Literactive Literacy Strategies

in Years 9 to 13

A Guide for Teachers

A Professional Learning Programme



Te Tāhuhu o te Mātauranga

Effective Hearning programme for

Effective Literacy Strategies is a professional learning programme for secondary school teachers that focuses on literacy teaching and learning.

The programme aims to increase:

- teachers' knowledge about literacy learning;
- teachers' active engagement in literacy teaching and learning in all subject areas;
- students' active engagement in their literacy learning;
- students' independence in their literacy learning;
- students' levels of literacy achievement.

These professional learning materials consist of a folder and a book.

The Effective Literacy Strategies folder includes A Guide for the Literacy

Team and A Guide for the Facilitator and the book is called Effective

Literacy Strategies in Years 9 to 13: A Guide for Teachers.



New Zealand Government

Effective Literacy Strategies in Years 9 to 13 A Guide for Teachers

Ministry of Education

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Foreword

For all students in all subject areas, literacy and language are central to thinking, learning, and achievement. Students need to learn how to use effective literacy and thinking strategies in order to be successful in our secondary school system and to become lifelong learners. Therefore, it is essential that all our teachers are effective teachers of literacy.

The Ministry of Education recognises this and as part of the Literacy and Numeracy Strategy has developed Effective Literacy Strategies in Years 9 to 13. It is a professional learning programme designed to help all secondary school subject teachers. It introduces teachers to effective literacy strategies that cater for the literacy learning and thinking needs of their students. It focuses on:

- literacy and literacy strategies;
- · teaching and learning;
- · professional learning that is sustained over time.

It provides:

- a process that an in-school literacy team can use to identify their school's literacy needs and priorities;
- a process that the literacy team can use to develop an action plan for a literacy initiative;
- materials to use in teacher workshops, which can be customised to suit the literacy priorities of a school and its teachers.

The Ministry of Education would like to thank all those people who have been involved in producing this resource. The result is a resource that provides advice and information to teachers on how to help all secondary students to improve their literacy achievement and become independent learners.

Elizabeth Eppel

Group Manager

Ministry of Education

Elizabeth Eppel

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Effective Literacy Strategies in Years 9 to 13 | A Guide for Teachers



Chapter 1: Introduction to literacy

Effective Literacy Strategies in Years 9 to 13 is a professional learning programme that includes a guide for the programme facilitator, a guide for the literacy team within a school, and a guide for teachers. This book, *Effective Literacy Strategies in Years 9 to 13: A Guide for Teachers*, is intended to be used by teachers taking part in the programme.

The focus of the programme is on effective literacy strategies – what secondary school teachers and students can do when engaging with texts in order to understand and create meaning in any subject area. Although texts can be used and created in written, visual, and oral language, this book and the professional learning programme that it is part of are concerned primarily with literacy in written English, that is, in reading and writing.

Literacy is the ability to understand, respond to, and use those forms of written language that are required by society and valued by individuals and communities.

Ministry of Education, 2003a, page 19

Why is literacy important?

All teachers are teachers of literacy because all students learn through language. Language is fundamental to thinking and learning. Language is the primary means by which we gather and communicate information. The links between language use, thinking, and learning are well known (Bruner, 1975; Vygotsky, 1986). At secondary school levels, students increasingly need to use specific forms of written language to represent and examine their ideas, to formulate new knowledge, and to express their understandings. Literacy strategies are vital for successful learning and achievement in our secondary school system.

Language demands and cognitive demands across the secondary school curriculum are considerable, and so secondary school presents learners with many literacy challenges. In every subject area, students need to read and write increasingly sophisticated texts as they progress through secondary school. The focus of literacy teaching should not be restricted to students in years 9 and 10 or those who have additional learning needs or special language needs. Literacy teaching is just as important for academic success in year 13 as it is in year 9.

Teachers have a responsibility to find out where each individual student is at in their learning. One way to improve the quality of their knowledge of the students is to learn about the students' prior experiences and existing expertise in literacy learning.

Because every [student's] literacy learning is grounded in the culture of their family and community, teachers need to gain a knowledge of the literacy practices of local families and to know how language is used in their students' homes.

... [Students] from the same cultural, ethnic, or socio-economic group can differ markedly, not only in their achievements but also in the knowledge and experiences that they bring to school literacy practices. Generalisations about groups of students can disadvantage some students or groups.

Ministry of Education, 2003a, page 46

Teachers who know about their students' backgrounds can develop a classroom community of learners who view diversity as an asset and are aware of its potential for enriching the learning of both teacher and students.

Teachers who understand the range of literacy needs of all their students can help them develop the language and learning that enable them to both engage effectively with texts and participate in their classroom community.

All teachers are teachers of literacy

Teachers should know about their students' background experiences and home literacy practices.

The aims of the Effective Literacy Strategies programme

Teachers need to raise the literacy achievement of all their students.

The Effective Literacy Strategies programme is a Ministry of Education initiative that aims to raise literacy achievement in New Zealand secondary schools. It is a professional learning programme designed to assist secondary school teachers in all subject areas to learn and teach literacy strategies and thinking strategies to meet the needs of their students. The programme is intended to benefit all secondary students at all levels of the school, whatever their current literacy strengths and needs.

The programme has a practical focus based on a strong theoretical background. It aims to present current thinking about different aspects of literacy and learning, to explore the challenges that they present to teachers, and to introduce a range of literacy strategies that have been trialled extensively in New Zealand secondary classrooms.

The main aims of this professional learning programme are outlined on page 9.

Note that the term "strategies" is used, in this book and this programme, for many kinds of literacy-learning activities that teachers or learners can select and use deliberately for particular purposes.



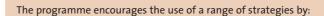
The Effective Literacy Strategies programme aims to

INCREASE:

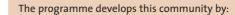
- teachers' knowledge about literacy learning;
- teachers' active engagement in literacy teaching and learning in all subject areas;
- · students' active engagement in their literacy learning;
- · students' independence in their literacy learning;
- · students' levels of literacy achievement;

THROUGH:

 encouraging teachers to deliberately use an extended range of literacy strategies;



- providing a framework that links literacy strategies to the processes through which readers engage with texts;
- providing strategies for specific purposes;
- clearly stating what teachers should be looking for when they observe the students using and practising the strategies.
- developing a sustainable professional learning community that is given time to reflect on and explore teaching practice and students' learning;



- promoting analysis of both teaching practice and student literacy data at each workshop;
- providing an action research framework that helps teachers to "dig deeper" into their practice.
- enabling teachers to help all their students become increasingly independent learners who can sustain their own ongoing learning.



 providing a teaching framework that moves from modelling through to collaboration with and support of students until the students are members of a learning community of effective, independent users of literacy strategies.

The structure of the Effective Literacy Strategies programme

This teachers' guide is part of a facilitated professional learning programme, and the sequence of the chapters in this book is reflected in the workshops of the programme. Workshops 1 and 7 are the two core workshops. Workshop 1 introduces the programme. Workshop 7 summarises what the programme has covered and gives teachers an opportunity to reflect on what they have done, to celebrate their achievements, and to plan for the future. In workshops 2–6, teachers learn literacy strategies and thinking strategies, plan to trial them with students, and share the results of the trials. In each workshop session, teachers spend about half the time learning about and trying out different literacy strategies for improving students' learning.

Chapters 2–6 of this teachers' guide explain the literacy and thinking strategies that this programme introduces. Each of these chapters is structured around four headings.

- What the research tells us. This section of each chapter includes relevant research information about literacy learning.
- What the challenges are. This section of each chapter discusses ways in which teachers can:
 - identify their students' learning strengths and needs;
 - find out what they can do to meet their students' needs;
 - develop independent learners.
- What can make a difference: the deliberate use of literacy strategies. This is the main section, which explains the actual literacy strategies.
- Reflecting and planning. This section consists of a template for teachers to use.

The explanation of each strategy in chapters 2–6 is also structured around a common set of headings. This structure is designed to help the teacher identify a strategy that meets their instructional purpose.

The headings in the explanation of each strategy are:

- **Description** (The name of the strategy is followed by a brief description.)
- The purpose of the strategy (The teacher selects an instructional purpose for literacy learning on the basis of what they know about their students' literacy strengths and needs and about the text that the students need to engage with.)
- What the teacher does
- · What the students do
- What the teacher looks for (This section gives possible evidence of learning that the teacher could look for to establish whether the intended learning is taking place and to plan for further learning.)



Processes for engaging with text

"Learning from, with, and through text" involves a "complex and essentially recursive" set of processes (Wray and Lewis, 1995). The Effective Literacy Strategies programme identifies these processes by the following headings, which are adapted from Wray and Lewis:

- **Drawing on prior knowledge.** The learner asks, for example, "What do I already know about the topic?"
- **Establishing a purpose.** The learner asks, for example, "Why am I doing this task? What do I hope to gain from it?"
- Locating information. The learner asks, for example, "Where do I find the information?"
- Adopting literacy strategies. The learner asks, for example, "What strategies will I use that match both the purpose and the text?"
- **Recording information.** The learner asks, for example, "How shall I record the information I need that matches my purpose?"
- Interacting with text. The learner asks, for example, "How do I get to the information? What strategies and tools should I use?"
- *Monitoring understanding*. The learner asks, for example, "How does this information link to my previous ideas? What do I/don't I understand?"
- Evaluating information. The learner asks, for example, "Have I got the information I need? If there is conflicting information, how do I decide which information source is more useful?"
- Assisting memory. The learner asks, for example, "What is meaningful in what I have learned? How will I use this greater understanding?"
- **Communicating information.** The learner asks, for example, "How could I present my understanding so that it meets the purpose?"

Further questions that relate to the processes are listed in the sections on Developing independent learners in chapters 2–6 of this guide. There is also more information about each of these processes in appendix 2.

The framework on pages 14–15 below provides a structure that includes three stages of planning for literacy teaching and learning. This framework indicates how literacy-learning purposes and the associated processes for engaging with texts are linked both to this planning structure and to a range of literacy strategies.

Every learning task that students work on has a purpose or purposes. For tasks that engage students in reading, writing, or vocabulary learning, the literacy-related learning purposes can usually be expressed in terms of the processes listed above. For example, a student whose task is to gather information on a particular natural resource will engage with texts in the process of "locating information", and their literacy-learning purpose could be "to locate relevant information". (They will also have a content-related learning purpose, which is not included in the framework because content learning differs from subject to subject.)

The framework shows a range of literacy strategies. The range includes strategies that are associated with each process. Teachers can learn to link each strategy to a particular process, purpose, and learning task, and students can be taught to select and use appropriate literacy strategies to meet their literacy-learning purposes.

In this resource, a written text means a piece of written communication that is a coherent, identifiable unit.

All learning strategies need to be deliberately taught ... the teacher will need to explain the purpose of each strategy and model it several times. The students will need multiple opportunities to practise ...

Ministry of Education, 2003b, page 6

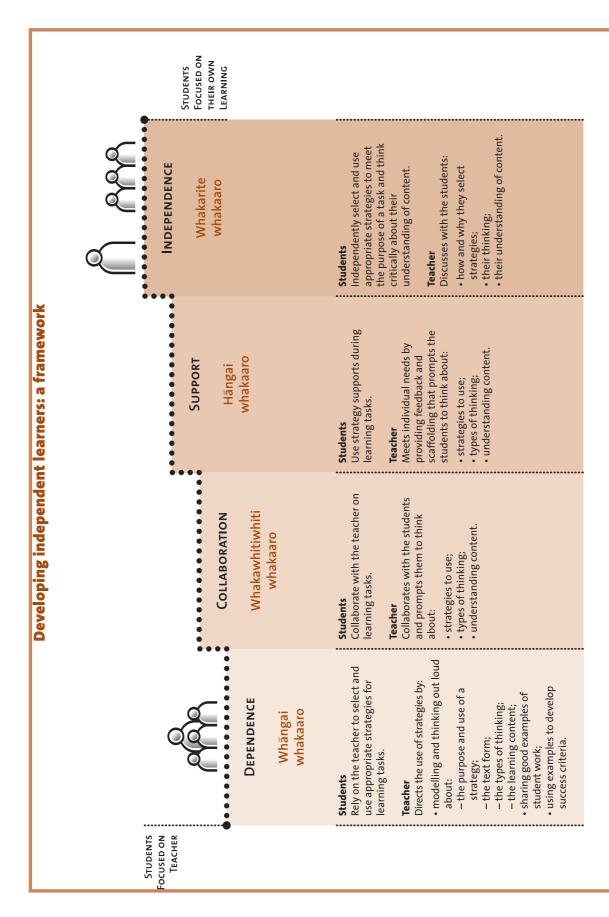
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Many of these strategies can be used for more than one purpose and process. This framework shows only where the strategy is first introduced in this professional learning programme.

It could be useful to put this framework on the classroom wall to remind students to think about the strategies they know and the processes they need to use when they engage with text.

The strategies listed in this framework are representative of the strategies that can be used. It is not a comprehensive or exclusive list. There are similar strategies that teachers can include in their students' learning kete.

The diagram on page 13 explains the various aspects of the framework of strategies for engaging students with texts (see pages 14–15).



The teacher uses their knowledge of the students and the texts to decide on the teachers' role in the learning task. Discussion is needed at all phases.

STRATEGIES

		For writing tasks					Teaching approaches for writing* • Using shared & guided approaches to writing: p.137	Using graphic organisers: p.112 Text-completion activities: p.114 Identifying key avords in a passage: p.115 Summarising: p.116 Condensing information: p.117 Listening & note making: p.118 Dictogloss activity: p.120
Strategies for engaging students with text: a framework	STRATEGIES	For reading tasks	rains ecipro ostbo WLH uide;		wing	• Skimming & scanning: p.66 • Treasure hunt: p.67 • Surveying text structure: p.67	Teaching approaches for reading* Teach Reading to & talking with students: • Us p.80 wr. • Shared reading: p.81 • Guided reading: p.82 Using co-operative learning approaches* • Co-operative reading square: p.121 • Co-operative jigsaw activities: p.122	. บ • ก ค • Su • Su • Si •
for engaging students		For vocabulary tasks	ducing new vocabul				Solving unknown vocabulary Using context clues: p.36 • Interactive cloze activity: p.36 • Clustering: p.38 • Structured overviews: p.40 • Clines: p.41	
Strategies	PROCESSES FOR MEETING PURPOSES	STUDENTS THINKING ABOUT	Drawing on prior knowledge, e.g., What do I already know?	Expecting success in learning	Establishing a purpose, e.g., Why am I doing this?	Locating information, e.g., Where can I find this	Adopting literacy strategies, e.g., What strategy will match my purpose and the text?	Recording information, e.g., How shall record the information I need that matches my purpose?
	PROCESSES FOR M	TEACHER THINKING ABOUT	Activating students' prior understandings & linking these to new information and concepts	Motivating & engaging students	8	Students extracting & organising relevant information		
	STRUCTURE		PREPA			THINKING THROUGH THE LEARNING		

Introduction to literacy 1



STRATEGIES

Combining written & visual aspects of Word-to-sentence activity: p.87 texts: p.87 combining sentences: p.87 Identifying key words: p.85 reconstructing paragraphs: p.89 Identifying main ideas: p.88 Using "comment codes": p.90 Using a three-level thinking guide: p.91	Responding about texts Generating texts: p.95 Using ques:	Reading behind the lines: p.107 Distinguishing between fact & opinion: texts: p.105 p.109 Trash or treasure: Selecting relevant information: p.106	iry p.46 my	Composing paragraphs Using templates & acronyms: p.138 Shared paragraph writing: p.140 Composing extended text Using writing frames: p.141 Sharing quality work: p.142	Nores • The asterisks in the "adopting literacy strategies" boxes above identify teaching approaches that teachers may select to facilitate the teaching of a range of strategies for engaging with text. • Many of these strategies can be used for more than one purpose and process. This framework shows only where the strategy is first introduced in this professional learning programme.
	• Predicting & defining new words: p.42		Opportunities to use new vocabulary Concept circles: p.44 Pair definitions: p.45 Word & definition barrier activity: p.46 Word games: Word guessing; Call my bluff; Taboo: p.47 Picture dictation: p.48		
Interacting with text, e.g., How do! get to the information? What strategies should! use?	Monitoring understanding, e.g., How does this link to my previous ideas?	Evaluating information, e.g., If there is conflicting information, how do I decide which source is more useful?	Assisting memory, e.g., What is meaningful in what I have learnt? How will I use my greater understanding?	Communicating information, e.g., How should I present the information?	
Students thinking through their ideas & developing conceptual frameworks		Students evaluating ideas critically	Students demonstrating understanding of learning		
		USING NEW UNDERSTANDINGS			•

How teachers can make a difference

Teaching practice can be described as truly effective only when it has a positive impact on student achievement. Ministry of Education, 2003a, page 8 The Effective Literacy Strategies programme is based on current research that clearly shows that effective teachers can and do make a difference to students' learning. Effective teaching practice in the classroom has a major impact on student learning, and literacy strategies are tools of effective practice.

Hattie (1999) analysed a considerable number of research studies and reached the conclusion that effective teachers are those who:

- set and communicate appropriate, specific, and challenging goals;
- · structure learning situations so that their students can reach these goals;
- provide reinforcement and corrective feedback to their students;
- encourage their students to understand learning processes and to develop independent strategies for learning.

All teachers can be effective literacy teachers.

Effective teaching practices are those that empower all students to improve their achievement and that reduce the disparities in the achievements of diverse students.

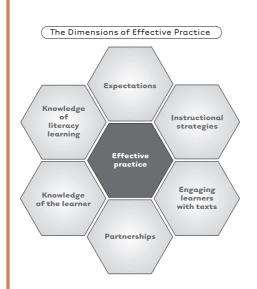
Teachers in all subject areas can improve the literacy levels of their students by applying these principles of effective teaching. They can make a real difference. But in order to set appropriate, challenging goals and to plan suitable learning opportunities for specific groups of students, secondary school teachers first need to:

- learn about their students' backgrounds and prior learning, especially their literacy and thinking strategies and their language expertise (for example, it is critical that they develop partnerships with whānau and with other teachers and that they gather and analyse qualitative and quantitative data about the students);
- develop their knowledge of literacy learning and literacy strategies to enable them to teach literacy and thinking strategies;
- apply that knowledge to the learning in their own content areas.

The Effective Literacy Strategies programme is based on recent theory and practice and provides sound guidance for secondary school teachers who face the challenge of improving students' literacy in any subject area. The kinds of knowledge, strategies, and attitudes that teachers need and the ways they should apply them can be described in terms of six dimensions of effective literacy practice.

The dimensions of effective literacy practice

The diagram shows the six dimensions of effective literacy teaching practice. All teachers should consider how each dimension relates to their classroom practice and their students' achievement.



Knowledge of literacy learning

Knowledge of literacy learning encompasses knowledge about literacy as well as knowledge about literacy acquisition. Literacy is the ability to understand, respond to, and use those forms of language that are required by society and valued by individuals and communities ...

Knowledge of the learner

Knowledge of the learner encompasses knowing about the pathway of progress for each [student] and about the patterns of progress for literacy learners in general at different points in their development ...

The effective gathering, analysing, and using of knowledge about the learner is informed by the teacher's knowledge of literacy learning as well as by the teacher's expectations.

Instructional strategies

Instructional strategies are the tools of effective practice. They are the deliberate acts of teaching that focus learning in order to meet a particular purpose ... The teacher's use of instructional strategies is informed by their knowledge of the learner and of literacy learning. Effective teachers plan the use of instructional strategies, and they also make strategic, "on the run" decisions in the course of their teaching ...

Engaging learners with texts

Engaging learners with texts means placing the use and creation of texts at the heart of literacy learning. Texts exist and can be created in written, oral, and visual forms ... Effective practice involves using and creating rich texts. These relate to [students'] interests, draw on and affirm their social and cultural identities, use authentic language, and motivate and challenge them as learners.

Expectations

Expectations are the ideas that teachers, [students], parents, and communities have about [students] as learners – about their knowledge and expertise, their progress, and their achievement ...

Teachers' expectations shape all aspects of their practice. They impact on learners' patterns of progress as well as on their achievement.

${\it Partnerships}$

Partnerships are collaborative relationships that contribute to and support [students'] learning. Each learner lives in a network of significant people, including their teachers, family, peers, and specialist teachers. Effective teachers recognise the need for, and actively promote, partnerships within these networks.

Effective partners complement one another and value one another's contributions. Each partner has a particular role in the relationship ... Effective partnerships are active, planned, and dynamic.

Ministry of Education, 2003a, pages 12–15

Using literacy strategies deliberately

One of the main ways that the Effective Literacy Strategies programme helps teachers to make a difference is by encouraging teachers to use literacy strategies deliberately. Deliberate acts of teaching are the instructional strategies that teachers use to equip their students with knowledge, awareness, and learning strategies.

Teachers need to plan teaching acts that will enable their students to learn from, with, and through texts. Teachers who are members of an active and supportive professional learning community have access to support, encouragement, and professional feedback as they try out new teaching and learning strategies and become more deliberate in their teaching to meet the needs of their students.

Developing a professional learning community

The primary aim of the Effective Literacy Strategies programme is to help teachers encourage their students to become independent and strategic literacy learners. When teachers are members of a professional learning community in which they are acknowledged, supported, and challenged and feel that it is safe to take risks and share information, they can review and alter their teaching practice so that it makes a real difference to their students' learning.

Teachers who are part of a professional learning community engage in active learning. This includes professional reading and discussion, and it also includes action research undertaken by teachers for specific practical purposes.

Teachers who are part of a professional learning community:

- take part in quality conversations that include discussing specific qualitative and quantitative data to find out about their students' literacy-related strengths and needs;
- take responsibility for their own professional growth and increase their knowledge of literacy learning;
- develop a shared language as they learn literacy strategies and discover how to use and teach them strategically.

The Effective Literacy Strategies programme encourages teachers to trial and refine strategies in the classroom, responding to their students' perceived learning needs, and to gather, analyse, and reflect on evidence of the students' learning and on the effectiveness of their own classroom practice.

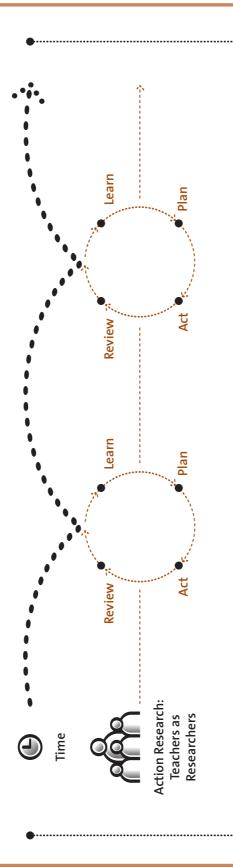
The effectiveness of classroom literacy programmes is greatly increased when the teachers form a professional learning community in the school. This engages teachers in a shared process of enquiry to improve the effectiveness of their teaching practice.

Ministry of Education, 2003a, page 172

This increased knowledge and engagement results in greater complexity, independence, and collegiality in the action research, including increased:

deliberateness and awareness in the teaching act;
complexity of analysis using multiple perspectives during a review;
ability to handle ambiguity and complexity as a

Action research: a framework



As teachers increase their:

- knowledge, based on evidence, about students;
 knowledge of the strategies and processes involved in engaging with text;
 knowledge about the benefits of a professional
 - learning community;
- engagement in the process of action research;

they become more willing to take risks in their practice.

Adapted from Kemmis and McTaggart, 1988, page 11 (see Kemmis and McTaggart, 2000)

ability to experiment in planning.

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... take risks, make mistakes, and engage in honest self-reflection. Hill. Hawk, and

Taylor, 2002, page 12

Action research: teachers as researchers

Action research by teachers has the aim of improving their teaching practice. It involves observing, analysing, reflecting on, and evaluating (as well as appropriately amending) classroom practice. The action research model is fundamental to this professional learning programme because this model focuses on both teaching and learning.

The workshops are spaced so that teachers can reflect on ideas and try out new strategies in their classrooms between workshops. At the beginning of each workshop, teachers are asked to report on their findings, give feedback on how strategies worked, and share ideas and resources.

What do teachers know or need to know about their students' literacy knowledge, strategies, and attitudes? To focus their classroom research, teachers gather and analyse evidence of the literacy achievement of one group of students and concentrate on these students throughout the programme. This information helps teachers to gain detailed knowledge of these students' literacy strengths and needs. The teachers can then use that knowledge to inform their general classroom practice.

Action research: a student focus group

Teachers may already be aware of a small group of students – between three and five individuals – about whom they would like to know more. These students can be the focus group for their action research. The teachers will support the students in becoming more strategic learners, for example, by helping them to decide which strategies to use, which text to use, and how to use it. Teachers will need to keep an ongoing record of:

- the students' literacy knowledge, strategies, and attitudes;
- · their own planned responses;
- their own teaching actions;
- their review of the effectiveness of their actions.

The record should include the teacher's analyses of and reflections on all these factors. Refer to page 24 for a reflecting and planning template to use for this as well as other kinds of reflection and planning.

Developing independent learners

One of the main aims of the Effective Literacy Strategies programme is to develop students as independent learners. All of the strategies in chapters 2–6 can help students to become independent learners.

There are four stages in the process of developing independent learners:

- dependence/whāngai whakaaro students rely on the teacher to select and use appropriate strategies;
- collaboration/whakawhitiwhiti whakaaro students collaborate with the teacher to select and use strategies;
- support/hāngai whakaaro teachers provide supports to enable their students to select and use strategies independently;
- independence/whakarite whakaaro students independently select and use appropriate strategies to meet the purpose of a task.

Introduction to literacy



Teachers initially need to model and explain the strategies and support their students in learning to use them. However, as the students become more familiar with a particular strategy and its purpose, the teacher can gradually provide less support. When introducing new strategies or new and challenging content, the teacher again provides support or "scaffolding" until the students learn how and when to use the strategies by themselves. They will then be able to transfer that learning to other areas.

Teachers need to become thoroughly familiar with each of the four stages of developing independence so that they have a clear picture of each. This will enable them to support their students' development in using the strategies confidently, offering the right amount of support for the stage the student is actually at and encouraging them to move on to the next stage.

The diagram on page 22 shows a framework for introducing new strategies into the classroom.

FOCUSED ON THEIR OWN STUDENTS LEARNING their thinking; their understanding of content. appropriate strategies to meet the purpose of a task and think critically about their Independently select and use **Teacher** Discusses with the students: INDEPENDENCE how and why they select understanding of content. Whakarite whakaaro strategies; Developing independent learners: a framework **Students**Use strategy supports during learning tasks. providing feedback and scaffolding that prompts the students to think about: **Teacher** Meets individual needs by types of thinking; understanding content. whakaaro Hāngai SUPPORT strategies to use; Teacher Collaborates with the students and prompts them to think about: **Students**Collaborate with the teacher on Whakawhitiwhiti COLLABORATION types of thinking; understanding content. whakaaro strategies to use; learning tasks. Students Rely on the teacher to select and use appropriate strategies for learning tasks. modelling and thinking out loud **Teacher** Directs the use of strategies by: using examples to develop - the purpose and use of a sharing good examples of DEPENDENCE the types of thinking;the learning content; Whāngai whakaaro - the text form; success criteria. student work; strategy; STUDENTS FOCUSED ON TEACHER

The teacher uses their knowledge of the students and the texts to decide on the teachers' role in the learning task. Discussion is needed at all phases.



Thinking with students about their learning

Students have to learn how to learn. The evidence from the PISA (Programme for International Student Assessment) 2000 study (see Ministry of Education, 2001b) shows that students need to develop a range of information-processing abilities (both cognitive and metacognitive) and that it is just as important for them to deliberately prepare for learning – "to define their own goals, to be proactive, to interpret success and failure appropriately, to translate wishes into intentions and plans and to shield learning from competing intentions" (Artelt et al., 2003, page 73).

Students and teachers need a shared language to talk about the types of thinking associated with classroom tasks and about literacy strategies and thinking strategies. Many students who already know some terms to describe the writing process – "revising", "editing", and so on – and who are familiar with some pre-writing strategies, such as brainstorming or mind mapping, may not know how to describe their own thinking and learning. Even students who describe instances of creative thinking and memory thinking in conversation may not realise how these processes form part of their learning.

It is very helpful for students to keep learning logs. By using learning logs, students can develop the language, knowledge, and awareness to think strategically and reflectively about their learning and the literacy strategies they use. Monitoring students' learning logs also helps teachers to relate their teaching practice to their students' learning.

Students may keep learning logs in separate books, but logs can also be part of students' everyday work. For example, students could rule a broad margin on each page of their work and use that space to reflect, ask questions, jot notes, and so on.

Refer to appendix 1 of this guide for a brief summary of the purposes of learning logs, a set of "starters" to get students writing reflectively, and a fuller description of the benefits of keeping learning logs. Note too that chapters 2–6 each include specific questions (under the heading Developing independent learners) that students can use in their learning logs.

Reflecting and planning for teaching

Teachers, like students, need opportunities to think strategically and reflectively about their learning. The template on the next page could be used for this purpose. Every chapter of this book includes a copy of this template to encourage teachers to reflect on their work with the strategies in that chapter.

Students need to deliberately prepare for learning.

Reflecting and planning

Reflecting Planning • Trialling a strategy - Focusing on a group of students • Developing a learning community

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Chapter 2: Vocabulary

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Chapter 2: Vocabulary

This chapter focuses on strategies that teachers and learners can use to solve new vocabulary and to discover and reinforce the meanings of the words and terms that they encounter in the various subject areas.

As you read through pages 27–31, you may find it useful to think about the following questions:

- What does this mean for my subject area?
- · What does this mean for my students?
- Which of these ideas was I already aware of?
- · What have I just learned?
- · What else do I want to know?

What the research tells us

Knowing about learners' vocabulary needs

People need to know words and terms in order to develop language and in-depth thinking. Research (for example, Corson, 1997) indicates that students who have a wide vocabulary generally show greater proficiency in learning than those with more limited vocabularies. A learner's vocabulary knowledge strongly influences their ability to comprehend what they read and to write effectively.

Many students whose oral vocabulary is quite adequate for everyday communication have not yet acquired a rich store of words to use for reading and writing. In particular, they may lack knowledge of the academic vocabulary that's important for success at secondary school. All students need planned opportunities to learn, use, and practise, in authentic contexts, the vocabulary that they need in order to communicate about the subjects they are studying.

There is more than one level of knowing a word or term. We can understand many words when hearing them spoken or reading them in a text, even though we do not use these words in speaking or writing ourselves. This is known as our "receptive vocabulary". Our "productive vocabulary" consists of those words that we can actually use accurately, either in speech or in writing. Students need to be able to use the specialised words that they learn.

Not surprisingly, new learners of English have considerably less knowledge of English vocabulary items than first-language English speakers of the same age (Nation, 1990, 2001). Cummins (1989) estimates that it takes two years for new learners of English to be able to communicate effectively at a conversational level. It can take five to seven years for these students to learn to use academic language proficiently.

All students need many exposures to the vocabulary that is new to them. Effective teachers help their students to link new words to their existing knowledge and give them opportunities to reinforce their learning during meaningful communication.

Vocabulary knowledge is crucial to language and cognitive development.

Students usually need direct teaching to acquire the specialised vocabulary that is vital for academic success.

Students learning English as a new language have an urgent need to acquire more vocabulary.

Knowing about different categories of vocabulary

The following vocabulary categories may be useful for teachers to consider. (See Nation, 2001.)

High-frequency words

High-frequency words are the words most often used in a language and make up over eighty percent of most written text. There are about two thousand high-frequency word families in the English language. These include all the basic words needed for communicating in English. A teacher who is aware that some students may not know the high-frequency words in the language they are using at school can plan to teach them these words first, along with a few other words that they need to know, such as the teacher's name.

Specialised academic vocabulary

Students need to learn new, subject-specific terms for every subject that they study at secondary school. For example, in the resources and economic activities strand of social studies, they need to be able to use the terms "supply and demand", "productivity", and "access to goods and services".

Many students know only the everyday meanings of words that also have different, specialised meanings. One reason for students finding certain academic words difficult to learn is that many words have a general, everyday meaning as well as a subject-specific meaning. For example, "volume", "range", and "function" all have both everyday and specialised meanings. Nicholson (1988) found that many students had very strongly established understandings of the everyday meanings of certain words and so they found it hard to grasp that these words also had specialised academic meanings. When discussing subject content with their students, teachers can explore this issue and model using the words correctly in different contexts.

General academic vocabulary

General academic vocabulary includes terms used across the curriculum. Some of these terms, such as "define" and "assess", are often used when giving instructions to students, and others, such as "method" and "survey", are used to describe concepts, processes, and strategies common to many subject areas. General academic words are often used in tests and examinations, and students need to be confident about using such words to "show what they know".

Coxhead compiled her academic word list (a list of general academic terms) by analysing which words were most often found throughout twenty-eight subject areas in university texts in New Zealand and around the world (Coxhead, 1998). A copy of the most common headwords from this list can be found in appendix 3 on page 158. Teachers could check whether their students understand how the words in this list are used in their subject areas.



What the challenges are

To understand subject content and achieve their learning goals, students need to know the relevant vocabulary, including specialised words and terms. The challenges for teachers are:

- · to establish what vocabulary expertise the students bring with them (that is, to know their students);
- to establish ways of building on the students' expertise and teaching them the vocabulary they need (that is, to know what teachers can do);
- to help the students develop strategies to identify and solve unknown vocabulary (that is, to enable them to become independent vocabulary learners).

Are the students aware of the context-specific meanings of the words they need to use?

Knowing the students

Teachers can collect useful information about their students' vocabulary knowledge in their subject area by devising a simple test using the key words of the subject. Monitoring the students' work as they use new words will also provide valuable evidence to use when planning future vocabulary teaching.

Teachers can provide an environment that is rich in subject-specific words. This raises the students' consciousness of words and their awareness of the power and fascination of words. For example, a class could develop a display of "words of the week" or a "word wall", where the students write up new words that they have learned (see Ruddell and Shearer, 2002). This activity need not be limited to newly learned or subject-specific words – it can include any interesting words. As well as giving the message that words are fun, such a display can provide the teacher with useful evidence of their students' developing vocabulary knowledge. One student (quoted in Ruddell and Shearer, page 352) said, "I used to only think about vocabulary in school. The whole world is vocabulary."

All students benefit from thinking and talking about new vocabulary. For students from non-English-speaking backgrounds, it may be best for them to use their first language for this, or to find first language equivalents for new English vocabulary.

Students need to know the vocabulary of specific subjects.

Knowing what teachers can do

Introducing students to new vocabulary

Teachers can identify the key terms needed for understanding and communicating about some specific subject content. This is the vocabulary that the students need to know in order to understand, discuss, and write about the subject content appropriately. Examples of strategies for introducing new words and terms are on pages 33-35.

When deciding which key terms to teach, consider:

- how often the terms are used;
- how important they are for relevant subject-specific learning;
- how important they are for general academic use.

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For some words, a simple explanation from the teacher may be all that is needed. For many other words, the teacher will need to plan how to integrate the vocabulary learning into their teaching of the subject content. Simply giving a word's definition or presenting it in a glossary may not be effective. Students need to link new words with the words they already know and with related words and terms.

It is important to remember that there is a limit to the number of vocabulary items that students can take in at one time. Within one learning session, students should not be expected to learn more than six or seven words.

Helping students to solve unknown vocabulary

Encourage students to actively monitor their own understanding of text. When students get "stuck" in their reading, they should be aware that they can decide to try one or more appropriate strategies. Teachers can help them to adopt and use effective literacy strategies when they come across unfamiliar words and terms. Examples of strategies for solving unknown vocabulary are on pages 35–41.

Giving students opportunities to use new words and terms

Students need many exposures to new words in meaningful contexts.

Plan to provide many opportunities for students to integrate their new words into their spoken and written vocabularies. When students practise using new vocabulary soon after learning it, they are more likely to remember it and to use it appropriately and with increasing confidence.

Teachers can promote vocabulary learning by exposing their students to new words in a range of meaningful contexts and by setting purposeful tasks that require the students to use the words many times. Vocabulary learning should occur in oral language contexts as well as written language contexts. Speaking and listening provide the platform for learning new vocabulary, which can then be used in reading and writing. Discussion and other oral-language activities that are part of the classroom culture help to establish students' newly learned vocabulary as part of their "usable memory". Examples of strategies that provide opportunities for students to use newly learned words and terms are on pages 44–49.

Developing independent learners

Students need to be actively involved in learning subjectspecific vocabulary. Students need to be aware of the strategies that they can use to help them decode and understand unfamiliar words and terms. They will be more successful in learning new words when they consciously take an active part in the learning process. By teaching them strategies that they can use to develop their knowledge of words, teachers empower students to become independent vocabulary learners.

Teachers should encourage all students to try to identify the meaning of unfamiliar words by themselves, first by using context clues and other strategies to work out the meaning and then by checking in their dictionaries.

cabulary

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Teachers could suggest that students use the following questions, at appropriate stages as they learn new vocabulary, to help them think about their understanding.

- What key words do I know already?
- What related words do I know?
- What new vocabulary can I now use confidently to explain my understanding of the subject content?
- What new understandings have I gained?
- What are some examples of context clues that may help me to understand new vocabulary?

These questions could be included in students' learning logs (refer to appendix 1) or put on wallcharts for students to refer to when appropriate.

Teachers model strategies for learning unknown vocabulary, and students practise using these strategies. Effective Literacy Strategies in Years 9 to 13 | A Guide for Teachers

STRATEGIES

What can make a difference: the deliberate use of literacy strategies

The following section (pages 32–49) suggests literacy strategies that teachers can use to:

- introduce new words and terms to students;
- help students to solve unknown words and terms;
- give students opportunities to use new words and terms.

Many of the strategies can also be used by students independently, to further their own learning, when they have seen them modelled and practised them.

These strategies are derived from the work of a number of researchers over the last twenty-five years. They are explained in more detail in Alvermann and Phelps (1998) and in Morris and Stewart-Dore (1984).

TRIALLING STRATEGIES

As you try a new strategy with your colleagues, you may find it useful to think about these questions:

As a learner

- What processes for engaging with text did I use? For example, did I draw on my prior knowledge? Did I set a purpose?
- What kind of language did I use? For example, was I more precise than I used to be in using specialised vocabulary? Did I give more detail than I used to in my descriptions?
- How did the new strategy enhance my understanding of the content?
- What did I learn from others in my group?

As a teacher

- What is happening in my classroom that makes me think this strategy will be useful for a student or group?
- How would I structure the use of this strategy to help my students become more independent?
- How will I monitor my students' learning when they use this strategy?
- How will this strategy enhance my students' understanding of the content?

STRATEGIES

Introducing students to new vocabulary

When introducing new vocabulary, begin by activating students' prior knowledge of the subject content that the terms relate to.

Strategies for drawing on prior knowledge

Find out any existing understandings that the students have of each new word or term. Build on these understandings by modelling the use of some of the following strategies.

- Link the new word to related words that the students know.
- Teach the word in a relevant context, using concrete examples where possible to illustrate the word's meaning.
- Write the word clearly on the board and use visuals, or act out the word, to demonstrate its meaning.
- Divide the word into syllables, if appropriate, and discuss headwords, prefixes, suffixes, and roots.
- Encourage the students to say the word aloud. Explain any unusual spelling patterns. Discuss other words with similar sounds or spelling patterns.
- Help the students to construct a definition when they understand the word.

New vocabulary can also be introduced by using one of the strategies described below: word maps, structured overviews, or clines.

WORD MAPS

This strategy involves the students in brainstorming words that relate to a single "focus word" chosen by the teacher.

The purpose of the strategy

Constructing a word map enables teachers to find out what relevant words the students know already and to introduce new words. The word map shows the students some relationships between words that they already know (for example, how several words can be formed from one root or one headword). A word map can also clarify the relevant subject-specific meaning of a word that has more than one meaning.

What the teacher does

- Choose a focus word for the word map and write that word in a central circle on the board.
- Decide what the various branches of the word map will be. These could be:
 - the focus word itself used with different meanings;
 - other words that have similar meanings;

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STRATEGIES

- words from the same word family as the focus word;
- words that relate to the idea or theme presented by the focus word.
- Write the branches of the map on the board and discuss each branch with the students before starting the brainstorm.
- Ask the students to brainstorm words that relate to the focus word. Record each word on the appropriate branch of the map. The brainstorm can be a think-pair-share exercise before a word is contributed to the class discussion.



• Discuss the words on each branch. Discuss new words, familiar words used in new ways, and relationships between words.

What the students do

- The students suggest words to add to the word map that the teacher is building on the board.
- They discuss the words on the completed word map and the relationships between them.

What the teacher looks for

- Are the students making connections with other words that they know?
- Are they aware that some familiar words may have different meanings in specific contexts?
- Are they using new words independently?

- Are they using words from different word classes, for example, adjectives and adverbs, as well as nouns?
- Are they critically analysing the relationships between words? For example, in
 discussing the completed word map, are they debating whether the meaning of
 one word is closer than another to the meaning of the focus word?

Variation on the strategy

After completing this activity with the whole class, the teacher can use it for various purposes with groups and individuals. For example, the teacher could provide a blank word-map structure with labelled branches. The students could then fill in the spaces.

Helping students to solve unknown vocabulary

Teachers can help students to understand how they decode text. Many readers are not aware of the processes that they automatically use to make sense of written text. Students need to become aware of these processes so that, when they come across text that they don't understand, they can consciously select and adopt strategies to solve the problem.

Adopting literacy strategies

Strategic readers habitually select and use appropriate strategies; often they use more than one at a time. Students need to develop a repertoire of strategies for their independent reading of subject area texts.

Students can be taught to look closely at an unknown word and to use some basic decoding strategies to work out how it sounds and what it might mean. For example, the students can:

- "sound out" the word, break it into syllables, and consider whether that clarifies the word and its meaning for them;
- seek clues to a word's meaning in the prefix, the root word, or the suffix (when they have been taught to recognise these elements).

The unknown word's function in the sentence may be another clue to understanding it.

Native speakers of English can usually recognise the kind of word (for example, noun, adjective, or preposition) that would make sense in a particular place in an English sentence.

When solving unknown words, readers usually combine, in a complex process, their knowledge of words and letters, of the structure of the English language, and of the meaning of the whole text. The section that follows includes strategies for solving unknown words that they meet in text as well as strategies for learning about new subject-specific words.

STRATEGIES

USING CONTEXT CLUES

Using context clues is a valuable strategy that a reader can employ to help them work out the meaning of an unknown word. Students who are reasonably fluent readers (for example, secondary school students who can recognise the written forms of 2500 or more high-frequency words) can use their understanding of the context in which a new word occurs, along with their knowledge of how to decode printed text and their awareness of how the English language works, to infer the meanings of many unknown words. How successful a reader is in using context clues may depend on:

- · their existing knowledge of the subject content;
- the number of unknown words in each sentence (see page 58 in chapter 3 for a simple test to establish this);
- · the type of text and the purpose for reading.

Teachers can encourage their students to adopt the habit of reading on to the end of the sentence or paragraph when they encounter an unknown word. This enables the reader to build up their understanding of the context in which the word occurs. A reader's intelligent guess about a word's meaning is often confirmed as they read on. A text often restates significant content in another way or provides examples that can help the reader to decide whether their prediction was correct.

The meaning of a word is often explicitly given in the text itself, and students can be taught to look for such help. For example:

- there may be a definition in brackets after the word or elsewhere in the text;
- a synonym may be provided;
- a phrase or clause may describe the unknown word.

Most students automatically use many kinds of thinking to decode, comprehend, and question the texts that they read. However, teachers can help their students to develop strategies for solving unknown words, especially those in academic texts, by drawing the students' attention to context clues in such texts. For example, the teacher could model how such clues could be accessed by thinking out loud and suggesting "Perhaps I should read that again" or "Maybe I should read on to see if there's a clue."

AN INTERACTIVE CLOZE ACTIVITY

In this interactive cloze activity, the teacher gives the students a text with some words deleted from it and asks them to fill in the gaps. Many teachers regularly use cloze activities to test their students' knowledge of content or of subject-specific words (by asking the students to read text with specialised words omitted and fill in the gaps). In this version, however, the subject-specific words are left in the text and words that contribute to the general meaning or to the structure of the piece are deleted instead.

The purpose of the strategy

Through this strategy, students learn how to use the context clues in a sentence, paragraph, or whole text to work out the meaning of unknown words and to actively read for meaning. The teacher can use the strategy as the basis for a whole-class language activity that involves discussing words and their contexts.



When students become more skilled at using all the clues available in a text to unlock the meanings of unfamiliar words, teachers need only remind them to use these clues when they go on to read other texts. Gradually, the students learn to use context clues strategically in their independent reading and no longer need reminders.

As the class works on the cloze activity, the teacher can observe how individual students handle the task and note any learning needs that are apparent.

What the teacher does

- Choose an appropriate text similar to one that the students will use, and delete
 a variety of words that are not subject-specific, making sure that there are
 clues in the text for each missing word.
- Delete at least one word that signals the order of ideas for example, "because", "secondly", or "subsequently".
- Include among the deleted words some for which there are several alternatives, because this will promote discussion.
- Give each student a copy of the prepared text and discuss with the students the sorts of clues they could use to identify the deleted words.

What the students do

- The students work on their own, writing one word in each gap in their copy of the prepared text. They could highlight the "clue" in the text.
- They move into pairs or small mixed groups to discuss their responses and to decide which alternatives are better.
- They discuss the various responses as a class, comparing possible alternatives and explaining what clues they used to work out a missing word.

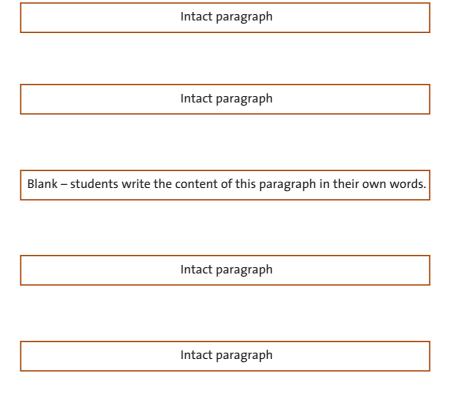
What the teacher looks for

- Are the students demonstrating that they are using various text clues to help them identify the missing words and understand the text generally?
 For example:
 - Are they recalling the words that they already know in a sentence and using them to help work out what the missing word is?
 - Are they thinking creatively to predict meaning as they read?
 - Are they critically analysing the usefulness of clues in the paragraph (for example, signal words such as "whereas" and connectives such as "because", or looking for the word to which a pronoun refers) to help them understand the links between sentences?
 - Are they noticing text-structure clues, such as headings, subheadings, and visuals?
- Are any students unable to place a grammatically correct word in the space?
 (If so, this suggests that the student may need further opportunities to learn about the structure of the English language.)

STRATEGIES

Variations on the strategy

- In a **structural cloze**, all the words in a particular category are left out. For example, the teacher might leave out all the connectives (such as "because", "however", and "since") that help to link ideas. As the students fill the gaps with connective words, they will draw on contextual information to work out how the ideas in the text are developed and ordered.
- In a paragraph cloze, a whole paragraph is omitted from a series of paragraphs (as shown in the diagram below). This activity, which helps students to work with coherent text, can be used as both a writing and a vocabulary strategy. In order to complete a paragraph cloze, the students must have previously read the whole text.



CLUSTERING

Clustering involves organising sets of key words into different clusters or groups.

The purpose of the strategy

This strategy gives students opportunities to think about and discuss the meanings of words and the relationships between words. It reminds them of words they already know and introduces them to new words.



What the teacher does

- Prepare several sets of about twenty cards, each showing a key word or term that relates to the relevant subject content.
- Give small groups of students a set each of these cards.
- Describe the activity to the students. The first time, model how to create two or three clusters and then "think out loud" about all clustering decisions before asking the students to work in their groups.

What the students do

- The students work together to arrange their cards in clusters or groups
 according to the meanings of the words on the cards. If necessary, they can
 have a "don't know" pile; this discourages unsupported guessing. Students
 should be able to give reasons for each of their decisions.
- They agree on their clusters and then write, on a separate piece of paper, a general heading that describes each cluster. They place each heading above the relevant cluster.
- They explain their group's particular arrangement to the rest of the class or to another group. This discussion can provide useful teaching and learning opportunities.

What the teacher looks for

- · Are the students actively engaged in discussing words and their meanings?
- Are they using the words in discussion, and are they critically analysing and negotiating the possible meanings?
- Are they using other new words that they have learned?

Variations on the strategy

- The clustering activity is effective at various stages of learning words that relate to specific subject matter.
 - Before teaching specific subject content, teachers can use clustering to activate students' prior knowledge of key words.
 - After new words have been introduced, teachers can use the activity to reinforce the meanings of these words and to enable the students to practise using the words.
 - At the end of a unit of work, this activity can be used to review the students' understanding of the words they have learned.
- When they have become familiar with the strategy, it may be useful for the students to predict, before they start actually grouping the words, the headings that will describe the clusters they expect to make.

STRATEGIES

STRUCTURED OVERVIEWS

A structured overview is a hierarchy of key words or concepts that relate to one main idea. The main idea is given in the heading at the top of the page. Other related ideas are recorded and connected by lines to the main idea and to each other. The lines indicate links to the main idea and between the most closely related ideas. The structured overview flows in a "tree structure" from the most general terms, at the top, to the details or examples at the bottom. Such an overview can be used in different ways as a framework for learning. Structured overviews are most useful for information that is hierarchically ordered.

The purpose of the strategy

Using this strategy helps students to understand key words and ideas that they need for learning subject content and enables them to identify relationships between these words and ideas.

What the teacher does

- Select the key words that relate to one main idea and organise them into a structured overview. (The students should not see this overview.)
- Draw up a blank version of the overview (that is, draw the boxes and arrows, but don't add any words).
- Give the students a list of all the words that go in the boxes on the blank overview. (This list could be written on the board, or paper copies could be given to the students.) Show the students how to put two or three of the words in the correct places on the blank overview. Then ask them to complete the overview.

What the students do

- The students work at first on their own, putting words from the list into the boxes they think appropriate. They think about the reasons for their decisions and prepare to share these reasons.
- They then work in pairs, comparing what they and their partner have done and discussing the options, for example, asking whether some options are better than others and, if so, why.

What the teacher looks for

- As the students complete their individual overviews, are they reflecting about why they make particular choices?
- Are the students discussing the words with their partners and critically
 analysing possibilities for placing them correctly in the blank overview?
 For example, are they discussing how the words relate to each other and to
 other words or terms that they know?

Variations on the strategy

A structured overview can be used at different stages of the learning process.



The teacher can use it:

- when introducing new subject content: creating the overview helps the teacher
 to find out what the students already know about the core ideas and provide a
 structure for organising new learning;
- as a resource for ongoing reference: teacher and students can build the overview up together as the unit of work progresses;
- to assess the students' learning: the overview can be used to assess learning both during the unit of work and at the end.

Students can develop their own structured overviews, either with the teacher's help or independently. For example, when students have worked through a clustering activity and organised selected words under general headings (see pages 38–39), they can then use a structured overview to present this work. Students may need to be shown how to create an effective hierarchical structure by developing increasingly detailed subheadings (in an order that they can justify, giving reasons) under the main idea at the top of the page.

Students can also use a structured overview to organise their writing and research tasks. As individuals, they brainstorm key ideas that relate to their main idea and write down all the relevant words that they can think of. They then work either individually or in pairs or groups to categorise their words, and they go on to prepare their own structured overview.

The teacher can remind the students of this overview strategy when they are planning their writing and research tasks. As the students become more familiar with this strategy, they will learn more about when and how to use it. When a student understands that the overview provides a useful framework for structuring their learning or for planning essays, they often adopt and use this tool almost automatically in their independent study.

CLINES

A cline is a graded sequence of words, usually shown on a sloping line. (The word derives from the Greek word *clino* – to slope.) Constructing a cline involves arranging words in a continuum that indicates their degrees or shades of meaning.

The purpose of the strategy

This technique reinforces students' understanding of the meanings of words that they already know; it can also add new words to their vocabularies. Working with clines highlights the nuances in word meanings so that the students become more aware of them.

What the teacher does

- · Choose a word for each end of the cline.
- Choose words for the students to place between the end words.
- Write all these words on sets of cards and give an identical set to each pair or group of students.

STRATEGIES

What the students do

The students work in pairs or groups to place the cards in order according to the degree or shade of meaning of each word.

What the teacher looks for

- Are the students recalling known words and beginning to use new words in their discussions?
- Are they discussing the words' nuances and shades of meaning?

Variation on the strategy

As a class, brainstorm words on a theme. Then draw a cline, using any of these words that could belong to a common cline. Discuss nuances in the words' meanings in order to place each in the correct relationship to the others. In a subject like maths, numbers and symbols as well as words and terms can be used for clines.

Strategies for monitoring understanding

PREDICTING AND DEFINING NEW WORDS

The students predict and define key words that they think will be in a text that they've previewed (for example, by skimming and scanning – see page 66). They then read the text, identify any key words that they didn't predict, and go on to discuss definitions of these and revise their existing definitions in the light of their reading of the text.

The purpose of the strategy

This strategy raises students' awareness of key words and encourages them to think about their understanding of what these words mean. As the session progresses, the students learn more about the words' meanings and consider changing their definitions. When the students become familiar with this strategy, they can use it independently.

This strategy could be used to help students predict what they are going to read and to support them in identifying the purpose for reading.

What the teacher does

- Prepare a chart, identifying three key words and ensuring that these are listed on the chart (see below).
- Ask the students to preview the text and predict three further key words that they think will be in the text.
- At the end of the lesson, go through the "experts' definitions" that the students come up with, compare these with the students' own definitions, and discuss.



	Were they in the text?	Our definition before reading the text	Our definition after reading the text	Experts' definition of key words
Teacher's predicted key words				
Our predictions of three further key words				
Key words that we didn't predict				

What the students do

- The students preview the text, for example, by skim-reading the headings.
- They list three key words that they predict will be in the text.
- They write their definitions of the six predicted key words (three from the teacher and three of their own).
- They read the text, ticking off any words predicted by them or the teacher as they encounter these words in the text.
- They list unpredicted key words that occur in the text.
- They write their own definitions of the key words that they didn't predict and redefine the six that they defined before reading.
- They return to the text or use another resource (for example, a dictionary of
 words in the specific subject area) to find and copy "experts' definitions" of the
 key words that they didn't predict and of all the predicted key words.
- They discuss their changing definitions in pairs or groups.

What the teacher looks for

- Are the students able to use previewing strategies to predict what is in the text?
- Are they noticing the key words used?

STRATEGIES

- Are they using the context clues to construct appropriate definitions?
- · Are they able to see whether some definitions are better than others?

Giving students opportunities to use new vocabulary

The following strategies can help students studying specific subject matter to recall newly learned vocabulary and to use it effectively.

Strategies for assisting memory

Students need many exposures to their new vocabulary in order to link it to their prior understandings and become fluent in using it.

CONCEPT CIRCLES

The teacher writes a set of words or terms in a circle on the board, and the students discuss the meanings of the words and the relationships between both the words and their meanings.

The purpose of the strategy

This strategy helps students to explain concepts (including the meanings of words) and to see the connections between concepts (and between words).

What the teacher does

- Draw a circle on the board and divide it into four segments.
- In each segment, write a key word associated with the subject content. The four words all need to express concepts that relate to each other.

What the students do

- The students discuss the words in the circle with a partner, working out and explaining the conceptual relationships that link the words.
- They share and discuss their ideas with the whole class.

What the teacher looks for

- Are the students explaining the links?
- How accurately are the students using the specialised words when they are explaining the relationships between concepts?

Variations on the strategy

- **Blank segments:** The teacher can leave one segment of the circle blank and ask the students to first work out what the missing concept or term is and then explain that decision to a group or the class.
- A whole-class activity: Each student is given a word or term. They move around the class, find a partner, and make a clear connection between their words or terms. Each pair then links up with another pair and makes connections between all four terms. This continues until the class is in about six groups. Each group explains to the class the connections that they worked out.



PAIR DEFINITIONS

The students work in pairs. One student writes a definition for a given word, and then the other student, who has not seen the original word, writes a word that fits the definition.

The purpose of the strategy

This strategy gives students the opportunity to recall, and then write, their own definition of a word and to find out how well their definition conveys the intended word to another student. It gives teachers the opportunity to assess their students' understanding of key words.

What the teacher does

- Prepare two charts (see below). Each chart consists of three columns:
 - The first column is headed "Words" and contains a list of key words.
 - The second column is headed "Definitions" and is left blank.
 - The third column is headed "Words" and is left blank.

The two charts should have different lists of key words in the first column.

Words	Definitions	Words
[Key word]		
[Key word]		
[Key word]		

• Have the students work in pairs. Give one student in each pair a copy of the first chart, and give the other student a copy of the second chart.

What the students do

- In the second column (Definitions), each student writes a definition for each
 word listed in the first column. The student then folds the paper along the
 vertical line between the first and second columns so that their partner can see
 the definitions but not the original words.
- The students swap papers with their partners and read their partners' definitions. Each student then writes in the third column (Words) the word that they think their partner has defined.
- When each student has completed their chart, they open it out, compare it with their partner's, and discuss any issues. If they have two different words for one definition, they discuss whether the two words could mean the same thing. They can also discuss whether the definitions were clear enough to indicate one specific meaning or whether they were ambiguous.

STRATEGIES

What the teacher looks for

- Can the students provide written definitions specific to the subject content?
- Can they provide a word that fits a given definition?
- What memory thinking do the students use to recall a word or definition?
 (Ask the students what they did to help them recall learned vocabulary.)

Variation on the strategy

- **Telephone whispers:** Increase the number of students in the group to four and extend this activity as follows:
 - Prepare four different charts, each with five columns. In the first column of each chart, write a different list of key words.
 - Give each member of each group a copy of one of the four charts. After writing their definitions in the second column, each student folds the page between the first and second columns and passes the page on to the next student.
 - That next student fills in the third (Words) column, folds the page again to hide the first two columns, and passes the page on to the next student (and so on until all five columns have been completed).
 - When the four pages are opened up, the students can check whether the words and definitions are similar and discuss any anomalies.

Words	Definitions	Words	Definitions	Words
[Key word]				
[Key word]				
[Key word]				

WORD AND DEFINITION BARRIER ACTIVITY

The students work together in pairs to match words with definitions.

The purpose of the strategy

The pair discussion involved in this strategy enables the students to practise saying and using key words, recalling the definitions, and checking their understanding of them.

What the teacher does

 Prepare a list of key words and a list of matching definitions. Make copies of both lists.

- Have the students work in pairs and give each student in each pair a copy of one of the lists.
- Ask the students to match the words to the definitions.

What the students do

 One student has the word list and the other has the definition list. They do not show their list to their partner. Each pair matches their words and definitions by reading their lists to one another and discussing the words and the definitions.

What the teacher looks for

- Are the students actively listening and asking for key phrases to be reread?
- Are they discussing possibilities and identifying connections?
- Are they giving each other constructive feedback?
- Are they recalling the vocabulary that they have learned?

OTHER STRATEGIES FOR DEFINING WORDS

- Matching activities: Give the students a set of cards with words and a set with
 the definitions of those words. Working alone or in pairs or groups, the
 students match the words with their definitions. Matching can be done as part
 of a game like bingo or dominoes.
- Quizzes: Short, five-minute vocabulary quizzes, held at the beginning of a lesson, can refresh students' memories of key vocabulary items. Students can take turns to lead the quiz. Spelling words correctly can be part of the task.

WORD GAMES

In the following three games, students make up clues to help others recognise key words. Such activities help students to acquire deeper levels of vocabulary knowledge.

- Word guessing: Give one student a word and ask them to draw or mime its
 meaning so that the group or class can guess it. Alternatively, stick a word
 onto a student's back or forehead and have the student try to work out what
 the word is by asking the other students questions about it.
- Taboo: Give a student one word to define and four "taboo" words that they
 must not use in their definition or in answering questions about it. The rest of
 the class or group tries to guess the word from the definition and by
 questioning.
- Call my bluff: Put the students into groups and give each group a different word. Ask each group to compose four "definitions" of this word, one that is correct and three that are incorrect. The group then presents their four definitions to the other groups, who decide which is the correct version, gaining points if they get it right.

STRATEGIES

PICTURE DICTATION

This strategy involves listening, reading, and writing and includes both written and visual language.

The purpose of the strategy

Using this strategy helps students to listen carefully to an oral text and to transform the information into visuals and then back into words. This enables students to practise recognising and using key content vocabulary.

What the teacher does

- Select a clearly sequenced text (for example, a list of instructions or steps in a process or story) and divide it into eight to ten simple sentences.
- Read out each of the statements in turn and ask the students to draw their own simple visual, illustrating the statement, in the appropriate box. (Remind the students that their pictures don't have to be perfect and that they only have a limited time to draw them. They don't have to show their visual to anyone else.)
- Asks the students to talk about their visuals to a partner, translating them back to words.
- Discuss the process with the class and then ask the students to write a caption for each of their visuals.

What the students do

- The students draw up their page with numbered boxes, one box for each statement. As they listen to the statements being read out, they draw a visual in each box.
- In pairs, the students take turns to talk through their visuals, recreating the text for their partners.
- Individually, the students write a caption for each of their visuals and then read it to their partners.

What the teacher looks for

- Can the students understand the statements and transform them into visuals?
- Can they use the appropriate vocabulary (written and oral) when they put the visuals back into words?
- Are the students showing an understanding of the words and concepts?

Variation on the strategy

• **Picture matching:** The teacher prepares the visuals for the sequenced statements and mixes them up so that they are out of order. The students have a copy of these visuals.

Vocabulary 2 STRATEGIES

- As the students listen to each statement read aloud, they match each statement with its visual.
- Taking turns, in pairs, students recreate the original text orally and then in written form, using the visuals as cues.

Reflecting and planning

Reflecting Planning - Trialling a strategy - Focusing on a group of students • Developing a learning community

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Chapter 3: Preparing for reading

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Chapter 3: Preparing for reading

This chapter focuses on strategies that teachers and students can use when preparing to read written texts. When preparing to read, students need to draw on their prior knowledge, establish a purpose for reading, and decide where they can locate the information they need. In this book, reading is defined as getting meaning from text by bringing meaning to text. *English in the New Zealand Curriculum* (1994) defines a text as "A piece of spoken, written, or visual communication that constitutes a coherent, identifiable unit" (page 142).

As you read through pages 53–60, you may find it useful to think about the following questions:

- · What does this mean for my subject area?
- · What does this mean for my students?
- · Which of these ideas was I already aware of?
- What have I just learned?
- What else do I want to know?

What the research tells us

Knowing about literacy learning

In order to be successful readers and writers, students need to learn the code of written text (so that they can translate written language into spoken language and vice versa), to make meaning from texts, and to think critically about the messages in the texts. Teachers are responsible for helping students to develop the knowledge and strategies that will enable them to decode or encode particular texts, discover their intended meanings, and question the texts effectively. Teachers should also encourage and monitor the students' growing awareness of how and when to use the literacy strategies that they learn.

Sometimes teachers may assume that direct instruction in reading and writing is no longer needed. However, new emphases in teacher instruction become important as students increasingly encounter texts in subject areas with new demands in terms of specialist vocabulary, presentation of content, and concepts. Approaches like reading to students, shared reading and writing, and guided reading and writing remain relevant throughout the school years. The teacher's support and quidance are ... still needed

Ministry of Education 2003a, page 149

Developing strategies for reading

Readers use and integrate information from various sources as they read a written text. To construct meaning from a text, strategic readers consciously integrate their existing knowledge and strategies with the sources of information in the text. A reader's existing or prior knowledge includes their background knowledge and their literacy-related knowledge. Sources of information in texts include semantic sources of information, syntactic sources of information, and visual and grapho-phonic sources of information. These concepts are discussed briefly on page 54.

Readers actively construct meaning from text.

Using prior knowledge

The prior knowledge that students bring to reading is based on their own unique experiences and understandings. Because every reader's prior knowledge is different, the meaning taken from a given text will vary from reader to reader.

Students' background knowledge is their knowledge about the world and life in general; it also includes their existing understandings of concepts related to the content of the text. As readers, students relate new ideas in the text to what they already know, using their existing knowledge to help them predict what might follow, to draw inferences, and to make generalisations. Readers who have little background knowledge of subject content find it hard to make meaning from texts in that subject area.

Students' literacy-related knowledge includes their knowledge of:

- · how texts work and what different kinds of text are used for;
- how oral language is used and the ways in which oral language and written language are structured;
- · how print conventions are used;
- · the forms and meanings of familiar words and phrases;
- the visual-language features (for example, layout, pictures, symbols, and icons) of the texts that they read.

Using the sources of information in text

Sources of information in the written text include:

- **semantic sources of information** the meanings of the written words and of any diagrams or pictures in the text;
- **syntactic sources of information** the structure or syntax and grammar of the language that is used (at word, phrase, and whole-text level);
- visual and grapho-phonic sources of information the visual features of the printed letters, words, sentences, and paragraphs, including print conventions such as punctuation, spaces between words, and the use of capital or lower-case letters and italics or bold print.

Students can use these sources of information only if they can make links between:

- their existing understandings and the concepts in the text;
- their existing knowledge of the structure of language and the structures used in the text;
- their existing understanding of phonics (how sounds relate to print) or of print conventions and the words or conventions used in the text.

The importance of motivation and engagement

A reader's interest and motivation strongly affect their ability to engage in reading. One of the main attributes of effective readers is that they have the interest and motivation to read and to comprehend the meaning of the text. In the PISA 2000 study (Ministry of Education, 2001b), researchers questioned fifteen-year-old students about their attitudes to reading, related these responses to the students' literacy achievements, and concluded that students' engagement in reading and students' performance are closely associated. Engaged readers work on unlocking the text; they find strategies to help them read it because they want to understand it. When students enjoy learning and believe in their own reading abilities, they are likely to engage with their texts.

Effective teachers create the conditions for motivation and find ways to engage the students in their learning. Refer to appendix 4 for information about motivating and engaging students.

Knowing about features of texts

Reading involves an interaction between the reader and the text. The teacher needs to consider the ways in which features of the texts in their subject area can affect their students' ability to gain meaning.

Text difficulty or level is usefully thought of as getting an appropriate balance between supports and challenges. Supports are the features of text that make it easy to read, and challenges are the potential difficulties, for particular readers. It's important to remember that supports and challenges exist only in relation to the reader: what one student finds a challenge, another may find a support.

Ministry of Education 2003a, page 127

Academic texts used in secondary schools cover a huge range of text forms, including literary texts, worksheets, Internet websites, books setting out detailed information on specific subjects, and short pieces, such as letters to the editor.

The language used in academic texts is often concise, abstract, and highly structured compared with the language that students use in conversation and discussion. Academic vocabulary includes many subject-specific terms. The information in academic texts is often dense; for example, there may be long paragraphs discussing abstract concepts that are removed from the students' personal experience. Sentence structure is often complex in these texts, which are generally written from an objective or impersonal perspective. Visual features of the text, such as labelled diagrams, may also require interpretation skills that the students have not yet learned.

Academic texts are often complex in structure.

Knowing how to choose appropriate texts

Visual features of academic texts

Published texts are designed and illustrated to enhance the written content. A typical page in an academic text is likely to have varied typefaces, visual images, and colours. Sometimes these features, even when they are attractive to the eye, can create barriers for students. Diagrams do not always help students to interpret written text, especially if the connections between visual images and text are unclear (Hill and Edwards, 1992). Researchers (for example, Thornley and McDonald, 2002) have found that students often ignore visual images and do not always understand the significance of subject-related illustrations, diagrams, and graphs. Teachers should find out what kinds of visual features actually aid their students' understanding and build on these to help the students interpret the visual features typical of texts in their subject area, in particular, making the purposes of the visual features explicit to students.

Features of electronic texts

Electronic text brings new dimensions to learning. Electronic platforms allow information to be presented in a range (and often a combination) of media. Written text and visual images can fly across the screen or rotate and flash. The introduction of hypertext and hyperlinks means that text doesn't have to be presented in the traditional linear structure. Readers can play an active role in selecting non-linear pathways through text and can have different texts on screen at the same time. These new kinds of texts are exciting and engaging but can also be challenging for some readers (refer to Unsworth, 2002).

There are many ways to apply information technologies in the classroom. The Internet provides access to authentic (as well as inauthentic) texts in students' subject areas: for example, history students can analyse scanned copies of original documents and recorded oral-history interviews; economics students can work with simulations and models, loading their own raw data into electronic files and databases; and science and technology students can use the same imaging techniques that the scientific community uses.

Considerations for teachers

In order to choose texts that will motivate and engage their students, teachers need to consider what they know about their students in relation to the kinds of texts used in their subject area.

The appropriate difficulty level of a text depends on many factors, including:

- the students' prior knowledge of and interest in the content;
- the range and complexity of the vocabulary;
- the students' sight vocabulary and their current decoding competence;
- the layout of the text, including line length and word spacing;
- the support given by the illustrations;
- the length of the text;
- the syntax of the text and the complexity and length of the sentences;
- the number and nature of new ideas or concepts presented in the text.

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In particular, secondary school teachers should consider:

- · how difficult the vocabulary is and how many new, subject-specific terms there are;
- to what extent new terms are explained in the text and how clear and coherent these explanations are;
- how complex the concepts and ideas are and how densely they are grouped;
- how long and complex the sentences and paragraphs are;
- how the text is organised and structured (for example, how headings, paragraphs, and italic and bold print are used);
- how user-friendly the physical layout and typography are (for example, consider the
 density of the print and the size and clarity of the typeface);
- how clear the visuals graphs, pictures, and diagrams are.

What the challenges are

Teachers who understand the processes and strategies that readers use and the characteristics of the academic texts in their subject areas can help their students to develop the literacy strategies they need.

Knowing the students

All classes in New Zealand secondary schools include students with diverse experiences, knowledge, understandings, skills, and strategies for literacy learning. Many students can read texts with familiar content and structures fluently but do not yet have a range of strategies for approaching unfamiliar kinds of text or texts with unfamiliar content. Others have a basic sight vocabulary and can decode straightforward text but have not learned to think critically about the ideas presented in the text. Still others may not yet have learned to use all the sources of information in a text; for example, they may not expect to make sense of a new form of text, or they may not recognise how language is structured in an unfamiliar kind of text. (For students who are learning English as an additional language, most text structures will be unfamiliar, including the structure of spoken English texts.)

Teachers can ask their students about their reading strategies and observe them as they carry out reading tasks. Examples of interview schedules can be found in the Literary Leadership inquiry tools, which are available online at www.tki.org.nz/r/literacy_numeracy/lit_lead_tools_9_13_e.php

Teachers can also use their schools' reading data analyses, for example, analyses of results from the Progressive Achievement Tests (PATs), the Supplementary Test of Achievement in Reading (STAR; Elley, 2000), the Essential Skills Assessments: Information Skills Years 5–10 (ESA:IS; Croft et al., 2000), or the Tests of Reading Comprehension (TORCH), all published by the New Zealand Council for Educational Research. They can also refer to their school's National Certificate of Educational Attainment (NCEA) results. Note that the Assessment Tools for Teaching and Learning (asTTle: Ministry of Education and the University of Auckland, 2003) are currently available for levels 2–4 of the English curriculum (available online at www.asttle.org.nz) and that levels 5–6 will be available in 2005.

To evaluate their students' current readiness to read the required subject-specific texts, teachers may decide to use a simple assessment measure like the one described below, based on a text that their students will be using.

Gather information by talking to students, using school data, and conducting action research.

A measure for assessing whether a student can read a text independently

This "rule of thumb" measure is straightforward and easy to use. Select a chunk of text (about 100 words) and have the students read it silently. Whenever a student encounters a word they don't know, they raise a finger on one hand. If all five fingers are raised (that is, if five words are unknown), the text is probably beyond their independent reading level. In that case, if alternative, easier material is not available, the text should be read using an instructional approach such as guided or shared reading. (See chapter 4, pages 79–83.)

Knowing what teachers can do

Helping students to become strategic readers

Research shows that teachers can make a difference by providing focused instruction to meet the needs of all their students. Effective literacy strategies will work for students in different ways and at different levels. The following chart shows some ways that teachers can use strategies to meet the learning needs of their students, including their reading needs.

How students learn	What teachers do
• imitate	modeldemonstrate
identify and face challenges and overcome problems	 set instructional objectives based on students' identified needs plan activities with appropriate kinds and levels of challenge provide opportunities for students to solve problems
understand and help set learning goals for tasks	help students to understand the learning goals of tasksbuild shared goals
make connections	 show students how to activate their prior knowledge help students to see relationships between what they know and what they are learning monitor to ensure that students make connections
• practise	 provide opportunities for practice through text- based activities monitor learning and plan next steps
 develop the ability to apply their learning and transfer it to new contexts 	 plan opportunities for students to apply learning show students how to use their learning in new contexts monitor this transfer
 respond to and seek feedback 	give timely and appropriate feedbackprovide opportunities for students to act on the feedback
 reflect on and regulate their learning 	 help students to build metacognitive awareness encourage students to evaluate and reflect critically on their learning

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Effective teachers select appropriate texts in order to enable their students to comprehend and respond to meaning. They use their knowledge of the students' existing literacy expertise to decide on strategies for engaging the students in text-based activities that will meet their learning objectives.

Factors to consider when selecting texts include:

- the students' existing body of knowledge, repertoire of literacy strategies, and awareness of what they know and can do;
- · the students' familiarity with (that is, their prior knowledge of) the subject content;
- · the purpose for using the text;
- · the supports and challenges that these students will meet in the text;
- the text's relevance to the subject content to be learned;
- how far the text is likely to engage the students;
- how reading the text fits into the planned teaching and learning programme or unit of work.

Teachers can prepare students for reading a particular text by:

- · linking new information to the students' prior experience and knowledge;
- giving them opportunities to discuss both new and familiar concepts that they will meet in the text;
- clarifying the meanings of unfamiliar terms;
- explaining the overall structure of the text (see chapters 5 and 6 for more discussion on text structure).

The teacher and the students need to prepare collaboratively for the reading task. The teacher can model how strategic readers deal with the challenges of reading new kinds of texts, for example, by "thinking out loud" about what they already know about the subject content or by setting themselves a clear purpose for reading the text. Such modelling helps students to understand how to prepare for reading a text and builds their confidence in the reading strategies they're already using.

The teacher also needs to encourage the students to actively plan and develop their own purpose for reading – this will enable them to use what they have learned from the teacher's modelling in their own strategic reading (see appendix 2 for more detail).

Students think about what they know and what they might learn.

Developing independent learners

Students need to understand that it is essential to establish clear purposes for their subject-related reading. They will make more effective decisions as they read and gather information when they base those decisions on well-chosen purposes for reading.

Students should be encouraged to ask themselves the following questions before beginning to read. The students could use their learning logs to help them think about some of these questions.

Students clarify the purpose for reading so that they can monitor their own understanding.

Drawing on prior knowledge

- What do I already know about the subject?
- What do I already know about the structure and visual features of this type of text?

Establishing a purpose for reading

- Why am I reading this text?
- What do I need to find out?
- What will I do with the information?

Locating information

• How will I find this information in this text?



What can make a difference: the deliberate use of literacy strategies

The following section (pages 61–69) suggests literacy strategies that teachers can use for:

- · activating students' prior knowledge;
- · helping students establish a purpose for reading.

Many of the strategies can also be used by students independently, to further their own learning, when they have seen them modelled and practised them.

TRIALLING STRATEGIES

As you try a new strategy with your colleagues, you may find it useful to think about these questions:

As a learner

- What processes for engaging with text did I use? For example, did I draw on my prior knowledge? Did I set a purpose?
- What kind of language did I use? For example, was I more precise than I used to be in using specialised vocabulary? Did I give more detail than I used to in my descriptions?
- How did the new strategy enhance my understanding of the content?
- What did I learn from others in my group?

As a teacher

- What is happening in my classroom that makes me think this strategy will be useful for a student or group?
- How would I structure the use of this strategy to help my students become more independent?
- How will I monitor my students' learning when they use this strategy?
- How will this strategy enhance my students' understanding of the content?

Strategies for drawing on prior knowledge

The degree of students' prior knowledge about any subject greatly affects their ability to understand a written text on that subject. It is often useful to employ more than one strategy at a time to activate this prior knowledge. The strategies described below are primarily teaching strategies, but students can use some of them independently after a period of teacher modelling and collaborative work.

STRATEGIES

BRAINSTORMING, RECIPROCAL INTERVIEWING, POSTBOX ACTIVITY

By using this combination of strategies – Brainstorming, Reciprocal interviewing, and a Postbox activity – teachers can identify their students' current knowledge of relevant subject content. Activating students' prior knowledge of the subject content and discussing it with them will enable teachers to select appropriate texts and strategies.

The purpose of these three strategies

These strategies will remind students of what they already know so that, when they read, they can build on this knowledge to learn relevant new information.

What the teacher does (Brainstorming)

- Brainstorm ideas about a subject-related concept or topic with the whole class.
- Ask the students to draw their mental images of aspects of the concept or topic.
- Discuss the topic with the students and write up key vocabulary on the board.

What the students do (Brainstorming)

• The students identify key aspects of their prior knowledge of the topic.

What the teacher does (Reciprocal interviewing)

 Ask the students to write down what they know about a topic and then have them develop two or three questions to use to interview another student about the topic. (See page 95 in chapter 4 for strategies to generate effective questions.)

What the students do (Reciprocal interviewing)

- The students write down what they know about a topic and develop two or three questions about it.
- They find a partner and share their joint knowledge by interviewing their partners.

What the teacher does (Postbox activity)

- Set up a postbox where the students can post questions about a new topic.
- Question the students about what they already know about the topic and encourage them to use the postbox for their own questions. These questions may be the unanswered ones from the Reciprocal interviewing activity.
- Discuss the students' questions and responses with them, as a class, and talk about the links between similar responses.

What the students do (Postbox activity)

 The students respond to questions about what they know already and think of new questions about the topic.



- They contribute their responses and questions to the postbox.
- · They participate in the class discussion.

What the teacher looks for (in all three strategies)

- Do the students draw on their relevant prior knowledge?
- Do they show evidence of misconceptions or partial conceptions? Are they aware of these, or do they become so during the activity?
- Are they engaged in the brainstorm (or interview or postbox activity)? Are they
 motivated to learn more?

Variations on the strategies

Teachers could help the students to fine-tune their thinking by:

- using a clustering activity (see page 38);
- modelling and explaining how to complete a KWLH sheet (refer to appendix 5);
- having the students jot down what they know about a topic, either in note form or as a word map, and then share this information with a partner or group.

Establishing a purpose for reading

Without a clear purpose for reading, students' interactions with a text may be unfocused and haphazard. Students need a clear idea of why they are reading: what information they need to find; where, in the text, they are likely to find this information; and what they will do with the information when they find it. Preparing for reading involves setting a purpose for reading and predicting what will be in a particular text.

Strategies for establishing a purpose for reading include previewing and predicting text content and asking questions (for example, about what the reader needs to know and where they might find that information). Readers can predict the information that is likely to be in a text by previewing its content. This enables them to set a purpose that describes how they will seek the information that they need in this specific text. Asking questions before they read and as they read enables them to relate what they read to their predictions and to think about how well their reading is meeting the purpose.

To show the importance of preparing for reading, direct students to read a text without establishing a purpose. Afterwards, ask them:

- how they read;
- · what they recorded.

Then give the students a clear purpose for reading the same text or a similar one and ask the same questions again. Discuss the results of this exercise with them.

STRATEGIES

PREVIEWING AND PREDICTING TEXT CONTENT

The purpose of the strategy

Previewing a text in order to predict its likely content encourages students to read actively. This strategy helps motivate students to check how far their predictions are correct and to find out what new knowledge is being presented. When they are familiar with this strategy, students can use it independently before they read a text.

What the teacher does

- Present an outline of the text, using its headings and major visual features, and ask the students to predict what the text will be about.
- Ask the students to read one section. Then ask them to predict the information that will be presented next. This is particularly useful when previewing a narrative text.
- Discuss how these predictions impact on the actual reading of the text.

What the students do

- The students write notes, independently or with a partner, about the content that they predict will be in the text.
- As they read the text, they tick their notes to indicate when they predicted accurately.
- · They discuss how they use their predictions while reading.

What the teacher looks for

- Are the students making logical predictions from the headings or from their previous reading of a chunk of text?
- · Are they engaged in the task?
- · Are they monitoring their understanding?

Variation on the strategy

Write some statements about the content of the text and discuss these with
the students before they preview the text. After previewing the text, the
students decide whether they predict that the statements will accurately
reflect what is in the text, and then they read to discover whether they
predicted correctly.

ASKING QUESTIONS

Asking questions helps readers to establish a purpose for reading a particular text and to monitor how far their reading of the text is achieving that purpose.

The purpose of the strategy

Asking questions before and during reading helps students to establish and clarify a purpose for reading a particular text. The questions will reflect both the knowledge students bring to the text and their developing knowledge of the concepts introduced through the text.

What the teacher does

- Model both effective and ineffective questions and discuss with the students
 why some are more effective than others. Refer to the "What we Want to
 learn" part of the KWLH strategy (see appendix 5 on page 161) and have the
 students jot down what they hope to find out as a result of reading a particular
 text.
- Use questions to identify a purpose for reading or use an established purpose to fine-tune questions.
- Suggest that the students add new questions as they read. (See Using question dice, on page 96.)

What the students do

- Before they read, the students make up questions that establish a purpose for reading. They ask themselves what they want to find out from the text, where in the text they are likely to find it, and why they want to know (that is, how they will use the information).
- As they read, they jot down answers or ask more questions about the information they are finding and whether it meets their purpose for reading.
- They check after their reading, to see whether they have found answers to their questions and whether they have enough information to meet their purpose for reading the text.

What the teacher looks for

- Are the students using questions that help them to set a relevant purpose?
 Are they asking reflective questions?
- Are they reading purposefully and engaging actively with the text to find answers to their questions?
- Are they monitoring their understanding as they read?
- Are they monitoring the quantity and quality of the information and deciding how far it meets their purposes?
- Do their questions give you new information about their strengths and needs in literacy learning?

Variation on the strategy

 Students set their own purpose for reading by turning the title and subheadings into questions and using these questions to locate information and monitor their own understanding.

STRATEGIES

Strategies for locating information

SKIMMING AND SCANNING

Skim-reading is a strategy for gaining general information about a whole text quickly. The reader "skims over the surface" of the text, gaining a broad picture of the content. The reader may choose to pay more attention to some parts of the text than others but reads none of the parts in close detail.

When **scanning**, the reader looks through a text for particular pieces of information, paying closer attention to sections where they expect to find the required information and looking out for words or images that relate to it.

When students have practised these techniques, they should be able to use them in their independent reading. When setting a reading task, teachers could prompt students to skim-read or scan before they begin reading.

The purpose of the strategy

Skim-reading and scanning help students to read more efficiently by getting a general idea of the text and of where to find relevant information in it. This enables them to adopt strategies that are appropriate to the text and their purpose for reading.

What the teacher does

- Select a text that has headings and subheadings (for example, a textbook, an article, or a webpage).
- Explain skim-reading and scanning to the students.
- Give the students sixty seconds to skim-read headings, subheadings, and some of the words that they judge are "key" and to jot these down.
- Give the students three minutes to scan for three key points that elaborate on headings in the text.
- In pairs, have them compare their findings.

What the students do

- The students use their skim-reading and scanning skills to quickly survey the text.
- They jot down notes on the headings and main points.
- They compare their notes and revisit the text to identify relevant material that they didn't notice when they skimmed and scanned.

What the teacher looks for

• Are the students critically analysing their notes and identifying the key points that they found and also those that they missed?



TREASURE HUNT

The purpose of the strategy

This strategy enables students to learn about the text features that help readers to find information – such as the contents page, the home page (on websites), the index, the glossary, and hierarchies of headings and subheadings.

What the teacher does

- Select a whole book, a long section of text, a page, or a website.
- Prepare a list of questions that the students can answer by using supports in the text to find specific information, for example, by referring to the list of contents or the index or by scanning headings in the text.
- When the students have answered the questions, discuss the supports in the text and the processes and pathways that they used to find the answers.

What the students do

- The students decide where they might expect to find an answer to each question.
- They look for the answers, identifying the supports in the text that they use to help find the answers.
- They compare the answers they find and discuss the processes and pathways that they used to find them.

What the teacher looks for

immediately

 Are the students becoming aware of the different structural features within books, websites, and other texts that can help them to quickly and efficiently find what they are looking for?

later

Are the students using this strategy in their independent reading? Are they
accessing the list of contents, the index, or other supports as they read to
find information?

SURVEYING TEXT STRUCTURE

Knowing how a particular text form is usually organised helps students learn how to use such texts. Teachers should understand the structures that are typical of the texts in their subject area and be able to explain these forms to their students. Students who understand how and why an author has structured their information in particular ways are more likely to understand the information and recall it.

STRATEGIES

Students need to be able to survey text structure at both paragraph and extended-text level. At the paragraph level, students might notice whether the author has used any of the following structures:

- · comparing and contrasting;
- cause and effect;
- · problem and solution;
- time sequence;
- · spatial description;
- listing.

See appendix 7 for graphic organiser templates showing a range of paragraph structures.

At the extended-text level, students might identify the text form and look for the conventions of that form. For example, if the text takes the form of a report and the author's purpose was to report on a group of objects, events, or ideas, the text might include:

- an introduction;
- · a general classification of the group;
- a series of paragraphs on the individual members of the group;
- subheadings.

Purposes and examples of written text forms are provided in appendix 6 on page 162.

The purpose of the strategy

This strategy involves scanning a text to get an overview of its organisation and clues to its content. It enables the reader to skip some parts and concentrate on more relevant sections when setting a purpose for reading this text or fine-tuning their ideas about an appropriate purpose for reading.

What the teacher does

- Select a text that has clear headings and subheadings, a range of different print types, and a variety of visual elements.
- Explain how text features can help the students to gain an overview of the text's structure and can give clues to its content.
- Give the students a set time to survey the text, looking for useful information about its structure and layout.
- Ask the students to identify where, in the text, they might seek a specific kind of information.

What the students do

 The students scan the pages or screen, noting such structural and layout features as title, headings, subheadings, words in bold or italic, and other visual features.

Preparing for reading



STRATEGIES

 With a partner, they discuss how these features could help them find specific information and what this suggests in terms of setting a purpose for reading this text.

What the teacher looks for

- Are the students describing the structure of the text at both paragraph and extended-text level?
- Are they discovering what the text is about? Are they identifying possible purposes for reading this text?
- Are they discovering sections that they may need to read carefully and others that they can skip?

Variations on the strategy

- Select a text without headings (or remove the headings). Ask the students to supply appropriate headings and to compare and discuss their suggestions.
- After analysing the structure of the paragraphs and extended text in a subject-specific text that is a good model, the students could focus on writing a piece with the same structure. Templates and grids to support the writing of such texts can be found in appendix 7 on pages 163–164.

Reflecting and planning

Reflecting Planning • Trialling a strategy - Focusing on a group of students • Developing a learning community

4

Chapter 4: Reading for deep understanding

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Chapter 4: Reading for deep understanding

This chapter focuses on strategies that teachers and learners can use to gain deeper understanding of the information in texts. Engaging in these activities involves thinking about thinking. Teachers can use the approaches to reading to help students engage with the thinking in challenging texts. Reading for deep understanding requires students to be prepared for reading (see chapter 3).

As you read through pages 73–78, you may find it useful to think about the following questions:

- · What does this mean for my subject area?
- · What does this mean for my students?
- · Which of these ideas was I already aware of?
- What have I just learned?
- What else do I want to know?

What the research tells us

Students need to develop strategies that they can use deliberately and purposefully to enhance their understanding of text and develop their critical awareness.

Ministry of Education, 2003a, page 131

Readers need to understand texts at surface level and also at deeper levels of understanding. The depth of a reader's understanding of any text depends on their prior knowledge and their ability to engage actively with the ideas presented in the text.

The different levels should be seen as part of a continuum. This continuum of understanding begins where the reader understands the meaning of the text at a literal level. It extends to where the reader can interpret the author's implied meanings and then continues to the deeper levels of critical reading, where the reader evaluates the content, responds to the author's ideas, and integrates those ideas with their own existing knowledge. Students need to use strategies to effectively employ the processes needed to engage with text at these different levels. However, "In building reading aptitude, there is no skills-only approach that can substitute for extensive reading. On the contrary, repeated studies have demonstrated that instruction in isolated grammar, decoding, or comprehension skills may have little or no impact on students' activity while actually reading" (Schoenbach et al., 1999, page 7).

Writing draws on the same sources of knowledge as reading.

Talking and listening are the two sides of spoken communication, and reading and writing are just as closely linked. Readers and writers use their knowledge and experience: readers to construct meaning from text and writers to construct meaning in text. ... To communicate in written language successfully, learners need to read like writers and to write like readers. ... In setting their instructional objectives, teachers need to plan to make students aware of these links.

Ministry of Education, 2003a, page 11

Reading and writing are reciprocal processes: comprehending and composing text are complementary.

Teachers can make a difference by scaffolding their students as they learn comprehension strategies. Much of the research on reading comprehension has focused on how students are taught to use comprehension strategies. Vygotsky (1978), in his work on cognitive development, provides a strong theoretical framework that teachers can use to support and challenge their students when working alongside them. Vygotsky views the student as a "novice" and the teacher as an "expert". As the expert, the teacher models each new strategy at an appropriate level and gradually guides the student towards independence. This idea of the teacher "scaffolding" students, so that they are supported in learning new strategies until they can use them independently, is the key to teaching comprehension strategies.

A landmark study, in which this scaffolding technique was used to teach comprehension, was carried out by Palincsar and Brown (1984). Four comprehension strategies used by strategic readers are:

- predicting;
- asking questions;
- clarifying;
- · summarising.

Teachers can model strategies.

The Reciprocal Teaching approach that Palincsar and Brown developed was designed so that readers at different levels could learn to use these strategies successfully. First the teacher models by leading a reading group and using the four strategies in turn, in a structured way, to discuss a text. In their group, the students then use the same structure to read and discuss other texts, practising the strategies and taking turns to lead the discussion. By leading and participating in these group discussions, students can "internalise" the four strategies and learn to use them independently. New Zealand research studies (for example, Westera, 1995) show that teachers using the four strategies of the Reciprocal Teaching approach can enhance secondary school students' comprehension. The Ministry of Education video *Reciprocal Teaching: Extending Reading Strategies* (1993) shows this process occurring in a New Zealand intermediate school.

Recent studies on instruction in comprehension strategies (for example, Pressley, 1998, 2001) have established that the teacher has a crucial role in helping students learn how to use appropriate strategies when reading. To the strategies listed above, Pressley adds "imaging" – that is, constructing mental images representing the text's content. In many subject areas, metaphors and similes are used to explain abstract concepts. Imaging enables learners to understand the ideas associated with sophisticated concepts.

Teachers can give feedback while students are practising strategies. The teachers in Pressley's study explained these strategies to their students and modelled them repeatedly. The students were then given extensive opportunities to practise the strategies with the teachers' guidance and feedback. Finally, the teachers explained to their students how to apply the strategies independently and gave them opportunities to do so.

All of these research studies show that deliberately teaching comprehension strategies leads to positive gains, both in students' achievement and in their interest in reading. Teachers of all subjects, then, need to teach their students reading strategies and give them opportunities to practise. It is also important for teachers to offer constructive feedback.



Some research (for example, Wray and Lewis, 1995) shows that opportunities for extended reading may be limited in secondary classrooms. Many secondary school teachers rarely set their students reading tasks that take more than a minute to complete. This kind of fragmented reading gives students no opportunities to reflect on texts, discuss them, and formulate ideas about them. Students need to read many kinds of extended text to develop confidence in using the kinds of comprehension strategies discussed above.

Students need opportunities to read extended texts.

An important element in the comprehension process is the reader's monitoring of their own understanding as they read. After clarifying their purpose for reading, a reader monitors their reading by:

Students need to learn to monitor their understanding as they read.

- · identifying key aspects of the text;
- · focusing their attention on these aspects;
- engaging in self-questioning;
- taking appropriate corrective action when necessary.

As the students gain practice in becoming aware of and controlling their own reading processes, they yield additional information for their teacher about the social contexts, strategies, knowledge bases, and understandings they bring to the task of making sense of texts. A reading apprenticeship is at heart a partnership of expertise, drawing both on what subject area teachers know and do as disciplinary readers and on adolescents' unique and often underestimated strengths as learners.

Schoenbach et al., 1999, page 14

What the challenges are

Knowing the students

Research in New Zealand secondary classrooms indicates that many students lack the necessary comprehension strategies to fully understand the texts they read in their subject areas. In his study of New Zealand thirteen- and fourteen-year-old students, Nicholson (1984) found that there was often a gap between what students understood and what their teachers thought they understood.

In a recent study (Thornley and McDonald, 2002), the researchers interviewed students from all levels of a New Zealand secondary school to find out what strategies they used regularly to make meaning from unfamiliar text. Many students reported that they avoided reading whenever they could, and only a few could talk about specific strategies they used when reading unfamiliar texts. The strategies most commonly used to make meaning in reading were simply to read the text "over and over" or to ask for help. Some students mentioned scanning the text for the key words used in the teacher's written questions. Several said that if they were asked to make notes, they simply "lifted out" sections that they thought might be useful. Here are two students' comments:

Sometimes I don't get what the question means so I kind of read it, I read over the question about 10 times and then usually I get it, what it means ...

If I don't understand then I'll just ask for help.

Thornley and McDonald, 2002, page 20

Yet in international studies comparing students' literacy levels, New Zealand secondary students rank well. In an assessment of the reading, mathematics, and scientific literacy levels of fifteen-year-old students undertaken by PISA (Programme for International Student Assessment), New Zealand students performed well generally. A high proportion of them performed at the top level of literacy. See the PISA 2000 summary below.

In terms of its mean or average score, New Zealand is among the six best performing countries for each of reading, mathematical and scientific literacy.

• Out of 32 countries we have the third highest mean scores for both reading literacy and mathematical literacy and the sixth highest mean score for scientific literacy.

In terms of reading literacy, New Zealand has [an above average] proportion of its students at the top level of proficiency.

• We have 19 percent of our students in the highest proficiency level (level 5) for reading literacy. This is about 1 in 5 of our students compared with an international average of about 1 in 10 students.

In terms of the spread of scores, New Zealand has a very wide distribution for each of reading, mathematical and scientific literacy.

- This is also the case in some other countries with high average performance like Australia and the United Kingdom.
- The spread of scores is generally wide within individual schools in New Zealand.
 This means that each school is likely to be working with a diverse range of student ability.

Ministry of Education, 2001b, page 1

New Zealand students show a wide spread of achievement. However, New Zealand students also showed one of the widest spreads of scores in the results of this survey. The number of New Zealand students scoring at the bottom two levels was proportionately higher than the international average at those levels. New Zealand, then, has a substantial group of low-scoring students. Many of these are Māori and Pasifika students, and many are students whose first language is not English or whose home literacy practices differ from those of the classroom. Such students are also represented in the top level of literacy proficiency.

The PISA 2000 study also showed that there were greater differences in students' achievement within individual schools than between different schools. Refer to appendix 8 for a copy of the PISA graph showing the distribution of student performance on the combined reading literacy scale.

Teachers can observe and question their students to gain information. Teachers need to find out as much as they can about the reading comprehension strategies their students are using. One way of finding out is to observe students reading a text that they have not seen before and then have them discuss the reading process and the text. The discussion could be carried out with a small group of representative students. The teacher could ask:

- how easy, difficult, or interesting the students think the text is;
- how the students approach unfamiliar texts;
- what reading comprehension strategies they know about;
- · how they plan to monitor and evaluate their understanding.



Knowing what teachers can do

The type of reading task that teachers set affects the way their students read a text. Some students may want to avoid reading and may use "search and destroy" methods to answer questions (Nicholson, 1988). However, teachers can design reading tasks specifically to encourage their students to read the text carefully and engage actively with the ideas so that they are supported in understanding the text at a deeper level. Reading tasks that lead students to think critically should generally be based on a piece of extended text rather than on short extracts.

Teachers should set reading tasks that will actively engage their students.

Teachers should set reading tasks that encourage students to:

- · use information;
- monitor and reflect on their understanding;
- think critically as they read.

Developing independent learners

The teacher's role in developing their students' expertise and independence in reading for deep understanding includes:

- integrating the teaching of appropriate comprehension strategies into the teaching of content;
- explaining and modelling the selected strategies;
- · explaining to the students when, where, and why to apply these strategies;
- providing frequent opportunities for the students to practise the strategies and giving them guidance and support initially;
- explicitly reinforcing the students' efforts by giving constructive feedback on their successes in applying the strategies;
- allowing the students time to talk about the strategies they use as they read for deeper meaning.

In order to develop independence in using strategies to unlock the deeper meanings of texts, students need to be aware that they are responsible for noticing any breakdowns in their understanding that occur as they read a text. They also need to know that there are strategies that they can learn and adopt to help them regain understanding – strategies such as rereading and rephrasing, in their own words, what the writer is saying. See chapter 3, page 58, for the "rule of thumb" measure for new vocabulary. As students engage with the writer and the content, they need to ask questions so that they can elaborate on their initial understandings and think critically about both their learning and the ideas and information in the text.

Students need to monitor their learning and to have a repertoire of strategies to use when they get stuck.

The following are some questions that students could be asking themselves as they read. Students could use their learning logs to help them think about some of these questions:

Adopting literacy strategies

- Am I using the most helpful strategies? For example, should I be skim-reading this text or reading it closely?
- What do I need to do if I don't understand the text?

Interacting with text

• What questions should I be asking the writer as I read? (For example, does the writer justify their opinion?)

Monitoring understanding

- How well am I understanding the text?
- · What information do I need to remember?
- · How does this relate to my previous understanding?
- Can I make sense of what I visualise?
- Can I use what I understand to complete the tasks?



What can make a difference: the deliberate use of literacy strategies

The following section (pages 79–97) suggests literacy strategies and approaches to reading that teachers can use for:

- helping students to adopt literacy strategies when interacting with text;
- helping students to monitor their understanding.

Many of the strategies can also be used by students independently, to further their own learning, when they have seen them modelled and practised them.

TRIALLING STRATEGIES

As you try a new strategy with your colleagues, you may find it useful to think about these questions:

As a learner

- What processes for engaging with text did I use? For example, did I draw on my prior knowledge? Did I set a purpose?
- What kind of language did I use? For example, was I more precise than I used to be in using specialised vocabulary? Did I give more detail than I used to in my descriptions?
- · How did the new strategy enhance my understanding of the content?
- · What did I learn from others in my group?

As a teacher

- What is happening in my classroom that makes me think this strategy will be useful for a student or group?
- How would I structure the use of this strategy to help my students become more independent?
- How will I monitor my students' learning when they use this strategy?
- How will this strategy enhance my students' understanding of the content?

On pages 84–92, the section Strategies for interacting with text includes writing strategies along with the reading strategies that involve the same process.

Teaching approaches for reading

There are three approaches to reading that teachers can deliberately use to introduce students to a challenging text – "reading to", shared reading, and guided reading. A fourth approach, independent reading, is for students who do not need support to help them engage and interact with a particular text.

STRATEGIES

Level of support	Approach
Teacher modelling of reading	Reading to and talking with students
Collaborative construction of meaning	Shared reading
Supported reading	Guided reading
Students reading without support	Independent reading

When deciding which of these approaches to use with a specific text, teachers should consider the following factors:

- how complex the structure of the text is;
- how familiar the students are with the conventions in the text;
- how familiar the students are with the subject content and its vocabulary;
- · the ways in which the text attempts to engage the readers;
- the range of literacy and thinking strategies that the students can use independently to make sense of the text;
- how the teacher expects to use the text;
- where reading the text fits into the teaching and learning sequence.

In all these approaches, teachers initially prepare their students for reading (see chapter 3 for strategies), encourage them to develop a deep understanding of the text (see this chapter for strategies), and then guide the students to process, evaluate, and record their ideas (see chapter 5 for strategies).

Note: The first time a teacher introduces a literacy strategy, there will be more modelling than discussion. However, as the students become familiar with the strategies, both they and the teacher will "think out loud" and discuss points of interest before, during, and after reading.

READING TO AND TALKING WITH STUDENTS

The teacher reads a text to the students and then discusses it with them.

The purpose of the approach

Reading aloud to students, so that they hear how the text sounds when read fluently and with understanding, gives them valuable experiences of the kinds of text they will be asked to read and write. Reading to students can provide a way of introducing new text structures and new vocabulary and concepts.

What the teacher does

Select a typical text in your subject area – one that will take no more than ten
minutes to read aloud – and prepare the students for the reading. Then read it
to the students.



STRATEGIES

- Talk with the students about their understandings of the text.
- Give the students a similar text to read independently.

What the students do

- The students listen to the text and discuss it after the reading.
- They read a similar text independently.

What the teacher looks for

immediately

- Does the students' understanding of the text increase as they discuss the various concepts introduced in the reading?
- Are they adopting appropriate reading strategies to help them read independently?

later

 Are the students remembering and using aspects of the model presented by the text?

Variation on the strategy

• Instead of reading the text aloud, the teacher uses a recording of the text.

SHARED READING (READING WITH AND TALKING WITH STUDENTS)

In shared reading, the teacher reads a text that is too difficult for the students to read by themselves while the students follow the reading in their own copies of the text or on an overhead transparency (OHT).

The purpose of the approach

This teaching approach encourages the students to think about the uses of particular literacy strategies. As the teacher models and "thinks out loud" about adopting particular literacy strategies during the reading, the students focus their thinking, express their ideas, and get feedback on them.

The teacher can also use shared reading to focus the students' thinking about subject content or about particular text structures – for example, graphs.

What the teacher does

- Select a text to share with the students, one that is likely to be difficult for them to read and that gives them opportunities to learn specific literacy strategies. Give each student a copy of the text or display it on an OHT.
- Discuss the purpose for the reading with the students, explaining the specific strategies that will be taught as well as the specific text structures that will be explored.
- Read the text, modelling and explaining the use of the selected strategies.

STRATEGIES

- After the reading, take the students back to the purpose for reading and review
 it. Discuss the different ways in which the students will be able to apply the
 literacy strategies that were modelled and discussed.
- Set the students a task that includes independent reading of the same text and using the information in it.

What the students do

- All the students have a copy of the text and listen to it read aloud, following both the reading and the teacher's thinking as they read their own copy.
- When the teacher pauses to discuss the text, asking questions and making predictions, the students listen, respond, question, and learn how a strategic reader processes information.
- The students read the text themselves and complete the set task, for example, summarising key ideas.

What the teacher looks for

- In their independent reading of the same and similar texts, do the students use the strategies that were modelled and discussed?
- Are the students understanding more than they would have if they had read the text without the modelling and discussion of strategies and concepts?

GUIDED READING

In guided reading, the teacher works with a group of students or a whole class on a text that the students can read reasonably well by themselves but that has some challenges. It may be either the content or features of the text that the students need support with.

The purpose of the approach

The guided reading approach gives teachers a framework for guiding students through a new text. It provides support and help for students before and after their individual reading so that they can experience success in tackling an unfamiliar text. During the lesson, students will learn and practise a useful reading strategy as they interact with and discuss the ideas presented in the text. This framework can be used with the literacy strategies described in this chapter, chapter 3, and chapter 5.

What the teacher does

- Select a subject-specific text that students in the group will be able to read
 with fair but not complete understanding. Give each student a copy of the text
 or display it on an OHT.
- Establish a purpose for reading and explain it to the students.
- Select a strategy for interacting with text one that is appropriate for both the
 text and the students (examples of suitable strategies can be found on pages
 84–92 in this chapter).
- Introduce the text using the pre-reading strategies from chapter 3.

Reading for deep understanding



STRATEGIES

- Model the selected strategy, "thinking out loud" as you do so.
- · Give clear instructions for the reading task.
- After the students have read the text, discuss how the strategy worked and what they have learned.
- Set a task that will monitor the students' understanding of the text (perhaps a task based on one of the strategies in chapter 5).

The table below (adapted from Thornley and McDonald, 2002, page 21) gives three examples of a literacy focus and describes literacy strategies that could relate to each focus.

Literacy focus	Literacy strategies
Text conventions	Identify the author's purpose and expected audience. Analyse the text structure and the language used to achieve the purpose.
Vocabulary	Identify and define the key content vocabulary. Explain how the students can find out the meaning of these words – for example, by using word-level information, bracketed definitions, and information in the surrounding text.
Monitoring understanding	Use self-questioning techniques.

What the students do

- The students read the text, applying the strategy and meeting any other purposes for the reading.
- As they read, the students apply and monitor the use of the selected strategy.
- The students engage actively in the instructional conversation, referring back to the text to substantiate their points.

What the teacher looks for

- Do the students understand the content?
- Are they able to refer to the text to substantiate their points?
- Are they able to infer from the text and relate the ideas to their prior knowledge of these ideas?
- · Are they using the selected strategy?
- Are they using context clues and their knowledge of text structures to develop their understanding of the content?
- Do they engage actively in the instructional conversation?

STRATEGIES

Strategies for interacting with text (reading and writing)

COMBINING WRITTEN AND VISUAL ASPECTS OF TEXTS (READING)

Visuals are an integral part of many printed and electronic texts. Students need to learn about the purposes of visual features and the relationships between visual and written aspects of texts in order to comprehend and interpret such texts. For example, many diagrams present some of the information from the print in an abbreviated form. Students who are unfamiliar with this convention may not realise that they can often fill in the gaps in their understanding of a diagram by referring to the printed text that accompanies it. Before students read a new kind of text, teachers can discuss the ways in which it presents information (including visual ways) and help them link these techniques to familiar ways of presenting information.

The purpose of the strategy

This strategy develops students' understanding of the relationship between written and visual aspects of texts.

What the teacher does

- Choose and photocopy or print out one page of a text (from either print or
 electronic media) that presents its main ideas through both written and visual
 language. Cut the page into segments, each segment with a self-contained
 unit of written or visual text. Hand out each segment to a different pair or
 group of students to read and interpret in isolation.
- Ask each group to report back to the whole class on the information in their segment. As a class, discuss the purpose of each segment, comparing the information it gives the reader with the information in other segments, and clarify why the information was presented in different ways.

What the students do

- In groups, the students study their segment of the text and discuss the main ideas presented in it. They decide on three key ideas and write these on a large piece of paper.
- Each group presents their three key ideas to the class.
- The whole class discusses the different ways the information has been presented and considers how the different kinds of presentation complement and support each other.

What the teacher looks for

immediately

- Are the students becoming aware of how written information and visually presented information in a text can support each other?
- Are the students critically analysing the quality and quantity of the information presented both in writing and visually?



STRATEGIES

later

Are the students showing in their independent reading that they're noticing all the information presented in a text, whether it is in written or visual language?

Variations on the strategy

- **Jigsaw activity:** This strategy would lend itself well to a jigsaw activity (see page 122 in chapter 5). In their "expert groups", the students could study their own segment; then, in their "home groups", they could put the parts together and compare the different ways in which information is presented.
- Comparing printed texts with texts in electronic media: The students could examine extracts on the same topic from both printed texts and texts in electronic media. The students could then compare the ways in which the texts present their information.

IDENTIFYING KEY WORDS (READING)

The students read a text to locate some key words identified by the teacher and work out the meanings of these words from their context. This prepares them to read another text and identify its key words for themselves (refer to chapter 2, page 42).

The purpose of the strategy

This strategy enables the students to identify key words and the meaning of those words in a passage of written text. Identifying key words is a step towards identifying and understanding the main ideas in a text.

What the teacher does

- Choose two passages of written text for the students to read. (This activity includes two exercises; a different passage is used for each exercise.)
- When introducing the text for each exercise, make clear to the students the purpose for which they are reading the text, because the purpose will affect which words are "key".
- The first exercise

Identify some key words, write them on the board, and ask the students to find the words and work out their meanings as they read the first passage. Discuss these words with the class afterwards to clarify meanings.

The second exercise

Have the students read the second passage and then work in pairs or groups to discuss it and decide which of the words are most important or "key".

What the students do

- The first exercise
 - The students read the first passage, find in it the key words that the teacher has written on the board, and work out the meanings of these words from the text.
 - In a whole-class discussion, the students discuss and clarify the meanings of the words.

STRATEGIES

- The second exercise
 - The students read the second passage, noting the words they think are important as they read the text or after they've read it.
 - They select five key words from the text.
 - They discuss their key words with a partner and agree on five words that they both think are key.
 - The students form into groups of four and, through discussion and negotiation, select five words that all four students in the group agree are key words. This negotiating process can follow definite rules, with each student taking turns to remove or nominate a word, or the group can decide on a process to use.
 - After the group work, each group presents their key words to the whole class. The class discusses the different selections of key words.

What the teacher looks for

- · Are the students interacting purposefully with the texts?
- Are they saying the words aloud and critically analysing their understandings of the words' meanings?
- Are the students referring to the main ideas in the text to help them identify the key words?

Encourage the students to identify key words independently as they read and interpret any new text. They may want to mark the text in some way, perhaps by underlining or highlighting important words in a way that causes no permanent damage to valuable books, for example, laying a transparency sheet over the top.

Variation on the strategy

• The strategy can be used with texts in electronic media. The students can identify the key words as they read by putting them into bold text or italics.

USING READING TO MODEL WRITING

After learning to identify key words, the students could focus on writing first sentences and then paragraphs. Students who have learned to write clear sentences and to link them in a way that develops ideas logically are more likely to become effective writers of longer texts, such as reports and essays.

Some students have difficulty with constructing sentences and using punctuation accurately. They will need opportunities to practise developing these skills. When students have not yet learned to use punctuation effectively, teachers can ask them to read their writing aloud and to note where they pause, which is usually where a full stop (or perhaps a comma) should be. This will help the students to understand that the punctuation in written language helps to show the reader how words are grouped in written language.

The following two strategies – Word-to-sentence activity and Combining sentences – link the Identifying key words reading strategy to the writing of sentences.



STRATEGIES

WORD-TO-SENTENCE ACTIVITY (WRITING)

The purpose of the strategy

The purpose is to teach the students how to construct sentences using key words.

What the teacher does

- Keep the students in the same groups as for the second exercise in the Identifying key words strategy (see above).
- Ask each group to construct two or three sentences using the five key words that their group has agreed on earlier.

What the students do

- Each group constructs their sentences using their key words.
- Each group then joins another group to share and discuss their sentences.

What the teacher looks for

- Are the students recalling the ways in which sentences are constructed?
- Are the students critically analysing the meanings of the new sentences?

COMBINING SENTENCES (WRITING)

The students match up sentence parts to form whole sentences and then form these sentences into a paragraph.

The purpose of the strategy

This strategy can help the students understand how sentences are constructed. It can also encourage them to use more complex sentence structures.

What the teacher does

- Using sentences from one of the paragraphs explored in Identifying key words (see above), write half of each sentence on a card.
- Give each student group a complete set of cards.
- Ask each group to match up their cards to form complete sentences and then to place their sentences in order.

What the students do

- Working in their groups, the students match the sentence parts and form complete sentences.
- They compare and discuss the sentences they've made, and they put the combined sentences into a sequence to form a paragraph.
- They compare the paragraph they've formed with the one in the original text and discuss any anomalies.

STRATEGIES

What the teacher looks for

immediately

- Are the students recalling the ways in which sentences are constructed?
- Are the students critically analysing any differences in meaning between the original and the reconstructed paragraph?

later

 Are the students applying their understanding of how sentences and paragraphs are constructed to their other writing in this subject area?

IDENTIFYING MAIN IDEAS (READING)

The students match up each paragraph of a text with one of a set of summary statements written by the teacher.

The purpose of the strategy

This strategy provides the students with a tool to help them distinguish between main ideas and supporting details in a text by "weeding out" what is less important.

Identifying main ideas in an academic text is a complex process that takes time to learn. It is very important because it is the first step towards learning how to summarise and take notes. This strategy helps the students to focus on the key aspects of the text (those that enable the reader to meet the purpose for their reading) rather than being distracted or sidetracked by trivial aspects.

What the teacher does

- Select a text that is at the students' level and on a subject that's familiar to them. Check that the text is well structured. The best texts to use when teaching students how to select main ideas are texts that have clear, topicbased sentences and clear links between paragraphs, which help the reader to see the development of the author's ideas.
- For each paragraph, write a sentence that summarises the main idea of that paragraph.
- Give each pair or group of students a set of these summary sentences.
- Discuss with the class the strategies involved in selecting main ideas and producing summary statements.

What the students do

- The students work in pairs or small groups to match each sentence with the appropriate paragraph as they read the text.
- The students justify their choices, explaining why they think each statement reflects the main idea of a specific paragraph.

What the teacher looks for

 Are the students critically analysing their decisions about which main ideas go with which paragraph?

Reading for deep understanding



STRATEGIES

 Are the students using the other literacy strategies that they have learned? For example, are they reading with a purpose and with questions in mind, identifying key words, and reading for meaning?

Variation on the strategy

- Provide the students with another set of sentences one sentence of supporting details for each main idea. Ask your students to match these to their "main idea" sentences. Give them opportunities to practise this.
- Next, provide them with sets of sentences that have fewer supporting details (or none at all) and ask them to find supporting details for each main idea by themselves. Give them opportunities to practise this.
- The students can then begin to construct their own summaries by writing sentences for the main ideas and the supporting details in each paragraph.

RECONSTRUCTING PARAGRAPHS (WRITING)

The students reconstruct a paragraph after the teacher has "scrambled" the order of the sentences in the paragraph.

The purpose of the strategy

This strategy helps the students to understand how paragraphs are constructed. It prepares them to critically analyse the writing of paragraphs.

What the teacher does

- Select an example of a well-constructed paragraph from a text in your subject area. If possible, choose one of the paragraphs used in Identifying main ideas (see page 88). Rewrite this paragraph with its sentences "scrambled", that is, in the wrong order.
- Discuss with the students how readers go about identifying which sentence or sentences express the main ideas in a paragraph (see Identifying main ideas).
 Explain or discuss how connectives are used to link sentences. Remind the students that a paragraph usually has a clear beginning, middle, and end. (See pages 67–68 of chapter 3 for information about text structures.)
- Give copies of the paragraph with scrambled sentences to student groups to unscramble (for example, they could give each sentence a number indicating where it should come in the sequence). Also, ask the groups to identify all the connectives in the paragraph by underlining or highlighting them.
- Have each group join another group and discuss the paragraphs they have constructed, justifying their decisions.

What the students do

- The students work in pairs or groups to put the sentences into a well-constructed paragraph.
- The students discuss their paragraph structures, explaining their reasons for ordering the sentences in a particular way and identifying any linking words.

STRATEGIES

What the teacher looks for

immediately

• Are the students recalling what they have learned about paragraph structure, including the use of connectives, in their discussions about sentence order?

later

 Are the students applying their understanding of main ideas and paragraph structure to other texts that they read and write?

Variations on the strategy

- Provide a "main idea" sentence that is intended to be the first or last sentence in a paragraph. Ask the students to write the missing sentences and complete the paragraph.
- Give the students a paragraph without a "main idea" sentence and have them write one.

USING "COMMENT CODES" (READING)

The students annotate a piece of text by using "comment codes" to indicate the contents or to note their responses to it.

The purpose of the strategy

This strategy encourages the students to be active readers, engaging with the text and responding to the ideas presented. It also gives the teacher evidence about how well the students are understanding the texts they read.

What the teacher does

- Discuss with the students how they can annotate text as they read. Explain the codes they can use to comment on the text. Examples of comment codes are A for "agree", DA for "disagree", MI for "main idea", D for "detail", CTO for "check this out", and I for "interesting".
- Make a copy of the text on an OHT.
- Read the selected text aloud with the students and model how to annotate it using comment codes.
- Give the students another text to read and annotate independently.
- Discuss the annotations and what they reveal about the students' responses to the ideas in the text.

What the students do

- As the students read, they either write their annotations in pencil in the margins of the text or line up a piece of paper beside the text and use the codes in the appropriate places.
- In pairs or small groups, they compare and discuss how they have used their comment codes.



STRATEGIES

What the teacher looks for

- Are the students thinking logically and analysing critically as they annotate the text and discuss their comment codes?
- Are students "checking out" or clarifying any points?

Variation on the strategy

• Annotating texts in electronic media: The students can also use comment codes to annotate electronic texts. As they read the text on the screen, they can add their comment codes in colour, capital letters, or italics, beside and within the text. This exercise needn't be limited to working with computers in the classroom. Once the students are familiar with the strategy, they could use it at home or in the library and discuss their work in the classroom later on.

USING A THREE-LEVEL THINKING GUIDE (READING)

A three-level thinking guide consists of a series of statements, about a specific text, presented at three levels of thinking (see page 94 for levels of thinking):

- Level one (literal): "reading on the lines" to find out what is actually said on the page;
- **Level two (interpretative)**: "reading between the lines" to interpret what the author might mean;
- Level three (evaluative): "reading beyond the lines" to relate the information to other knowledge and evaluate the information.

Readers check the text, think about it critically, and evaluate it so that they can respond to all the statements in the guide. As they read a written or visual text and work through a three-level guide, they focus first on the actual information in the text. They then think through this information, making links between ideas and interpreting the author's thoughts. Finally, they consider the implications of the ideas, making generalisations and critically evaluating the arguments.

Three-level thinking guides can be prepared for a range of texts, including newspaper and journal articles, extracts from curriculum textbooks, word problems in mathematics, literary works such as poems, and visual texts such as pictures, diagrams, graphs, and cartoons. Three-level guides need not be restricted to written texts: they can also be used when watching videos or listening to audiotapes or CDs.

The three-level thinking guide model was devised by Herber (1978) and developed further by Morris and Stewart-Dore (1984).

The purpose of the strategy

Three-level thinking guides promote active reading for meaning at different levels and encourage critical reading. The class discussion that takes place after the students have completed the guide is an important part of this strategy and provides opportunities for developing group skills.

STRATEGIES

What the teacher does

- Select an important aspect of subject content and an appropriate text (written or visual) and determine the content objectives for using this resource.
- Write two or three level-three (evaluative) statements that represent these content objectives.
- Write the level-one (factual) and level-two (interpretative) statements, keeping in mind the purpose for reading. There should be more statements at level one than at levels two or three.
- Check that some statements can be interpreted in different ways, in order to promote discussion.
- When using the guide with students, introduce the subject content and the text in the usual way and explain how to read and complete the guide.
- Initially, take the students through the process step by step (level by level).
- In the discussion after the guide is completed, make sure that the students explain their answers and justify their views.

SOME TIPS FOR THE TEACHER

Select a text with content that is worth studying with close attention, because the guide takes time to prepare and to work through with the class.

Do not use this strategy as a homework exercise or as a test. The value of the activity lies in the discussion it generates among the students as they give their views and justify what they say by referring back to the text.

Provide plenty of time for the students to work through the guide, because it has the potential to stimulate a lot of lively discussion and debate in the classroom.

What the students do

- The students read through the text independently (unless the teacher decides to introduce it by reading it aloud first).
- The students work through the guide, referring to the text to find evidence for each statement.
- In pairs or small groups, the students share, discuss, and debate their responses.

What the teacher looks for

- When discussing responses, justifying ideas, and rereading the text to find evidence, are the students:
 - locating information (level one)?
 - interpreting the implied meaning (level two)?
 - drawing on their prior knowledge to critically analyse ideas (level three)?

Reading for deep understanding



STRATEGIES

- Are the students justifying and explaining their responses, referring back to the text?
- · For all responses, are the students monitoring their understanding?

Variation on the strategy

 The students can write their own statements (or questions, for example, by using question dice – see page 96) at the different levels after reading a text.

Strategies for monitoring understanding

RESPONDING TO TEACHERS' QUESTIONS ABOUT TEXTS

Asking questions about text content before, during, or after the students have read a text is probably the most common way in which teachers try to check and extend students' understanding. Effective questions guide students as they search for meaning and help them to understand the ideas in the text. However, as Nicholson discovered (1984, 1988), students can answer some kinds of questions by reading the text superficially or even without reading it at all. This is because many of the text-related questions teachers ask are about facts only, and so students can answer them by quoting directly from the text or by using their general knowledge, without needing to understand or interpret the text.

One way for teachers to improve their questioning is to consider the levels of thinking that the questions demand. Bloom's taxonomy of cognitive processes (1956) provides a useful framework for questions. This model describes three levels of thinking:

- the factual level, which involves stating facts;
- the interpretative level, which involves interpreting, linking, and comparing information;
- the evaluative level, which involves analysing, evaluating, and applying information.

Teachers can begin by setting some simple, factual questions that all students can answer, and they can follow these with questions that will encourage the students to interpret the information. They can conclude with one or two high-level questions that require the students to critically evaluate and apply the information in the text. This will help to extend the students' thinking.

The chart on the following page names categories of thinking based on Bloom's taxonomy and briefly describes each category. The last column gives some examples of questions, instructions, and question stems for teachers and students to use.

STRATEGIES

Levels of thinking (based on Bloom's taxonomy of cognitive processes)

Thinking process	Explanation	Useful verbs	Question and instruction stems
Level one Knowledge	Recalling information	list state find describe	Who? When? Where? What? How many?
Level two Comprehension	Interpreting Comparing Seeing relationships between ideas	explain why interpret compare link contrast	Explain why What are the causes/effects? What are the differences or similarities? Why is it that?
Level three Application	Applying knowledge to a new situation or experience	solve illustrate show	How could this be used? What is another example of? Solve the problem.
Analysis	Using information to identify motives or causes and to draw conclusions	explain how analyse distinguish examine	Explain what/how What was the problem? What factors contribute to? What is the meaning of?
Synthesis	Putting new information together to make predictions or solve problems	create imagine predict plan	What are possible solutions? Can you develop, create, design, devise, compose, formulate?
Evaluation	Using information to make judgments or form opinions	justify assess decide	What is the best? Prepare a case on What do you think?

Summary of levels:

Level one	Knowledge	Fact	Reading on the lines
Level two	Comprehension	Interpretation	Reading between the lines
Level three	Application	Elaboration	Reading beyond the lines
	Analysis		
	Synthesis		
	Evaluation		

Reading for deep understanding



STRATEGIES

A similar way to improve questioning is provided by Ruddell (2002). This model (as adapted by Whitehead, 2004) has five levels of thinking and a range of thinking skills associated with each level. The levels of thinking are:

- factual stating the facts;
- interpretative inferring from the facts;
- application applying understandings taken from the text to a new situation;
- affective understanding the emotional dimension of characterisations and events;
- **ethical** deciding what is good or bad, or wrong or right, about behaviours, events, opinions, and assertions.

The different thinking skills associated with these five levels of thinking are shown in the first column of the following table.

	Factual	Interpretative	Application	Affective	Ethical
Identifying details	Х	Х			
Establishing the sequence of events	Х	Х	Х		
Associating cause and effect	Х	Х	Х	Х	Х
Determining main ideas	Х	Х	Х	Х	Х
Predicting outcomes	Х	Х	Х	Х	Х
Evaluating information	Х	Х	Х	Х	Х
Problem solving	Х	Х	Х	Х	Х

GENERATING USEFUL QUESTIONS ABOUT TEXTS

Having students ask questions before reading is an effective way of reminding them of their existing knowledge and of arousing their interest in a text. Asking themselves questions as they read also helps students to engage with a text, to monitor their reading, and to check whether the reading is meeting their purpose. After reading, students can generate and respond to questions at any of the levels described above to demonstrate that they've fully comprehended the text.

A New Zealand study (Gray, 1996) showed that year 10 science students, when given explicit teaching about levels of questioning, increased the quantity and improved the quality of their questions. In their "learner diaries", most of these students indicated that their awareness of the value of self-questioning had increased. They also expressed their insights about different levels of thinking, for example:

I didn't know you could step up your questions.

I learnt that good questions squeeze your brain.

Gray, 1996, page 21

STRATEGIES

It is important for the students to use the terms that describe each level of thinking and to understand the sorts of questions that evoke that particular kind of thinking.

USING QUESTION DICE

The students throw two dice, one with a different question starter on each side and one with a different verb (usually modal) on each side. They use the starters and verbs that they roll as the basis for building questions about a piece of text.

The purpose of the strategy

Using question dice helps the students to form questions and to develop an understanding of the different levels of questioning. It provides a simple tool that they can use to monitor how well they understand a text.

A question-dice activity is also a fun way to develop students' confidence about asking questions.

What the teacher does

- Prepare several pairs of dice; each group of students will get a pair.
 - One dice in each pair has basic question starters on each side, for example: "What?", "Who?", "When?", "How?", and "Why?"
 - The other dice has verbs on each side, for example: "is/are", "would", "can/could", "will", "might", and "should".
- Guide the students through a text and ask them to finish reading it independently.
- Explain to the students that:
 - first, they roll the question starter dice and make up a question that uses the question starter that they rolled;
 - next, they roll the other dice, to get a verb, and make up a question that uses this verb with their question starter from the first roll, for example, "How could ...?", "Why might ...?", "When would ...?".
- Demonstrate this process for the students, for example: "How could this problem be solved differently?" or "Why might the writer have put this sentence last?" Decide whether the questions will relate to a particular text.
- Use Bloom's taxonomy (see pages 93–94) to discuss with the students the type of question they construct each time they roll the dice.

What the students do

- In groups, the students take turns rolling the first dice and making up a question that uses the question starter that they roll. They record their questions.
- Still in their groups, the students take turns rolling the second dice and making up a question that uses both the question starter they rolled first and the verb from their second roll. They record their questions.

Reading for deep understanding



STRATEGIES

- The students could identify the levels of thinking on which their questions are based
- The students attempt to answer the questions and confirm the answers by rereading parts of the text.

What the teacher looks for

immediately

- Are the students being creative in how they design their questions?
- Are they rereading the text to check their understanding?
- Are they building up their knowledge of the different levels of their own thinking and understanding?

later

 Are the students transferring their new understandings about different types and levels of questions to other learning (for example, when setting questions for their independent research)?

Variations on the strategy

- The question-dice activity can be used in many learning situations that require students' active involvement, such as listening to an audiotape or a CD or viewing a film or video.
- Question dice can also be used to generate questions before reading, in order to develop a purpose for reading.

Reflecting and planning

Reflecting	
Planning	
Trialling a strategy	
• Focusing on α group of students	
Developing a learning community	

5

Chapter 5: Evaluating and recording information

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Chapter 5: Evaluating and recording information

This chapter focuses on strategies that teachers and learners can use when evaluating the information in texts, processing it, and recording it. Engaging in these activities involves using and combining critical and creative thinking as well as literacy knowledge, skills, and strategies.

As you read through pages 101–104, you may find it useful to think about the following questions:

- · What does this mean for my subject area?
- · What does this mean for my students?
- · Which of these ideas was I already aware of?
- What have I just learned?
- · What else do I want to know?

What the research tells us

Every day, we seek and use information to help us make decisions. In today's world, students are faced with many challenges that require sophisticated literacy skills. To become lifelong learners, they need strategies to cope with new communications technologies and the profusion of information in print and other media. Students need to become expert in selecting information sources appropriate for their purpose and evaluating the information they find.

Developing the abilities and willingness of students to be critical of what they read will involve encouraging them to use a variety of criteria to judge the accuracy, relevance and status of the information they find. Students will constantly come across misleading, incorrect, intentionally or unintentionally biased information, and they need to know how to recognise this and what to do about it.

Wray and Lewis, 1995, page 7

Teachers can help their students to develop critical and creative thinking strategies, problem-solving strategies, and information-handling strategies so that they will be able to judge and evaluate the information they find. Students also need to learn to make notes that they can refer to later – for example, when completing an essay or a research report or when linking new ideas to something learned earlier. These skills and strategies are required in all subject areas, so all teachers should plan to teach them to their students.

Students need to know *why* they are looking for particular information so that they can make decisions about *what* to record, and *how* they should record it.

Research carried out in New Zealand (Moore, 2002) indicates that many students do not have the literacy strategies to process the amount of information they encounter at school.

Crooks and Flockton (1998) assessed the information skills of year 8 students as part of the National Education Monitoring Project (NEMP). They examined the strategies that students employed to clarify their information needs and to find, gather, analyse, and use information.

Encourage students to judge the accuracy and relevance of the information they find.

Strategic learners are aware of their purpose for recording information

The NEMP results identify areas of student need.

They found that students were relatively successful in identifying sources of information when these were easy to find, but were less successful when the pathway to finding information was less obvious. The students did not perform well when asked to interpret or summarise information. Many students scored poorly in tasks that required them to select main points and to identify relevant and irrelevant information.

Dunn (2001) reported on a study (for the standardisation of the Essential Skills Assessments) that identified the standards of information skills achieved by some cohort groups. The year 9 and 10 students in this study had some difficulty with such higher order reading skills as judging the relevance of information and deciding, on the basis of the information provided, whether a given conclusion was correct. The results showed that, in any given class and school, students are likely to demonstrate a range of skills – some students will have minimal skills in evaluating information, others will have moderate skills, and still others will have advanced skills.

Students need to know the purpose for reading.

Recording of information differs from taking notes in that it involves more active thinking and the interpretation of ideas to form a personal summary. It is important that students learn how to move beyond copying whole chunks of information and become effective note makers. Students need models of structures that they can use for recording information. Lewis, Wray, and Rospigliosi (1994) have shown that students can make their own decisions about recording when they are aware of the purpose for reading and know when and how to use a range of guiding structures.

What the challenges are

As the Internet continues to expand and more information becomes available, students need, more than ever, to develop strategies to select, process, evaluate, and record information so that they can become independent learners. Using these strategies allows students to take responsibility for their schoolwork and helps them to achieve academic, vocational, and personal success.

Knowing the students

Teachers should know and use the available assessment tools.

The Essential Skills
Assessments provide a
tool that teachers can
use to identify students'
strengths and needs in
information skills.

At primary school, most students will have begun to develop their skills in extracting ideas from text and reorganising the ideas. It is essential that teachers of year 9 and 10 students extend their existing strategies by building on what the students can already do. There are assessment tests available to help teachers identify both what students can do and what their next learning step is. The Essential Skills Assessments: Information Skills (ESA:IS), prepared by the New Zealand Council for Educational Research (Croft, Dunn, Brown, et al., 2000), enable teachers to test students on a range of information-literacy skills. For example, the test on evaluating information in text assesses critical-reading skills that require judgment and the analysis of some relatively sophisticated language. Observing students as they carry out information processing tasks will help teachers discover which students are coping well and which need further support and guidance.

Students for whom English is a new language can have difficulty in understanding the need to learn processing and evaluating strategies. Sometimes these students lack experience in accessing a range of information sources and may not have had opportunities to develop and present their own opinions and to comment critically on others' views. However, teachers should not assume that this will be so.



Knowing what teachers can do

Teachers can model the process of evaluating the information in a text. Sometimes students believe that everything written by adults is true, so an initial strategy could be to deliberately introduce out-of-date, biased, or contradictory written material. The teacher can demonstrate, by "thinking out loud", how to recognise and respond to evidence that a text contains unsound information (perhaps in the context of a shared reading). Students need opportunities to learn how to judge the authority or reliability of a particular text.

Teachers can also model effective ways of recording and reusing the ideas and concepts in texts. It is important that students learn how to record information strategically. Recording is a complex process that uses a range of literacy and thinking skills and strategies. So teachers need to give students direct instruction and opportunities to practise in order to develop their recording skills.

To be strategic recorders of ideas and information in texts, students need:

- an understanding about their purpose for reading and recording the information;
- background knowledge, vocabulary, and an understanding of the relevant concepts;
- effective strategies for selecting, processing, analysing, and interpreting the relevant information, including:
 - strategies for identifying main points and related ideas,
 - strategies for distinguishing between relevant and irrelevant information,
 - strategies for organising ideas in a clear structure.

When carrying out tasks that involve recording information, students can practise the literacy and thinking strategies that they have already learned.

Developing independent learners

To help their students learn to use the evaluating and recording strategies to process information independently, teachers can:

- identify the specific strategies that are needed;
- explicitly teach these strategies in manageable steps initially by modelling;
- explain why and how these strategies are useful;
- give the students many opportunities to practise the strategies, both collaboratively and independently;
- provide the students with support and feedback as they learn and apply the strategies.

Working in small groups enables students to discuss both their learning and the usefulness of a particular strategy in helping them meet the purpose of a task.

The following questions can help students to monitor their understanding. Students could use their learning logs to help them think about some of these questions.

Teacher modelling makes a difference for students.

STRATEGIES

Evaluating information

- Is the information in this text relevant to my purpose?
- Who wrote it? Has the writer a particular point of view that I need to take into account?
- How will I go about selecting information from this text?
- Is the information in this text sufficient for my purposes?
- What other sources of information could I use?
- How does the information in this text compare with that in other texts that I have read?

Recording information

- How does the structure of the text suggest the way I should record the information for later use?
- How does the purpose of the task suggest the way I should record the information for later use?



What can make a difference: the deliberate use of literacy strategies

The following section (pages 105–125) suggests literacy strategies that teachers can use for:

- helping students to evaluate information;
- · helping students to monitor their understanding;
- helping students to record relevant information.

Many of the strategies can also be used by students independently, to further their own learning, when they have seen them modelled and practised them.

TRIALLING STRATEGIES

As you try a new strategy with your colleagues, you may find it useful to think about these questions:

As a learner

- What processes for engaging with text did I use? For example, did I draw on my prior knowledge? Did I set a purpose?
- What kind of language did I use? For example, was I more precise than I used to be in using specialised vocabulary? Did I give more detail than I used to in my descriptions?
- How did the new strategy enhance my understanding of the content?
- What did I learn from others in my group?

As a teacher

- What is happening in my classroom that makes me think this strategy will be useful for a student or group?
- How would I structure the use of this strategy to help my students become more independent?
- How will I monitor my students' learning when they use this strategy?
- How will this strategy enhance my students' understanding of the content?

Strategies for evaluating information

This group of strategies focuses on the need for students to objectively evaluate the information in texts, biases within texts, and inconsistencies between texts and to relate these to their purpose for the reading. Both of the trash or treasure strategies below teach students how to select relevant information according to their purpose.

TRASH OR TREASURE: CHOOSING THE BEST TEXTS

Students need to learn to think about the relevance and the comparative usefulness of whole texts, so that they can use their time efficiently to meet their purpose for reading.

STRATEGIES

The purpose of the strategy

In this version of Trash or treasure, students learn how to make decisions about the relative usefulness of whole texts.

What the teacher does

- Collect a number of texts on a specific topic, for example, articles from newspapers or the Internet. These could be reference texts that the students have collected for a specific study.
- Group the students and give copies of the texts to each group.
- Ask a question related to the subject content or topic. Tell the students to rank the texts according to whether they are relevant to the question (treasure) or not (trash).
- Ask another question and let the students reconsider their rankings. This will
 develop their awareness that the purpose for the reading dictates the relevance
 of the information.

What the students do

- The groups of students rank the texts from most relevant to least relevant and justify their rankings.
- Each group joins other groups to compare and discuss their rankings.

What the teacher looks for

- Are the students discussing the relevance of the material and reflecting on the purpose of the task as they sort through the texts?
- Are they justifying their initial rankings by going back to the set question?
- Do their justifications include comments about text bias, text age, the content of each text, and text form?

Variation on the strategy

This strategy can be employed to make decisions about texts on the Internet. Give the students a selection of URLs, some of which are relevant to a set question or purpose and some of which are not. The students can work collaboratively on this activity. They can open a Word document and copy and paste text from websites, identifying relevant information and organising it so that it meets the purpose. Some school websites provide training for students in doing this.

TRASH OR TREASURE: SELECTING RELEVANT INFORMATION

Students often need to select relevant information and set aside irrelevant information for a particular purpose or task. In this version of Trash or treasure, students work with short statements like those they will encounter within a text.

The purpose of the strategy

The purpose of this strategy is to make decisions about the relevance of short statements or sentences within texts.

What the teacher does

- Prepare twelve to fifteen short statements about the relevant subject content and print them on cards.
- Divide the class into groups and give each group a set of the statements.
- Ask a question that gives the students a purpose for sorting the statements. Tell the students to sort the statements into two piles according to whether they are relevant to the question (treasure) or not (trash).
- Ask a different question and let the students reconsider their selections. This
 will lead them to discover that the relevance of information depends on the
 question and their purpose for reading.

What the students do

- In pairs or groups, the students put the statements into two piles:
 - relevant statements (treasure pile);
 - irrelevant statements (trash pile).
- The students discuss their selection within groups or with the whole class.
- They then reorganise their piles in response to the new question.

What the teacher looks for

- Are the students critically analysing the information and reflecting on the purpose of the task?
- Does the discussion indicate that the students are becoming aware that the purpose for reading dictates the relevance of the information?

Variations on the strategy

- Give each group a different question and compare the selection of relevant statements.
- Encourage the students to use this Trash or treasure strategy whenever they evaluate information they have gathered. When it's OK to mark the information source, they can use a highlighter to identify relevant key points (the treasure) and can cross out the irrelevant parts (the trash).

READING BEHIND THE LINES

Written texts, whether in print or electronic media, are never neutral, and students need to be able to identify the author's voice in any text. The values and beliefs of the author affect the messages that are communicated, and so it's important to know who is "behind the lines".

STRATEGIES

The purpose of the strategy

This strategy (Whitehead, 2004) helps students to recognise the author's purpose in writing the text, the author's viewpoint on the subject, and any consequent bias that may be presented. The strategy builds on the three-level thinking guide strategy (see page 91 in chapter 4) and adds a fourth level – reading "behind the lines" in order to identify the author's voice.

What the teacher does

- Develop four sets of questions that will help students to think critically (you could use or adapt the questions in the box below).
- Model, by "thinking out loud", how some of the questions may be used to read "behind the lines" of a particular text.
- Ask the students to apply the same questions to a different text that is similar in form and content.

Questions to promote critical thinking include:

1. Power relation questions

- Acceptance: Should we accept that ... (for example, that ... the majority culture should have power over a minority culture)?
- Benefit: Who would benefit if ... (for example, if ... the minority culture had power over the majority)?

2. Values and beliefs questions

- What are the author's values and beliefs?
- What kind of life would you have if you accepted these values and beliefs?

3. Identity questions

- What is the role of each person or institution in the text?
- Whose voices are not heard in the text?
- · Whose interests are being served in the text?

4. Knowledge questions

- Is there support for what the author is saying?
- · Why did the author write the text?

adapted from Whitehead, 2001, pages 84–90

What the students do

- The students attend to the teacher's modelling with the first text in order to find out how to complete their task.
- They read the second text independently.
- In small groups, the students discuss the questions, decide on answers, and justify their decisions.

What the teacher looks for

- Are the students thinking critically about the texts rather than immediately accepting the information?
- · Are they using the critical-thinking questions appropriately?

DISTINGUISHING BETWEEN FACT AND OPINION

Many texts include a combination of fact and opinion. Differentiating between these is a crucial step towards being able to evaluate the content.

The purpose of the strategy

This strategy helps students to understand the importance of identifying an author's viewpoint and of recognising what is fact and what is the author's opinion.

What the teacher does

- Prepare a series of statements on some subject content. Include some statements that are obviously based on either facts or opinions and some that can be interpreted in different ways.
- Hand out copies of the statements to small groups of students and ask the groups to decide whether each statement is opinion or fact.

What the students do

- Each group discusses each statement, decides whether it is opinion or fact, and
 justifies their decisions.
- They share their decisions with other groups and compare decisions, justifying their decisions where necessary.

What the teacher looks for

- Are the students using information in the text to identify facts and opinions?
- · Are they thinking critically about the text?

Variation on the strategy

As they read a text, students can identify and mark the statements that might
indicate an author's personal opinion or bias, perhaps by using comment codes
like those described on page 90 in chapter 4. For example, instead of A (agree)
and DA (disagree), they could use O (opinion), F (fact), and B (bias). This
variation could be used to study fact and opinion in newspaper articles.

COMPARING TEXTS

Students need to become aware of the differences among the texts used in a single subject area and of the reasons for these differences. The texts they read may use different terms or different visual images to explain the same concepts, and different authors may choose to emphasise different points. Students need strategies for comparing different texts in the same subject area.

STRATEGIES

The purpose of the strategy

This strategy helps students to use several texts that cover the same subject content and to critically analyse the different ways in which aspects of content are presented. This helps the students to become aware of the author's voice.

What the teacher does

- Select several texts, from different sources, that present the same information.
- Ask groups of students to compare the information and the way it is presented.
- Prepare a comparison chart for the students to use to record their discussion. The questions in the first column will depend on the purpose of the text and task. The questions suggested in Reading behind the lines, on pages 107–108, could be adapted for this use.

Sample chart: Comparing the viewpoints in different texts

(Note that more columns should be added when students are comparing more than two texts.)

Question	Text 1	Text 2
Who is the author?		
What viewpoint is expressed?		
What main idea or argument is presented?		
What information is given to support this main idea or argument?		

What the students do

- The students read the texts and discuss their similarities and differences.
- They discuss answers to the questions in the first column, record the group's agreed responses on the chart, and discuss these decisions with other groups.

What the teacher looks for

- Are the students using the literacy and thinking strategies they have learned as they critically analyse the texts?
- Are they selecting main ideas from the texts and reading beyond and behind the lines?

Variation on the strategy

• The teacher can select texts from newspapers, books, and the Internet and ask the students to compare how information is presented in these different text forms and media. (This could also be part of the Trash and treasure activity.)



Strategies for monitoring understanding

Many of the strategies in this book involve helping students to monitor their learning – for example, the questioning strategies on pages 93–96 in chapter 4 and the KWLH strategy in appendix 5 on page 161. Group activities such as think-pair-share are often focused on monitoring understanding. Students may also have been recording their thoughts and reflections about their learning in learning logs. A further tool that they can use to monitor their understanding is "quickwriting".

QUICKWRITING

Quickwriting is a form of note making that helps students to remember and clarify the ideas they meet in texts.

The purpose of the strategy

The quickwriting strategy helps students use writing to explore and clarify ideas and to recall what they know and understand.

What the teacher does

- Suggest a quickwriting task at various stages in a lesson to help the students think about what they are learning.
- Explain that the writing is not meant for an audience but is for their personal use. It will be brief, informal, and "unfinished". The students are not expected to write in complete sentences or to take care with spelling and grammar.
- Remind students whose first language is not English that they can write in their first language if they feel more confident and competent working that way.
- Give the students time to write, then ask them a question that relates to what they have been learning.

What the students do

At the start of a lesson

- The students write rough notes on what they remember from the last lesson and share them with a partner.
- They then write a quick response to the teacher's question and read it aloud to a small group, the teacher, or the whole class. (This provides them with thinking and rehearsal time.)

During a lesson

- The students write an example of something the teacher is talking about.
- They write an explanation of a new piece of information, using their own words.
- They write their response to an idea or point of view.

STRATEGIES

Before listening to a speaker or watching a video

• They jot down their predictions or questions.

When seeking information in texts

• They jot down the relevant information that they find and perhaps also note how they plan to use it.

What the teacher looks for

- Do the students recall what they have learned?
- Are they using the quickwriting strategy during lessons without teacher prompting? (If so, then the students are thinking about their own thinking.)

Strategies for recording information

This section provides strategies that students can use to record information for various purposes. Many of the strategies discussed in earlier chapters can also help students learn to make useful notes about the information or ideas in a given text. For example, surveying a text (see pages 67–69 in chapter 3) can enable students to identify its structure and main ideas. Structural features such as headings can be the basis for notes that summarise the information. The first strategy in this section suggests a range of ways to organise information graphically to meet particular purposes for recording.

USING GRAPHIC ORGANISERS

A graphic organiser is a visual representation of ideas and is often used to summarise information. Each kind of graphic organiser has its own particular purpose and organises information in a specific way.

Types of graphic organisers

- 1. A comparison chart or Venn diagram can be used to show the similarities and differences identified in a text that compares two places, individuals, objects, or ideas. The diagram identifies the similarities and differences.
- 2. A chart or a flow diagram can be used to show the information from a text that uses a cause-and-effect explanation or a problem-solution structure.
- 3. Timelines can be used to show time sequences.
- 4. Mind maps (including star and spider diagrams) or tabulated formats are useful for grouping ideas and showing the relative importance of each.
- 5. Structured overviews go one step further and put the main ideas into a hierarchy of importance or a logical sequence (see page 40 in chapter 2).

This list could be made into a wall chart for students to refer to.

See appendix 7 for illustrations of some of these kinds of graphic organiser.



The purpose of the strategy

This strategy teaches students how to summarise by graphically representing the main ideas of a text. The type of graphic organiser chosen will depend on the structure of the text and the purpose of the task.

Different kinds of paragraph structures are identified below.

Compare and contrast

Cause and effect

Problem/solution

Time sequence

Spatial description

Listing

What the teacher does

- Identify the structure of a particular text or text section that the students need to use, and discuss the purpose for reading.
- Model the process of preparing an appropriate graphic organiser. Explain how
 main ideas and supporting details can be shown visually on the graphic
 organiser, and then demonstrate how to use words, pictures, symbols, and
 (if appropriate) colour to add to the effect.
- Encourage the students to suggest appropriate graphic organisers to suit particular text forms. The students will make increasingly focused suggestions as they become familiar with the purposes of each kind of graphic organiser.
- Ask the students to create their own graphic organiser for a specific purpose.

What the students do

- The students watch, listen, and contribute suggestions as the teacher prepares a graphic organiser for a specific purpose.
- Each student creates their own graphic organiser.
- They compare their graphic organisers, critically analysing the different formats and identifying the kinds of information that each gives the reader.

What the teacher looks for

- Do the students notice how the information is organised in the text?
- Are the students adopting appropriate graphics to represent the ideas? Are they critically analysing text structure and task purpose, and are they recalling the appropriate use of each kind of graphic organiser?
- Are they thinking creatively as they use their literacy strategies to identify and record main ideas?

STRATEGIES

Variation on the strategy

The teacher can select two representations of the same information – one as written text and the other as a graphic organiser. The class can then be divided into two groups, and each group can be given one version of the information. One group converts the information from their written text into a graphic organiser, and the other group converts the information from their graphic organiser into written text. They then compare their final versions and also compare these with the originals.

TEXT-COMPLETION ACTIVITIES

Filling in the gaps in incomplete texts encourages students to think carefully about the importance of including both main ideas and supporting details when making notes.

The purpose of the strategy

This strategy helps students to record main ideas and supporting details after reading a text or viewing a video. Rather than copying notes and having little engagement with the text, the students read carefully to fill the gaps.

What the teacher does

- Provide, as a handout and as an OHT, notes about a text that the students have read or a video that they have watched, leaving out words, phrases, sentences, or paragraphs. Leave spaces for the students to provide examples or some supporting details.
- Ask the students to fill in the gaps and to provide examples or supporting details from other sources.
- Discuss the range of suggested "gap fillers".

What the students do

- The students complete the notes carefully.
- They consult other sources to complete their notes.

What the teacher looks for

- Are the students thinking creatively and critically to determine what needs to go in the gaps?
- Are they using a range of literacy strategies (particularly the strategies associated with comprehension)?
- Are they processing the information from other sources before adding it to their notes?

Variations on the strategy

- As the students become more competent recorders, the teacher can provide a framework with headings, rather than text with gaps, and ask the students to fill in the details.
- Incomplete notes can be given out before reading or viewing. The students can be supplied with text references to help them to fill in the gaps.

IDENTIFYING KEY WORDS IN A PASSAGE

All secondary school students need to learn to identify key words and phrases readily.

The purpose of the strategy

Identifying key words helps students to focus on main ideas as they make notes. Whenever they are reading independently, students should use this strategy to gather information.

What the teacher does

- Encourage the students to skim and scan (see page 66) for key words and phrases before they read the text. Have them make a list of words they find that they predict will be key words.
- Have the students read the text, jotting down key information when they find it. Ask them to compare these jottings with their list of key words, make a final list of key ideas, and discuss this list with a partner.
- Then have the students make notes about the text, using their final list of key ideas. Discuss the purpose of the notes, asking the students how they might use them.

What the students do

- The students skim and scan the text to identify possible key words and phrases.
- They make a list of the words and phrases that they predict will be "key".
- They read the text more closely to find out whether their predictions were the key concepts in the text or not. As they read, they jot down the actual key words and phrases that they find in the text.
- They then compare this list with the one they made after skimming and scanning and make a final list of key ideas.
- They discuss and justify their final list with a partner.
- They make notes about the text, using the main ideas that they have now confirmed are "key" in this text. These notes could be in the form of a graphic organiser.

STRATEGIES

What the teacher looks for

- Are the students critically analysing their list when they look at their predictions and when they discuss it with a partner?
- Are they using a range of comprehension strategies when identifying the key words and phrases?
- Are they using their knowledge of the purpose of the note taking to determine the detail that should go into their notes?

Variations on the strategy

- If the students use teacher-prepared study notes, they can use a text-marking strategy to highlight or underline the key words.
- If they are using an electronic text, they can identify key words by putting them into bold print or underlining them on screen.

SUMMARISING

Chapter 4 introduced a range of strategies to help students identify main ideas as they read a text. One strategy (see page 88) involved matching "main idea" statements and supporting statements to specific paragraphs in a text. The next step, for students, is to learn to create their own "main idea" statements.

The purpose of the strategy

This strategy enables students to identify the main ideas in a text and to write a summary of these ideas.

What the teacher does

- Read a short text (perhaps a text of five to ten paragraphs) with the class. Then ask the students to look at a specified paragraph and write a statement that sums up its main idea or ideas.
- Have the students compare and discuss their statements in pairs or groups.
- Explain to the students that not all paragraphs have their own main ideas for example, some paragraphs (often the first or the last paragraphs in a short text) are themselves summaries of all the ideas in the text so it is not appropriate to try to summarise such paragraphs. "Think out loud" about the text to show the students how to identify these kinds of paragraphs.
- Ask the students to find all the paragraphs that have a main idea and to repeat
 the process of writing a summary and discussing it.
- Have the students work in groups to link the clearest statements in order to create a summary of the whole text.

What the students do

- The students write a statement for each paragraph that has a main idea.
- In pairs or groups, they compare these statements and decide on the clearest statements for each paragraph.
- They link the clearest statements to develop a summary of the whole text.
 This could be organised graphically.

What the teacher looks for

- Does the group discussion show that the students are analysing their various statements as they decide which is the clearest?
- Does the group discussion indicate that the students are aware of the structure of the text they are reading? For example, do they notice whether the first paragraph has a main idea?
- · Can the students link the main ideas?

Variation on the strategy

 The students can identify main ideas by marking a photocopy of the relevant text with highlighters or by underlining part of the text. They can highlight main ideas and details in different colours. The students can then use these markings as a basis for writing their summaries.

CONDENSING INFORMATION

Most secondary teachers have worked with students who choose to copy out sections of a relevant text rather than summarise it in their own words. Students who lack the confidence to decide what to leave out often find it easier to copy whole sentences than to decide which words and phrases are unnecessary. It is possible that such students don't have a clear idea of the purpose for reading and recording.

The purpose of the strategy

Learning to condense information helps students to reduce or eliminate the amount of straight copying they do when note making. It also helps them to think about what they are writing and how best to express it for the purpose.

What the teacher does

- Model the process of condensing information into notes that will be useful for study purposes in your subject area. For example, explain that scientists, historians, and other researchers all use condensed notes to summarise primary data. Because the notes are intended for the student's future use, they must capture all the key information.
- Use a primary source of information (for example, a research paper or a newspaper) to model effective and ineffective examples of condensed notes.
- Discuss the key differences between the effective and ineffective examples.

STRATEGIES

- Discuss the need to know the purpose for reading in order to know what to record. (In this case, the purpose is to record information about the main idea for future recall.)
- Use the analogy of text messaging to explain the need to condense information. Most students will understand that, when they text-message, they leave out letters and words and also use abbreviations and symbols to communicate their message as briefly as possible.
- Ask the students to read a text, write a text message of the main idea, and then
 compare their messages with those of other students. The link to note making
 can then be easily made.
- Provide formats that limit space or that clearly define where to place main points and related ideas:
 - Give each student a frame or structure, such as a structured overview (see page 40 in chapter 2), on which they can fill in responses for each point.
 This limits what they can write.
 - Show the students how to use the dot-and-jot method of recording (see page 164 in appendix 7), which also limits the amount they can write. The students write a heading and, on each line underneath the heading, they put a dot (or bullet) and a note – perhaps a key word or phrase – that is no more than one line long. Full sentences should not be used.

What the students do

- The students condense first a sentence and then a paragraph from a given text, using fewer words and more abbreviations and symbols than the original text.
- They practise using restricted formats, condensing the main ideas of a text to meet the purpose for reading.
- They critique their notes to assess whether they have enough detail for future use.

What the teacher looks for

- Are the students using appropriate literacy and thinking strategies to identify the main ideas and eliminate irrelevant ideas?
- Are they thinking about how they will use their summaries in the future and whether the information they have recorded will be the most useful?
- Are they using these strategies in their independent reading and recording work?

Variations on the strategy

- The students can be divided into groups, and then each student can be given a removable sticky note on which to summarise a section of information. They then stick their notes onto the group summary page.
- The students can be given removable notes in two colours one for a main idea and one for a supporting statement. The note format limits the amount of information that can be written.

LISTENING AND NOTE MAKING

For this strategy, teachers need to provide an audio version of (or read aloud) a piece of written text. They also need to prepare a written summary of that text with gaps for the students to fill in.

The purpose of the strategy

This strategy will help students to develop their listening skills. The need to fill in the gaps engages the students' attention initially, and they learn to distinguish main ideas from peripheral ones.

What the teacher does

- Find or prepare a spoken text about relevant subject content. Make sure that it has a clear structure and is a reasonable length.
- Prepare a written summary of the text with spaces for the students to fill in specific facts as they listen. Initially, provide a summary with only a few spaces.
- Discuss the summary and ask the students to predict what the spoken text will tell them.
- Play the audio text aloud or read aloud, pausing at intervals so that the students can record information on their summary papers. Check to see if any students want the passage replayed.
- As the students become more proficient, include less of the relevant
 information in your written summaries of the texts. When the students have
 completed this activity with different texts a number of times, provide only an
 outline of the text and, at a later stage, simply provide headings and key words.

What the students do

- The students listen to the text being read aloud and fill in the gaps in their teacher-prepared summary.
- They listen to identify which pieces of information they need for their purpose.

What the teacher looks for

- Are the students being critical and creative in their predictions about the text?
- Are they using their comprehension strategies and applying them to a situation in which they are listening rather than reading? For example, are they "listening on" to make sense of key vocabulary that is new to them?

Variation on the strategy

 This method can also be used effectively when the students are watching videos or live presentations.

STRATEGIES

DICTOGLOSS ACTIVITY

Students at senior levels are often expected to listen to a speaker and make their own notes on the main points. This is a sophisticated skill, and students need support and training to do it successfully. The Dictogloss activity is based on a dictation procedure originally suggested for students learning a new language (Wajnryb, 1990). Here, it is adapted to help students learn to listen carefully and make notes of main ideas.

The purpose of the strategy

The Dictogloss activity trains students to listen carefully and make notes of main points. The co-operative aspects of this strategy give students peer support and provide opportunities to share ideas.

What the teacher does

- Find or prepare a text on subject content that is suitable for reading aloud. Make sure it has a clear structure and is a reasonable length.
- Discuss the subject content of the text with the students and ask them to predict what they might hear.
- Explain the procedure and talk about abbreviations that the students may be familiar with (for example, abbreviations used in text messaging).
- Read the text aloud at normal speaking pace.
- Read the text again.

What the students do

- The first time the text is read, the students listen carefully, without writing, to get an overview of the whole text.
- During the second reading, the students jot down the main ideas, using abbreviations if they wish.
- In small groups, the students pool their ideas and produce a group reconstruction of the text.
- The students compare their group's version with the original and discuss their process and its effectiveness.

What the teacher looks for

- Are the students demonstrating comprehension strategies as they independently listen and make notes?
- Are they reasoning and analysing in their groups as they recall, evaluate, and reflect on the information that each group member presents? Is each person's contribution considered and respected?

Using co-operative learning approaches

A CO-OPERATIVE READING SQUARE

Co-operative learning approaches can be an effective way to involve students in learning and using a range of literacy and thinking strategies. The success of the co-operative learning tasks also depends on the use of interpersonal listening and speaking skills – that is, on intelligent, social co-operation among students.

Chapter 4 presented a range of reading strategies to improve students' comprehension of text. These were presented as separate strategies for students to develop and practise.

When students are confident in using these strategies, they can integrate them using a comprehensive model. The co-operative reading square is a variation of the Reciprocal Teaching model (see page 74), in which groups of students work through a series of set comprehension activities. Students need to practise co-operative group work if they are to understand the processes involved and gain the full benefit of the approach.

The purpose of the strategy

The co-operative reading square strategy helps students to work together and to assess and value the contributions of others as they engage with the text in a four-step process:

- **Step 1.** Questioning (monitoring understanding);
- **Step 2.** Identifying key words and ideas (interacting with text);
- **Step 3.** Summarising (recording);
- **Step 4.** Presenting ideas visually (communicating).

What the teacher does

- Select a text. This could, for example, be a textbook extract, a mathematical problem, a poem, or a narrative. It should be reasonably short and at a reading level that's easy for the students.
- Divide the students into groups of four and give each group a copy of the text they are to read. Explain the four tasks and the associated subtasks. Each group member will be responsible for one of these tasks.
- Go through the four tasks (questioning, identifying key words and ideas, summarising, and presenting ideas visually) with the whole class.
- After the group activity, use the examples from different groups to discuss such
 questions as: "What helped you to understand the text?", "What key words and
 ideas did your group select?", and "What did your group decide was the main
 idea?" The graphics used for the visual presentations can also be compared.

STRATEGIES

What the students do

- The students read the text on their own or nominate one person in their group to read it aloud.
- Each student leads the group in one of the following four tasks.
 - 1. Ask a question for the rest of the group to answer. This could be about something the questioner does not understand, such as the meaning of a word. The other students in the group respond to the question and then, in turn, ask their questions for the group to respond to. (They could use the question dice activity on page 96.)
 - 2. Identify a key word in the passage and explain it. The other students contribute further key words, so that the group comes up with six to eight words.
 - 3. Retell or summarise the main idea in their own words. After each student has had a turn, the group discusses and agrees on a summary statement using the identified key words.
 - 4. Present the main idea of the text visually, using the information discussed and including the contributions of the other group members.

What the teacher looks for

- Are the students critically analysing the meaning of the text by discussing it constructively with others in their group and evaluating the responses of others?
- Are they thinking creatively in their design of a visual image?
- Are they recalling literacy and thinking strategies that they have used and practised previously?
- · Are they working co-operatively to complete all the tasks?

CO-OPERATIVE JIGSAW ACTIVITIES

A text often lends itself to being divided into sections that can be studied separately and then reconstructed. Once students are confident about working in co-operative reading squares, teachers can extend the co-operative approach to a jigsaw activity. In the jigsaw activity, each student is a member of two groups – they are members of an "expert group" in which they acquire expertise on a particular aspect of the learning, and they are also members of the whole class or of a home group.

Whether the non-expert group is to be the whole class or a home group, the teacher needs to discuss with the students what they are going to read (including key concepts, new words, and so on) and to set a clear purpose for reading.

The purpose of the strategy

Jigsaw activities give students further independent practice in reading and interpreting texts.



Option A: "Expert groups and whole class" jigsaw activity

What the teacher does

- Put the class into groups of four. Explain to the students that each of these
 groups will take responsibility for becoming expert on the content of a
 particular section of the text and will then share their expertise with the rest of
 the class.
- Give each group a different part of the text to read and discuss, using the steps of the co-operative reading square (see page 121).
- Ask each group to present its summarised part of the total information to the rest of the class, in the sequence used in the original text, using their visual images to illustrate the main idea and highlight the key words.
- Set the class a task that requires them to integrate all the summaries.

What the students do

- Read and discuss their part of the text in their group, each group member in turn leading one of the steps of the co-operative reading square.
- Prepare a group summary statement about their group's part of the text, using the list of key words and a visual image of the main ideas.
- As a group, present their summary to the class, using their key words and visual image.
- Use the class summaries to complete the class task.

Option B: "Expert groups and home groups" jigsaw activity

What the teacher does

- Explain to the class that each student will belong to two different groups, an expert group and a home group.
- Place the students into "home groups" of an appropriate number (for example, four) and number the students in each home group (for example, 1, 2, 3, and 4). Alter the numbers in the groups according to the class size.
- Explain to the students that all students who share the same number are members of the same expert group. Ask them to move into their expert groups.
- Give each expert group a different text (either different sections from one long text or different short texts on the same subject) to read and discuss, as a co-operative reading square. There may need to be a time limit for this. If there are more than four students in the group, they may need to share responsibility for the four tasks.
- Collect all of the texts before the students, who are all now experts on their group's section of the text, rejoin their home groups. Each student shares with the other members of their home group the specific expertise that they have gained in their expert group.

STRATEGIES

Have the home group summarise the main ideas from each expert. Then set a
follow-up task to check all students' understanding of the text or subject. For
example, the students can fill in an information chart or diagram, solve a
problem, answer questions, or write a paragraph about the text or subject.

What the students do

- In their expert groups, the students read their text and go through the four steps of the co-operative reading square.
- Each expert group prepares a summary statement containing key words and a diagram. Each student in the group makes their own copy of this.
- The students return to their home groups and, using the summaries from their expert groups, take turns to teach the main ideas in their part of the text to the others in their home group.
- They listen to the other members of the home group. The group negotiates how they can present the main ideas about the text or subject and how they will show the connections between the different ideas. This could be in the form of a summary chart or a mind map.
- As pairs or individuals, they complete the final task to check their understanding of the original texts.

What the teacher looks for

For options A and B

- Are the students working co-operatively and discussing their texts at a deep level?
- Are they demonstrating high-level thinking strategies? Are they thinking critically and analysing their understanding of the text, discussing it with others in their group, and evaluating all the responses?
- Are they thinking creatively in their design of a visual image?
- Are they recalling individual strategies that they have previously used and practised?
- Are they using a range of literacy strategies (particularly comprehension and communication strategies)?
- Can they link the ideas from the different summaries?
- Are they working co-operatively to complete all the tasks?

Variations on the strategy

Less successful readers, or students whose first language is not English, can be
placed in an expert group that is given a simpler or shorter text to study. These
students can then play an equal role as members of the class or of their home
group, while receiving the teacher support they need to make meaning of their
section of text.

Evaluating and recording information



Give each expert group a different text on the same topic. When the students
are confident about using their text's information on the topic, give them a
text with a different kind of information on the same topic (for example, one
with more opinions than facts) and ask them to discuss and explain
any anomalies.

Reflecting and planning

Reflecting Planning • Trialling a strategy - Focusing on a group of students • Developing a learning community

6

Chapter 6: Learning to write and communicate through texts

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Chapter 6: Learning to write and communicate through texts

This chapter focuses on strategies that teachers and learners can use when writing texts. Writers communicate meaningful ideas by integrating their prior knowledge and the information that they gather for the writing purpose with their understanding of how written language works to create a written text. Students need to be aware of both the strategies and the processes they use to read text before they communicate their ideas through writing.

As you read through pages 129–135, you may find it useful to think about the following questions:

- What does this mean for my subject area?
- What does this mean for my students?
- · Which of these ideas was I already aware of?
- · What have I just learned?
- · What else do I want to know?

What the research tells us

Knowing about the writing process

Like reading, writing involves creating meaning through text. Skilled writers, like skilled readers, draw on their prior knowledge and make connections with new information. They critically analyse and evaluate their work as they clarify their ideas, choose vocabulary, and compose and revise a text. Students need to develop knowledge and a range of literacy and thinking strategies in order to become effective writers.

As students come to see, with their teacher's help, that writing is like a dialogue between the writer and the developing text, they become increasingly critical readers of their own texts. Just as good readers constantly question the author or the text, good writers, too, ask themselves questions. Effective teachers deliberately promote such questioning through planned activities.

Ministry of Education, 2003a, page 136

Writing, like reading, develops from oral language, but written language is often quite different from spoken language. Speech is usually more informal and repetitive than written language, and people often speak in phrases rather than in complete sentences. Speakers make use of tone, facial expressions, and body language to help get their message across, and they can judge whether they are communicating successfully by observing the responses of the listeners. Writers do not have this immediacy of communication and rely on writing conventions and stylistic devices to communicate their ideas.

The following four stages characterise the writing process:

Stage 1: Forming intentions

The writer:

- · determines the purpose and audience;
- chooses a topic and ideas;
- · finds and selects information.

Stage 2: Composing a text

The writer:

- selects the most appropriate content or ideas;
- writes these ideas down, structuring and sequencing content appropriately;
- chooses the most appropriate language for the purpose and the audience.

Stage 3: Revising

The writer:

- · reviews the draft to ensure it meets the purpose and is appropriate for the audience;
- · modifies the writing as necessary;
- attends to surface features such as spelling, grammar, and punctuation.

Stage 4: Publishing

The writer:

- decides how to present the text to the intended audience, considers the need for complementary visual material, and prepares this if appropriate;
- proof-reads the writing and presents it in the chosen way;
- seeks feedback on the final product;
- shares the text with the audience.

These four stages are closely interrelated and often overlap, as the writer's progression from one step to the next is influenced by what they have done and what they anticipate.

Knowing about purposes for writing and text forms

Students need to learn to write for many purposes.

Secondary school students are expected to write for a variety of purposes and to use different text forms in different subjects. The diagram in appendix 6 shows the range of purposes for writing that students may be asked to meet and gives examples of some associated text forms. Both teacher and students need to be aware of the conventions and structures of the different text forms.

Students learn to write by reading, by writing, and by discussing writing. They also need explicit instruction. Writers learn about the conventions and characteristics of the various text forms through reading and writing and through discussion of and explicit instruction in reading and writing.

Studies of effective teachers have shown ... that they continually make explicit the connections between reading and writing. Teachers who have a grasp of this reciprocal relationship recognise that writing is neither secondary to reading nor something to be taught separately from reading.

Ministry of Education, 2003a, page 113

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A New Zealand study (Crooks and Flockton, 1999), found that year 8 students expressed a strong preference for writing stories rather than producing fact-based writing. They appeared to feel more comfortable and confident about writing fiction or first-person narrative recounts than about writing other kinds of texts. This may have been because they felt more confident that they had something to write about (that is, the knowledge needed for writing) or because they felt more confident about the purposes and structures of those forms of writing.

The 2002 NEMP writing assessment results (Flockton and Crooks, 2002) showed a small reduction in expressive writing achievement and no significant difference in functional writing for year 8 students since 1998. Students at year 8 thought that in order to be good writers, people needed to use their imagination, enjoy writing and learning, and know how to use punctuation. Year 8 students were not as positive as year 4 students about writing at school, did not believe themselves to be as good at writing, and had less positive feelings about how their parents and teachers viewed their writing ability.

Other research studies demonstrate that teachers can improve their students' academic writing if they explicitly teach them how different text forms are structured and how to use the strategies associated with the writing process. Research on the use of writing frames (Lewis and Wray, 2000; Wray and Lewis, 1997), for example, shows that once students have a structure, they are more able to generate ideas and to organise those ideas coherently and logically.

Another recent New Zealand research study (Nicholls, 2001) confirms that low-achieving secondary students who are given explicit teaching in the genre of written argument can improve their performance. In this study, students received targeted training to help them understand the structure of an argument by analysing the language features of this text form and using writing frames to practise their own writing. The writing frames helped the students to organise their arguments logically and gave them the structural vocabulary (for example, connectives such as "for this reason" and "finally") to link their ideas.

This chapter focuses on formal writing. However, students often write informally in the classroom, for various purposes – for example, to help them monitor their understanding ("How do I know what I think until I have seen it written?"). Appropriate questions for monitoring understanding have been suggested in each chapter (in the section on Developing independent learners) and also in the section on quickwriting in chapter 5.

Teachers need to build on their students' knowledge and awareness of the writing process and teach them literacy strategies and thinking strategies that will enable them to use the process to complete their writing tasks. Many of the strategies described in chapter 5 can be used for both reading and writing. Strategies for interacting with text when writing are also suggested in chapter 4.

What the challenges are

Every teacher needs to know the specific purposes for writing required in their subject and to explicitly teach the structures and the literacy and thinking strategies associated with these purposes.

The act of writing can assist students in thinking about their own understandings.

Knowing the students

Teachers can gather information on students' writing by observing them as they write and by evaluating their writing and discussing it with them. *The New Zealand Curriculum Exemplars* (Ministry of Education, 2003c) provide details about the kinds of information that can be gathered from a student's writing.

The chart below summarises the main purposes for academic writing. Teachers can use the right-hand column to record particular examples from their subject area.

Writing purpose	Definition	Subject-based examples of writing tasks
Identify	State the name(s), define the subject: List or label Give examples	
Describe	Write what the subject, or process, or event is like: Features or properties Composition Function	
Explain	Write a detailed account of how and why: Procedures or methods How things happen or work Reasons for action or event	
Discuss	Comment on/about topic: Present interpretations and arguments for and against	
Argue	Present one point of view: Interpret facts Provide supporting evidence Persuade readers that your viewpoint is proven	
Justify	Give reasons for your opinion, method, selection, or conclusion: Provide supporting evidence Defend your decisions, actions, or conclusions	
Apply	Use the information in a new situation: Create, design, or solve problems using the given model	
Analyse	Examine all information to draw a conclusion: Interpret facts and ideas Compare different methods, results, or solutions Make connections Draw conclusions	
Evaluate	Make a personal judgment: Reflect on procedures, processes, or decisions Suggest likely positive and negative results or conclusions Critically examine findings	

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Teachers could also ask the following questions about students' writing.

- Is there a clear purpose and audience for the writing, and does the writing meet that purpose for that audience?
- Is the information conveyed of the quality required?
- Are the ideas clearly expressed? Is the language appropriate to the text form? Are there coherent sentences with a variety of structures?
- Are the structures appropriate for the text form? Is the writing logically organised? Are the main and supporting ideas well linked? Are all the sentences linked in meaningful ways?
- · Has the writer attended to surface features, such as spelling, punctuation, and grammar?
- · Does the vocabulary include appropriate subject-specific words?

It is also important to know about the literacy and thinking strategies that students use during the writing process. Teachers could look for the following evidence at the different stages of writing.

Forming intentions

- Do the students use strategies to plan what they will write?
- Do the students use strategies for organising and analysing the information they find (for example, do they use brainstorms, spider diagrams, listings, the KWLH strategy, structured overviews, and timelines, as appropriate to the text form)?
- Do the students use feedback and feed-forward from peers and teacher at this stage?

Composing a text

- Do the students use and experiment with language to clarify their ideas?
- Do the students use appropriate writing frames for structuring and sequencing content?
- Do the students use quickwriting to monitor their understanding as they draft their text?
- Do the students use feedback and feed-forward from peers and teacher at this stage?

Revising

- Do the students focus on purpose and audience?
- Do the students use feedback and feed-forward from peers and teacher at this stage?

Publishing

- Do the students present their writing in ways that are appropriate to their purpose and audience?
- Do the students use feedback and feed-forward from peers and teacher at this stage?

More detailed information about assessing writing is available in:

- the AsTTLe materials (Ministry of Education and the University of Auckland, 2003; available online at www.asttle.org.nz);
- the Assessment Resource Banks (available online at http://arb.nzcer.org.nz/nzcer3/nzcer.htm);
- Non-English-Speaking-Background Students in New Zealand Schools: ESOL Assessment Guidelines (Ministry of Education, 1999);

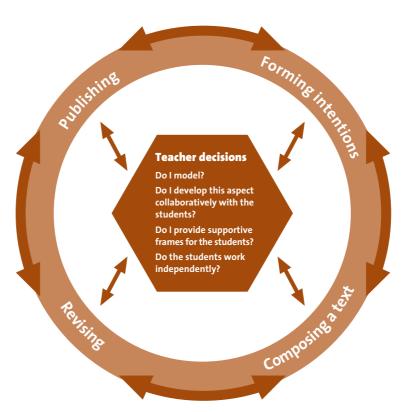
• The New Zealand Curriculum Exemplars (Ministry of Education, 2003c; available online at www.tki.org.nz/r/assessment/exemplars/index e.php).

Students whose first language is not English may need special support in their writing. Many of these students have learned to communicate effectively in spoken English but have not yet learned the academic language they are expected to use when writing in subject areas at secondary school. Class or group discussions can extend students' subject-specific vocabulary and help them to understand the ideas. Models and examples of the kinds of writing required are particularly useful for students who have not met these text forms in their earlier education.

Knowing what teachers can do

Teachers who know their students will know their writing strengths, know the gaps in their writing expertise, and plan to meet these needs. The students may need help in constructing complete sentences, structuring information within a paragraph, recognising elements of a coherent text, and using the conventions of written language. As students move on to more extended writing, teachers will need to give more detailed instruction about the specific forms and writing styles required for different writing tasks and about the writing process. The role of the teacher and the support provided to students at each stage will vary depending on what the next learning steps are for each student.

Stages of the writing process



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Students' writing can be supported by small-group discussion at each stage of the writing. Sharing ideas and talking about them helps students to prepare for writing, generate and clarify ideas, practise the relevant vocabulary, and think through and organise their ideas. Sharing and discussing their completed work in pairs or in small groups and evaluating the finished product together can also be very helpful for students.

Developing independent learners

Students need to know not only what they are doing but also how to do it and why they are doing it. With this knowledge, they are more able to monitor their own writing and to evaluate their finished product. Students should be encouraged to ask themselves the following questions about their writing.

Forming intentions

- What is the purpose of the writing task?
- What do I know about the topic or ideas?
- Who is the audience, and what do I want them to know about the topic and the ideas?
- What do I need to find out?
- How can I put my information into the appropriate form?

Composing a text

- What are the main ideas I want to include?
- · What supporting examples, evidence, details, or data will I need to include?
- · How should I structure my ideas?
- How can I make my writing clear and effective?
- What language or subject-specific vocabulary will I need to include?

Revising

- After writing the first draft, can I see how to improve it?
- Does my text make sense at word, sentence, and whole-text level?
- Are my ideas appropriate and supported?
- Do I need to reorganise my sentences or paragraphs?
- · Are the language and vocabulary appropriate for the purpose?
- Are the spelling, grammar, and punctuation correct?

Publishing

- · What is the most effective way to publish or present my material?
- How will I check that it is complete, accurate, and ready for sharing?

Throughout the writing process, the students should be thinking about what they can do by themselves and what they need support with. They may want to use their learning log to help with this thinking.

STRATEGIES

What can make a difference: the deliberate use of literacy strategies

The following section (pages 136–145) suggests approaches to literacy strategies that teachers can use for:

- helping students to compose paragraphs and extended texts;
- helping students to choose appropriate writing strategies.

See chapter 4 for other sentence-structure and paragraph-writing strategies. Many of the strategies can also be used by students independently, to further their own learning, when they have seen them modelled and have practised them.

TRIALLING STRATEGIES

As you try a new strategy with your colleagues, you may find it useful to think about these questions:

As a learner

- What processes for engaging with text did I use? For example, did I draw on my prior knowledge? Did I set a purpose?
- What kind of language did I use? For example, was I more precise than I used to be in using specialised vocabulary? Did I give more detail than I used to in my descriptions?
- How did the new strategy enhance my understanding of the content?
- What did I learn from others in my group?

As a teacher

- What is happening in my classroom that makes me think this strategy will be useful for a student or group?
- How would I structure the use of this strategy to help my students become more independent?
- How will I monitor my students' learning when they use this strategy?
- How will this strategy enhance my students' understanding of the content?



Teaching approaches for writing

USING SHARED AND GUIDED APPROACHES TO WRITING

Shared writing is a joint writing approach in which both teacher and students contribute to the plan, the ideas, and the language of the text they construct together. In guided writing, teachers discuss and model writing strategies with students in small groups and the students go on to construct texts individually (see also pages 141–142).

The purpose of the strategy

As they work with the teacher to construct a text through shared writing, the students learn how to brainstorm ideas, plan an outline, and draft a piece of writing for a particular purpose in a specific form. By writing the text collaboratively, the students learn from the teacher and from each other, become confident in expressing their ideas, and extend their thinking. The teacher is able to focus the students on the parts of the writing process that they need to learn next.

What the teacher does

- Before beginning the shared writing task, clarify with the students why the writing is being done collaboratively.
- Work through one or more of the four stages of the writing process, using the relevant questions for each stage (see page 135).
- Model how a writer analyses, evaluates, and clarifies their ideas, chooses appropriate language, and composes and revises a text. Acknowledge the interrelatedness of each stage in the writing process. The points in the box below may be useful.

Forming intentions

- Clarify the purpose and the audience with the students.
- Discuss the topic with students, activate their prior knowledge, and brainstorm ideas (for example, by drawing a mind map or listing words that are related to the topic). Ask probing questions to determine whether the ideas gathered reflect a thorough understanding of the topic and the purpose.
- Decide on an appropriate extended text structure.

Composing a text

- Work with the students to organise the ideas and plan an outline, reminding them of the outlines they have worked with previously (for example, in the activity on pages 141–142).
- With the students, critically analyse how the main ideas are expressed (for example, whether they are well supported by evidence or illustration).
- Write with the students, constructing the text together.

STRATEGIES

Revising

- Discuss whether appropriate language has been used, whether ideas have been linked, and whether the text is likely to engage its intended audience.
- · Review the purpose for writing.
- Modify the writing, attending to surface features such as spelling, grammar, and punctuation if necessary.

Publishing

- Reflect on ways the text could be presented and choose the way that best meets the purpose for writing.
- Proof-read and complete the text.
- Make the completed text available to the intended audience and seek feedback.

What the students do

- The students engage actively in contributing to the writing process, suggesting ideas for content and structure.
- They reflect to consider how far the shared writing has met its intended purpose.

What the teacher looks for

- Are the students reflecting on their understanding of text content, text structure, and the writing process?
- Are they extending their understanding by learning from others and trying new ideas?

Strategies for composing paragraphs

These strategies focus on analysing the purpose for writing and constructing cohesive sentences and paragraphs. The students work both individually and in groups. See chapter 4 for more strategies.

USING TEMPLATES AND ACRONYMS

Students practise using templates and/or acronyms to structure their paragraphs.

The purpose of the strategy

Templates and acronyms provide valuable support for students as they sequence and structure their ideas to meet the purposes of their writing tasks. They also help students to focus on appropriate language for different text forms.

Learning to write and communicate through texts



What the teacher does

- Discuss the purpose of a particular text form.
- Analyse the structure and language of a model example of that text form.
 Assessment exemplars from The New Zealand Curriculum Exemplars (Ministry of Education, 2003c) may be helpful (available online at www.tki.org.nz/r/assessment/exemplars/index_e.php).
- Use templates to model for the students (or collaboratively build with them) an effective paragraph for a text in that form. The planning template below is designed to help students write an explanatory paragraph.

 Note: Templates can also be prepared for other paragraph forms, such as describing, explaining procedures, persuading, or presenting an argument. Authors such as Anderson and Anderson (1997), Derewianka (1991), Knapp and Watkins (1994), and Whitehead (1992, 1995, and 2003) have formulated further examples.

Template for writing an explanation

Question:	
Key words in the question:	
Introductory sentence: What are you trying to explain? How Who When Why	
What points do you need to include? What are the key words, ideas, or information that you will need to use to answer the question? Decide on examples to illustrate your points.	
How will you sequence your explanation? Decide how to order your ideas and choose link words that you might use.	
How will you end your explanation? Is there a general statement you can make to sum up your explanation?	

STRATEGIES

 Alternatively, use acronyms to provide structures for students. For example, the acronyms below offer ways to structure paragraphs for specific purposes.

Explanation	SEX/SEE(D)	Statement/Explain/Example (Diagram)
Argument	APE	Assertion/Proof/Example
Description	GEE	Generalisation/Elaboration/Example
Discussion	PPQ	Point/Paraphrase/Quote

 Ensure that the students understand that the paragraphs they construct using templates and acronyms may need to be adapted for use in a complete text.
 Extended writing for a purpose often uses a mixture of paragraph structures and a range of literacy devices that give the writer a voice and engage the reader.

What the students do

- When the students have a thorough knowledge of the content or topic and are familiar with the conventions signalled in the template or by the acronyms, they work in pairs to draft a paragraph that meets the intended purpose.
- The students write their own individual paragraphs, deciding whether a template or acronym structure will suit their purpose best.

What the teacher looks for

- Are the students becoming aware of how the purpose for writing determines the text form?
- · Are they reflective in their planning?
- Do they need less support as they become familiar with the form and with the subject content or topic?

SHARED PARAGRAPH WRITING

In this strategy, the students work in small groups, taking turns in different roles, to construct a paragraph.

The purpose of the strategy

Shared paragraph writing enables students to write together, helping one another to work through the process of structuring content and selecting the most appropriate language.

What the teacher does

- Explain the purpose for writing and the form of paragraph to be used (perhaps using models or templates, as explained in the previous strategy).
- Organise the students in small groups. Give each group a subject or topic and perhaps some subject-specific vocabulary to use.

Learning to write and communicate through texts



What the students do

- Each student takes a turn to dictate a sentence to the others. For example, if
 they use the SEE model, one student composes the factual statement, another
 composes the explanation, and the third gives the example.
- The group discusses their three sentences and makes changes where necessary to construct a good paragraph (one that meets the purpose, includes all three elements, and is connected, engaging, and concise).
- The whole class shares and analyses the paragraphs that they have constructed.

What the teacher looks for

 Are the students reflecting on the appropriateness of the language they use and the sequence of ideas?

Variations on the strategy

- If the purpose of the writing task is to give a point of view or write an argument, the teacher can provide a proposition that relates to the issue. Each student in a group then writes a sentence supporting the proposition on a strip of paper. The group studies all the sentences and decides how to sequence and modify the sentences to construct a cohesive and coherent paragraph. (An alternative is for each student to write the sentence on a page that is passed around the group.)
- The teacher can give the groups five key words to include when they write their paragraph.

Strategies for composing extended texts

USING WRITING FRAMES

The students learn how to use a writing frame (Wray and Lewis, 1997, 1998), which is a skeleton or outline of a planned text that includes prompts for learner writers. The outline summarises the structure of the planned text and states what should be written in each section. The prompts, which may include questions, key points, or sentence starters, are designed to help the students fill in the outline.

Appendix 9 gives a model of an outline for a report. Appendix 10 includes two writing frames. Both frames are for reports on cyclones: the first is for a secondary student with some expertise in writing longer texts; the second is a scaffolded version for a student who needs more help. Each sample writing frame is followed by an appropriate word bank.

Other examples of writing frames for various text forms can be found in Anderson and Anderson (1997), Derewianka (1991), Knapp and Watkins (1994), and Whitehead (1992, 1995, and 2003).

STRATEGIES

The purpose of the strategy

Writing frames provide structures for extended writing at the draft stage. They can be used by the teacher and the students together, by groups of students, or by individuals to produce the kinds of extended writing that are appropriate for a particular subject. When students are familiar with writing frames, they can use them independently to support their extended writing.

What the teacher does

- Prepare an outline for an appropriate text form in the subject area (see the example in appendix 9). Using the outline, prepare a writing frame (see appendix 10 for examples). The prompts may be in the form of questions, short descriptions of what should be included in each paragraph (as on page 167), or sentence starters. A bank of relevant words may be supplied with the writing frame (as on pages 167 and 168 in appendix 10).
- Explain the writing frame to the students in some detail, modelling it in the context of a collaborative writing task. "Think out loud", explaining what you are doing and encouraging students' contributions while filling in the writing frame on the board or on OHT.

What the students do

- The students work through a writing frame with the teacher, contributing their ideas for filling in the writing frame.
- Once the students understand the structure of the writing frame and the purpose of the prompts, they can use a writing frame template to plan and create their own texts.

What the teacher looks for

- Are the students critically analysing and reasoning as they create their extended texts using writing frames?
- As students become familiar with the text structure, can they write independently?

Variation on the strategy

• If appropriate, prepare two different writing frames to cater for the needs of students at different levels (as in appendix 10). For example, a writing frame could be specifically designed to help students who have not yet learned to structure their writing beyond the paragraph level. This frame would have a bank of basic words and many sentence starters to provide plenty of support. Another frame, for students with some experience and expertise in writing longer texts, would have only a few prompts and more challenging vocabulary.

SHARING QUALITY WORK

Good models of a specific text form, such as the written language exemplars in *The New Zealand Curriculum Exemplars* (Ministry of Education, 2003c), can be used to clarify the features and structure of the text forms that students need to learn to write in their subject areas.



The purpose of the strategy

By reading and analysing good models, students gain a clearer understanding of what they are expected to write.

What the teacher does

- Find an example of the kind of text that students are expected to write in your subject area.
- Put a copy of a complete text (or a summary of the text, if it is a long piece) on an OHT, so that the students can see how it is structured and what sort of language is used.
- Annotate special features of the text (such as the kinds of language used for various purposes) and label the main sections or stages, explaining why the text is structured in this way.
- Identify the generic features that made this writing successful. These features could be used as a checklist for the students' own writing.

The table below (adapted from Thornley and McDonald, 2002, page 22) suggests literacy features that students could focus on and related strategies that the teacher could model and discuss.

Literacy focus	Literacy strategies
Text forms and conventions	Carefully read the assigned task or question. Identify the purpose, intention, and audience for writing. Select an appropriate text form. Make decisions about text conventions (for example, an explanation could include objective ideas, data, reasons, illustrations, diagrams, and tables).
Vocabulary	Identify and define the key vocabulary to use – check definitions and synonyms to develop a precise language.
Organising information Monitoring understanding	Make decisions about the selection of content based on its relevance for answering the question. Use graphic organisers to sort the information. Use structured overviews to organise headings, main ideas, and content. Write the text, using sentences and paragraphs. Ensure that the meaning of subject-specific vocabulary is conveyed through supporting text (provide context clues for readers).

STRATEGIES

What the students do

- The students attend to the teacher's explanation, asking questions or commenting.
- The students work in pairs to annotate and label further examples of the same type of text.
- They then discuss these texts and their notes on them, first in groups and then
 with the whole class, identifying the key structural and language features of
 similar texts.

What the teacher looks for

- Are the students critically analysing the structural and language features of the texts?
- Are they suggesting logical reasons for these structural and language features?
- · Are they developing criteria for their own writing?

Variations on the strategy

- Take a photocopy of an appropriate text and cut it into separate parts or paragraphs. Ask the students to sequence the scrambled paragraphs to form a coherent text. They can then talk about what enabled them to complete this task.
- Discuss one of the New Zealand exemplars for written English and help the students to identify criteria that could be used to evaluate texts in this form.
 Consider both the surface features and the deeper elements that make the exemplar a quality piece of work.

ORGANISING AND LINKING IDEAS

The students use a list of connective words and phrases to sequence and link a series of paragraphs.

The purpose of the strategy

This strategy helps students to organise information logically and to provide cohesion between the sentences and paragraphs in an extended text.

What the teacher does

- Take a text that is a good model of an appropriate text form and put it on an OHT or make multiple copies for students. Explain or discuss how its organisation gives it coherence.
- Point out linking words and phrases and other structural features.
- Select a text consisting of short paragraphs, and remove all connectives so that the paragraphs are not clearly linked.
- Give the students copies of this text with a selection of connectives and signal
 words to use (see appendix 11 for a list of such words). Discuss these words,
 explaining how different connectives have different purposes and how they can
 signal the logical development of ideas.

Learning to write and communicate through texts



What the students do

- The students use connectives from the list to link the paragraphs and organise them into a complete text that flows logically.
- In groups, the students discuss each other's texts and give each other feedback on the cohesion between the paragraphs.

What the teacher looks for

immediately

- Are the students critically analysing the organisation of their connected texts?
- When the students write independently, are they showing evidence that they
 are improving their ability to structure their writing and link paragraphs by
 using appropriate connectives?

Reflecting and planning

Reflecting Planning • Trialling a strategy - Focusing on a group of students • Developing a learning community

7

Chapter 7: Learning literacy strategies: what have we achieved, and where to from here?





Chapter 7: Learning literacy strategies: what have we achieved, and where to from here?

How can teachers build on what they have learned?

By now, you will have had opportunities to try out with your students many of the strategies described in chapters 2–6. The chart in appendix 12 reproduces the strategies framework from pages 14–15 but omits the strategies. It is intended for you to use to reflect on how you and your students have employed the strategies and to help you plan for the future. For example, you might write the names, in the appropriate boxes, of the strategies that you have used or those you plan to use, referring to the strategies framework on pages 14–15.

How successful has the programme been?

The Effective Literacy Strategies programme aimed to increase:

- · teachers' knowledge about literacy learning;
- teachers' active engagement in literacy teaching and learning in all subject areas;
- · students' active engagement in their literacy learning;
- students' independence in their literacy learning;
- · students' levels of literacy achievement.

Evidence of the success of the programme would include:

- teachers working more collegially with other teachers;
- · teachers working more effectively with students in text-rich classrooms;
- teachers confidently using evidence from student work as the basis for all their teaching decisions and developing challenging, thought-provoking literacy activities in their subject areas;
- students becoming increasingly confident and purposeful in selecting and using the literacy strategies from their personal kete to explore rich networks of ideas and develop a deep understanding of content in all the subjects they study.

Teachers matter, and what they do matters ... Teaching practice can make a major difference to student outcomes.

Ministry of Education, 2003a, pages 8–9

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Appendix (1) Learning logs

A learning log or journal is a student's own ongoing record of their learning. Students can use them in a number of ways, for example, by recording any difficulties they have and how they deal with them. But they can use learning logs for more than this. They can use them to understand and reflect on their learning processes and on the learning-to-learn strategies that they use. They can use them to:

- · identify what and how they're learning;
- · identify the types of thinking they're using to learn;
- · process the information they've gathered;
- develop learning strategies that are effective for them;
- · monitor and evaluate their own learning;
- · become increasingly independent as learners.

Teachers need to explain the purposes and uses of learning logs to their students, making it clear that the logs will not be assessed because they are a private dialogue between each student and the teacher. At times, teachers may suggest that each student shares their log with a partner if they are happy to do so.

In planning for students to use the learning-log process, teachers can:

- build the writing of the log into a regular routine over several weeks;
- give students a set, limited time in which to write in their logs probably at the end of the lesson;
- focus on a specific task, activity, key concept, or learning strategy in each lesson;
- · use a variety of approaches, such as free writing, questions, or sentence starters;
- model reflections by writing on the board as students write in their books;
- · check logs regularly and write short feedback comments to each student.

Logs may be kept in separate books, but they can also be part of students' everyday work. For example, students could rule a broad margin on the side of their page and use that space to reflect, ask questions, jot notes, and so on.

The Knowing What Counts series of books includes a range of reflection strategies for students. See Davies, Cameron, and Gregory (1977–).

Starters for writing a learning log

Students may simply write what they wish, or they may be given open-ended questions or sentence starters. Sometimes teachers may want the learning-log entries to focus on specific areas. Some suggested cues are listed in the following table.

To encourage students to write about:	Try these starters:
learning conditions	I find it helpful when the teacher
	I find it hard to learn when
their understanding of the learning process	The first thing I do when I work on a (problem/writing task) is
	Something I still find puzzling is
content	Today we learned about
	One important fact I need to remember is
	Three important words I need to remember from today's lesson are
	I'd like to know more about
their use of skills or learning strategies	I found the (note making/writing) task difficult/easy because
	Having to (ask a question/draw a mind map) helped me to
	I find the best way to record facts to remember is
their personal responses	What I enjoyed most today was
	I agree/disagree about
	One thing that puzzled/surprised/confused me today was

Benefits of learning logs

As students gain the language and ability to describe their learning, they learn to express and record their thoughts and ideas about that learning. This means that they can reflect on and communicate their learning and their new understandings. They can monitor their learning and achievement and assess their own work. This process helps students to become independent learners.

Using learning logs helps students to:

- become more personally engaged with what they are learning and how they are learning;
- become more aware of their own thinking and learning processes;
- transfer learning strategies, making links between lessons and across subjects;
- · reflect on and describe what is happening and what they understand;
- express their learning difficulties without having to talk to the teacher or show
 themselves up in front of their peers (this may be especially important for some students
 whose first language is not English);
- focus on how they learn and become more responsible for their own learning progress;
- learn the skills of self-monitoring and self-evaluation;
- · become more independent as learners.

By including the learning-log process in the students' programme, teachers can:

- gain more evidence of their students' learning (their prior knowledge and understanding, responses, difficulties, and concerns);
- · respond to individual students by writing in their logs;
- identify when their students have difficulty with a particular concept, task, or teaching approach;
- plan more effectively as they become more aware of their students' needs and perspectives;
- follow the learning progress of each student more closely.

Appendix (2) Processes for engaging with text

The processes for engaging with text (learning from, with, and through text) that are referred to in this book are based on a model by Wray and Lewis (1995). This appendix provides excerpts from Wray and Lewis's own descriptions of the processes, set out under the headings used for the processes in this book. Wray and Lewis's full paper is available online at www.warwick.ac.uk/staff/D.J.Wray/exel/exit.html

DRAWING ON PRIOR KNOWLEDGE

- 1. Elicitation of previous knowledge.
 - ... Theories about [prior knowledge] suggest that learning depends, firstly, upon the requisite prior knowledge being in the mind of the learner and, secondly, upon it being brought to the forefront of the learner's mind. ...

ESTABLISHING A PURPOSE

2. Establishing purposes.

A crucial part of the process of learning from texts must involve the specification of just what information is required from these texts and why. If this is not done, then subsequent interactions with texts will tend to be haphazard rather then purposeful. For many primary school children, however, an initial purpose for reading will often consist of nothing more than a vague statement such as 'I want to find out about dinosaurs (or birds, or trains etc)', which is certainly not precise enough to be useful to them. Statements like this have two logical consequences. Firstly they give no criteria for judging the usefulness of any information which is found. If it is about dinosaurs (or birds etc.) then it must be relevant. Secondly there is no indication of when the process of finding information should stop. Children could go on for ever finding information about dinosaurs (etc.) and still be no nearer satisfying this vague purpose. ... [Students] need to be encouraged to specify as precisely as possible what it is they want to find out, and what they will do with that information when they have found it. They may be asked to draw up a list of questions to which they want to find answers, or tasks which they aim to complete. ...

LOCATING INFORMATION

3. Locating information.

Clearly in the world outside school, the texts which will help meet the reading purposes [students] have defined will not be simply presented to them as a package. They will need to find the information they require in libraries, books or whatever sources are appropriate. This will involve knowing how to use a library system to track down likely sources of the information required, how to find information efficiently in books and other sources (using index and contents pages, for example), but also how to use the most important information resource – other people. To this list must also be added the skills of using the various tools of information technology to retrieve needed information. Teletext televisions, computer data-bases and the Internet are all extremely useful sources of information in the classroom, but not unless the [students] possess the requisite skills for using them. ...

ADOPTING LITERACY STRATEGIES

4. Adopting an appropriate strategy.

It is clear that efficient readers modify the ways they read according to their purposes for reading, the nature of the texts they are faced with and the context in which they interact with these texts. ...

From research into the capacity of readers of various kinds to monitor and control their own reading behaviour ... it appears that one of the things which distinguishes effective from less effective readers is the ability to take appropriate, and conscious, decisions about which reading strategy to adopt in which circumstances, and when to switch strategies. ...

INTERACTING WITH TEXT

5. Interacting with text.

The above processes are ... crucial to the effective use of reading to learn and, in many ways, the success of the actual "eyeball-to-text" part of the process depends upon them. Nevertheless, it is the stage of interacting with the text which remains at the heart of the whole process. Here the reader engages in an intricate transaction with the printed symbols, constructing a meaning, or meanings, on the basis of what he/she brings to the text – knowledge, beliefs, attitudes – and the intended message of the author of that text. ...

MONITORING UNDERSTANDING

6. Monitoring understanding.

Current theories of reading tend to converge in suggesting that an important element of the comprehension process is the reader's ability to monitor his or her own understanding as it develops in interaction with a text, and to take remedial action in the event of comprehension problems ...

RECORDING INFORMATION

7. Making a record.

In adult everyday life, a search for required information will not always result in any written record: the adult may simply remember the information or act upon it immediately. However, in the effective use of reading as a means of study, in schools or colleges, the recording of information, usually by the making of notes, will be an essential part. ... information recording [should be considered as] inextricably linked to purpose for reading. ...

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EVALUATING INFORMATION

8. Evaluating information.

In the light of the "information explosion" we are currently witnessing, with the sheer amount of textually stored information growing exponentially far beyond an individual's capacity even to be aware of its existence, it seems even more important that we try to develop in [students] a questioning attitude to what they read. ...

Developing the abilities, and willingness, of [students] to be critical of what they read will involve encouraging them to use a variety of criteria to judge the accuracy, relevance, and status of the information they find. ...

ASSISTING MEMORY

9. Assisting memory.

Although more recent psychological research into memory has suggested that this is a good deal more complex than we might at first think, one very influential way of examining memory has been to look closely at its corollary, forgetting. ...

Firstly, it seems that the more meaningful the information we are trying to remember, the more likely we are to retain it for a longer period. Meaningful information is information which the learner can make sense of, that is, can 'fit' somewhere in a mental map of that part of the cognitive world. This re-emphasises the importance of attempting to bring to the foreground learners' previous knowledge which, as we suggested earlier, is the key to effective learning.

Secondly, remembering is improved by revisiting the information one is trying to remember. ...

COMMUNICATING INFORMATION

10. Communicating information.

In many adult information-using experiences, telling other people what has been found is not an important part of the process simply because the outcome may well be some kind of personal action rather than a report of whatever kind. Yet in educational contexts physical outcomes, usually written, are almost invariably expected of [students] as part of their work with information texts. ... this can be a benefit in helping [students] make the information they are working with more their own, and thus retained for longer.

Appendix (3) Academic headwords list

Sublist 1 (most common headwords)

analyse	approach	area	assess	assume	authority
available	benefit	concept	consist	constitute	context
contract	create	data	define	drive	distribute
economy	environment	establish	estimate	evident	export
factor	finance	formula	function	identify	income
indicate	individual	interpret	involve	issue	labour
legal	legislate	major	method	occur	percent
period	policy	principle	proceed	process	require
research	respond	role	section	sector	significant
similar	source	specific	structure	theory	vary

Sublist 2

achieve	acquire	administrate	affect	appropriate	aspect
assist	category	chapter	commission	community	complex
compute	conclude	conduct	consequent	construct	consume
credit	culture	design	distinct	element	equate
evaluate	feature	final	focus	impact	injure
institute	invest	item	journal	maintain	normal
obtain	participate	perceive	positive	potential	previous
primary	purchase	range	region	regulate	relevant
reside	resource	restrict	secure	seek	select
site	strategy	survey	text	tradition	transfer

This word list gives the first two sublists from *An Academic Word List*, compiled by A. Coxhead (1998). The full list contains 570 word families subdivided into ten sublists according to the most frequent words found in texts of twenty-eight subject areas.

Appendix 4 Motivation and engagement

This material in this appendix is reprinted from Ministry of Education (2003a), pages 22–23.

Only when students are motivated, are interested, and enjoy learning do they make the progress they are capable of in their literacy learning and go on to become lifelong learners. An effective teacher connects to each student's interests, experiences, and sense of identity, shares a love of reading and writing, and generates excitement and a sense of purpose – all this gives heart to a teacher's practice ...

Motivation

Teachers have to create the conditions for motivation; it's not just a matter of immersing students in learning activities. When students are motivated and have developed the positive attitudes that will lead them to become independent readers and writers, they gain long-term benefits. Studies have shown that students' recreational reading and writing is a good indicator of their achievement.

Teachers' expectations for students' behaviour and academic performance influence the students' motivation and therefore their actual achievement ...

Students are more motivated when their learning activity is directed towards a goal that they know, when they receive informative and affirming feedback, and when they can see the links between what they did and successful outcomes.

Motivation is affected by self-concept and a sense of self-efficacy. A belief in themselves and their ability to succeed in classroom tasks has an energising effect on both teachers and students. This is why motivation is often a major issue for teachers working with students who have experienced difficulties in reading or writing.

Students' motivation and engagement increase when they have ownership of their literacy learning and are familiar with the language and the tasks expected of them. This is especially so for those students whose backgrounds differ from that of the dominant school culture. When these learners' cultural values and knowledge are incorporated into their learning activities, they are more motivated to learn.

Engagement

Engagement means participating actively rather than being passive in the learning process. Learners engage more readily when they expect to succeed and when they see worthwhile challenge in their learning tasks.

In literacy learning, *intellectual engagement* relates to thinking – the cognitive processing of written forms of language. When learners engage intellectually, they bring mental rigour and focus to their learning task. As they read and write, they need to think consciously about how to use the knowledge and strategies they are acquiring.

Emotional engagement relates closely to motivation and interest and is important for both

teachers and students. Literacy learners who are emotionally engaged will have a positive, sometimes even passionate, attitude towards reading and writing and will take ownership of their learning. Learners' emotional engagement is affected by other people's expectations and by their own self-concepts. When teachers and students are emotionally engaged in the learning, this enhances the quality of the relationships built between teachers and students and among students.

A further concept to consider is *cultural engagement*. Every learner views literacy tasks through a cultural "lens" because most of the prior knowledge, experiences, and values that a learner brings to literacy activities arise from their cultural background. Culturally based values and knowledge affect each learner's engagement and interest in the learning activity. Ensuring cultural engagement is particularly important in classrooms where the students come from diverse backgrounds, especially where their cultural backgrounds differ from the teacher's.

Appendix $\langle \mathbf{5} \rangle$ The KWLH strategy

KWLH

The KWLH strategy expands Ogle's (1986) KWL strategy (What we know, What we want to learn, What we have learned) by adding the category "How we know".

Purpose of strategy

- For the teacher to activate students' prior knowledge of a given topic.
- For the students to identify their own prior understanding and to monitor their learning during the activity.

What the teacher does

- Brainstorm aspects of the topic.
- Get the students to fill in a KWL sheet with a new column for H How we know.

What we Know	What we Want to learn	What we have Learned	How we know

Ask the students to jot down what they know and what they want to know about a
topic, either in notes or in a concept map, and then share these with a partner or in a
group. Work through the task and have the students add to their chart at certain
points, e.g., if the task stretches over two days, ask the students to record their ideas
on the chart at the end of day one and at the end of day two.

What the students do

• Identify key aspects of their prior knowledge and what they want to know, triggered by the group discussions. Write these in column one, K, and column two, W. Identify key aspects of learning and how they will be learned that arise from the tasks. Write these in columns three, L, and four, H.

What teachers should look for

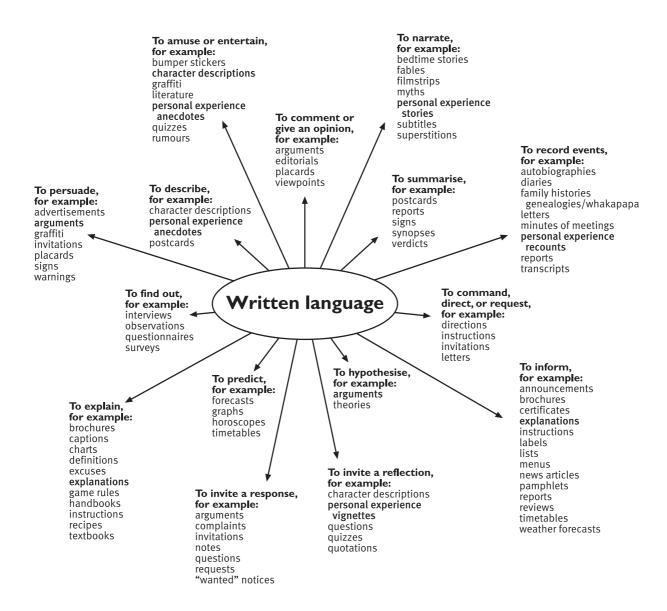
- Students recalling prior knowledge of the topic and the particular concepts associated with the curriculum area (K), including misconceptions and partial conceptions.
- The students' motivation to learn more (W).
- Students monitoring their own understandings (L).
- Students' knowledge from a range of sources (not just the teacher) (H).

Ministry of Education, 2003b, page 5

Appendix $\langle 6 \rangle$

Purposes for writing and examples of written text forms for each purpose

PURPOSES AND TEXT FORMS: WRITTEN LANGUAGE



Ministry of Education, 2003c, page 2 (English: Teachers' Notes)

Appendix 7 Examples of graphic organisers

Cause and effect

Торіс:	
Causes	Effects
Explain what the causes are.	Write down some effects.

Problem and solution

Торіс:	
Problem	Solution
Explain what the problem is.	Suggest ways to solve the problem.

Tabulated format

Information is tabulated and numbered in a set format to show the relative importance of each point.

A. Main heading

- 1. Main point
 - (a) detail
 - (b) detail
 - (c) detail
- 2. Main point
 - (a) detail

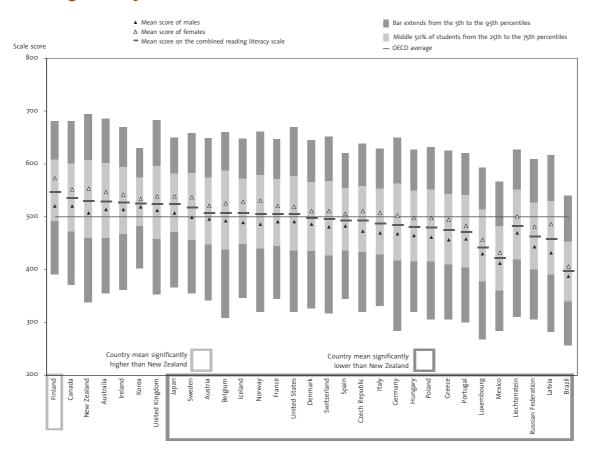
(and so on)

Dot and jot

Under each heading or research question, students put dots or bullets and jot down notes. Each note should be a key word or phrase, taking no more than one line per note. Full sentences should not be used.

Heading or question:	
Notes	Source
•	
•	
•	
•	
•	
•	

Appendix (8) The distribution of student performance on the combined reading literacy scale



Ministry of Education, 2001b, page 4

Appendix 9 Outline for a report

Outline for a report on an investigation or experiment

Introduction

Research questions/aim of investigation

Prediction/hypothesis

Body

• Section/paragraph 1 Method

Sampling/equipment

Data collection

Procedures

Section/paragraph 2 Results

Records of data

Analysis of data (graphics)

• Section/paragraph 3 Interpretation of data

Comments on findings

Comparisons

Section/paragraph 4 Discussion of findings

Any unexpected results

Any shortcomings of methodology

Implications

Conclusion

Statement summing up findings in relation to original aim or research questions

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Appendix (10) Two writing frames

Writing frame (for average student)

Question

What makes tropical cyclones so destructive to the islands of the Pacific and to the people who live there?

Introduction - classification of the phenomena

In this section, you will need to explain briefly what a cyclone is and outline the effects of cyclones on the Pacific islands.

Explanation of characteristics and effects

Strong winds

Describe the strong winds that come during a cyclone. Explain the effects these strong winds have on settlements and on the people living in them.

Heavy rain

In this paragraph, explain the effects of the heavy rain on the countryside. Describe the extent of flooding and the damage this causes to houses and farms.

Storm surge

Explain what a storm surge is. Describe its effects on coral rock and on the shoreline. Mention how the soil becomes soaked with salt and the effect of this saturation on farming.

Conclusion

In your final section, draw together all your ideas to answer the set question. Summarise the main factors you have written about in the three paragraphs in the body of the text. Write a concluding statement about the extent of the destruction that tropical cyclones bring to the Pacific islands.

WORD BANK

hurricane-force winds	destroy	destruction	debris
uprooted	vegetation	buildings	missiles
downpours	intense	landslides	blocking
damage	loss of life	rivers	road
flood plain	property	crops	pollution
waves	coral reefs	high tide	erosion
contamination	dumped	coastal	excessive

Writing frame (scaffolded version)

Question

What makes tropical cyclones so destructive to the islands of the Pacific and to the people who live there?

Introduction

A tropical cyclone is ...

A tropical cyclone brings destruction to the Pacific islands because \dots

Strong winds

The winds are so strong that ...

The winds destroy ...

People who live there ...

Heavy rain

The rain that comes with a cyclone is so heavy that \dots

Flooding causes damage to the ...

Farmland becomes ...

Storm surge

A storm surge (high tides and big waves) occurs when strong winds \dots

The coral reef is damaged by \dots

The soil on the coastal land becomes ...

Conclusion

A great deal of damage is caused by ...

As a result ...

The people living on the Pacific islands ...

WORD BANK

destroy	destruction	buildings	houses
roads	vegetation	trees	rivers
landslides	blocks	property	crops
damage	loss of life	water	waves
coral rock	contaminated	dumped	coastal

Appendix (11) Useful connectives and signal words

Introduction	the topic/issue/study area; this report
	my purpose/questions/area of interest/hypothesis
Describing	the first step, to begin with, initially, before, at this point
procedures or time sequences	secondly, subsequently, following this step, next, then, another
·	when, meanwhile, after that, after a while, later, finally, consequently
Giving example	for example, for instance, including, such as, another reason, another example, can be illustrated by, as follows
Comparing	both and, similarly, in most cases, not only but also
	more, most, less, least, less than, more than
Contrasting	but, however, on the other hand, in contrast to, whereas, alternatively, is different from, differs from, on the contrary, although, yet, nevertheless, despite this
Adding information	also, as well as, another point, another factor, another reason, in addition, additionally, besides, furthermore, moreover
Cause and effect	due to, because of, the reason for, consequently, in that case, hence, as a result of, as a consequence of, since, the effect of, if then, therefore, stemmed from, an outcome of, accordingly
Interpreting data	as can be seen by, according to, as shown in, evidence indicates, as exemplified by, as a result of
Conclusion	in conclusion, thus, therefore, for these reasons, these points lead to, as a result, the results indicate, accordingly, to summarise

Appendix (12) Blank version of the strategies framework

Strategies for engaging students with text: a framework

STRUCTURE	PROCESSES FOR MEETING	RETING PURPOSES		STRATEGIES	
	TEACHER THEINKING ABOUT	TEACHER THEINKING STUDENTS THEINKING ABOUT	FOR VOCABULARY TASKS	FOR READING TASKS	FOR WRITING TASKS
PREPARING FOR LEARNING	Activating students' prior understandings & linking these to new information and concepts	Drawing on prior knowledge, e.g., What do I already know?			
	Motivating & engaging students	Expecting success in learning			
	Establishing a purpose	Establishing a purpose, e.g., Why am I doing this?			
THE LEARNING Students THE LEARNING & organisi relevant information	₩ g	Locating information, e.g., Where can I find this out?			
		Adopting literacy strategies, e.g. What strategy will match my purpose and the text?			
		Recording information, e.g., How shall I record the information I need that matches my purpose?			

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interacting with text, e.g., How do I get to the information? What strategies should I use?	Monitoring understanding, e.g., How does this link to my previous ideas?	fvaluating information, e.g., if there is conflicting information, how do I decide which source is more useful?	Assisting memory, e.g., what is meaningful in what I have learn? How will I use my greater understanding?	Communicating information, e.g., How should I present the information?
Students thinking through their ideas & developing conceptual frameworks	Students self-monitoring their understandings	Students evaluating ideas critically	Students demonstrating understanding of learning	
		Using NEW Students (Valuating Unoststandings equality) critically conflicting information conflicting information conflicting information information information do I decided which southern seems in the conflicting information informa		Commun Informati e.g., How I present informati

References

- Alvermann, D. and Phelps, S. (1998). Content Reading and Literacy. Boston: Allyn and Bacon.
- Anderson, M. and Anderson, K. (1997). *Text Types in English*. Books 1, 2, and 3. South Yarra, Australia: Macmillan Education.
- Artelt, C., Baumert, J., Julius-McElvany, N., and Peschar, J. (2003). "Learners for Life: Student Approaches to Learning" at www.pisa.oecd.org
- Assessment Resource Banks (ARBs) in English, mathematics, and science: http://arb.nzcer.org.nz/nzcer3/nzcer.htm
- Bloom, B. (1956). Taxonomy of Educational Objectives. New York: Longman, Green and Co.
- Bruner, J. (1975). "Language as an Instrument of Thought". In *Problems of Language and Learning*, ed. A. Davies. London: Heinemann.
- Corson, D. (1997). "The Learning and Use of Academic English Words". *Language Learning*, vol. 47 no. 4, pp. 671–718.
- Coxhead, A. (1998). *An Academic Word List*. English Language Institute Occasional Publication no. 18. Wellington: Victoria University of Wellington.
- Croft, C., Dunn, K., Brown, G., Mapa, L., Bishop, B., and Kenneally, N. (2000). *Essential Skills Assessments: Information Skills Years 5–10* (ESA:IS). Wellington: New Zealand Council for Educational Research.
- Crooks, T. and Flockton, L. (1998). *Information Skills Assessment Results 1997*. Wellington: Ministry of Education.
- Crooks, T. and Flockton, L. (1999). Writing Assessment Results 1998. National Education Monitoring Report 12. Wellington: Ministry of Education.
- Cummins, J. (1989). *Empowering Minority Students*. Toronto: Californian Association for Bilingual Education.
- Davies, A., Cameron, C., and Gregory, K. (1997–). Knowing What Counts series. Courtenay, BC: Connections Publishing.
- Derewianka, B. (1991). *Exploring how Texts Work*. New South Wales: Primary English Teaching Association (Australia).
- Dunn, K. (2001). "Essential Skills Assessments: Information Skills How Well Can Students Read between the Lines?" *Set*, no. 2, pp. 24–26.
- Elley, W. (2000). STAR: Supplementary Test of Achievement in Reading for Years 7–9. Wellington: New Zealand Council for Educational Research.
- Flockton, L. and Crooks, L. (2002). Writing Assessment Results. National Education Monitoring Report 27. New Zealand: Ministry of Education.
- Gray, S. (1996). "Encouraging Effective and Reflective Listening to Text". *English in Aotearoa*, no. 29, pp. 55–60.
- Hattie, J. (1999). "Influences on Student Learning". Inaugural professorial address. Available at www.arts.auckland.ac.nz/edu/staff/jhattie/ermindex.html
- Herber, H. (1978). Teaching Reading in the Content Areas. New Jersey: Prentice Hall.
- Hill, J., Hawk, K., and Taylor, K. (2002). "Professional Development: What Makes It Work?" *Set*, no. 2, pp. 12–15.
- Hill, S. and Edwards, F. (1992). Language and Learning in Secondary Schools: Science. Wellington: Learning Media.

- Kemmis, S. and McTaggart, R. (1988). *The Action Research Planner*. 3rd ed. Geelong, Australia: Deakin University Press.
- Kemmis, S. and McTaggart, R. (2000). "Participatory Action Research". In *Handbook of Qualitative Research*, ed. N. Denzin and Y. Lincoln. Beverley Hills: Sage.
- Knapp, P. and Watkins, M. (1994). *Context-Text-Grammar: Teaching the Genres and Grammar of School Writing in Infant and Primary Classrooms*. NSW, Australia: Text Productions.
- Lewis, M. and Wray, D. (2000). Literacy in the Secondary School. London: David Fulton.
- Lewis, M., Wray, D., and Rospigliosi, P. (1994). "In Your Own Words Please': Helping Children Respond to Non-fiction Text". *The Reading Teacher*, no. 47, pp. 528–536.
- Ministry of Education (1993). *Reciprocal Teaching: Extending Reading Strategies*. Wellington: Parallax Communications. (Video available from Learning Media.)
- Ministry of Education (1994). English in the New Zealand Curriculum. Wellington: Learning Media.
- Ministry of Education (1999). Non-English-Speaking-Background Students in New Zealand Schools: ESOL Assessment Guidelines. Wellington: Ministry of Education.
- Ministry of Education (2001a). "Programme for International Student Assessment" at www.minedu.govt.nz (search for PISA).
- Ministry of Education (2001b). Assessing Knowledge and Skills for Life: First Results from the Programme for International Student Assessment (PISA 2000): New Zealand Summary Report. Wellington: Ministry of Education.
- Ministry of Education (2003a). Effective Literacy Practice in Years 1 to 4. Wellington: Learning Media.
- Ministry of Education (2003b). *Teachers Make a Difference: A Follow-up Workshop for Literacy Leaders* (years 9–13). Literacy Leadership in New Zealand Schools. Wellington: Learning Media.
- Ministry of Education (2003c). *The New Zealand Curriculum Exemplars*. Wellington: Learning Media and the Learning Centre Trust of New Zealand. Available at www.tki.org.nz/r/assessment/exemplars/index e.php
- Ministry of Education and the University of Auckland (2003). Assessment Tools for Teaching and Learning: He Pūnaha Aromatawai mō te Whakako me te Ako. Version 2. Wellington: Learning Media (CD-ROM)
- Moore, P. (2002). *Information Literacy: What's It All About?* Wellington: New Zealand Council for Educational Research.
- Morris, A. and Stewart-Dore, N. (1984). *Learning to Learn from Text: Effective Reading in the Content Areas*. New South Wales: Addison-Wesley.
- Nation, I. S. P. (1990). Teaching and Learning Vocabulary. Boston: Heinle and Heinle.
- Nation, I. S. P. (2001). *Learning Vocabulary in Another Language*. Cambridge, UK: Cambridge University Press.
- National Certificate of Educational Achievement (NCEA) website: www.nzqa.govt.nz/ncea
- National Education Monitoring Project (NEMP) website: http://nemp.otago.ac.nz/
- New Zealand Council for Educational Research tests: www.nzcer.org.nz/tests/nzcertest.htm
- Nicholls, H. (2001). "Connectives in Academic Reading and Writing". Unpublished thesis, University of Auckland.
- Nicholson, T. (1984). "The Confusing World of High School Reading: What the Teacher Doesn't See". Set, no. 1.

References

- Nicholson, T. (1988). Reading and Learning in the Junior Secondary School. Wellington: Department of
- Ogle, D. (1986). "KWL: A Teaching Model That Develops Active Reading of Expository Text". *The Reading Teacher*, February, pp. 564–570.
- Palincsar, A. and Brown, A. (1984). "Reciprocal Teaching of Comprehension-fostering and Comprehension-monitoring Activities". *Cognition and Instruction*, vol. 1, pp. 117–175.
- Pressley, M. (1998). *Reading Instruction That Works: The Case for Balanced Teaching*. New York: The Guilford Press.
- Pressley, M. (2001). "Comprehension Instruction: What Makes Sense Now, What Might Make Sense Soon" at www.readingonline.org/articles/handbook/pressley/index.html
- Progressive Achievement Tests (PATs): www.nzcer.org.nz/tests/nzcertest.htm
- Ruddell, M. (2002). Teaching Content Reading and Writing. 3rd ed. New York: Wiley.
- Ruddell, M. and Shearer, B. (2002). "'Extraordinary,' 'Tremendous,' 'Exhilarating,' 'Magnificent': Middle School At-risk Students Become Avid Word Learners with the Vocabulary Self-collection Strategy (VSS)". Journal of Adolescent and Adult Literacy, vol. 45 no. 5, pp. 352–363.
- Schoenbach, R., Greenleaf, C., Cziko, C., and Hurwitz, L. (1999). *Reading for Understanding: A Guide to Improving Reading in Middle and High School Classrooms*. San Francisco: Jossey Bass in partnership with West Ed.
- Te Kete Ipurangi website: www.tki.org.nz
- Thornley, C. and McDonald, T. (2002). "Reading across the Curriculum". *Set*, no. 1, pp. 19–23.
- Unsworth, L. (2002). "Changing Dimensions of School Literacies". *Australian Journal of Language and Literacy*, vol. 25 no. 1, pp. 62–77.
- Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, Mass.: Harvard University Press.
- Vygotsky, L. S. (1986). Thought and Change. Cambridge, Mass.: M.I.T. Press.
- Wajnryb, R. (1990). *Grammar Dictation*. Resource Books for Teachers: Oxford English series. United Kingdom: Oxford University Press.
- Westera, J. (1995). "Reciprocal Teaching of Reading Comprehension in a New Zealand High School". *Psychology in the Schools*, vol. 32, pp. 283–293.
- Whitehead, D. (1992). Language across the Curriculum. Hamilton, New Zealand: Berkley Publishing.
- Whitehead, D. (1995). Factual Writing Think Sheets: Frameworks for Factual Writing and Thinking. Hamilton, New Zealand: Seaforth Properties (Education Division).
- Whitehead, D. (2001). *Top Tools for Literacy and Learning*. Auckland: Pearson Education.
- Whitehead, D. (2003). Writing Frameworks. Christchurch: User Friendly Resources.
- Whitehead, D. (2004). Top Tools for Teaching Thinking. Auckland: Pearson Education.
- Wray, D. and Lewis, M. (1995). "Extending Interactions with Non-fiction Texts: An Exit into Understanding" at http://www.warwick.ac.uk/staff/D.J.Wray/exel/exit.html
- Wray, D. and Lewis, M. (1997). "Teaching Factual Writing: Purpose and Structure". *The Australian Journal of Language and Literacy*, vol. 20 no. 2, pp. 131–139.
- Wray, D. and Lewis, M. (1998). "An Approach to Factual Writing". *Reading Online*, May. Available at www.readingonline.org/articles/writing/index.html