Support Materials for Students with Special Education Needs

2011

Teaching and learning cycle
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Introduction

The English K–10 Syllabus provides learning outcomes that are statements of the knowledge, skills and understanding expected to be gained by most students as a result of effective teaching and learning by the end of a stage. The English K–10 Syllabus recognises that students learn at different rates and in different ways. Some students' language learning needs will dictate that they will be working towards outcomes at an earlier or later stage.

Assessing, planning (p 9), programming (p 11), implementing (p 15) and evaluating (p 29) form the basis of the teaching and learning cycle, which involves consideration of the individual learning needs of all students and the creation of a learning environment that supports students to achieve the outcomes of the syllabus. Teachers should undertake regular and ongoing assessment of students’ progress to ensure they are making sufficient progress and to identify any difficulties students may be experiencing in their learning.

Assessment

Assessment is the process of collecting, recording and analysing information about student progress towards the achievement of syllabus outcomes. Students indicate their level of understanding, knowledge and skill development in what they do, what they say, and what they write and draw.

Assessment occurs regularly throughout the teaching and learning cycle. Teachers use assessment information about an individual student’s knowledge, skills and understanding, and strengths and weaknesses to inform planning, programming, implementation and evaluation.

Effective assessment enables teachers to:

- establish appropriate starting points for teaching and learning
- design whole-class programs that meet the needs of all students (this includes the determination of appropriate adjustments (p 25))
- identify specific areas of instructional need and priorities for individuals or groups of students
- identify whether students are ready for the next phase of learning (p 19) or require further teaching and/or consolidation of learning
- identify the outcomes and/or content achieved using the criteria for assessing learning (p 7)
- provide informative feedback to students on their progress.

Teachers will provide students with opportunities to demonstrate their learning in the context of everyday classroom activities, as well as in planned assessment events. The form of assessment selected is based on the purpose of assessment.

The English K–10 Syllabus (pp 124–187) provides information on the following forms of assessment:

- assessment for learning
- assessment as learning
- assessment of learning.

Assessment for learning involves teachers deciding how and when to assess student
achievement, as they plan and program the work students will do, using a range of appropriate assessment strategies. As part of this process, teachers need to assess students’ prior knowledge, skills and understanding to identify what students already know and can do.

Assessment as learning involves students in the learning process. Students are provided with opportunities to monitor their own progress. Assessment of learning takes place at key points in the learning cycle, such as at the end of a unit of work, or the end of a year or stage.

Additionally, diagnostic assessment can be used to inform the teacher of the knowledge, skills and strategies which require additional targeted teaching. It enables teachers to plan, program and implement teaching and learning strategies that will remediate identified difficulties. It is important to note that preventing long-term difficulties is reliant on early diagnostic assessment (Rose 2006) and targeted teaching and learning.

What evidence of learning is required?

The evidence of learning that is collected informs judgements about what individual students know, can do and understand in relation to the selected syllabus outcomes.

In planning assessment opportunities, teachers need to consider:

• the criteria for assessing learning that will be used to make judgements about what individual students know, can do and understand
• the suitability of selected assessment strategies for the phase of learning and for the knowledge, skills and understanding to be assessed
• the ways in which individual students communicate
• the time required for individual students to communicate
• the support and/or adjustments required to enable individual students to demonstrate their knowledge, skills and understanding in relation to the selected outcomes and/or content.

Adjustments to enable access to assessment opportunities

Teachers determine adjustments as appropriate to particular assessment opportunities to enable individual students to demonstrate achievement in relation to selected syllabus outcomes. The nature of the adjustments for individual students may be informed by the collaborative curriculum planning (p 9) process.

Adjustments may include:

• adjustments to the assessment process, for example:
  – more time to complete a task or aspect of a task
  – flexible timing, eg a student completes an activity or task over a number of sessions
  – use of assistive technology
  – use of a reader or writer
  – changing the conditions under which the skill is to be performed, eg a student listens to a tape of a story instead of, or before, reading it orally
  – providing additional support or prompts, eg a student is provided with pictorial prompts to support reading during a reading comprehension task
• adjustments to what students are asked to produce, eg students:
  – respond to alternative criteria for assessing learning, eg a student may be working towards outcomes that are broken down into smaller incremental steps
  – attempt and complete fewer activities/tasks
How will this evidence of learning be gathered?

Assessment strategies should be appropriate, manageable, time efficient and suit the purpose of assessment.

Evidence of learning in relation to the selected outcomes could be gathered using the following assessment strategies:

- curriculum-based assessments, eg teacher constructed tasks
- systematic teacher observations during teaching and learning experiences
- use of published tests, ie standardised and criterion-referenced tests (these may be used as part of diagnostic assessment)
- discussion with students about their use of learning strategies (p 22)
- interviews with students
- analysis of work samples
- analysis of errors (Westwood 2004).

The teacher may record the gathered information using:

- anecdotal notes
- checklists
- oral records
- profiles
- videos
- photographs
- graphs
- numerical data.
Is there sufficient evidence that students have made progress as a result of these experiences?

During and following the implementation of learning experiences, teachers use evidence of learning to determine whether students are ready for the next phase of learning or require further teaching and learning to consolidate their knowledge, skills and understanding. Judgements are made using criteria for assessing learning.

Teachers need to evaluate the effectiveness of instruction and learning experiences in relation to selected outcomes and student achievement.

Student progress can be assessed:
- during a learning experience to check if students are learning what is being taught
- over a period of time to check if students are making adequate progress towards the achievement of outcomes
- at the end of a unit or stage to make an on-balance judgement about the achievement of outcomes.

Criteria for assessing learning

Judgements about students’ knowledge, skills and understanding in relation to the selected syllabus outcomes are made using criteria for assessing learning.

The syllabus content descriptions provide further detail of how students can work towards the achievement of syllabus outcomes. The content descriptions in the syllabus can assist teachers in planning criteria for assessing learning.

When developing criteria to assess student progress, teachers may specify the following:
- how well the learning/behaviour will be demonstrated, for example:
  - level of accuracy (number or percentage correct)
  - duration (how long or within what time frame)
  - latency (the length of time between presentation of information and responses)
  - frequency (number of times)
- the conditions under which the learning/behaviour will be demonstrated, for example:
  - the context
  - how information will be presented.

Determining how well and under what conditions students will demonstrate their achievement is essential for students experiencing difficulties, to ensure they are making sufficient progress as a result of intervention/instruction.

To determine how well and under what conditions a student will demonstrate learning or behaviour requires consideration of the phases of learning (i.e. acquisition, fluency, maintenance and generalisation). The criteria will vary with the phase of learning the student has reached.

The teacher might plan criteria to indicate that the student has achieved the exit goal for a particular phase of learning and is ready to progress to the next phase of learning. Examples of criteria for identifying letter–sounds for lower-case letters for each phase are presented in the following table.
# Example: criteria for identifying letter–sounds for lower case letters

<table>
<thead>
<tr>
<th>Phase</th>
<th>Indicator</th>
<th>Conditions</th>
<th>Level of performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisition</td>
<td>provide the most common letter–sound for all lower-case letters</td>
<td>when presented individually on flashcards</td>
<td>at 100% accuracy</td>
</tr>
</tbody>
</table>

**Criteria for the acquisition phase**
The student will provide the most common letter–sound for all lower-case letters when presented individually on flashcards at 100% accuracy

| Fluency     | provide the most common letter–sound for all lower-case letters          | when presented individually on flashcards | within 1 second at 100% accuracy |

**Criteria for the fluency phase**
The student will provide the most common letter–sound for all lower-case letters when presented individually on flashcards within 1 second at 100% accuracy

| Maintenance | provide the most common letter–sound for all lower-case letters          | when presented individually on flashcards and assessed on a weekly basis | within 1 second at 100% accuracy |

**Criteria for the maintenance phase**
The student will provide the most common letter–sound for all lower-case letters when presented individually on flashcards and assessed on a weekly basis within 1 second at 100% accuracy

| Generalisation | provide the most common letter–sound for all lower-case letters | when presented in a variety of ways (on flashcards, in lists, at the beginning of words) | within 1 second at 100% accuracy |

**Criteria for the generalisation phase**
The student will provide the most common letter–sound for all lower-case letters when presented in a variety of ways within 1 second at 100% accuracy
Planning

The *English K–10 Syllabus* provides information on principles that underpin effective planning at whole-school, stage and class level, as well as at an individual level.

Teachers may choose to use a particular method of planning and programming, such as that illustrated in Figure 1.

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**Collaborative curriculum planning**

For some students with special education needs the collaborative curriculum planning process is appropriate.

Collaborative curriculum planning is a process whereby a group of people meet to discuss and make decisions about curriculum options and adjustments to enable a student with special education needs to access the curriculum and associated learning experiences and assessment opportunities. The subsequent development of teaching programs within the key learning areas (KLAs) is informed by the collaborative curriculum planning process.

The planning meetings will include the student and parents/carers. The meetings should also include people who have significant knowledge of the student, such as the classroom teacher, school principal (or representative), learning support personnel, stage supervisor and
community service providers. A student’s particular learning needs may also necessitate the involvement of professionals with specific expertise. The management of the collaborative curriculum planning process is the responsibility of the school principal.

The collaborative curriculum planning process might involve:
• determining priorities across the KLAs
• determining adjustments across the KLAs that are necessary for the student to participate in learning experiences and demonstrate achievement in relation to selected outcomes
• considering any transition needs of the student, eg to school, between schools, between classes and to secondary school.

Professionals with specific expertise

Planning for some students may require the input of professionals with specific expertise. These may include speech pathologists/therapists, occupational therapists, physiotherapists or itinerant teachers (vision and hearing). Any professionals involved in the planning process, including the teacher, should be flexible with their role boundaries given the likelihood that knowledge and skills will overlap (Sigafoos, Arthur-Kelly & Butterfield 2006; Carter et al. 1995).

Speech pathologists/therapists

Speech pathologists/therapists can provide advice in relation to developing the skills and strategies that students require for effective communication during classroom instruction, routines and social contexts. This may include advice related to the design and use of appropriate communication systems for individual students. Speech pathologists/therapists may also provide advice in relation to language difficulties and speech production difficulties as well as eating, drinking and swallowing (Carter et al. 1995).

Occupational therapists

Occupational therapists have particular expertise in the development and maintenance of functional movement and fine motor skills, and the appropriate positioning and seating of a student. They may also provide advice with regard to adapted equipment, switches to access computers and other technology, and communication aids (Carter et al. 1995).

Physiotherapists

Physiotherapists have particular expertise in the development, maintenance and correction of a student’s posture, strength, stability and flexibility. They may also provide advice about the modifications required to the environment, and the exercises or positioning that will improve a student’s posture, strength, stability and flexibility (Carter et al. 1995).
Programming

Principles underpinning effective programming are included in the *English K–10 Syllabus*. Stage outcomes describe the strands speaking and listening, reading and viewing, and writing and representing, as well as skills of spelling, handwriting and grammar, punctuation and vocabulary. Teachers should integrate content from the strands when learning in one strand can support learning in the other strands and assist students to see the relationships between the strands of English.

*Figure 1 (p 9)* illustrates one method of planning and programming that incorporates assessment for learning.

When planning whole-class programs that meet the needs of all students, teachers may need to incorporate a student’s particular communication and/or therapy priorities and goals into the classroom routine and planned learning experiences.

Selection of outcomes

The selection of outcomes from the *English K–10 Syllabus* is central to programming and is based on the learning needs of individual students. As part of this process, teachers need to assess students’ prior knowledge, skills and understanding.

Outcomes to be addressed should be selected at the stage level that the student is working towards. Individual students may access outcomes at different stages of the *English K–10 Syllabus* according to their learning needs.
Figure 2 may assist teachers in the selection of appropriate outcomes for individual students for a unit of work.

For some students, teachers will need to plan a sequence of small steps towards the achievement of outcomes through which they will be able to monitor student progress.

Note that the selection of outcomes for students with special education needs and the determination of adjustments required for specific units of work may be informed by the collaborative curriculum planning process.

**What content, learning experiences and instruction will allow students to demonstrate these outcomes?**

It is important that teachers develop whole-class programs that meet the learning needs of all students.

**Content**

In planning a unit of work, teachers may choose to integrate content from the speaking and listening, reading, and writing strands to facilitate students’ learning.

Content should be selected from the *English K–10 Syllabus* according to an individual student’s learning needs. Teachers should identify the knowledge, skills and strategies
required by the student to demonstrate achievement in relation to the selected outcome(s) using the:

- content descriptions for each outcome that are arranged by key processes
- scope and sequences of grammar and punctuation, and graphological and phonological processing skills.

**Learning experiences**

Teachers design teaching and learning experiences and assessment opportunities for a unit of work to address the selected outcomes and content, and through which they can make judgements about student achievement. In designing teaching and learning experiences for a unit of work, teachers should identify:

- the size of teaching and learning steps appropriate to the phase of learning (p 19) and students’ learning needs
- the appropriate sequence for teaching and learning. This may be:
  - hierarchical, where new learning consolidates previous learning and is a prerequisite to the next or
  - logical, where skills are not interrelated but there is a logical reason for doing one before another
- the learning experiences to be used for assessment purposes (assessment for learning)
- how learning will be assessed.

In developing a whole-class program, teachers consider:

- grouping of students
- resources
- adjustments to meet the learning needs of individual students.

**Instruction**

Teachers should identify appropriate teaching procedures and strategies for the selected outcomes and content, and phase of learning.

**Procedures**

By using effective teaching procedures at the whole-class level, teachers reduce the number of students who will experience difficulties and require intervention/remediation (Purdie & Ellis 2005; Rose 2006).

Effective teaching and learning procedures (Rosenshine 1995) include:

- presenting new material in small steps
- helping students to develop an organisation for new material
- guiding student practice by:
  - supporting students during initial practice
  - providing for extensive student processing
- providing extensive independent practice
- supporting students to use learning strategies (cognitive strategies and metacognitive strategies) for higher level tasks.

These are outlined in the following section.
Teaching strategies

To meet the diverse learning needs of students, teachers identify and use strategies that are appropriate to the knowledge, skills and/or strategies, phase of learning, and students’ specific areas of difficulty in a strand (Speaking and listening, Reading, Writing).

Students experiencing difficulties are likely to require more intense and explicit instruction (Graham & Harris 2005). This might include:

- additional explanation
- pre-teaching of prerequisite knowledge, strategies and skills for new learning
- repeated modelling
- the implementation of teaching steps that are further broken down into smaller steps (Mastiopieri & Scruggs 2002)
- additional teaching and learning experiences at each phase of learning (acquisition, fluency, maintenance, generalisation)
- instructional scaffolding.
Implementation

Implementation of the program developed will reflect the decisions made regarding effective procedures and strategies, resources (p 24), adjustments (p 25) for individual students, and the grouping of students (p 27).

Presenting new material in small steps

Students with additional learning needs will develop knowledge, skills or strategies more readily if they are broken down into manageable ‘chunks’ or steps.

Presenting material in small steps and providing for practice (p 17) after each step enables students to build layers of understanding and skills on what they already know and can do (Curriculum Corporation 2005). Teachers should monitor student practice to prevent errors in the construction of their knowledge, skills and strategies.

To support students in the development of knowledge, skills and strategies, the teacher can:

- identify the prior learning steps essential to the new learning
- review relevant concepts and vocabulary
- explain new or unfamiliar vocabulary
- provide a short statement of goals and an overview of the lesson, identifying the main ideas
- model new learning, giving instructions and explanations using clear and concise language
- provide time for guided practice and independent practice after each step
- provide feedback (p 19) to students
- start with easier material, moving to more difficult material
- frequently monitor students’ learning.

Helping students to develop an organisation for new material

Students with well-connected knowledge structures (ie well-organised, with numerous and strong connections and interconnections between stored information) are more able to retrieve information easily and use their working memory to focus on new material and problem solving. Students’ prior knowledge provides a framework into which they can integrate new information.

Teachers can assist students to integrate new material into their existing knowledge by:

- explaining the purpose of learning or task
- explaining what students will learn during teaching and learning experiences
- providing a review of previous learning (including relevant vocabulary) to activate background knowledge, skills and strategies
- identifying background knowledge, strategies and skills needed for a unit of work
- pre-teaching required background knowledge, strategies and skills (identified through assessment)
- drawing students’ attention to the key features of new material
• drawing students’ attention to the key features of new material
• linking existing knowledge to new material by identifying connections with prior knowledge and experience (Westwood 2006)
• modelling the process of developing concept maps using a ‘think aloud’ strategy
• providing students with or asking students to develop graphic organisers/concept maps/visual aids
• providing focus questions before activities to assist students to monitor and reflect on their comprehension of information (Curriculum Corporation 2005)
• providing sufficient practice and instructional scaffolding
• providing a scaffold for recording (Curriculum Corporation 2005)
• making explicit the indicators for success (eg a rubric), so students can judge when they have accomplished the intended learning.

Review

Review occurs when students are required to apply previous learning at different times and in different contexts. Review assists students to remember previously learned knowledge, skills and strategies and to develop connections with new learning material.

Effective review involves:
• planning opportunities for review that are distributed over a period of time
• planning opportunities for the review of recently learned and previously learned materials simultaneously
• reviewing previously learned knowledge, skills and strategies relevant to new learning.

Review strategies include:
• oral questioning
• tests and quick quizzes
• individual/group conferences
• using questioning to identify relevant prior knowledge (eg ‘What do we know about information reports?’)
• brainstorming in a small group or as a whole class what students know about a topic, skill or strategy
• highlighting and building on student’s existing knowledge, skills and strategies, eg ‘We know that …’
• including previously learned materials in current learning experiences.

Practice

Students require sufficient guided and independent practice to learn, remember and use knowledge, skills and strategies.

Guided practice

Guided practice involves supporting students during initial practice to ensure that they develop knowledge, skills and strategies with accuracy and do not practise errors. It also involves providing for extensive student processing.

During initial practice, the teacher supports students by:
• guiding or leading students through examples of the knowledge, skill or strategy
• providing a number of examples using a ‘think aloud’ strategy
• programming for active student involvement and frequent opportunities to respond, eg asking a high number of questions (Westwood 2006)
• questioning students at different levels of complexity, including those students who do not volunteer a response (Westwood 2006)
• monitoring the responses of all students
• identifying students who require further instruction, ie re-teaching or additional teaching and learning
• inviting students to come to the board and complete a task or an aspect of a task, discussing their skills and strategies (this allows students to view additional models and have skills and strategies explained by their peers).

Providing for extensive student processing

Information is more likely to be stored in long-term memory when students are provided with repeated opportunities to integrate and create links between new knowledge and existing knowledge.

Activities that help students to integrate new knowledge with existing knowledge include:
• comparing and contrasting new material with prior material
• drawing connections between new material and prior material, eg using concept maps
• organising information
• summarising
• explaining new learning to others, eg peer, group, teacher or teacher’s aide (Mastiopierri & Scruggs 2002)
• quizzing one another
• generating and answering questions
• developing mind maps
• applying learning to a new situation
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- providing a new example
- explaining their position to others
- reflecting on learning, eg writing reflections on their learning.

The teacher can help students to reflect on their learning by asking questions or instructing students to explain their thinking. It is important for teachers to provide students with sufficient time to respond to questions (Westwood 2006).

Examples of questions and instructions:

- How did you work it out?
- Show me how you worked it out.
- What steps did you take?
- How did you know that word says ‘shut’?
- What have you tried?
- Did you follow the instructions (scaffold)?
- Did you have a strategy?
- Explain what you were thinking.
- What do you think comes next?
- How did you know when you were finished? (Howell et al. 1993)
- How did you know that sound? … that word? … that answer?
**Independent practice**

Independent practice involves completing work independently, with the teacher monitoring student responses. Independent practice assists students to become more fluent in a skill or strategy and to consolidate their knowledge. Practice should be planned and implemented over time and be applied to as many relevant situations as possible to assist students with generalisation. Prior to independent practice, the student must have accurately acquired the necessary knowledge, skills and strategies.

Independent practice involves the teacher:
- providing an appropriate learning sequence
- carefully selecting examples specific to what individual students need to practise
- monitoring student work
- providing students with feedback.

Independent practice includes:
- independent reading and writing activities
- worksheets
- instructional games
- computer programs
- contracted work.

**Feedback**

**How will feedback be provided?**

Appropriate feedback during and following learning experiences assists students to consolidate learning. Feedback involves:
- providing frequent, specific, immediate and, where appropriate, corrective feedback about student responses
- immediately correcting errors that will affect learning
- asking students to build on incomplete responses or redo incorrect responses
- providing opportunities for students to reflect on small improvements, eg the teacher may say ‘You spelled nine words correctly today. That’s better than yesterday.’
- linking prior or future learning, eg the teacher may say ‘You didn’t know that word so you re-read the sentence to help you check your predicted meaning – well done’
- providing specific feedback on student effort, eg the teacher says ‘Well done, you kept redrafting the sentence until it was written correctly.’

**Phases of learning**

Students move through phases of learning when developing knowledge, skills and strategies as illustrated in the following table. The students’ phase of learning assists teachers in identifying the extent to which something should be learned and the next programming step (Mastiopierrri & Scruggs 2002).
## Phases of learning

### Acquisition

<table>
<thead>
<tr>
<th>Phase of learning</th>
<th>Exit goal(s)</th>
<th>Effective teaching strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acquisition</strong></td>
<td><strong>The student can:</strong></td>
<td><strong>The teacher should:</strong></td>
</tr>
<tr>
<td>Students learn to demonstrate new knowledge, skills and strategies, for example:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• recognise high-frequency irregular words</td>
<td>• demonstrate knowledge, skills and strategies accurately, with minimal support</td>
<td></td>
</tr>
<tr>
<td>• use capital letters at the beginning of sentences</td>
<td>• model/demonstrate how to perform a particular skill or strategy using ‘think aloud’</td>
<td></td>
</tr>
<tr>
<td>• use a jellybean switch to activate an MP3 player to listen to a poem</td>
<td>• model multiple examples before students are expected to demonstrate knowledge, skills and strategies independently</td>
<td></td>
</tr>
</tbody>
</table>

### Fluency

<table>
<thead>
<tr>
<th>Phase of learning</th>
<th>Exit goal(s)</th>
<th>Effective teaching strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fluency</strong></td>
<td><strong>The student can:</strong></td>
<td><strong>The teacher should:</strong></td>
</tr>
<tr>
<td>Students get better and faster at demonstrating knowledge, skills and strategies, for example:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• read with fluency</td>
<td>• provide frequent opportunities to practise the use of knowledge, skills and strategies (eg repeated reading, reading high-frequency words quickly and without hesitation)</td>
<td></td>
</tr>
<tr>
<td>• respond to a greeting in a reasonable time frame</td>
<td>• plan learning experiences that elicit frequent student input/responses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• provide appropriate feedback to students about accuracy and fluency</td>
<td></td>
</tr>
</tbody>
</table>
### Phases of learning (cont)

<table>
<thead>
<tr>
<th>Phase of learning</th>
<th>Exit goal(s)</th>
<th>Effective teaching strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maintenance</strong></td>
<td>The student can:</td>
<td>The teacher should:</td>
</tr>
<tr>
<td>(Haring, Lovitt, Eaton &amp; Hansen, 1978 cited in Wright)</td>
<td>• demonstrate the retention of knowledge, skills and strategies with accuracy and fluency</td>
<td>• initially provide opportunities for frequent review of previously learned knowledge, skills and strategies. The need for review reduces over time</td>
</tr>
<tr>
<td>Students demonstrate their ability to retain knowledge, skills and strategies, for example:</td>
<td></td>
<td>• build on students’ knowledge, skills and strategies by providing varied and increasingly complex examples</td>
</tr>
<tr>
<td>• spell an irregular word acquired in a previous unit of work</td>
<td></td>
<td>• provide for the practise of skills and strategies in context (eg practising word-recognition when reading text)</td>
</tr>
<tr>
<td>• use a newly enhanced communicative act after instruction has been completed</td>
<td></td>
<td>• teach students strategies to aid recall (eg spelling rules)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• provide opportunities for students to reflect on, share and evaluate their learning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• provide appropriate feedback to students</td>
</tr>
<tr>
<td><strong>Generalisation</strong></td>
<td>The student can:</td>
<td>The teacher should:</td>
</tr>
<tr>
<td>Students learn to apply knowledge, skills and strategies in different contexts and in different ways, for example:</td>
<td>• distinguish between similar knowledge, strategies and skills</td>
<td>• provide multiple and varied examples (Mastiopieri &amp; Scruggs 2002)</td>
</tr>
<tr>
<td>• recognise high-frequency words without assistance when reading a range of texts</td>
<td>• use knowledge, skills and strategies in different contexts</td>
<td>• identify conceptual links between strands (eg how the recognition of rhyme assists with spelling)</td>
</tr>
<tr>
<td>• use pointing to make a request in a range of settings</td>
<td></td>
<td>• discuss similarity of demands of new learning and previously acquired knowledge, skills and strategies (Westwood 2004)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• provide opportunities for students to use knowledge, skills and strategies in unfamiliar contexts, including problem solving</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• provide opportunities for students to use skills and strategies in everyday contexts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• provide opportunities for students to apply learning to more complex examples</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• provide frequent and cumulative review</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• provide appropriate feedback to students</td>
</tr>
</tbody>
</table>
Supporting students to use learning strategies

Learning strategies assist students to be aware of the ways in which they learn and how they can learn more effectively. Learning strategies include both cognitive and metacognitive strategies.

To use learning strategies effectively, students need to be able to select an appropriate strategy and apply the strategy in different contexts and for different purposes (Curriculum Corporation 2005).

Cognitive strategies

Cognitive strategies are plans or guides that support students to complete systematically less-structured or higher-order tasks. Cognitive strategies are involved in higher-order processes that require thinking, planning, processing and decision-making (Westwood 2004), for example:

- listening and reading comprehension (Reading p 27)
- writing a paragraph or constructing a text (Curriculum Corporation 2005).

Examples of cognitive strategies that students may use individually, or in combination to complete a task include: visualising, verbalising, answering self-generated questions or teacher questions, scanning, underlining or highlighting, summarising, using mnemonics, using memory aids, using visual or verbal prompts, note-taking, rehearsing (practice through repetition), using a set of procedural prompts or cues.

Cognitive strategies can be:

- general (eg a planning strategy for writing)
- specific to a particular task (eg the ‘i before e except after c’ spelling rule or a writing strategy for producing a particular text type).

Learning strategies for Speaking and listening, Reading and Writing are included in these sections.

Teaching strategies that support students to use cognitive strategies include:

- explaining why a cognitive strategy helps with learning or is useful
- explaining when to use a cognitive strategy, eg ‘You can use this strategy to help you plan what you will write’
- modelling cognitive strategies in small steps using ‘think aloud’, discussing the reason for each step (Zito et al. 2007)
- guiding student practice using the new strategy until the student can apply the strategy without error
- providing opportunities for students to remember and recall the strategy before using it. This may involve verbal rehearsal, eg ‘First I …’, etc.
- providing opportunities for students to use a strategy until they have experienced its benefit and are able to use it independently (Graham and Harris 2005b)
- gradually increasing the difficulty of examples for independent practice
- identifying other situations/contexts where the same strategy can be used, modified or used in combination with other strategies to assist with generalisation, eg key questions for a narrative may also be used for a book report or biography
- promoting the use of metacognitive strategies to support the use of cognitive strategies
- providing instructional scaffolding (p 26) to assist students in using a particular strategy
• identifying students who require additional support, practice and/or feedback, to use
cognitive strategies and the type of support that they require (Baker et al. 2003)
• providing opportunities for students to help each other and discuss their strategy use.

Memory aid

Purpose: To remember the correct spelling of here and hear according to meaning.
‘You hear with your ear.’

Procedural prompts

Purpose: Procedural prompts scaffold a student’s use of cognitive strategies by breaking the
strategy into small steps. Procedural prompts assist students to remember how to use a strategy.

The example below is a set of steps to guide students in answering questions to demonstrate
reading comprehension. The procedural prompts also include the cognitive strategies of
underlining and note-taking.

Example: procedural prompts for comprehension

Instructions

Step 1: Read the question carefully.
Step 2: Underline the key words in the question.
Step 3: Put the question into your own words.
Step 4: Look for the part of the text that will help you answer the question using the
key words or word in your question.
Step 5: Note down or underline the parts of the text that will help.
Step 6: Check if other parts of the text can help or give more information.
Step 7: Write your answer.
Step 8: Read the question again, and read your answer.
Step 9: Ask yourself:
• have I answered the question?
• do I need to include more information?
• should I make changes to my answer?
Step 10: Make changes to improve your answer.

Metacognitive strategies

Metacognitive strategies support the effective use of cognitive strategies (p 22) and involve
planning, monitoring, evaluating and modifying one’s thinking/strategic behaviour
(Westwood 2004). When using metacognitive strategies, students monitor what they
are doing and how to self-correct (Westwood 2004), eg ‘this isn’t working, I need to try
another way’ (Curriculum Corporation 2005).
Teaching strategies that support students in the use of metacognitive strategies include:

- explaining when and how to use metacognitive strategies
- explaining that metacognitive strategies are used to prompt thinking and to assist with the use of cognitive strategies
- modelling the use of self-instruction, self-questioning and self-monitoring strategies using ‘think aloud’
- supporting students to apply the strategies, scaffolding their self-talk through modelling, and opportunities for verbal rehearsal (Westwood 2004)
- providing opportunities to practise verbalising the metacognitive strategies that students use to assist with memory
- providing specific feedback on students’ use of metacognitive strategies
- providing opportunities for students to reflect on their strategy use, eg how they applied the strategy, how the strategy helped, any problems they encountered.

Resources

Teachers should use a variety of teaching resources to assist learning, ensuring that the selected resources are:

- purposeful
- stimulating and relevant to the interests and experiences of students
- well designed
- reputable
- accessible to all students
- diverse to cater for the full range of learning needs
- age appropriate
- placed appropriately in the classroom for ease of use.

Teachers may refer to the following websites for examples of quality literature:

- Children’s Book Council Awards of Australia
- DET Curriculum Support Bookshelf lists
- e:lit – experts in primary literacy (formerly the Primary English Teaching Association)
- NSW Premier’s Reading Challenge.
**Adjustments**

Adjustments are measures or actions taken in relation to teaching, learning and assessment that assist a student with special education needs to access syllabus outcomes and content, as well as associated learning experiences and/or assessment opportunities. These adjustments will vary according to the needs of the individual student, and may be determined in the context of collaborative curriculum planning.

Adjustments could include:

- additional presentation or modelling of knowledge, skills and strategies
  - providing simpler explanations (Westwood 2006)
  - modelling additional examples
  - breaking the task into smaller steps and providing students with additional time at each step
  - providing additional targeted instruction and instructional scaffolding in a smaller homogeneous group

- clarifying or shortening instructions
  - providing instructions in simpler language
  - giving one instruction at a time
  - ensuring that students can read and understand written instructions
  - providing instructions in alternative formats, eg providing written instructions in addition to oral instructions
  - asking students to repeat instructions
  - giving students the opportunity to ask questions about the learning experience

- changes to classroom organisation
  - changing lighting
  - reducing background noise
  - appropriate placement of objects and equipment in the classroom
  - labelling equipment and specific purpose areas
  - using colour-coding for the organisation of groups
  - using visually organised systems, eg names or pictures for personal or shared equipment

- providing opportunities for additional practice through group work, peer or volunteer tutoring and/or other individual assistance

- providing additional guided practice and independent practice

- providing additional monitoring and/or feedback or alternative feedback
  - maintaining closer proximity for more regular monitoring
  - encouraging students to monitor their own performance
  - making students more aware of their own performance, eg graph or chart the number of words a student reads accurately over time
  - reinforcing approximations towards the accurate demonstration of a skill, eg when learning to write their own name, a student initially traces their name, then copies their name, then writes their name independently
  - asking questions at different levels of complexity (Westwood 2006)

- slowing the pace of instruction
  - keeping a task the same for a longer period of time
  - presenting a reduced amount of new material
pacing presentation to give students time to process the information (Westwood 2006)

• adjustments to enable access to particular learning experiences
  – alternative formats (video 12) such as:
    • Braille or large print
    • oral/sign interpreters
    • subtitled videos
    • symbols paired with print
  – use of assistive technology such as:
    • closed-circuit television (CCTV)
    • jellybean switch
    • speech-generating device
    • text reader software
    • word prediction software
  – digital version of a text
• instructional scaffolding.

**Instructional scaffolding**

Instructional scaffolding is a means by which support and guidance is provided to assist the development of students’ understanding of English.

Scaffolding may involve modelling, cues, hints, prompts, steps, teacher questioning, direct guidance, selection and sequencing of examples, or support from a teacher, teacher’s aide or peer.

Scaffolding is temporary and is adjusted as a student becomes more successful or independent in undertaking a task. Scaffolding is reduced in a gradual and planned way by providing more varied, more difficult and less familiar examples or by changing the level of support provided to the student (Harniss et al. 2002).

Scaffolds may be presented in verbal, visual (written and/or pictorial), or physical form.

**Examples of scaffolding presented in a verbal form:**
– prompting a student having difficulty reading a word with ‘What do you do when you come to a word you don’t know?’
– highlighting new or key information, eg ‘Listen carefully, we are going to learn something new!’

**Examples of scaffolding presented in a visual form:**
– providing visual cues to highlight key information in a written text, eg underlining, bold or colour font (Westwood 2006)
– providing a picture prompt of a ball inside the round part of the letter ‘b’ to cue the student that the letter is b, not d
– displaying a chart of high-frequency words to assist with spelling
– displaying the steps involved in developing a written text type
– providing data banks of word families, topic/theme words
– adding symbols to magazines/books next to pictures/text
– providing permanent models, eg sentence structure.
Examples of scaffolding presented in a physical form:

- adding raised materials/tactile cues to text
- guiding a student’s hand to ensure that they select the correct alternative in match-to-sample activities
- placing a new or difficult task in the same position on a worksheet.

Grouping of students

Teachers organise students according to the nature of the teaching and learning experience and students’ learning needs. The grouping of students should be flexible within the day and/or within lessons.

Students are organised/grouped for:

- whole-class instruction
- small-group instruction
- individual instruction.

Whole-class instruction

Whole-class instruction may be used to:

- present or model new knowledge, skills or strategies
- introduce new topics in a structured and predictable manner, eg brainstorming, semantic web, fact tree
- provide students with a framework for undertaking a task, eg ‘What do we know about …?’; ‘What do we want to find out about …?’
- reinforce prior learning
- give instructions before group work
- play games
- brainstorm in a large group
- undertake shared reading.
Small-group instruction

Small-group instruction may be used to:
• provide additional modelling or practice of knowledge, skills or strategies
• support students with difficulties in a particular aspect of English to undertake work in the same content area, field, topic or theme as their peers
• monitor students’ progress more closely
• reflect on learning, clarify and extend ideas (Curriculum Corporation 2005).

Small-group instruction may include:
• homogeneous groups used for guided practice and independent practice at a specified level
• heterogeneous groups used for problem solving, exploring concepts, development of social skills.

Individual instruction

Individual instruction is sometimes necessary for a student to learn and acquire knowledge, skills and strategies. Individual instruction may be used to:
• provide additional modelling of knowledge, skills and strategies at the appropriate place on the English continuum
• support a student with a specific aspect of English with which they are experiencing difficulty.
Evaluation

Evaluation refers to a judgement made about the overall effectiveness of the program being implemented. This is necessary to determine what modifications might need to be made to the teaching program or what outcomes should be the next focus for programming.

Information gathered as part of the teaching and learning cycle will inform any changes to instruction that are required. For some students, information may also be gathered through the collaborative curriculum planning process.

These changes may involve:
• varying instructional approaches
• varying resources
• adjusting the pace of instruction
• reviewing previously taught material
• teaching an alternative sequence of skills
• trialling or implementing new or additional adjustments.