

Guidance

Curriculum, Examination
and Assessment

Key Stage 3 *National Strategy*

Access and engagement in design and technology

*Teaching pupils for whom English
is an additional language*

Heads of design
and technology
and EMA teachers

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About this guidance

The guidance is in two parts.

Sections 1 to 4 are intended for subject leaders of design and technology (D&T) 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 design and technology 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 design and technology lessons.

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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 design and technology 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 design and technology lessons.

The guidance also considers how pupils' self-esteem can be developed. Pupils cannot derive full benefit from their design and technology lessons unless social aspects of their learning are taken into account.

The Strategy has high expectations for *all* pupils, and the inclusion of pupils learning EAL is a fundamental principle.

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;
 - 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;
 - 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 head of design and technology 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

Schools implementing the Key Stage 3 Strategy will provide a supportive, inclusive learning environment based on the following features:

- structured lessons that draw pupils in from the start of the lesson;
- active and engaging tasks which encourage all pupils to participate;
- teaching and learning strategies that are oral and interactive;
- an emphasis on short-term planning, which includes planning for input and support from other adults in the classroom, to ensure the learning opportunities are maximised;
- subject-specific language skills and conventions of particular forms of writing, which are made explicit and demonstrated by the teacher;
- planned opportunities for oral rehearsal in pairs and in small groups;
- a requirement that pupils apply learning, supported by group work, before moving to independent activity.



The use of first languages in design and technology 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.

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

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:** it is particularly supportive if pupils try out ideas in their first language before writing in English;
- oral rehearsal will help reflection:** for example, before responding to a text or product, or discussing evaluations of their work.

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

- pupils need to practise the target language to improve fluency;
- pupils need oral rehearsal in the target language so that they are prepared for writing tasks;
- pupils need to take risks in their spoken English in order to build confidence;
- pupils need to practise expressing themselves quickly in English.

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?*
- *Are language-learning targets for pupils learning EAL clearly identified?*
- *Where a teacher works with an EMA colleague, do both 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?*
- *Do teachers provide a frame or other structure to help pupils to listen and make sense of what they hear?*
- *Is there enough support to help pupils with reading and writing in design and technology?*
- *Which features of a supportive learning environment occur in lessons you teach or observe within the department? Which require further development?*
- *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 English in design and technology 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. Academic English can take much longer to develop and therefore needs to be planned for, explicitly taught and learning reinforced in meaningful and purposeful contexts.

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 the pupils' first languages.

Fluent English users

These pupils will be competent, knowledgeable and fluent users of English, as well as 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.



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 design and technology 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 a common experience 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.

'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 a pupil learning EAL is likely to make progress in design and technology 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 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 design and technology lessons.



Availability of classroom support

Design and technology 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 during the course of the lesson (e.g. model writing, devise and resource starter, small groups). Share evaluation, marking and target setting.

Support from an EMA-funded classroom assistant in the lesson

Negotiate with the assistant a clear, agreed role 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 English and in helping you to assess what they know and can do in their first language.

Support from teacher/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 the opportunities to plan, teach and assess collaboratively as above.

Support for *some* design and technology lessons with one class in the week

Plan specific activities particularly relevant for pupils learning EAL within this lesson.



discussion
points

Pupils learning English: some considerations

- *A school's population can change over time. Which of the descriptions on pages 5 and 6 most closely fit pupils learning EAL in your school? Are these 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 design and technology 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 design and technology lessons, including visuals and sentence starters, can be used.*

Q We don't have any support in class. How can we help pupils learning EAL in our lessons?

A *It is often the case that there are no support teachers or assistants working in design and technology lessons. However, it will be possible to use the expertise and personnel working in the EMA team in school or in the LEA to help you plan ways in which pupils learning EAL can reach their maximum levels of attainment in design and technology.*

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, determined by the objective of the lesson and how pupils can be supported in achieving it. For example, it is unlikely that the reading, writing, speaking and listening groups would be the same for many pupils, but this will be particularly true for pupils learning EAL, who will be more proficient in spoken English.*

It is also of paramount importance that pupils who are learning English have the opportunity to hear positive English language models. Groupings need to be managed carefully, to ensure that this happens.

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. The 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.*



Much of the work pupils do in design and technology is practical. Good practice in teaching design and technology includes a great deal of modelling and demonstration. This helps pupils learning EAL to make good progress and demonstrate achievement in line with their capabilities. Design and technology lessons provide opportunities for pupils to develop their use of English through speaking and listening. There are also situations where pupils are expected to read and write as well as design and make products.

Here are some suggestions to ensure that teaching supports pupils learning EAL in design and technology lessons. They are focused on pupils who have been learning English for a minimum of two years and who are underperforming. Most of the suggestions do not require separate planning or provision but are examples of effective teaching and learning that will be particularly supportive of pupils learning EAL. In each section additional suggestions are made for where extra support is available.

Before the lesson

- Seek advice from specialist staff; plan together where possible.
- Check that learning objectives are clearly planned to build on prior attainment. Display them and refer to them during the lesson.
- With additional support it may be appropriate to pre-teach key vocabulary, read a piece of text in advance, or provide additional visual materials. This is particularly helpful when the reading of text during the lesson is going to be fairly rapid, for example, when reading a section in a textbook.
- Plan for the deployment of additional adults. Short-term planning should clearly define the roles of all adults and with whom they will be working; this is especially helpful when planning guided work.
- Plan structured lessons that offer additional support for pupils learning EAL to enable them to meet the lesson objectives and expected outcomes. The example overleaf, from the folder *Raising aspects of ethnic minority achievement*, demonstrates how a model of planning could be used in design and technology.
- Decide how to group pupils for the main part of the lesson. Identify targeted pupils.
- Identify talk activities, ensuring groups provide peer support wherever possible. Assign roles carefully and support active listening. Module 7 of the *Literacy across the curriculum* training file offers many helpful examples of pupil groupings and strategies.
- Select which pupils or groups to ask to feed back to the class in the plenary (remember to tell the pupils at the start of the lesson).
- Provide additional support and plan questions for the plenary to enable pupils to contribute a full response, rather than a one-word answer.



Planning a sequence of lessons in design and technology

The following planning model is linked to unit 9D of the DfES/QCA scheme of work for design and technology. This is part of the work on resistant materials for Year 9.

Aim: To help pupils to prepare a design brief for an electronic alarm system prior to beginning to make a product.

Pupils have to include details about the purpose of the alarm, the triggers for the alarm and the kinds of signals that will be passed.

Skills required by pupils	Design and technology planning
Expressing understanding	<ul style="list-style-type: none"> ■ Using appropriate text conventions ■ Drafting key sentences ■ Drafting a design brief
Processing understanding	<ul style="list-style-type: none"> ■ Discussing triggers ■ Identifying the key features of design briefs
Accessing new information and experience	<ul style="list-style-type: none"> ■ Completing grid about purposes and signals ■ Listening to, reading and locating information on chart
Sharing experience and knowledge	<ul style="list-style-type: none"> ■ Identifying and labelling visuals ■ Completing key words definitions chart
Outcome	<ul style="list-style-type: none"> ■ Completing design brief using a writing frame

During starter activities

- Pair a pupil learning EAL with a 'buddy' or sympathetic peer so that the pupil can receive help with 'oral rehearsal' of contributions.
- Make the starter activity 'concrete': for example, matching vocabulary or grouping similar words. Whiteboards are useful as they provide a link between talk and writing, allowing pupils to try out their ideas without errors being permanent.
- Differentiate questioning to ensure that all are engaged and appropriately challenged or supported.

With classroom support

- Ask an additional adult to pre-teach and prompt for 'show me' activities; 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

classroom
example

Using support from an EAL department

Departments in Plumstead Manor School, in Greenwich, London, bid for support from the language development department in partnership teaching. This support can take place in classrooms and can also help subject teachers plan for pupils learning EAL.

The design and technology department bid for support to help the department develop strategies to improve teachers' understanding of the literacy needed when Year 8 pupils evaluate the products they have made. The department also bid for support in lessons to help pupils to document the design process. They were able to work with the language development department to plan new strategies for pupils to use when evaluating the products they make and were also able to have EMA assistants working with pupils in two of their Year 7 classes.



Teacher introduction

- Make clear the context for learning and relate this to pupils' prior knowledge and experience where possible.
- Model the processes and techniques to be used. Talk about what you are doing and why.
- Use visual clues and pictures to help make the meaning clear.
- Make the introduction interactive so that it encourages questioning and discussion.
- Build in opportunities for pupils to have oral language modelled and to rehearse what they will say before they are expected to respond to the whole class.
- Build in brief 'thinking time': it allows pupils learning EAL to reflect on the question before answering. The 'Questioning' module of the Key Stage 3 Strategy foundation subjects training materials includes some helpful guidance.

With classroom support

- Work collaboratively – model speaker/listener roles to pupils and make explicit the criteria for successful speaking and listening.
- Use the expertise of specialist staff to model language features of shared reading or writing.
- Set explicit listening tasks using key words or a listening frame.
- Read text with pupils in advance of the lesson.
- Provide a copy of the text or extract with key words and features already highlighted in colour for pupils.
- Where appropriate, the support teacher could encourage pupils to use their first language.

Development: the main part of the lesson

- Group pupils thoughtfully and with different pupils for different purposes, such as providing a good peer model of language use.
- Planning for a guided group with pupils learning EAL will allow them to show what they know through more extended talk in a small supportive group. It will also enable focused teaching and assessment of learning needs.
- Make clear to groups what individual contributions are expected – allocate roles carefully. This is especially important in group discussion or in other group work, where a teacher may not be supporting.
- Allow pupils to talk or write in their first language, particularly when they are planning their design brief, planning writing or attempting to respond to questions from a written source.
- Ensure that purposeful talk and rehearsal are built into tasks.
- Provide matching, grid or DARTs type activities with some completed parts as a model. Make sure that the task requires some collaborative investigation and is not too easy.
- In writing activities, provide appropriate support, writing frames, talk frames, word lists etc. These are particularly helpful when pupils are developing an extended piece of writing, where the language may be unfamiliar.
- Avoid worksheet tasks that limit talk or investigation and inadvertently result in independent work.
- Provide well-structured demonstrations, where the meaning and process is clear regardless of the language used.
- Model the use of appropriate academic language in the context of the activities.
- Introduce and explain new vocabulary.
- Explain clearly and illustrate using work done in previous lessons or examples from everyday life.
- Ask questions which allow all pupils to take part.
- Repeat key points and vocabulary at different stages in the lesson.
- Encourage pupils to give answers which are longer than one or two words.
- Use diagrams and notes on the board to emphasise points made.

With classroom support

- Work collaboratively with specialist staff in preparing group activities and in allocating pupils to groups.
- Be explicit about the role of the additional adult – for example, supporting a pupil within a group, or working generally with the whole class.





classroom
example

Using a writing frame

A Year 9 class has made clocks using plastic and metal as part of their work on resistant materials. They are expected to produce an evaluation of their product as a piece of continuous prose. A grid has been provided to structure the process and allow them to collect their ideas and form sentences prior to the extended writing task.

Evaluation of my clock

Choose one statement for each section		Choose words to make your sentence say what you want it to
My clock does what it is intended to do My clock doesn't do what it is intended to do	because	Faults – electrical/panel
My clock looks well made My clock doesn't look well made	because	Design/finish
My clock is/isn't durable	because	Good fit of base to case/material used
My clock is/isn't attractive and colourful	because	Variety of colour/brightness/size of face
I enjoyed the project	because	Used new skills Made something that works A challenge/easy Looked appealing
I liked/disliked the process (processes) of: soldering/vacuum forming/ researching/sketching/rendering/ assembling/problem solving ...	because	It was easy/difficult/a challenge/new ... It was awkward/dangerous ...
I have learnt about the process of ... So I had to use a		soldering iron/vacuum former/coping saw/pillar drill ...
To improve this project I would		Research (greater depth/wider range) Better quality sketching Render work more carefully/ in more detail Faster/slower/organisation

During plenaries

- Ensure pupils have a role and opportunity to contribute to feedback.
- Tell individual pupils at the beginning of the lesson if they are going to be expected to speak in the plenary. This will give them time to plan for it.
- Make explicit how presentations to the rest of class are delivered – for example, standing up, facing the class and speaking so that others can hear.
- Encourage pupils to talk about what they have learned and how they learned it – use talk prompts or frames.
- Differentiate questioning.
- Use 'sentence starters' to encourage pupils to summarise what they have learned and record it.
- Use opportunities to revise and consolidate new and/or key vocabulary.



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 design and technology 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.

Typical exchanges during collaborative tasks might include rehearsal of language structures for questioning, explaining, advising, arguing a case, reflecting, predicting, empathising or formulating hypotheses. These will need to be modelled by the teacher beforehand.

Involve pupils in establishing clear organisational routines and ground rules for talk activities in your classroom early in the year and reinforce them regularly.

**classroom
example**

Promoting active listening

A Year 8 class in Osset School, West Yorkshire, is presented with an unfamiliar object as a starter activity. They have to ask the teacher questions about what it is made from and its particular properties in order to identify its use.

The teacher uses a 'no-hands' rule to ensure that a range of pupils ask questions. They do this for two minutes then talk to a partner to decide what they think it is. They then contribute their ideas.

The structure of the session ensures that the teacher chooses the pupils to ask the questions and so promotes maximum oral interaction. Pupils have a reason for listening to the questions and responses as they have to decide what the object is. They then have time to talk together before making their suggestions.

Strategies to develop speaking and listening

- Make language structures explicit in lesson objectives and planning.
- Model and explain the purpose and form of language structures involved in talk activities.
- Model the use of tools and other equipment, using clear explanations of how and why the equipment should be used.
- Model the design process, paying particular attention to specialist vocabulary.
- Set expectations for use of particular formal language in presentations and evaluations and model it.
- Display key vocabulary for the lesson and refer to the words on display. These words could be linked to pictures of tools and materials or to the objects themselves. Only display the vocabulary needed for the lesson to avoid pupils learning EAL being swamped.
- Group and regroup pupils with clear criteria related to the lesson's objectives and available peer support.
- Create opportunities for pupils to be active listeners, by inviting comments from a range of pupils, asking questions and expecting pupils to ask questions for themselves.



- Provide a purpose for listening. For example, pupils watching a video can be told to listen for certain things: 'This part of the video gives three reasons why people would use hardwood in furniture making. Listen carefully to see if you can spot them.'
- Provide a listening frame for pupils to use if they have to listen for a prolonged length of time, such as when watching a video.

classroom
example

Using a listening frame

A Year 8 design and technology class are working on differences between hardwoods and softwoods. The teacher has prepared the class by outlining the main characteristics of different woods and has carefully modelled and explained the words that pupils will need to understand.

Pupils have been provided with a listening frame to focus their listening and help them pick out the main points from the video. The activity will be completed in pairs, which have been organised to ensure that pupils learning EAL are grouped with fluent speakers of English. The pairs have to discuss their ideas before completing the task.

Hardwoods and softwoods

Work with a partner. When you are watching the video, fill in information in the chart about each of the types of wood.

	Hardwood	Softwood
Names of trees		
Appearance		
Where do they grow?		
Durability		
Uses		
Finishes		
Easy or difficult to work with		
Costs		
Environmental impact		

discussion
points

Speaking and listening

- *How do you currently involve your 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 design and technology lessons in your school.*



Pupils learning design and technology are often expected to read texts as part of research tasks. Reading for information requires the reader to be able to focus on the specific information they need to complete the task they have been set. Many pupils learning EAL are likely to need continuing support to access meaning and use the information in the texts provided in design and technology lessons. The *Literacy across the curriculum* folder has two useful modules on reading that provide further guidance: module 5, 'Active reading strategies', and module 6, 'Reading for information'.

Pupils learning EAL will need structured support and active tasks to help them to begin to engage with text and to utilise a range of strategies for reading for different purposes. Depending on their previous experience, confusions can arise with the following:

- cultural references – for example, references to common aspects of life in Britain which may be unfamiliar;
- reference in text, where meaning is carried across sentences and paragraphs through reference (to previously stated nouns) using pronouns (*it, they, he, she*);
- meaning carried through the use of complex sentences or clause construction in some texts;
- use of the passive voice, particularly in design and technology textbooks and reference materials;
- contextual definitions of words that can have different meanings from those encountered elsewhere, such as *file, plane*;
- subject-specific vocabulary and technical terms which have very specific meanings.

Strategies to develop reading

- Model strategies for reading texts – for example, skimming, scanning, reading on, using images, subheadings etc. – during whole-class sessions and in small groups. Be explicit in describing the strategies you are using as you model them. For example, draw reference links with arrows or mark textual clues in colour. Relate this to the lesson objectives and to the purpose for reading.
- Use strategies which help to structure reading, such as DARTs (directed activities related to text). These help pupils to access text and focus on the information they need. DARTs should be used as part of interactive whole-class teaching and collaborative group and paired work so that pupils can try out their ideas orally.

Examples of DARTs include:

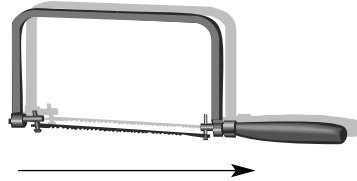
- sequencing;
- prioritising;
- matching pictures to text, such as matching pictures of tools and equipment to their names and uses – labels could also be made in pupils' first languages, if this is possible;
- matching phrases to definitions;
- matching examples of cause and effect;
- filling in gaps in text;
- the use of true/false statements;
- matching concepts to examples;
- sorting to determine which information is not needed for a piece of work;
- matching visual clues with text.



Matching visual clues with text

Pupils at Durants School in Enfield, London, are learning which tools to use for particular purposes when they are cutting materials. They have been given information about the tools to help them decide which one is best used for which purpose. In pairs, they talk about the information and then answer the questions.

Coping saw



Saw cuts in the direction of the arrow

A coping saw is designed to cut curves in wood and plastics. It is made from a metal frame fixed to a wooden handle, using a screw that tightens or loosens the blade. The teeth of the blade should face towards you when you are holding the handle.

What can I learn from the picture? _____

What can I learn from the text? _____

What are the advantages of using this tool? _____

What are the disadvantages of using this tool? _____



Reading

- Which aspects of reading do your pupils learning EAL find particularly challenging?
- What do you currently do to support them with reading tasks in your lessons?
- Do you provide opportunities for analysis of text to promote more independent study for pupils learning EAL?
- Identify which suggestions listed above could be developed further in teaching.

Pupils are often expected to write as part of the planning and evaluation of their practical work. Many pupils learning EAL may experience and demonstrate particular difficulty in their writing. Oral language use may be more fluent and mislead teachers as to the amount of specific targeted teaching required for written expression. In general, as for formal speaking and reading, the processes of writing need to be explicitly modelled by the teacher and supported through collaborative activities and guided group work. After this experience, carefully planned frames and sentence starters can support pupils toward independent writing.

Pupils will also need to experience reading good, clear examples of the kind of writing which is required for the task. Writing activity needs to be preceded by purposeful talk so that pupils can hear and rehearse some of the sentences they will need in order to develop a mental model ('a voice in the head') of the English structures required.

classroom
example

Group evaluation of a product

Pupils in year 7 at Plumstead Manor School in Greenwich, London have been designing and making pencil holders. The first stage of the evaluation was done in groups. This allowed pupils to discuss their evaluation and also allowed native speakers of English and fluent learners of EAL to model the use of appropriate language. The groups' comments were recorded which enabled individual pupils to use the written comments as models for their own writing.

Pupils learning EAL may show patterns of error when writing in English which are related to their experience of the structures in their first language. Confusions can arise. It is helpful if a teacher can identify patterns of error and talk about these with the pupil.

Strategies to develop writing

- Modelled writing: demonstrate how writing is composed and refined, especially at word and sentence levels.
- Shared writing: include pupils in a shared writing activity to which they contribute, to support and shape their first attempts at writing in a whole-class context.
- Shared reading of pupils' writing: explicitly identify successful conventions.
- Guided writing: this allows pupils' writing targets to be addressed through interactive focused teaching.
- Provide opportunities for group evaluations of products made by pupils.
- 'Scaffold' writing through writing frames etc. It is important that 'scaffolding' is scaled down and removed once it is no longer necessary.
- Structured questions will allow answers to be combined as continuous prose.
- Provide paragraph headings.
- Diagnostic marking: ascertain the most commonly made errors by close-marking pupils' work. These can indicate writing targets for individuals or groups of pupils.



A 'scaffold' to help pupils prepare for writing

A Year 9 group has been studying packaging prior to designing their own. They have to write about the particular types of packaging they are studying and have been given a writing frame to help them. The writing frame is varied, providing decreasing support as they go through the process.

Packaging

Look at two types of packaging. Write down what each type of packing is for, what it is made from, who it is designed to appeal to and whether it is fit for its purpose

Package 1

Packaging for _____

This packaging is made from _____

It is meant to appeal to _____

It is fit for its purpose because it is:

- colourful;
- easy to hold;
- watertight;
- waterproof;
- unbreakable;
- lightweight;
- non-slip;
- easy to open.

It is not fit for its purpose because _____

I would change it by _____

Package 2

Packaging for _____

This packaging is made from _____

It is meant to appeal to _____

It is fit for its purpose because it is _____

It is not fit for its purpose because _____

I would change it by _____

Writing

- Which aspects of writing do your pupils learning EAL find particularly challenging?
- What do you currently do to support them with writing tasks in your lessons?
- Identify which suggestions listed above could be developed further in your teaching.



Resources and further reading

Educational inequality: mapping race, class and gender, D. Gilborn and H. Mirza (Ofsted, 2000; ref: HMI 232)

Inclusive schools, inclusive society, R. Richardson and A. Woods (Trentham Books, 1999)

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

Key Stage 3 National Strategy *The foundation subjects training folder* (DfES ref: 0350/2002)

Managing support for the attainment of pupils from minority ethnic groups (Ofsted, 2001)

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

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

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

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

Supporting refugees in 21st century Britain, J. Rutter (Trentham Books, 2001)

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

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

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