support from an EMA-funded teaching assistant in the lesson

Negotiate a clear agreed role with the assistant in supporting you with teaching, supporting and assessing targeted pupils learning EAL.

Support from someone who speaks the pupil's home language in the lesson

This is valuable in supporting pupils who are inexperienced in using English to learn about ICT and in helping you to assess what they know and can do in their first language.

Support from a teacher or adviser with planning and resources outside the lesson

Utilise their expertise and knowledge of pupils learning EAL to help you plan for inclusion.

Support for *all* lessons with a particular class or year group for a specified period of time

This resource should give considerable added value to the pupils in the class. Maximise opportunities to plan, teach and assess collaboratively as above.

Support for *some* ICT lessons with one class in the week

Plan specific activities particularly relevant for pupils learning EAL within these lessons.

discussion
points

Pupils learning English: some considerations

- *A school's population can change over time. Which of the descriptions of peer groups on page 7 most closely fits pupils in your school? Is this the same in all classes across Years 7, 8 and 9?*
- *What support is available to your department at Key Stage 3? How is this allocated? How is it used by the department or individual teachers?*



4

Frequently asked questions

This section looks at some frequently asked questions and possible answers.

Q What provision and support can be made for 'new arrivals' in and outside ICT lessons?

A *An induction programme – including being paired with a 'buddy' and being given a booklet introducing pupils to the school's staff, rules and routines – can be organised. In addition, a dictionary and support materials for key ICT lessons, including visuals and sentence starters, can be used.*

Q Pupils often use their first language between themselves in class. I know that in theory this is OK but I have a feeling that often they do so to exclude others. Neither am I sure that they are 'on task' all the time. What is appropriate?

A *Class rules including those for talk tasks need to be crystal clear and negotiated with pupils. In ICT, use of English as the target language for learning is expected at all times unless you expressly suggest that particular pupils work in their first language for a clearly defined purpose.*

Q How can objectives be made to match all pupils' learning needs? How can sufficient repetition and reinforcement be built in for those who need it?

A *Pre-teaching key concepts and language features can help pupils learning EAL to fulfil their potential in lessons.*

Q How can teachers find time to plan alongside support teachers and assistants who support them for part of the week?

A *It is difficult to find time for planning, but even a short discussion or brief planning session can be beneficial. If time cannot be found, sharing medium-term plans with support staff can help them to understand the context of their work. In addition, if short-term plans state how support staff should be deployed and how they should work in lessons, this can greatly enhance their effectiveness.*

Q Can flexible groupings be provided to ensure that pupils learning EAL are not constantly placed in lower-ability groups or with pupils who have special educational needs in class, or withdrawn from lessons inappropriately?

A *This is a key issue: groupings should always be flexible and determined by the objective of the lesson, and how pupils can be supported in achieving it. Assessment of ICT capability should not be based on attainment in other subjects. It is also vital that pupils learning English have the opportunity to hear positive language models, and so groupings need to be managed carefully to ensure that this happens.*

Q How can I assess if a website is appropriate for using with pupils who are EAL learners?

A *You need to look at the reading demand of the website before pupils look at it. Websites can be made more accessible if pupils are asked to look for particular vocabulary. The websites you select for pupils to refer to should be matched to the objectives of the lesson.*



Q Is software available in other languages?

A Yes. Many common applications can be set up to offer foreign-language options. Dictionaries, for example, can be customised to support other languages. Web browsers can support other languages but may need additional downloads to make them work.

Q How should I approach the teaching of technical language?

A It is often most appropriate to teach technical language using either the standard or English words. Translations of words such as 'mouse', 'cell' or 'laptop' may not be possible in some cases and can sometimes be confusing. Most importantly, pupils should understand the concepts associated with the language and the functions which are performed.

Q Are there any bilingual sites that are monitored?

A The school's Internet service provider needs to ensure that filtering options for the Internet include the facility to filter foreign languages and foreign-language sites for inappropriate language.



Teaching and learning can be effectively supported through adaptations to activities and teaching approaches. Below are some general suggestions for ensuring that teaching supports pupils who are EAL learners in ICT lessons.

Before the lesson

Provide a structured approach to planning for support for EAL learners:

- Seek advice from specialist staff; plan together where possible.
- Plan for the roles of additional adults giving support in the lesson.
- Plan for support from technical staff; for example, they could make sure that appropriate software is loaded and/or correct options are selected.
- Brief additional support staff on any ICT skills or concepts they may be unsure about; it is unlikely that they will have specialist knowledge of ICT.

With additional support

- Plan to co-teach.
- Pre-teach some key vocabulary.
- Read a piece of text in advance or provide additional visual materials or desktop models.
- Identify talk activities (ensuring peer support in grouping wherever possible), offering additional support where appropriate and planning questions for the plenary to enable pupils to participate in and contribute fully to lessons.

During starter activities

- Pair a pupil learning EAL with a 'buddy' or sympathetic peer so that the pupil can receive help with rehearsing language.
- Make the starter activity 'concrete', for example by using symbols and pictures, providing key words or using sorting activities. This is particularly important for pupils at an early stage of English development.
- Assess the reading demand of any starter activity and prioritise key elements of the activity. For example, if it is a written activity, will fewer examples still enable learning objectives to be met?
- Assess the speaking demands of the activity. If pupils are, for example, discussing who needs certain types of information from a website, either provide some visual alternatives, or group pupils who are EAL learners sensitively so that they can use their first language to express their ideas or have key concepts modelled by a more-proficient English user.
- Differentiate questioning by adapting the language used and preparing pupils to answer questions by providing sample language.
- Model language by saying it clearly and where appropriate providing written examples so that pupils understand the different usage of language in ICT. Make explicit use of the key vocabulary from the *Framework for teaching ICT capability: Years 7, 8 and 9* (pages 67–69).



With classroom support

- Ask additional adults to pre-teach and prompt for demonstrations individually; correct and ask the pupil to try again.
- Ask the additional teacher or assistant to run the starter activity while you work with a group of pupils learning EAL.

During main teaching activities

- Assess the concepts being introduced. Target language may have no reliable or sensible alternative in the pupils' home language. 'Mouse', for example, is a convenient shorthand label for a tool which performs a number of complex functions. Those functions may not be immediately obvious or easy to convey to pupils who are EAL learners, particularly those who may have had interrupted periods of education and limited access to ICT.
- Contextualise activities and resources, relating them to pupils' prior knowledge and experience where possible. One pupil, for example, chose the topic of 'Bollywood' as the topic for her presentation. She needed access to appropriate visual images and sound files to do this.
- Introduce activities using visual materials, photos, video clips, presentations.
- Build in opportunities to model and rehearse oral language before expecting a response in whole-class discussion and questioning. Pupils could, for example, have a 'talk partner' so that they are able to rehearse new language in a non-threatening context.
- Allow pupils who are EAL learners to talk and write in their first language.
- Make clear to groups what individual contributions are expected – allocate roles.
- Group pupils thoughtfully and with different pupils for different purposes, for example, to provide a good peer model of language use.
- Ensure purposeful talk and rehearsal are built into tasks.
- Provide matching, grid or DARTs type activities with some completed parts as a model.
- Provide appropriate support, writing frames, talk frames, word lists etc. *Avoid* independent worksheet tasks that limit talk or investigation.
- Consider using interactive software which might support learning. Teaching and activities may be supported effectively by the use of software which integrates symbols, photographs and speaking with writing.
- Prompt pupils to listen for key vocabulary and specific information.

With classroom support

- Work collaboratively – model speaker/listener roles to pupils.
- Use the expertise of specialist staff to model target language.
- Support activities with the use of key words displayed around the classroom and/or close to pupils' workstations.
- Use multimedia facilities, such as interactive software, to model target language.
- Provide onscreen templates with key words marked in colour.
- Read guidance or activities with pupils in advance of the lesson.
- Work collaboratively with specialist staff in preparing group activities and in allocating pupils to groups.



During plenaries

- Ensure pupils have a role or opportunity to contribute to group feedback.
- Differentiate questioning.
- Encourage pupils to talk about what they have learned and how they learned it. Use talk prompts or frames.
- Use 'sentence starters' to encourage pupils to summarise what they have learned and record it.
- Use opportunities to revise and consolidate new or key vocabulary.
- Set up plenaries in advance so that pupils who are EAL learners have opportunities to take part without feeling 'on the spot'.

Providing feedback and checking progress

Marking pupils' work is a powerful method for assessing understanding and capability and for providing feedback. Where possible, pupils should print out their work so that it can be annotated and discussed. Pupils may understand the task and have a good level of capability, but not have the language to express their understanding.

Careful account must be taken of the ways in which pupils are taught and assessed so that resources and teaching styles in themselves do not become barriers to learning for pupils who are capable of high achievement in ICT. The following example demonstrates how one pupil was supported through effective assessment.

classroom
example

Supporting pupils learning EAL through assessment

Sofia has been studying features of documents to understand elements that are used and their effectiveness as a means of conveying an advertising message. A support teacher has talked through the language during the course of the lesson. Sofia makes the following responses to the features she is asked to assess:

Feature	I think
Fonts	This advert is not plain it is quite good and also it is eyechaing
Use of white space	It is not well layout and it has not used the white spaces
Graphics	There lots of images on the advert of item so this will encourage you to buy
Special symbols	There is only one symbols which is the arrow which go the letter

The support teacher, who is a non-specialist ICT teacher, provides her with verbal feedback and helps her to correct her grammatical errors. The ICT teacher is able to assess her level of understanding and provide her with annotated feedback which asks her questions such as 'What could be done to make the layout better?' to help her ICT capability develop.

A printout of her work enables her to discuss her progress and it can be used as her work develops to demonstrate progress over time.



Adapting lessons

Unit 7.1 lesson 1

The table below demonstrates some of the adaptations which could be made to lesson 1 of the sample teaching unit produced as part of the ICT strand 7.1: *Using ICT*. You will need to have a copy of this available as you read the suggestions in order to understand the context.

Section of the lesson	Type of activity	Adaptation
1 Starter: Identifying key content in a presentation	Paired discussion Whole-class discussion	Sit pupil with friend or sympathetic peer so that pupil can receive support from a partner and so that they can rehearse language. Provide a card-sort activity so that pupils can use pictures and symbols to demonstrate five things they would like to know about Pat.
2 Considering critically the information in a presentation	Viewing presentation Whole class individually responding to a series of questions	Tell pupils before the lesson what questions you would like them to answer. Consider changing questions to statements or simplifying questions. For example: 'Why do you think Pat did not include some of the things you would like to know?' could become: 'Pat did not include some of the things you would like to know. Why not?' 'Tell me something you do not know about Pat' could become: 'There are some things you don't know about Pat. Name one.'
3 The aim of the unit	Discussion Whole class	Build in opportunities to model and rehearse oral language before expecting a response to whole-class discussion and questioning. Pupils could, for example, have a 'talk partner' so that they are able to rehearse new language in a non-threatening context.
4 Organising a presentation	Demonstration Whole class	Before the lesson, think about the suggestions pupils might make for slide headings. Consider providing symbols or home-language alternatives for some of the slide headings.
5 Creating an initial design	Using software Paired work	Ensure that the content will be relevant to pupils' experience. Customise the software so that it is in pupils' home language. Encourage pupils to collect their ideas in home language, using, for example, a dictionary website. Consider carefully how pupils are paired. This could be either with a pupil whose English acquisition is good and who also has a good level of ICT capability or a pupil with the same home language but who is at a different level of English acquisition.
6 Plenary: Reviewing match of content to audience	Individual presentation Whole class	Prepare pupils to be ready to answer one question. For example: 'What is the most important piece of information in your presentation?' Provide pupils with model language during the lesson so that they will be prepared to answer the question. Write a sentence starter on the class display unit to help them give an answer.
7 Homework: Choosing and collecting pictures to illustrate a presentation		Encourage pupils to bring pictures that reflect their own culture and experiences.



Each of the themes and key areas from the Framework make different demands in terms of speaking and listening and reading and writing. Some of these are discussed in more detail in sections 6 and 7. It is likely that a unit of work, or even a single lesson plan, will draw on objectives from more than one theme. It is vital that the teaching and learning styles adopted as well as the deployment of resources enables all pupils, including EAL learners, to access those objectives.

discussion
points

Supporting teaching and learning

- *Identify which of the suggestions for starter activities, for main teaching activities and for plenaries are already strong features of teaching ICT to pupils learning EAL in your school.*
- *Identify which suggestions you would like to develop further in your teaching.*
- *Prioritise these suggestions and agree how you will put them into action.*



Talk is a vital part of the acquisition of any language. As part of the process, oral rehearsal is essential to support the development of English use for pupils learning EAL. It is also an important factor in developing thinking and understanding. Pupils who engage in exploratory talk, using the metacognitive process of 'thinking out loud' by sharing their reasoning with their peers, are more likely to understand, develop and internalise related concepts.

In the ICT classroom, a variety of opportunities for using speaking and listening to develop conceptual understanding will arise as the principles of interactive teaching and active learning are applied to the teaching of the ICT Framework themes.

Developing ideas and making things happen

During a unit on models and modelling, the following lesson objective is being taught to Year 8 pupils:

- Develop ICT-based models and test predictions by changing variables and rules.

At an early stage of the unit, pupils have the opportunity to remember what they have already learned about spreadsheets. A discussion is held to summarise the following key terms and processes:

cell, row, column, worksheet, numeric data, labels, formula, drag, copy, paste, fill handle, chart, chart wizard, sort.

All pupils are taught with a whole-class presentation which uses screenshots and labels to show and reinforce the concepts. For pupils learning EAL, teachers will need to provide opportunities to rehearse language and they should explicitly model the language for pupils. A clear classroom display which includes the target language will help to reinforce the learning.

The language used may have no reliable equivalent translation. Instead of seeking a translation, pupils should be shown clearly what the term or process represents or does and encouraged to use the English words in context.

Later, pupils work in pairs to explore a model through a spreadsheet. The interactive teaching and active learning which the Key Stage 3 Strategy promotes will provide pupils with opportunities to consolidate their learning through discussion and collaboration. At this point, the sensitive pairing of pupils will give pupils learning EAL the opportunity to hear the target language modelled as well as having opportunities to use it.

Pupils could also be provided with interactive worksheets on screen which enable them to click and drag labels and to match vocabulary with aspects of a spreadsheet.



Exchanging and sharing information

A group of Year 8 pupils has been learning how to present information, taking account of audience expectation and needs. The plenary will be used to remind pupils of the teaching objective and to check their understanding of data display. The teacher will do this by displaying a graph showing temperatures and asking pupils to consider if the graph is fit for purpose and if it provides holidaymakers with sufficient information to make a judgement about where and when to take a holiday.

The teacher wants a pupil who is an EAL learner to have the opportunity to contribute to the plenary so that he can articulate his understanding of the objectives for the lesson.

After the starter to the lesson and following a demonstration of weather websites, the teacher tells the pupil that she will be asking him for some suggestions in the plenary. She prompts the EAL learner by providing an opportunity for him to rehearse the appropriate language with a partner. He is able to manipulate labels on screen and say the vocabulary at the same time.

The pupil knows that the teacher will be asking him for some suggestions in the plenary about how the graph could be improved. He is able to rehearse the language during the plenary and uses his prompt sheet to help him answer the questions.



Speaking and listening

- *How do you currently involve bilingual pupils in speaking and listening activities?*
- *Do you build in appropriate opportunities for pupils to use their first language?*
- *Discuss ways in which you could strengthen speaking and listening skills and agree on at least three approaches that could be further developed in ICT lessons in your school.*

Many pupils who are EAL learners are likely to need continuing support to access meaning and to develop a critical response to ICT. They will need structured support and active tasks to help them to begin to engage in, for example, judging fitness for purpose and in order to modify and evaluate their work. They will need to utilise a range of strategies for reading for different purposes. Depending on their previous experience, confusions can arise:

- at text level;
- at sentence level;
- at word level.

At text level

Across the ICT curriculum, pupils will encounter opportunities to engage with a variety of texts. These may include websites, leaflets and presentations. Embedded within these texts will be many assumptions and concepts beyond the words used which could be a potential barrier to learning for pupils who are EAL learners. Some of these might be:

- cultural references – for example, pupils making judgements about the features of corporate leaflets may bring a different cultural perspective to the use of fonts and logos;
- English idiom, metaphorical language and culturally embedded language – this can occur in relatively informal websites that routinely use idiom, such as web pages aimed at teenage audiences.

At sentence level

Worksheets and guidance materials for ICT may often demonstrate a mix of sentences and word by word instructions. Very often they incorporate conventions commonly associated with ICT applications such as bullet points or indents for emphasis.

At word level

ICT regularly takes everyday words (for example, 'control', 'mouse', 'cell') and contextualises them so that they have a completely different meaning. This meaning should be taught explicitly using the subject vocabulary.



The image of 'SO' webpage is reproduced with kind permission of the BBC.

The 'SO' website can be viewed by visiting www.bbc.co.uk/so

ICT also requires pupils to develop keyboard skills because so much of the work that pupils record takes place on a keyboard. Pupils can be supported effectively in keyboard use and language acquisition with the use of overlays, which help to convey concepts. Classroom displays are also useful for supporting pupils in their learning.

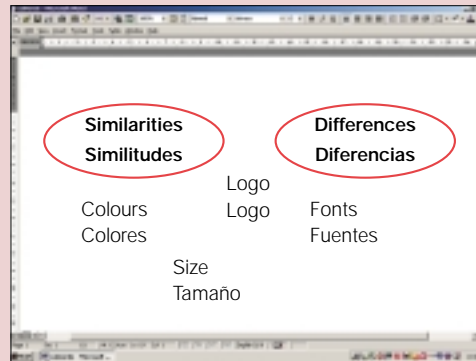


Finding things out

As part of a unit of work in Year 7, pupils are learning that different forms of information – text, graphics, sound, numeric data and symbols – can be combined to create meaning and impact.

The lesson starter requires pupils to identify common features and differences between corporate publications. Before pupils arrive in the classroom, the following statements are written on a whiteboard or other display unit:

- **similarities** between the publications
- **differences** between the publications



Pupils are asked to write down three similarities and three differences between a set of leaflets. The pupils are asylum seekers from a Spanish-speaking country. Before the lesson, the teacher has checked some language with the MFL department and devised some onscreen prompt cards using English and Spanish words. This has been done using a multimedia package, so that by clicking on the label after reading it, the pupil can sort the similarities and differences.

Developing ideas and making things happen

Pupils in Year 7 are learning how ICT is used to control events. They watch a video clip showing the sequence of a set of traffic lights. They are asked to work in pairs and write down numbered steps for the traffic light sequence that they have seen on the video.

One pupil who is an EAL learner is given a set of statements on cards so that she can sort the words. She has a copy of the video file on her PC so that she can refer to the sequence and match the words. She works with another pupil and repeats the words as she sorts them.

The teacher then asks the class for the statements which they have agreed. He writes them on the display unit. The pupil checks what has been written with her own answers.

Reading and writing

- *Which aspects of reading do your pupils learning EAL find particularly challenging?
How do you currently support them with reading tasks in your lessons?*
- *Do you have access to software that will support EAL learners?*



Resources and further reading

Framework for teaching ICT capability: Years 7, 8 and 9 (ref: DfES 0321/2002)

Literacy across the curriculum (ref: DfES 0235/2001)

Literacy through symbols, Tina Detheridge and Mike Detheridge
(David Fulton Publishers, 1997)

Managing support for the attainment of pupils from minority ethnic groups
(Ofsted, 2001; ref: HMI 326)

Planning for bilingual learners, Maggie Gravelle (ed.) (Trentham Books, 2000)

Raising aspects of ethnic minority achievement (ref: DfES 0639/2001)

Securing improvement: the role of subject leaders (ref: DfES 0102/2002)

Supporting bilingual learners in schools, Maggie Gravelle (Trentham Books, 2001)

Symbols Now, Chris Abbott (Widgit Software, 2000)

Websites

This small selection of websites offers a range of different types of support. Numerous commercial materials can be found via the Internet by using one of the commonly used search engines and searching for 'inclusion'.

General advice on inclusion and availability of resources

www.becta.org.uk

inclusion.ngfl.gov.uk

Advice on web pages and accessibility of design, including talking web browsers

www.w3.org

www.w3.org/WAI

www.econointl.com

Resource materials, including translation sites and foreign-language resources such as newspapers

www.linguanet.org.uk

www.bbc.co.uk

www.yourdictionary.com

www.onlinenewspapers.com

Note: software and applications which support speech options should be carefully evaluated before they are used in order to ensure that they model vocabulary clearly.

Disclaimer

The Department for Education and Skills wishes to make clear that the Department and its agents accept no responsibility for the actual content of any of the materials suggested as information sources within this document, whether these are in the form of printed publications or on a website.



Further copies of this document can be obtained from:

DfES Publications
Tel: 0845 60 222 60
Fax: 0845 60 333 60
Textphone: 0845 60 555 60
Email: dfes@prolog.uk.com

Ref: DfES 0611/2002

© Crown copyright 2002

Produced by the Department for Education and Skills

Extracts from this document may be reproduced
for non-commercial or training purposes on the
condition that the source is acknowledged

www.standards.dfes.gov.uk/keystage3
www.dfes.gov.uk