Sreating effective learners

Guidance

Curriculum and

Senior leaders, subject leaders and teachers in secondary schools

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Unit 13: Developing reading

Pedagogy and Practice:

Teaching and Learning in

Secondary Schools

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How to use this study guide

This study unit offers some practical strategies that teachers use to develop reading. The techniques suggested are tried and tested; they draw on both academic research and the experience of practising teachers.

By working through this guide, you can build your teaching repertoire step by step, starting with strategies that are easy to implement and moving on to those that will help pupils develop their skills still further. The unit contains 'reflections', to help you reflect on an idea or on your own practice, as well as practical tips and tasks to help you consider advice or try out strategies in your classroom. There are case studies to exemplify particular points, a summary of the research and some suggestions for 'next steps' and further reading. The final page invites you to reflect on the material and to set your personal targets for the future.

You can work through this unit in a number of ways:

- Start small; choose one class to work with. Ask another teacher to help by talking through what you intend to do and to act as a mentor.
- Work with another teacher or group of teachers who teach the same class.
 Work together on your approach to developing reading. After three weeks compare notes. Discuss which strategies are the most effective and why.
- Find someone to pair up with and team-teach. Design the tasks together and divide the role of teacher in the lesson between you.
- Work with a small group of teacher-researchers within your school. Use the guide to help you focus your work as a professional learning community.
 Record successes in your CPD portfolio.
- Identify sections of the unit that are particularly relevant to you and focus on those.

There is space in this study guide for you to write notes and responses to some of the questions, but you may also find it helpful to keep a notebook handy. For some tasks, you might want to make an audio recording or video of yourself in action so you can review your work more easily. You could add this, along with any other notes and planning that you do as part of your work on this unit, to your CPD portfolio.

The evidence of work you gather in your portfolio could count as points towards accreditation of an MA, or could support your application for membership of a professional body, such as the General Teaching Council of England (GTCE). It could also be used to support an application to reach threshold or Advanced Skills Teacher status.

You will need access to video sequence 13, Developing reading, when working through this unit.

Developing reading

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Introduction

Successful reading

In order to read well, pupils need to orchestrate a range of skills from basic decoding through to inference, deduction and being aware of the writer's purpose and how that affects the choices they made.

Successful readers:

- are confident in what they are doing and know how they should approach and read a text:
- recognise that texts are about much more than the words on the page;
- predict what will happen next;
- ask questions of the text;
- make links with other texts they have read both within and across various media:
- are able to relate what they read to their experience;
- pass judgements;
- evaluate text for veracity and usefulness.

Common issues

Reading is a complex active process in which readers use past experience and present skills to construct meaning. One of the most common reasons for lack of engagement in the classroom is the difficulty experienced by many pupils in working with texts. This is clearly most pronounced in classrooms where a high proportion of the pupils need support with literacy. However, strategies for focusing on the structure and meaning of different texts are applicable to all pupils. Those learning English as an additional language and/or those from ethnic minorities or socially challenging backgrounds may need particular support in accessing formal, more academic texts or those which depend on metaphor or cultural knowledge for their meaning.

In many classrooms texts are made increasingly easy for pupils in the mistaken belief that this supports pupils who might struggle. Oversimplification results in texts that lack any challenge, interest or exemplars of good writing. It is better to prepare pupils for a text and teach them how to read it until they can make those choices for themselves. By Key Stage 4 pupils should be able to read effectively without support. However, you may need to have guided groups for the less confident as texts become more complex.

Resolving the issues

Pupils are more likely to complete a reading task successfully if they have:

- a good working knowledge of subject-specific vocabulary and how this may vary from meanings in everyday life;
- support from the teacher about which approach to reading they might need through modelled and/or shared reading;
- a chance to access their prior knowledge before beginning this cues them in to the subject as well as permits you to deal with misconceptions;
- support for how to make notes or record the information;
- ways of monitoring their meaning as they read;
- a chance to work together, with you supporting groups according to need.

1 Engaging with the research

The research on pages 18–21 is taken from the background briefing paper: *Reading and the Key Stage 3 Strategy.*

Task 1

Research 20 minutes

Read the summary of research, pages 18–21 upon which reading in the Strategy is based.

- Note particularly the teaching strategies which improve comprehension.
- Reflect on how they match the way you were taught comprehension at school.
- How far does your current practice as a teacher match the way you were taught at school and/or the methods advocated in the research?

2 Subject-specific vocabulary

Your department may already have word walls to which pupils can refer. However, it is vital that these words are explicitly taught for meaning. Vocabulary needs to be contextualised, so the words on the wall should only relate to the work in hand. The more explicit the teaching of vocabulary that is done in Key Stage 3, the better pupils will manage in Key Stage 4.

Task 2

Words and their meanings

10 minutes

Consider the following words and how their meaning varies depending on the context in which they appear.

Word	Meaning 1	Meaning 2
pitch	field of play (PE)	acuteness/graveness of tone (music)
volume	degree of loudness (general/music)	large book (general/English)
bias	subjective point of view (general/English)	cut diagonally across the warp (textile technology)

How many other meanings can you think of for volume and pitch?

Task 3

Exemplification of subject-specific vocabulary 30 minutes in reading

Watch video sequence 13a. It is from *Extending literacy across the curriculum 2*, and shows a teacher teaching RE to a mixed-ability Year 8 group. As you watch the video, focus on the following.

- What does the teacher see as the issues for vocabulary in the lesson?
- How does she stage the learning to ensure pupils have grasped the meanings of the relevant vocabulary?
- How are the pupils learning English as an additional language supported in their understanding of key words?
- How does the vocabulary work contribute to the overall success of the lesson?
- What are the implications of the extract for your teaching?

Task 4

Classroom assignment: subject-specific vocabulary

10 minutes

Think about a topic you will be teaching shortly. List the vocabulary pupils might need and decide how you will familiarise pupils with it, if necessary.

Practical tips

- Pupils are more likely to remember vocabulary if they investigate it or work out meanings for themselves in pairs or groups.
- It can be helpful to make links to affixes if that is relevant, e.g. photo
 meaning light in photography and photosynthesis; bio meaning life in
 biography and biology.
- It helps if pupils record the vocabulary and its relevant meanings on posters as an *aide-mémoire* and/or develop their own glossaries.
- You might find it helpful to talk to a colleague about their subject-specific vocabulary and whether there are explicit links like the above which you can both make to demonstrate the *portable* nature of some affixes.

3 Approaches to reading

Pupils need to be told how they should read until they can select the appropriate approach for themselves. You may need to model the approach you think is most helpful so that pupils can see how it is done.

- **Scanning**: searching for a particular piece of information, e.g. a phone number.
- **Skimming**: glancing quickly through to get the gist, e.g. the sub-headings in a textbook to see whether there is anything pertinent.
- **Continuous reading**: uninterrupted reading of extended text, often for pleasure, e.g. a novel or travel guide.
- Close reading: careful study of a text, which includes pausing to look back or
 to think in order to examine the text in detail, e.g. studying a text to provide a
 summary for colleagues or selecting key reasons for events and evaluating their
 veracity.

Reflecting on reading approaches

10 minutes

Reflect on your subject and which approaches are needed and when. List some reading activities and the approaches pupils would need to fulfil the task. Think about when pupils need more than one approach, e.g. skimming to find an extract to close-read, or scanning the index prior to skimming and close reading.

Reading activities	Approaches pupils will need

Task 6

Classroom assignment: approaches to reading

10 minutes

When planning your next reading activity, plan how you will tell pupils which strategy to use.

Plan to check whether pupils know what to do and model the process if they are unsure. Modelling will make explicit the process you are going through as a reader. It might be the first time you have thought about what you actually do. Making what you do explicit to pupils will guicken the process for them.

Reflect afterwards on the successes and challenges of what you did.

4 The research process – reading for information

Task 7

The research process

20 minutes

Listen to the audio extract on the DVD, in which Maureen Lewis and David Wray talk about the EXIT model (Extending Interactions with Texts) which is useful when approaching a research task or reading for information. They discuss some preconceptions about reading and how to support pupils in the process.

Use the sheet below to record the purposes of the various aspects as discussed by Wray and Lewis.

Process stage	Purpose
Activating prior knowledge	
Establishing purposes	
Locating information	

Task continues

Adopting an appropriate strategy	
Interacting with the text	
Monitoring understanding	
Making a record	
Evaluating information	
Assisting memory	
Communicating information	
which sugges	text adapted from the EXIT model in the table on the next page, ts teaching strategies for the various stages. Begin to plan these your teaching.

The four stages of research skills

Stage	Activities	Strategies for support	Pupil questions
Stage 1 – Establishing purposes	 Generate and follow an enquiry Define audience and form of outcome (poster, oral presentation, leaflet, PowerPoint, report) Generate ideas – activate prior knowledge in relation to a topic Ask questions which narrow down the field of research and make it manageable 	 Tree diagrams, spider diagrams KWL (What I Know, what I Want to know, what I have Learned), QUADS (Question, Answer, Details, Sources) grids, model their use if necessary Teacher to model deductive questioning 	 What do I already know about this subject? What do I need to find out and where will I go for the information? Who is this for? What will it look like? Who would it be good to talk to about this?
Stage 2 – Locating information	 Locate and list useful sources: texts/websites/experts Recognise and use page layout and organisational patterns of information texts Use search engines such as contents/index/glossary/keywords/hotlinks Active reading strategies: skim a text for overall impression and main points; scan a text to pick out specific information using key words Select relevant information, reject irrelevant (however interesting) – highlight, textmarking 	 Lead a session on evaluating texts – which is useful? Teacher models through shared reading of different texts and verbalising selection decisions Teacher models scanning, skimming and noting pages to return to Essential/Useful/Optional grid 	 Where and how will I get this information? How should I use this source of information to get what I need? What does the reader need to know?
Stage 3 – Interacting with the text	Cluster information under headings and sub- headings (create categories/classifications)	Teacher models note- taking, introduces abbreviations and symbols	 What should I make a note of? Which items should I believe and which should I keep an open mind about?

Table continues

- Make notes: collect evidence under specific headings
- Identify bias, discriminating between fact and opinion
- Select visuals and draw diagrams
- Teacher prepares pupils for technical and specialist vocabulary
- Teacher demonstrates identifying bias, makes explicit ways to interrogate a text
- Teacher models checking, crossreferencing and how to deal with difficult or confusing material

- What can I do to help myself understand this better?
- What can I do if there are parts I do not understand?

Stage 4 – Shaping and communicating information

- Organise and re-present notes and references as a coherent text (oral or written): shaping/ clustering/creating categories of information
- Consider needs of the audience – create introduction, links between sections, conclusion
- Evaluate own and peer results

- Teacher shares effective examples
- Ensure time allowed for discussion; rehearsal before writing
- Shared writing of an introduction/ conclusion
- How can I best communicate this?
 Does it need to be on paper? (taped radio programme, a wall display)
- Which is the best section?
- What might I have done differently?
- What have I learned about research?

Adaptation of text from Wray, D. and Lewis, M. (1996) *Extending literacy. Children reading and writing non-fiction*. Routledge. © Maureen Lewis. Used with permission.

Practical tip

When accessing prior knowledge, try a snowball activity which is discussed in unit 10 Group work, section 3. This helps pupils increase their own knowledge as they share what they know. Conclude with a class discussion, concept map or list of what is known. This will also help you fill any gaps or correct any misconceptions before the pupils read on.

Classroom assignment: planning for reading

10 minutes

Next time pupils are reading for information or embarking on a research task, plan to access their prior knowledge and use it to plan the questions their research will answer. Questions could be divided amongst the class to speed up the research process and then responses brought together at the end.

Practical tips

- Use blank OHTs or PowerPoint slides for pupils to record their findings.
 They can then easily feed back to the whole class; such activities ensure they have a tidy record and permit you to assess what they have done.
- It can help to prepare and share the work with a colleague so the respective classes can feed back to each other.
- GCSE groups could prepare information leaflets or fact sheets for Key Stage 3 pupils.

5 Directed activities related to text (DARTs)

Active reading strategies are the key to the EXIT model as they encourage pupils to engage and process text so that they understand it. These strategies come under the general term of DARTs.

Directed activities related to text (DARTs) are strategies for processing texts developed by Lunzer and Gardner in the 1970s and 1980s. DARTs encourage pupils to read a text carefully, to go beyond literal comprehension and to think about what they read. ('Text' can be interpreted broadly and includes, for example, visual texts such as pictures, diagrams and graphs.)

Advantages of DARTs

- The use of DARTs is popular with pupils because they seem a bit like games or puzzles.
- They do not require definitive answers, thus enabling pupils to be tentative and exploratory.
- They offer a good focus for group work.
- Some initiative is handed over to the pupils.
- They are engaging and encourage teachers and pupils to tackle difficult texts.

Categories of DARTs

DARTs can be grouped into two main categories.

Reconstruction activities

These activities use modified text. The original text is broken down and given to pupils either in segments or as blocks of text with gaps. Pupils use prediction and then fill in gaps or sequence segments to reconstruct the text. This type of activity can help pupils develop an understanding of the structure of different text types. The following are examples of reconstruction activities.

- Text completion (cloze): Pupils predict deleted words, sentences or phrases.
- **Diagram completion**: Pupils predict deleted labels on diagrams using text and other diagrams as sources.
- Table completion: Pupils predict deleted items using table categories and text as sources of reference.
- Completion activities with disordered text: Pupils predict the logical order for sequence or classify segments according to categories given by the teacher.
- Prediction: Pupils predict the next part(s) of a text.

Practical tip

Cloze exercises need careful planning. Pupils can often choose the word from its grammar rather than any engagement with meaning. It can be better to allow pupils to choose the words for themselves rather than from a teacher-given list. It is also better if there is a range of possibilities and pupils have to explain their choices: refer back to the video sequence in the RE lesson in task 3 where the teacher insists on explanations for choices.

Analysis activities

These activities use unmodified text. Pupils select specific information from the text and then represent it in a different form. This type of activity helps pupils develop their analytical skills. The following are examples of analysis activities.

- Underlining or highlighting: Pupils search for target words or phrases that relate to one aspect of content, for example words or phrases that support a particular view.
- Labelling: Pupils label segments of text, for example they might label a scientific account using a set of labels provided (e.g. prediction, evidence and conclusion).
- Segmenting: Pupils segment paragraphs or text into information units or label segments of text.
- Diagrammatic representation: Pupils construct diagrams from text, for example flow diagrams, concept maps or labelled models.
- **Tabular representation**: Pupils extract information from a written text, then construct and represent it in tabular form.

Practical tip

A school in north-east England reported that it had raised attainment at a stroke by using some intervention money to buy every pupil in the school a highlighter pen and teaching them how to use it.

Pointers for planning DARTs

- Time is required to train pupils to talk constructively in pairs and groups, if it is new to them. There is more on developing the necessary social skills in unit 10 Group work, section 5.
- If you laminate resources such as sequencing strips or texts for highlighting, they can be used again.
- Learning may be implicit. Plan to draw out the learning and how it was learned, and relate it to subject-specific objectives. This develops the metacognitive aspects discussed in the research.

Practical tips

Use of DARTs is most effective when:

- worked on in pairs or small groups;
- the emphasis is not on finding a single 'right' answer but on giving reasons for answers;
- speaking and listening is the main activity, because the discussion of possibilities leads to closer examination of the text and develops engagement and understanding.

Care must be taken:

- not to overuse DARTs they can then become counterproductive;
- to make sure that texts, although challenging, are also accessible.

Text restructuring

Text restructuring involves reading a text and then recasting the information in another format – for example flow charts, diagrams, Venn diagrams, grids, lists, maps, charts and concept maps – or rewriting in another genre. The strategies involved in recasting information are also useful for making notes. Depending on the format of the original text and the recast text, skills used will include:

- identifying what is important and relevant in a text;
- applying what is known to a new context;
- remodelling the content and format of the text;
- classifying (being aware of the characteristics of) different genres;

- reading critically;
- summarising and prioritising;
- writing and designing.

Case study 1

At the end of a unit on the slave trade taught to a Year 9 class a history teacher wanted to use the Durban Conference on Racism, which took place in 2001, as a context for a text-restructuring activity. The end-product was to be a debate on the question: 'Should the British government pay reparations to Africa for the ongoing effects of the exploitation of its natural resources that began with the slave trade?'

He planned the activity as follows.

- **Step 1**: Share the learning objective of the lesson by using the key question: Should the British government pay reparations to Africa for the ongoing effects of the exploitation of its natural resources that began with the slave trade? At this point, explain the key phrases and the expected learning outcomes.
- **Step 2**: Explain the concept of reparations using the Durban conference as the context from which examples and illustrations can be drawn.
- **Step 3**: Provide the text-restructuring grid [below] for pupils to use when analysing the historical sources provided. Pupils will have seen some of these sources before in a different context. Give them 15 minutes to consider as many sources as possible from the selection provided and make a judgement about Britain's culpability in relation to each source used.
- **Step 4**: After they have looked at the sources, give pupils a fixed time to prepare their contribution to the debate. Explain the format for the debate, including guidelines for participation.
- **Step 5**: The whole class, including those who presented arguments, take a vote. In the plenary ask pupils to explain why they voted as they did, selecting the pieces of evidence that carried the most weight for them.

Instructions for pupils: Look at the sources provided and complete the grid.

For the purposes of the debate, choose three pieces of evidence that most show Britain's responsibility or lack of responsibility depending on the overall conclusion you have reached.

Source	Conclusion drawn from the source (proves Britain was responsible or not)	Explanation of how the source supports the conclusion drawn
1		
2		
3		
Overall conclusion		

Classroom assignment: text restructuring

15 minutes

Create your own text-restructuring grid. It can be designed as a general-purpose tool that will support many different learning objectives. You could choose one of the following.

- A compare-and-contrast grid that requires pupils to look for similarities and differences. The text selected for use with the grid can be visual (e.g. two painted portraits with subjects in a similar pose but in different artistic styles) or written (e.g. two news reports dealing with the same event but from two different newspapers, one broadsheet and one tabloid).
- A cause-and-effect grid that requires pupils to highlight or underline key
 events which are then sorted under the headings cause and effect. Allow for
 ambiguity: some events might be categorised as both! Narrative texts or
 recount texts are best for this kind of activity.

Plan the use of your grid into a lesson where the activity is appropriate to the learning objectives. Make a note of how pupils responded to the task.

Practical tip

Always be prepared to ask pupils:

- What makes you think that?
- What tells you that in the text?
- Find me a word/phrase/sentence which proves your view.
- How does it prove your view?
- How does that compare with ...?

There is a more extended account of the use of DARTs in module 5 of the Key Stage 3 *Literacy across the curriculum* training materials. You will also find support in the *Literacy for learning* materials where there are examples of reading activities for your subject.

6 Making notes

Many of the DARTs activities guide pupils into recording what they have learned rather than just asking them to take notes. However, there are times when notes are required, perhaps as an *aide-mémoire* for later reference or as part of preparation for a presentation.

Wray and Lewis remark that pupils are rarely taught to take notes, yet we expect them to be able to do it easily by Key Stage 4. They comment that pupils will often just copy chunks of text as they cannot prioritise or decide what is relevant, and this may match some of your experience.

Note-taking involves complex skills:

- close reading, listening, watching;
- making sense of an original text;
- determining what is relevant;
- identifying relationships between ideas;
- understanding how the writer has arrived at the key ideas;
- critically reflecting on the validity of the ideas in the text;
- selecting ideas appropriate to the task;
- transforming the language of the original into a form which is meaningful to the reader, even when they are producing an aide-mémoire for themselves;
- abbreviating language to produce a summary.

Task 10

Case study

15 minutes

The notes reprinted below came from a Year 8 pupil who was asked to *make notes on pollution from your own reading* as a homework assignment.

Read through the response and decide:

- how far the way the task was set contributed to the pupil's difficulties;
- what other difficulties the pupil had use the above list to support you;
- what you could do to make the task more focused for the pupil.



Task 11

Why take notes?

10 minutes

Reflect on:

- why you ask pupils to take notes;
- when you ask pupils to take notes;
- how you ask them to do it;
- how you prepare them to do it;
- how you could improve the process based on what you have read so far.

Task 12

Classroom assignment: planning note-taking 10 minutes

When planning the next note-taking exercise, plan to explain:

- why pupils need to do it;
- how they should do it;
- how you will use what they do, e.g. as an assessment or to check their understanding.

Then use your experience in aspects of the EXIT model to stage the process.

Practical tips

- It might help to work with a colleague teaching the same class as you but in another subject so pupils begin to transfer their skills across the curriculum.
- There are examples of note-taking formats in module 10 of the *Literacy* across the curriculum folder (DfEE 0235/2001).

Summary of research

Recent research into reading comprehension (or making meaning from texts)

Over the last few years there has been a renewed research interest (Pressley 2000, Kintsch 1998) into what is called, in the USA, 'reading comprehension'. This renewed research interest is not, however, a return to the concept of comprehension current in the period from 1945 to 1980. At that time the research was characterised by attempts to identify the sub-skills of comprehension, then to establish some sort of hierarchy and then to teach these identified skills to pupils in progressive order. (Such an approach is still to be found in some reading comprehension exercises.) Rather, the renewed research focus is based on seeing the child as actively engaging with the text to create meaning. It emphasises the acquisition of strategies whilst engaged in authentic reading, rather than being taught as a separate suite of skills; it has broadened the range of strategies to include both cognitive and interpretive strategies and it uses a problem-solving approach. It also recognises the impact of reader differences and the wider sociocultural context within which any act of reading takes place.

Pressley (2000) has undertaken a major research review in this field and he offers a list of approaches to reading development, and particularly comprehension development, which represent an up-to-date synthesis of all the major strands of research-derived strategies for improving reading. Some of it is particular to Key Stages 1 and 2, but much of it is directly relevant to Key Stage 3.

Pressley's list of strategies places considerable emphasis on various forms of vocabulary work. The importance of vocabulary development is also stressed in the US government's National Reading Panel Report (NRP 2000), which has undertaken a review of the research evidence regarding effective teaching of reading. In looking at reading comprehension it examined 230 research studies and noted three main themes in the research on the development of reading comprehension skills.

First, reading comprehension is a complex cognitive process that cannot be understood without a clear description of the role that vocabulary development and vocabulary instruction play in the understanding of what has been read.

Second, comprehension is an active process that requires an intentional and thoughtful interaction between the reader and the text.

Third, the preparation of teachers to better equip students to develop and apply reading comprehension strategies to enhance understanding is intimately linked to students' achievement in this area.

Extract from the US government's National Reading Panel Report 2000, National Reading Panel. Used with permission.

The second element (intentional and thoughtful engagement between the reader and the text) is also stressed in Pressley's list which puts emphasis on a number of ways in which the student's comprehension might be enhanced through making connections and considering responses. Such activities are characterised as being cognitive and social, and are also active (for example rehearsing prior knowledge, generating mental images, activating knowledge about text structure) and

interactive (for example asking 'why' questions, engaging in reciprocal teaching, working with the teacher and peers).

This emphasis on collaborative and/or interactive approaches to reading comprehension has been a characteristic of research in the field over the past 10 years and draws on theoretical perspectives from the cognitive sciences (for example from schema theory and story grammar) and socio-cultural perspectives (for example the 'teaching models' of Vygotsky and Bruner). The model of teaching advocated by Pressley and the NRPR is therefore a balance of direct instruction along with teacher modelling and guided practice, leading to independent practice and autonomy. This model is one which is reflected in KS3 training.

Both Pressley and the NRPR research overview on comprehension emphasise the crucial role of the teacher in explicitly encouraging the use of comprehension strategies. The NRPR cites evidence to show that the pupils of teachers who consciously included reading comprehension strategies within their reading programmes made better progress in their reading. It seems that comprehension improves when teachers provide explicit instruction in comprehension strategies and when teachers design and implement activities that support understanding (Tharp 1992). Explicitly planning to include such strategies within shared and guided reading would therefore seem to be an essential part of a successful reading programme.

The importance of having a range of learning strategies

It seems from the research quoted above that there is a growing consensus about the kinds of experiences pupils need in order to develop their reading comprehension, in the teaching model and in the range of strategies that might be helpful. The NRPR drew attention to the importance of pupils having a *range* of reading comprehension strategies. Work in cognitive psychology has shown that pupils need to have access to a *range* of strategies to enable development to take place. Siegler (2000) in a recent overview into learning and development makes the point that learners need a range of 'production strategies' (ways of doing things) and that having a wide range of production strategies is important for development to take place. Learners, he claims, add to their repertoire of strategies by:

- observation (watching someone do it);
- discovery/invention (finding out for themselves);
- direct instruction (explain, show, tell, practise, feed back);
- analogy (if this works for X it might also work for Y).

They then go on to refine these strategies by:

- automation (practising it until it becomes habitual);
- reflection (doing something and then thinking about it);
- examination (i.e. social examination, comparing and contrasting with others).

Access to a range of strategies is important for development but also to accommodate pupils' different learning styles. Research into brain function has shown that different areas of the brain are used when different kinds of thinking and learning are required. Some pupils show a marked preference for strategies that

require a particular type of learning to be used. Using a range of strategies ensures that pupils can use not only those strategies that they prefer but also those that require other types of learning to be stimulated. Howard Gardner (1993) has identified seven different aspects of learning. These are:

- linguistic or verbal;
- visual/spatial;
- logical/mathematical;
- physical/kinaesthetic;
- musical:
- interpersonal;
- metacognitive.

Robert Fisher gives a useful summary of strategies to enhance these different types of learning in his book *Teaching children to learn* (1995).

The importance of metacognitive awareness in reading comprehension

Siegler (2000) sees the pupil as moving from acquiring strategies to being able to reflect on their usefulness and compare them with others. This implies a level of conscious decision-making by the pupil. This 'self-awareness' and ability to reflect is important in learning. Gardner (1993) lists metacognitive intelligence as one of the types of learning, but it is one that, until recently, was rarely actively encouraged in many classrooms. Vygotsky (1962) suggested that there are two stages in the development of knowledge: firstly there is automatic unconscious acquisition (we learn things or do things but do not know that we know these things), and secondly there is a gradual increase in active conscious control over that knowledge (we begin to know that we know and that there is more we do not know). The second of these is a metacognitive level of understanding. Over the last decade we have become increasingly aware of the importance of metacognition in learning to read (Baker and Brown 1984). One of the characteristics distinguishing younger readers from older readers, and poorer readers from fluent readers, is that younger and poorer readers often do not recognise when they have not understood a text (Garner and Reis 1981); that is, there is evidence that they are not actively aware of their own level of understanding and are therefore not able to make an autonomous decision to use a strategy to enhance their understanding. Other readers show a greater awareness of their own level of understanding for they will stop when a text does not make sense to them. Some will then go on to select from their range of strategies that which might help overcome their problem.

In shared and guided reading sessions we can model for pupils how fluent readers monitor their understanding and use strategies to clarify their own understanding. These may range from semantic strategies to work out a troublesome word to sophisticated reflections on whether the meaning is deliberately obscure (as in a mystery) or perhaps challenging the author/text because the reader thinks they are incorrect. Such teacher modelling is an important part of the learning opportunities within reading sessions. The work of Gerry Duffy and Laura Roehler (Duffy et al. 1987; Duffy and Roehler 1989) concerning teacher demonstration and modelling is the one most often referred to.

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Next steps

This unit has explored an aspect of teaching and learning. You may wish to develop your ideas further, to consolidate, apply ideas in different contexts or explore an aspect in more depth and innovate.

Reflect

What have been the key learning points for you?

What has been the impact on pupils?

Here are some suggestions as to how you may develop practice further:

- Review the printed materials you have been using, both textbooks and any information or worksheets. How far have they been simplified so that there is little challenge or opportunity to develop pupils' reading skills? Plan to develop or find new materials that will stimulate you and the pupils and then plan supportive approaches. Evaluate the impact on understanding in your subject after a term: what has improved and what has not?
- Talk to the school librarian and see if you can develop a focused research project which you both support. Literacy across the curriculum, DfEE 0235/2001, module 10 looks at using the library / learning centre. Does working together have an improved impact on learning? What else might you do?
- Invite your pupils to evaluate the approaches used and give you feedback about the successes and challenges. Identify any approaches that prove particularly productive and discuss these with your department. Are there any that the whole department could focus on?
- Look at the questions in your subject's GCSE papers: what skills do pupils need to approach them and respond to the best of their ability? Does the textbook you use enable pupils to develop these skills? If not, what could you do to meet their needs?
- If you have a class with low literacy skills, plan to model, share and guide the key approaches to reading. Review progress after a few weeks. Evaluate the impact of each approach on learning.

For further reading the following publication is recommended:

- Literacy across the curriculum. Ref. DfEE 0235/2001.
- Wray, D. and Lewis, M. (1996) Extending literacy, children reading and writing non-fiction. Routledge. ISBN: 0415128293.

Setting future targets

Having considered your next steps, you may wish to set yourself some personal targets to support your own continuing professional development. You could use these ideas to inform your performance management discussion.

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Task 13

Setting your targets

40 minutes

When setting targets for the future you may want to discuss the possibilities with a colleague or your line manager.

Whatever you decide to do, you will need to consider the following.

- What are your objectives for the next year?
- · What are the expected outcomes in terms of pupils' achievements?
- What strategies will you employ to achieve these outcomes?
- · How will you track progress over the year?
- How will you know whether you have been successful or not?

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