

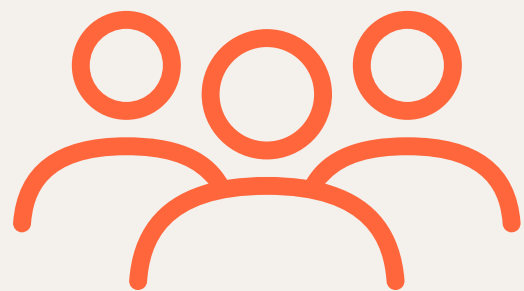


EVIDENCE
FOR LEARNING

Guidance Report

Secondary

Improving literacy in secondary schools



This Guidance Report is based on original content from a report of the same name produced by the Education Endowment Foundation (EEF). The original content has been modified where appropriate for an Australian context.

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Foreword

Good literacy skills provide us with the building blocks not just for academic success, but for fulfilling careers and rewarding lives. Yet despite our best efforts, a student in year 7 from the lowest quintile of social economic status (SES) is more than 10 times as likely to have reading skills below national minimum standard in comparison to a peer in the highest quintile of SES.¹

At Evidence for Learning, we believe the best way to break this link between family income and educational attainment is through better use of evidence: looking at what has—and has not—worked in the past can help us to decide what is likely to work in the future.

Historically, many secondary school teachers have not seen themselves as literacy experts. Teaching children to read has been the domain of primary schools, or the responsibility of teachers in the English department. Some cross-curricular efforts have held promise, but, in many secondary schools, the challenge of literacy remains.

This report argues for a change in tack. It emphasises that literacy in secondary school cannot simply be seen as a basket of general skills. Instead, it must be grounded in the specifics of each subject.

Crucially, this report makes the case that by attending to the literacy demands of their domains, teachers increase their students' chance of success in their subjects. Secondary school teachers should ask not what literacy can do for them, but what they can do for literacy.

It can be difficult to know where to start. There are thousands of studies of literacy teaching, most of which are presented in academic papers and journals. Teachers are inundated with information about programs and training courses, all of which make claims about impact. How can anyone know which findings are the most robust, reliable, and relevant to their school and students?

It is in response to these questions that we have produced this Guidance Report. Developed by our UK partner, the Education Endowment Foundation and updated for Australian audiences, it offers seven practical, evidence-based recommendations centred on the key concept of disciplinary literacy. It aims to support teachers in all subjects with strategies to help students read, write, and communicate effectively. These recommendations are relevant to all students, particularly for those struggling with their literacy.

Of course, this Guidance Report on its own will not improve the literacy of secondary school students. It is only when the research knowledge summarised in this guide is combined with teachers' professional judgement and expertise that students in classrooms across Australia will benefit.

We hope this guide will help to support a consistently excellent, evidence-informed secondary system in Australia that creates great opportunities for all children, regardless of their family background.

The Evidence for Learning Team

Introduction

What does this guidance cover?

This Guidance Report aims to help secondary schools improve literacy in all subject areas. It provides seven recommendations related to reading, writing, talk, vocabulary development and supporting struggling students. Throughout the report, recommendations emphasise the importance of disciplinary literacy.

Disciplinary literacy is an approach to improving literacy across the curriculum. It recognises that literacy skills are both general and subject specific, emphasising the value of supporting teachers in every subject to teach students how to read, write and communicate effectively in their subjects.

This guidance challenges the notion that literacy in secondary school is solely the preserve of English teachers, or literacy coordinators. The emphasis on disciplinary literacy makes it clear that every teacher communicates their subject through academic language, and that reading, writing, speaking and listening are at the heart of knowing and doing Science, Art, History, and every other subject in secondary school.

The term disciplinary literacy, as used in this guidance, does not relate to students' behaviour; rather, it highlights the idea of subjects as disciplines.

The guidance completes the suite of Evidence for Learning Guidance Reports focused on literacy, building on the [Improving literacy in lower primary](#) and [Improving literacy in upper primary](#) reports. These reports provide further detail related to aspects of this Guidance Report, for example related to early literacy development.

"This guidance challenges the notion that literacy in secondary schools is solely the preserve of English teachers."

Who is this guidance for?

This guidance is for school leaders and secondary school teachers across all subjects. It is also written to support literacy coordinators, subject leaders, and senior leaders with responsibility for professional learning and curriculum development.

Further audiences who may find the guidance relevant include other staff within schools who are responsible for supporting students to improve aspects of their literacy, including teaching assistants and classroom support staff, as well as, school councils, parents, program developers, and educational researchers.

Summary of recommendations

1



Prioritise 'disciplinary literacy' across the curriculum

- Literacy is key to learning across all subjects in secondary school and a strong predictor of outcomes in later life.
- Disciplinary literacy is an approach to improving literacy across the curriculum that emphasises the importance of subject specific support.
- All teachers should be supported to understand how to teach students to read, write and communicate effectively in their subjects.
- School leaders can help teachers by ensuring training related to literacy prioritises subject specificity over general approaches.

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6

2



Provide targeted vocabulary instruction in every subject

- Teachers in every subject should provide explicit vocabulary instruction to help students access and use academic language.
- Effective approaches, including those related to etymology and morphology, will help students remember new words and make connections between words.
- Teachers should prioritise teaching Tier 2 and 3 vocabulary, which students are unlikely to encounter in everyday speech.
- Teachers and subject leaders should consider which words and phrases to teach as part of curriculum planning.

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3



Develop students' ability to read complex academic texts

- Training focused on teaching reading is likely to help secondary school teachers teach their subject more effectively.
- To comprehend complex texts, students need to actively engage with what they are reading and use their existing subject knowledge.
- Reading strategies, such as activating prior knowledge, prediction and questioning, can improve students' comprehension.
- Strategies can be introduced through modelling and group work, before support is gradually removed to promote independence.

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4



Break down complex writing tasks

- Writing is challenging and students in every subject will benefit from explicit instruction in how to improve.
- Teachers can break writing down into planning, monitoring and evaluation, and support students by modelling each step.
- Targeted support should be provided to students who struggle to write fluently, as this may affect writing quality.
- Teachers can use a variety of approaches, including collaborative and paired writing, to motivate students to write.

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5



Combine writing instruction with reading in every subject

- Combining reading activities and writing instruction is likely to improve students' skills in both, compared to a less balanced approach.
- Reading helps students gain knowledge which leads to better writing, whilst writing can deepen students' understanding of ideas.
- Students should be taught to recognise features, aims and conventions of good writing within each subject.
- Teaching spelling, grammar and punctuation explicitly can improve students' writing, particularly when focused on meaning.

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6



Provide opportunities for structured talk

- Talk matters: both in its own right and because of its impact on other aspects of learning.
- High quality talk is typically well-structured and guided by teachers.
- Accountable talk is a useful framework to ensure talk is high quality, and emphasises how talk can be subject specific.
- Teachers can support students by modelling high quality talk, for example including key vocabulary and metacognitive reflection.

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7



Provide high quality literacy interventions for struggling students

- Schools should expect and proactively plan to support students with the weakest levels of literacy, particularly in Year 7.
- Developing a model of tiered support, which increases in intensity in line with need is a promising approach.
- Assessment should be used to match students to appropriate types of intervention, and to monitor the impact of interventions.
- Creating a coordinated system of support is a significant challenge requiring both specialist input and whole school leadership.

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1

Prioritise 'disciplinary literacy' across the curriculum



8:40–9:00

Home group time



Students begin home group time by taking their reading books from their bags. Most students read teen fiction, though some borrow a non-fiction book from the school library. For fifteen minutes, students read in silence. When the bell rings, books are stowed into bags and they head off to their lessons.

Their home group tutor, an experienced science teacher, recognises that reading is intrinsically valuable, but is unsure whether every student is benefiting from this silent reading time. Silent reading is a calm way to start the day and most students seem to enjoy reading, but she is unsure whether weaker readers use the time well. As a science teacher, she also wonders whether the literacy skills students pick up while reading for pleasure will help them in her subject?

Discussion Questions:

- Does silent reading change students' attitudes to literacy or improve their outcomes?
- How transferable are reading skills? For example, is reading fiction likely to help students understand texts in science?
- What contribution can non-English teachers make to students' literacy?

Why literacy matters

Literacy is fundamental for success in school and later life. Students who cannot read, write and communicate effectively are highly unlikely to access the challenging academic curriculum in secondary school and are more likely to have poor educational outcomes across all subjects.²

The academic challenges faced by students moving from primary to secondary education are often underestimated. For example, students in Year 7 must adjust to being taught by a range of teachers—often undertrained in the literacy demands of their subject—using a range of new types of texts, which are often dense and more technical than those encountered in primary school. Such challenges can create a 'literacy gap', meaning that many students making the transition from primary struggle to access the secondary school curriculum.³

Disciplinary literacy

Disciplinary literacy is an approach to improving literacy across the curriculum. It recognises that literacy skills are both general and subject specific, emphasising the value of supporting teachers of every subject to teach students how to read, write and communicate effectively.^{4,5}

As students progress through an increasingly specialised secondary school curriculum, there is a growing need to ensure that students are trained to access the academic language and conventions of different subjects. Strategies grounded in disciplinary literacy aim to meet this need, building on the premise that each subject has its own unique language, ways of knowing, doing, and communicating.⁵



By anchoring literacy clearly in subjects, disciplinary literacy aims to support students to develop relevant 'disciplinary habits of mind'.⁶ These are subtle but important differences in reading in subject specific ways.⁷ For example, in Biology, a student may read an informational text about photosynthesis and assume that is it an authoritative account, suppressing thoughts about the author of the text. In contrast, in the English classroom, a student could read with an active awareness of the author and the context in which the text was authored. For maths teachers, explicitly teaching mathematical vocabulary and specific reading strategies for written problems could support students to read like mathematicians.

The silent reading vignette above might prompt us to reflect on how a school's approach to improving literacy should balance general and subject specific support. Silent reading (sometimes branded as "Drop Everything and Read" or similar) may be appealing for a range of reasons, but a literacy strategy that only includes general approaches is unlikely to be as impactful as one that also includes support for teachers to improve students' literacy in their subjects.

Likewise, generic literacy training relating to extended writing or common approaches to assessing spelling, punctuation and grammar could prove flawed if they are poorly understood, or not clearly aligned with the curriculum and aims of subject teachers. The requirement that students always write in full sentences might help English teachers, but hinder colleagues in Science.

Silent reading is also an important example because it highlights that many plausible approaches to improving literacy may not improve outcomes for students. While silent reading might have other positive outcomes, such as providing a structured start to the school day, overall evaluations of silent reading programs have shown inconsistent effects on student outcomes and motivation.^{8,9,10}

This does not mean that schools should stop whole-school approaches to literacy, but it does suggest a need to think carefully about how whole-school approaches,¹¹ as well as related school policies (such as marking), will be implemented and balanced with more subject specific support. It also suggests that schools should consider the quality of the professional development aimed at supporting teachers to develop the disciplinary literacy of their students.⁵

The first step towards considering disciplinary literacy might be to discuss, with colleagues, questions that surround literacy in each subject, such as:

- What is unique about your subject discipline in terms of reading, writing, speaking and listening?¹⁰ What is common with other subject disciplines?
- How do members of this subject discipline use language on a daily basis?
- Are there any typical literacy misconceptions held by students, for example, how to write an effective science report?
- Are there words and phrases used typically, or uniquely, in the subject discipline?



How can school leaders prioritise disciplinary literacy?

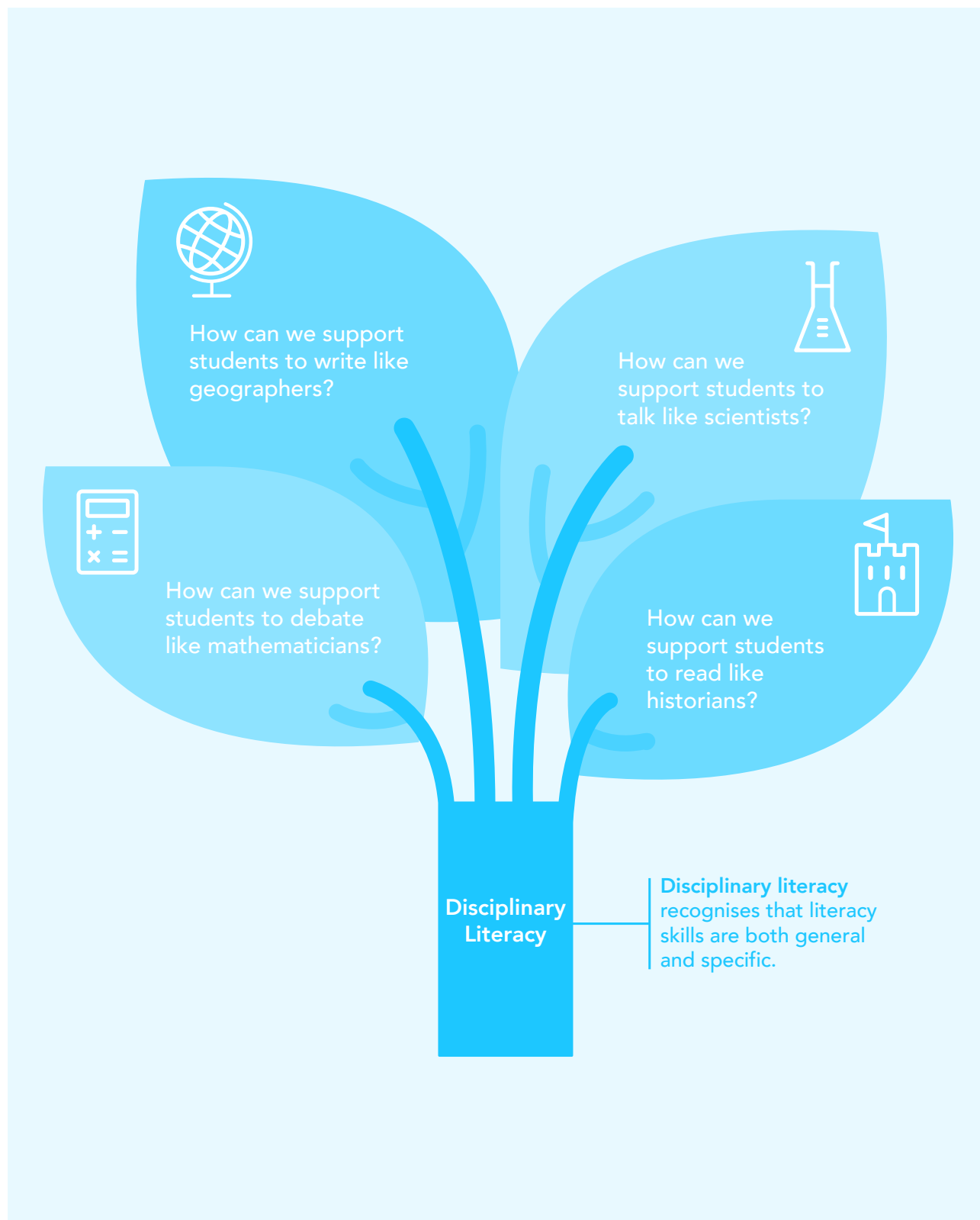
Secondary teachers are likely to have experienced a significant amount of training focused on literacy, or been asked to support new whole school literacy initiatives, yet many teachers feel ill-equipped to improve literacy outcomes in their subject area.¹² Teachers have recognised the importance of literacy and strategies promoted as ‘literacy across the curriculum’, but this, often, does not translate into the successful application of literacy in their subject discipline. School leaders can prioritise disciplinary literacy by exploring several strategies:

- Auditing existing literacy practices, attitudes, and resources in school—involving both teachers and students; this could include an evaluation of existing literacy policies and roles such as the literacy coordinator;
- Creating subject specific literacy plans, rooted in the discipline, that address barriers to accessing the curriculum related to reading, writing and communication;
- Supporting teachers to define effective reading, writing, and talk in their subjects; for example, history teachers might discuss what reading strategies are deployed by historians to appraise historical sources;
- Building an expectation around the collection and use of valid and reliable assessments to collect baseline data of students reading ability;
- Evaluating the quality and complexity of existing reading materials in school, assessing the degree of academic challenge such texts pose to our secondary school students as they progress through school; relating this to baseline data of students’ reading ability, and;
- Ensuring that the development of disciplinary literacy is coherently aligned with curriculum development—for example, in Art, that the development of drawing skills is paired with teaching students how to make high quality annotations utilising specialist vocabulary.





Figure 1: Disciplinary literacy





9:00–10:00 Mathematics



Students enter the classroom and take out their maths books. They locate their 'knowledge organiser' for the term, a coloured page which includes key mathematical vocabulary and formula for the unit of work the class is studying, and begin reading.

Following an established routine, students quiz themselves on a section of mathematical vocabulary, before putting their knowledge organiser to one side and beginning their lesson.

Their teacher is pleased that the knowledge organisers distil key information, including important mathematical terminology. However, she would like to be able to do more to help students remember and understand the terms they are trying to learn. For example, she knows that mathematical terms often have Greek or Latin origins, but is unsure whether explaining this will help students.

Discussion Questions:

- How can we ensure that vocabulary instruction is effectively integrated into classroom teaching?
- How can we move beyond static word lists to support students to develop a deeper understanding of the meaning and application of words?
- How can we ensure that subject specific vocabulary becomes memorable and that students can use new words in writing and talk?

Students develop their language skills throughout secondary school as they read both in class and independently, and from engaging in academic talk and listening. Nurturing the development of the academic language of secondary school is crucial, given the increasingly specialised language of subject disciplines. This can be supported by targeted vocabulary instruction.

One of the significant challenges of secondary school is that all students must develop secure knowledge of the specialised and technical vocabulary needed to access the curriculum.¹³ As students move from one subject classroom to another, they need to navigate and switch between subtly different forms of communication and vocabulary use. Further increasing the challenge, the subject specific academic vocabulary of the subject disciplines differs considerably from the language students habitually use to communicate outside of the school gates.¹⁴

The specialised vocabulary of mathematics, for example, includes words that have a specific meaning in maths, but have different meanings in other contexts. For example, 'factors' of a number in mathematics has a different meaning to the 'factors' that influenced World War II in History. It is easy to see how confusion for students can occur. Other examples in mathematics include words like 'value', 'prime', 'area', 'mean', 'fraction', and 'improper'.

Organise vocabulary into meaningful patterns within and across subjects

It is helpful to define and characterise what makes the vocabulary of secondary school uniquely complex. Ultimately, the words and phrases used in the subject disciplines are more specialist and rarer than in everyday talk and language,¹⁵ but the patterns within specialist vocabulary can be used to help students overcome this complexity.

A significant proportion of the subject specific vocabulary we use at secondary school has ancient Greek and Latin origins.¹⁵ In Science and Maths, the proportion can be as high as 90%.¹⁶ This offers a challenge for our students, but also an opportunity. Academic vocabulary helpfully includes common word roots (such as, 'geo' or 'bio'), prefixes (such as 'un-' and 're-') and suffixes (such as, '-ing' and '-ed'). Teachers can use approaches to vocabulary instruction based in **etymology** and **morphology** to help students understand and remember new words.¹⁷

Etymology is the study of the origin of words.

In Biology a teacher introducing students to the concept of "symbiosis" might emphasise the origin of the word to explain the concept in a memorable way. Symbiosis derives from the Greek for "companion" and "a living together". This hook can help students remember the idea that symbiosis involves close physical association and is mutually beneficial.

Morphology is the study of the structure and parts of words.

A mathematics teacher might explore the Latin prefixes in shapes and key terms and explicitly encourage students to spot the patterns between words: for example, between quarter and quadrilateral, triangle and triple. Patterns can also cross subjects, for example from octagon in Maths to octave in Music.

Some words change their meaning over time, so in subjects like English Literature, awareness that the word 'brave' meant barbarous in the 15th century but that its meaning has evolved over time, is valuable for interpreting older literary texts.

Teachers can also deepen students' understanding of vocabulary using graphic organisers, such as concept maps and the Frayer Model.

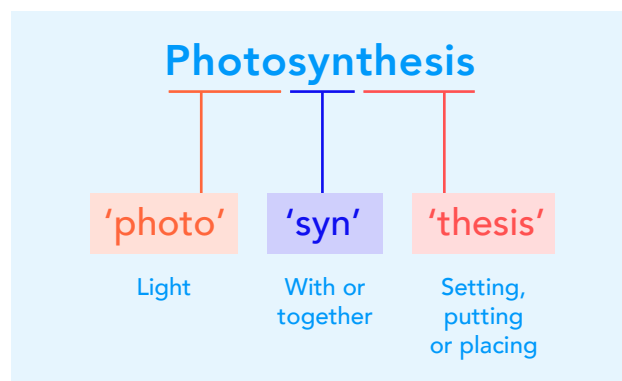


Figure 2: The morphology of photosynthesis

Several helpful frameworks exist to help secondary school teachers identify complex vocabulary (including phrases and idioms) and select words to teach explicitly. Isabel Beck and colleagues developed a model presenting tiers of vocabulary that helpfully delineates between vocabulary used in subject disciplines and across the curriculum (see Figure 3).^{18,19}

A key insight from this model is the need to explicitly teach Tier 2 and Tier 3 vocabulary, which will be unfamiliar to many students.

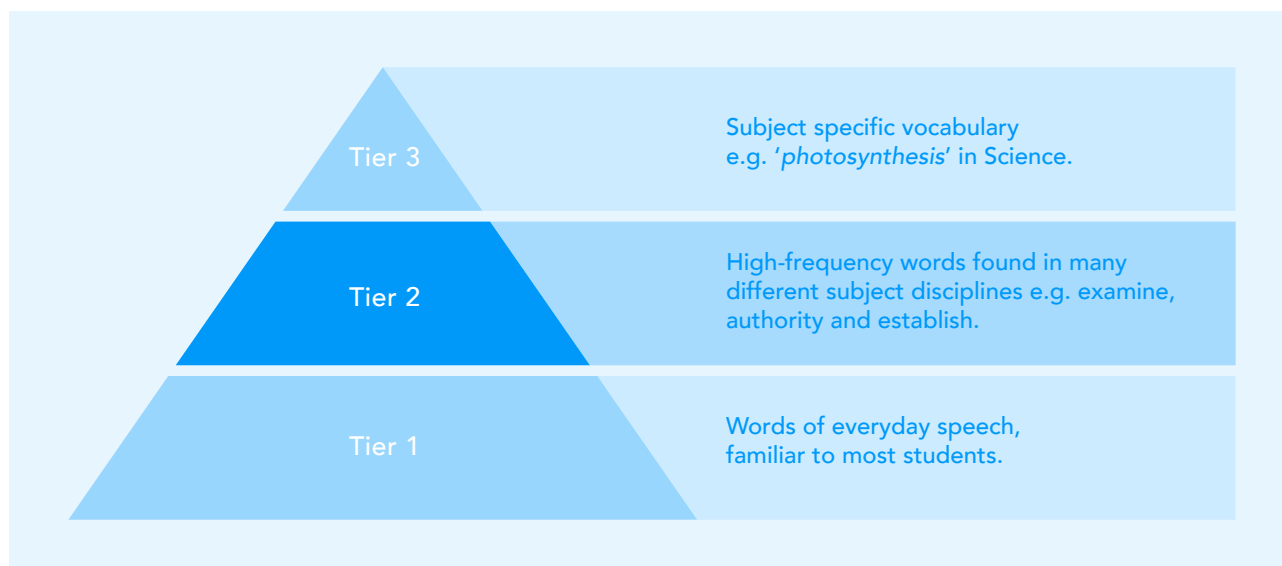


Figure 3: Tiers of vocabulary

While there is relatively limited evidence about how best to teach vocabulary explicitly, promising ways to promote targeted instruction of academic language in the classroom include:

- Exploring common word roots. For example, in science, analysing the etymology of 'photo' ('light') and generate other scientific vocabulary that includes the root 'photo' such as 'photosynthesis', 'photobiotic' and 'photon'. The word roots model is explored in further detail in the EEF's [Improving Secondary Science Guidance Report](#).
- Undertaking 'word building' activities, such as matching prefixes and root words for example, 'anti-body' or 'anti-matter.'
- Encouraging independent word-learning strategies, such as how to break down words into parts and how to use dictionaries, to support students as they read more widely.
- Using graphic organisers and concept maps to break down complex academic terms in visual ways to aid understanding.²⁰
- Undertaking regular low-stakes assessment,²¹ such as quizzes, to provide multiple exposures to complex subject specific vocabulary, before applying this vocabulary in use; for example, in essay writing.

- Consistently signposting synonyms so that students recognise how some Tier 2 vocabulary items can enhance the accuracy and sophistication of their talk and writing in the subject domain.
- Combining vocabulary development with spelling instruction. For example, highlighting morphological patterns that determine complex spelling of subject specific vocabulary.²²

When using the tiers of vocabulary model, one complexity relates to Tier 2 words that are "false friends," in that they are used in multiple subjects, but have different meanings in each. Exam command words often fit within this category. Two subjects both might use the word 'analyse' to elicit an answer but require a very different response, or 'range' in mathematics which could be confused with its usage in geography if not unpacked or contextualised. The existence of false friends demonstrates why it is important for subject teachers to develop confidence in teaching what words mean in their subjects and may present a challenge for some whole school literacy approaches, such as a cross-subject 'word of the week.'

Case study: Koonung Secondary College, Victoria

Improving literacy outcomes for all students is a key focus of Koonung's strategic plan.

In the Science classroom, subject-specific language is taught regularly and explicitly. In addition to instruction that focuses on morphology and drawing student attention to word roots, teachers have introduced a 'word of the week' to help students improve their vocabulary. Each week, students are presented with three Tier 2 or 3 words of varying complexity and asked to choose one on which to focus. For example, focus words when studying properties of substances in Year 7 Science may include determine, evidence, liquid, solid, density, or conductivity.

After choosing a word, students complete a graphic organiser that includes a definition, a diagram, identification of related words and examples of its correct use. Students then review this word throughout the week by completing activities such as relating the word to weekly work, considering the word's use in other contexts, teaching another student their word or sharing their knowledge with the class.

Long-term acquisition of new vocabulary is supported by regular review of previous focus words through classroom discussion, the development of glossaries and the creation of anchor posters for display around the classroom.

Aligning vocabulary instruction with curriculum development

There is a shared responsibility between senior leaders and subject leaders, including literacy coordinators, to support subject teachers to develop strategies to teach vocabulary effectively, and then align vocabulary instruction with curriculum development.

To develop a coherent planning process that is undertaken in subject departments, but led and supported across subjects, schools might consider:

- Carefully selecting Tier 2 and Tier 3 vocabulary for explicit teaching as part of curriculum design (see Figure 3);
- Considering links between subjects in curriculum planning and teaching, for example recognising vocabulary that crosses subject disciplines as well as where misconceptions could arise from "false friends";
- Providing students with rich oral and written language environments (with opportunities for implicit learning) as well as directly teaching vocabulary (explicit learning) using approaches such as highlighting morphological patterns;
- Providing multiple opportunities to hear, see and use new words;¹⁷ developing the number of words students know (breadth) and their understanding of relationships between words and the contexts in which words can be used (depth), for example, by exploring links between language used in different subject disciplines.

An effective professional development opportunity might involve asking teaching staff to work in departments to identify the essential Tier 2 and Tier 3 vocabulary that they will teach explicitly, and cumulatively, in their curriculum, consolidating students' knowledge where appropriate.



10:00–11:00 Geography



Nearing the end of the term, the class is a little behind schedule with their year 11 course. The teacher asks his students to read the next four pages of the textbook to explore the 'challenges of the human environment', before asking them to make some notes on the chapter.

The teacher observes that some students are struggling with the academic language and the structure of the textbook but is unsure how best to address these barriers.

The teacher recognises that the complex language of 'ethnic composition', 'net migration' and 'social deprivation' is wedded to lots of graphs, images and linked sources, but they are unsure how best to teach students how to 'read like geographers' with independence.

Discussion Questions:

- How can we best teach students to read complex informational texts?
- Which reading strategies improve the accessibility of subject specific texts and genres?
- How can we support students to become effective independent readers?

All teachers should be supported to understand the fundamental ways in which students learn to read, and the most common barriers they face. While most students begin secondary school with the general skills and knowledge needed to read accurately, fluently and with comprehension, some do not.

In addition, teachers must be provided with training to ensure that they are able to teach reading in their subjects. A major part of the challenge of literacy in secondary school is related to demands of academic reading. Whilst some students may learn to navigate subject specific texts naturally, others are likely to struggle, particularly when working independently.²³

Professional development focused on teaching reading is likely to help teachers teach their subject more effectively, as well as providing teachers across subject disciplines with effective strategies to support students and a common language about reading instruction.²⁴

Further information about general reading development can be found in the [further reading](#) section of this report.





The challenge of academic reading

Academic reading is challenging because it requires students to actively engage with complex, subject specific texts. For most students, reading comprehension is much more challenging than verbal comprehension, which typically contains less technical language and is accompanied by a range of additional cues that support understanding.²⁴

Take these sentences from the [National Geographic resource](#)²⁵ which looks at ‘conserving the earth’:

“Many of the medicines we use today come from plants found only in tropical rain forests. Sustainable forestry practices are critical for ensuring we have these resources well into the future.”²⁵

To comprehend these short sentences, students need to engage with what they are reading, drawing on what they already know and making new inferences to learn more. For example, to understand the link between the first and second sentences, students would need to know that forestry is the management of trees and vegetation (such as plants used for medicine).

Additionally, students need to make inferences that go beyond the literal words in the sentence and draw upon their knowledge of their subject. For example, they may infer by the use of ‘sustainable forestry practices’ that there are unsustainable alternatives taking place, or draw upon their wider background knowledge to predict what other impacts might be felt by deforestation.²⁵

Effective readers of informational texts continually draw upon a complex wealth of prior knowledge about the world and language, as well as their awareness of subject specific genres and vocabulary.²⁶ As students tackle a challenging text, they make sense of it by constructing a rich mental representation (called a ‘situation model’²⁶) that goes far beyond a simple, literal interpretation. Drawing on their language skills, relevant background knowledge and ability to infer, readers develop their understanding, which is refined and adjusted as they learn more.

Developing students as strategic readers

Reading strategies aim to support the active engagement with texts that improve comprehension. Given the complexity of academic reading, students need to be able to deploy an array of reading strategies, which can be modelled and practised in the classroom to develop students as strategic readers.²⁷

Reading strategies include:

Activating prior knowledge—students think about what they already know about a topic from reading or other experiences, such as visits to museums, and try to make meaningful links. This helps students to infer and elaborate, fill in missing information and to build a fuller ‘mental model’ of the text. Example: students are asked to recall the human responses which lead to deforestation.

Prediction—students predict what might happen as a text is read. This causes them to pay close attention to the text, which means they can closely monitor their own comprehension. Example: students could be asked to predict the impact of deforestation on Australian wildlife.

Questioning—students generate their own questions about a text to check their comprehension and monitor their subject knowledge. Example: students generate five key questions on ‘the ongoing impact of deforestation in the Amazon.’

Clarifying—students identify areas of uncertainty, which may be individual words or phrases, and seek information to clarify meaning. Example: students check they understand a graphic presenting deforestation rates within figures presented alongside the text.

Summarising—students summarise the meaning of sections of the text to consolidate and elaborate upon their understanding. This causes students to focus on the key content, which in turn supports comprehension monitoring. This can be supported using graphic organisers that illustrate concepts and the relationships between them. Example: students generate a short summary of the impact of deforestation on a local community who rely on the forest for resources.



These strategies overlap with ‘reciprocal reading’:²⁸ a structured approach that teachers can employ to support strategy use and student discussion. Following the reciprocal reading model, students initially work collaboratively²⁹ in groups with guidance from the teacher. Over time, there is a gradual release of responsibility so that groups and students can apply the strategies more independently.²⁹

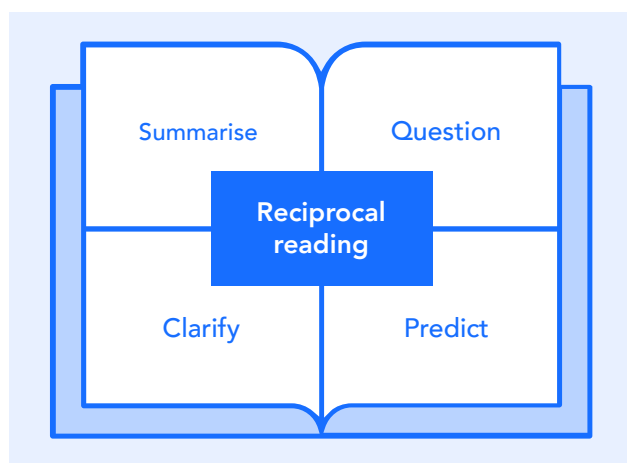


Figure 4: The reciprocal reading approach

Subject matters

Importantly, in secondary school, reading strategies need to be carefully applied and adapted in different subjects. For example, whereas in the geography example above predictions informed by students’ knowledge of the economic and social factors that affect deforestation, in English Literature questions might be tied to character development or narrative arcs.

In History, a teacher might model and then ask students to practice using a range of history-specific reading strategies when exploring historical texts, including:³⁰

Sourcing—as students read, they annotate any information related to the origin of a historical source, to establish its significance and evaluate the degree of certainty that can be attached to claims made in the source;³¹

Contextualising—students underline and annotate key information related to the social and political context of when a source was created, including considering the purpose of the text and for whom it was written. They also need to be aware that words or phrases in a historical context often convey different meanings from their modern usage;

Corroborating—students carefully compare sources, in order to create and refine an ‘event model’. Some details may be raised to the level of facts, whilst others are rejected as falsehood, or categorised as possibilities.

Recognising the nuanced subject specific differences relating to reading, and considering how to contextualise strategy instruction in different subjects, ensures that reading strategies are tightly linked to the development of subject knowledge and skills.

One area worthy of further research relates to how much time should be spent on reading strategy instruction. While there is a strong and consistent evidence base supporting strategy instruction, some authors have argued that it may be possible to teach reading strategies quickly and then move on.^{32,33} This conclusion is not clearly supported by the existing evidence base, but new studies, including some related to the application of reading strategies in different subjects, would be valuable.



Case study: Reciprocal reading at Ernesford Grange Academy (UK)

Developing reading through specific reading roles has enabled students to understand different concepts, develop their vocabulary, improve their reading, articulate themselves appropriately and work together as a team. Whilst reading, each student takes on a specific role:

- The Director develops questions to prompt thoughts, opinions and feelings of the group;
- The Helper locates passages that are harder to understand, which students then re-read and discuss;
- The Reporter reports on new vocabulary and definitions;
- The Summariser summarises what was read and conveys main points succinctly.

Students then have an organised discussion based on question or statement posed by the Director. Using the 'Talking Toolkit' (a school developed dialectic sentence starter resource), they communicate their ideas, developing and challenging points with a clear focus on academic language. Students can also include the new academic vocabulary, from the Reporter, where appropriate, adding to the quality of discussions whilst using the Talking Toolkits.

This format can be adjusted to suit different subject disciplines. For example, Spanish teachers have modified this and have altered the Talking Toolkit to make a subject specific Spanish version, so students are still developing and challenging their ideas using Spanish sentence starters, whilst offering explicit support to read and talk in Spanish.



4

Break down complex writing tasks



11:30–12:30

Physical Education



In Physical Education, the class has been learning about the training plans used by athletes preparing for competitions. As part of this topic, they have been evaluating alternative forms of training and analysing which training plans are more likely to be effective in different sports.

The teacher wants students to be able to tackle the extended answer questions that call for 'evaluation' or 'analysis' with confidence, but knows that often students struggle with these terms. She thinks that some students are also put off by the length of the answer that is required.

To help students, she intends to provide students with a planning sheet and a list of key words that strong answers are likely to include. However, she wonders what other types of support she can provide? Conversely, she wonders whether there is a risk of providing too much support?

Discussion Questions:

- How can we break down complex writing tasks?
- How can we support students to become independent writers?
- How can we motivate students to persist with challenging writing tasks?

The challenge of writing

Writing is challenging, for teachers and students alike. Writing tasks, including high mark questions in exams, can require students to recall and organise large quantities of information, communicate with accuracy and group ideas in structured ways. Kellogg, an American literacy expert, argues that writing tasks can be as cognitively demanding as chess.³⁴

Understanding why writing is challenging and how complex writing tasks, including essays and extended answers, can be broken down can help students succeed across the curriculum.

Writing is demanding because it requires students to combine three processes. Students must be able to transcribe, that is, physically write or type and compose, generating ideas and translating them into words, sentences and structured texts. Finally, students must use executive functions, to enable them to make plans, motivate themselves and review and redraft texts.¹⁷

The complexity of writing means it can place a heavy burden on working memory, which can be thought of as the part of the brain where information is processed and combined. Students' working memories can become overloaded if any of the processes involved in writing become too demanding.¹⁷ To demonstrate the importance of the interaction between different elements of writing, we can see that even relatively simple writing tasks, like writing a diary, become much harder if attempted using a transcription approach that feels unnatural, for example, by forcing someone to write in block capitals.³⁵

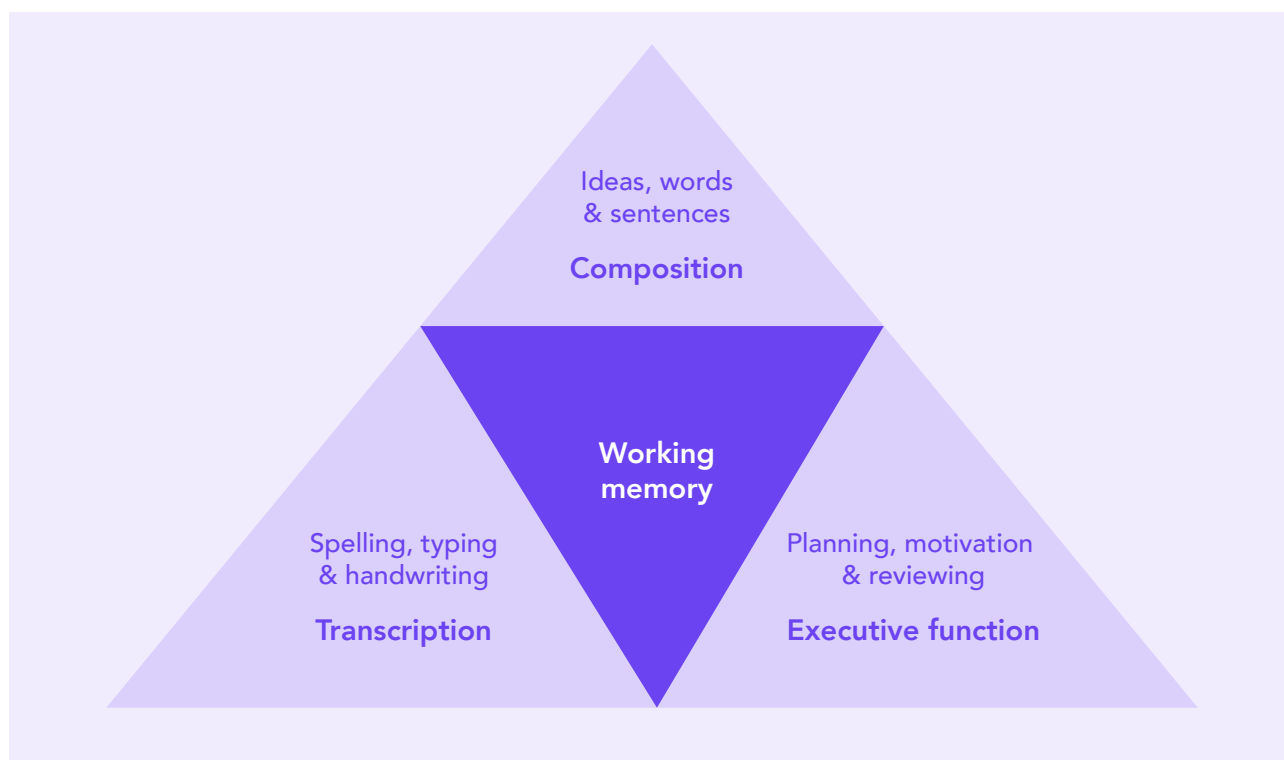


Figure 5: Based on 'The Simple View of Writing', developed by Berninger et al.³⁶

Breaking it down

Teachers can help students cope with the challenge of writing in several ways, but a common theme running through effective forms of writing instruction is that they support students to break down complex writing tasks and help students to become fluent in as many of the processes involved in writing as possible.

Teachers can help students break down writing tasks by:

- Providing word-level, sentence-level and whole-text level instruction. There is evidence to suggest that by focusing on the micro elements of writing for longer, students will ultimately be able to write longer and include high quality responses. For example, in history, sentence starters can encourage students to analyse sources more deeply (for example, 'While initially it might appear that..., on closer inspection...').³⁷
- Ensuring that students understand the subject-specific connotations of Tier 2 vocabulary used in writing questions. For example, in English Literature, "evaluate" questions often require students to justify their answers with reference to a personal response whereas in Physical Education evaluation may require students to refer to the likely consequences, strengths and weaknesses of particular choices.
- Explicitly teaching students planning strategies, such as how to use graphic organisers.³⁷ Over time students should develop proficiency using a range of strategies, and develop the ability to choose between them depending on task and audience.
- Helping students monitor and review their writing, for example by providing a checklist of features included in high quality answers or using it as a self- or peer-assessment tool.³⁸



When introducing any strategy, it is helpful if initially the teacher models how the strategy should be used, for example, by speaking aloud to explain what she is doing and why, before students use the strategy themselves. After attempting to use the strategy, students should be given an opportunity to reflect on whether and why the approach was helpful in order to help them make links between the use of the strategy and success in the task.³⁷

In common with wider evidence about modelling and scaffolding,^{39,40} it is recommended that over time assistance from the teacher is gradually removed, supporting students to become increasingly independent.^{41,37} Strategies can also be grouped together into sequences to create longer writing cycles. A typical writing cycle will include planning, drafting and editing stages. While not every writing task will require every step in the cycle, an important part of teaching writing is ensuring that students understand that expert writers in any subject follow multiple steps to create high quality work.

Teachers can also support students by:

- Ensuring students' transcription skills become automatic so that they can focus on other aspects of writing, and by quickly identifying students in need of extra support, which might include practising spelling, handwriting or typing.¹⁷
- Recognising that students with difficulties with transcription – for example, related to dyslexia or dyspraxia – may not be able to demonstrate their true knowledge of a topic through written work unless extra support is available.¹⁷ Providing a computer can help improve the length and quality of writing from students identified as weaker writers, particularly when instruction in typing is also provided.¹⁷
- Using pre-writing activities that ensure students have strong background knowledge related to the topic they are writing about. For example, revising key ideas before beginning a writing task will help students use them in writing more successfully.¹⁷

Motivation

Motivation is also particularly important for success in writing.^{15,42} Students' attitudes and self-perception matter in all aspects of literacy, but appear to have a particularly strong effect on writing. Promising strategies to approach this challenge include the use of:

- Collaboration—students write together in pairs or writing teams and learn to provide structured feedback at each step of the writing process;⁴³
- Competition—such as challenging students to beat their previous score in self- or peer-assessed pieces of writing;
- Self-talk—encouraging students to celebrate successes in writing^{15,38,43,44,45} as a key component of approaches to writing based on “self-regulated strategy development”. Studies involving this approach have shown promise in a range of subject areas.⁴⁶





13:30–14:30

History



In History, students have been studying Movements for Change in the 20th century. The class enters the room and settle, and the teacher begins: 'OK everyone, we've been reading about the recognition and rights of Indigenous people for three lessons. We know the key ideas. Now it's time to write.'

The teacher has decided to set the students an essay for three main reasons. First, she wants to assess whether students have understood the ideas and facts they have been learning about. Second, she wants to see whether they are able to express judgements about the relative importance of different factors and can support them with evidence. Finally, they will be ultimately assessed through writing tasks, so this feels like essential training.

She knows some of the class will find the task challenging. Some students can forget key ingredients, such as evidence, or fail to structure their answers clearly, while others struggle to spell unusual words. However, surely this means it's even more important to practise?

Discussion Questions:

- Where should writing tasks sit within lessons and lesson sequences?
- How can we integrate reading and writing tasks in different subject areas?
- How can we support students to improve their spelling, punctuation and grammar?

Reading and writing are complementary skills

It can be tempting to see good writing as something that flows seamlessly from an understanding of the ideas and concepts that have been studied: if students understand the material, then shouldn't they be able to write about it effectively?

However, while subject knowledge is undoubtedly necessary to write about a topic, this view is likely to be unhelpful for two reasons. First, content knowledge alone may not be enough to enable students to write well. Students are likely to benefit from instruction in the 'rules of writing', which will vary in each subject area. Second, it overlooks the potential of writing to deepen students' understanding of key concepts and ideas.

In reality, reading and writing are overlapping, complementary skills. As students read or write, they draw on a common body of knowledge,⁴⁶ related to the topic being studied, and to their understanding of texts, syntax, and vocabulary. Reading and writing also enhance one another.⁴⁷ Reading has been

shown to improve the quality of students' writing, while writing about texts improves students' reading comprehension and fluency.^{24,48,49,50} While it is not a mistake to spend some time teaching reading and writing separately,⁴⁷ it is beneficial to consider how to integrate reading and writing instruction, and likely to be a missed opportunity to think of writing as something that happens after students have 'learned the material'.

Reading high quality texts in every subject, for example those that effectively illustrate the conventions of particular types of writing, gives students an opportunity to observe the discipline-specific aspects of writing that relate to particular subjects. Rather than assuming all students will pick this up implicitly, teachers can explicitly draw attention to the discipline-specific aspects of writing as they read them in class.



In English Literature, this might mean developing an understanding of how writers use form and language to create coherent themes within texts, while in art lessons this might mean understanding how critics identify layers of meaning within paintings.

Effective ways of combining reading and writing might include:

- Writing before reading, for example by asking students to outline in bullet points what they currently know about a topic or generate questions they will later try to answer through reading;
- Using annotations to identify information or explore key features of texts, e.g. underlining information about the types of evidence being cited in a science textbook;⁴¹
- Asking students to write short summaries of texts they read; although this is a skill which some students may struggle with initially, writing a one-sentence summary of a paragraph, for example, can help students think more carefully about the meaning of what is written, and monitor their comprehension of the text;³⁷
- Creating checklists based on examples of good writing in each subject. For example, while reading a geography textbook, the teacher might ask students to highlight words related to cause and effect, such as 'Due to this...'; 'A contributory factor was...'.⁴¹ Students can subsequently use checklists and examples in their own answers;³⁷
- Anticipating common misconceptions or errors and highlighting how writers avoid them in high quality texts. For example, in Psychology, students might mistakenly believe that theories can be 'proved'; it would therefore be beneficial to highlight phrases that experienced writers use instead. For example, instead of saying "This proves the theory that..." expert writers say: "This theory is supported by the fact that..." or "This evidence is consistent with the theory that..."

Spelling, punctuation, and grammar

Fast and accurate spelling is a key component of writing fluency. While there is limited high quality evidence about how best to teach spelling, one core principle is that spelling should be actively taught, rather than simply tested.⁵¹

Promising strategies for teaching spelling include:

- Teaching groups of related spellings alongside a discussion of the morphology and etymology (see Recommendation 2), prioritising words that are linked to content that is currently being studied rather than from decontextualised word lists;
- Pre-teaching spellings of challenging words and anticipating common errors, for example, 'government' in politics or 'Shakespeare' in English Literature, homophones such as 'there' vs. 'their' or joining errors, for example, 'alot' instead of 'a lot';
- Helping students recognise familiar patterns of letters within words and sound out words based on their knowledge of phonics;
- Collaborative approaches, for example, grouping students and asking pairs to come up with memorable strategies for spelling challenging words;
- Teaching students to self-quiz using retrieval practice, for example, using flash cards.

There is also a relationship between spelling and handwriting. While it is not the case that poor handwriting necessarily results in poor spelling, handwriting that is not fluent can have a negative impact on spelling if it uses up a student's cognitive resources (see also [Recommendation 4](#)).¹⁷



Evidence on teaching punctuation and grammar is mixed. Multiple reviews indicate that teaching grammar as a stand-alone topic in a decontextualised way does not have a positive impact on writing quality, with some syntheses even indicating a negative effect. Instead, it appears more promising to teach grammar in a way that highlights how grammatical changes can convey different types of meaning in the context of given types of writing, rather than on defining and describing grammatical terms in abstract.¹⁷

Contextualised grammar instruction is well-suited to instruction across different subjects. For example, to support students to write with precision about competing arguments in History, teachers might find it helpful to explicitly explain to students the role of modal verbs like ‘could, would, should’ and ‘might’, or the way in which adverbs can be used to create more fine-grained distinctions between judgements. For example, instead of saying “If Rosa Parkes wasn’t associated with the National Association of Advancement of Coloured People (NAACP), then her arrest wouldn’t have led to the elimination of segregation on busses”, as historians we would say: “Arguably, had Rosa Parks not already had association with the NAACP, her act of quiet defiance may not have had the impact on changing segregation laws that it ultimately produced.”⁴²

In addition, there is consistent evidence supporting sentence-combining activities, which involves asking students to create more sophisticated sentences by combining two or more basic sentences.^{38, 52}

For example, students might be given the basic sentences, ‘During World War II, Australian women adopted many roles traditionally done by men’ and ‘post-war, social conditions effecting women improved’ and asked to combine them, for example, ‘As a result of female empowerment during the course of World War II, women experience improvements in social conditions when the war ended,’ as part of a lesson about the importance of events in creating momentum for change.

Teachers in different subjects should not feel obliged to teach grammar that is not relevant to their discipline. But conversely, where an understanding of a particular piece of grammar or punctuation will support students to succeed, they should be supported to teach students how to use it in their writing. This is likely to be an area where teachers can work together to develop their expertise and where support from leadership will be necessary. For example, literacy coordinators might work with heads of department to identify a key subject specific aspect of grammar to focus on in a sequence of departmental training sessions.

In addition to identifying aspects of grammar or punctuation that are important in specific subjects, students are likely to benefit from school-wide consistency focusing on general aspects of literacy in writing, for example related to the use of full stops and capital letters.

Teachers can also consider the types of feedback they provide on errors related to spelling, grammar and punctuation. For example, careless mistakes should be marked differently to errors resulting from misunderstanding. The latter may be best addressed by providing hints or questions which lead students to underlying principles; the former by simply marking the mistake as incorrect, without giving the right answer.⁵³ Using marking codes can also be an effective way of speeding up the marking process and setting consistent codes at a whole-school level is worth considering.



14:30–15:30

Civics and Citizenship



In Civics and Citizenship, students have been comparing different ethical perspectives on animal experimentation. Their newly qualified teacher has decided to run the lesson as a debate, and would like students to prepare and deliver short speeches on the topic.

The teacher wants students to be able to participate in academic discussions with confidence and coherence. He also knows that discussion has the potential to engage students and extend their understanding of the topic they are studying.

However, he is apprehensive, and realises that talk can be unproductive, or become dominated by a small number of students. Another challenge is time. Even when done well, with so much material to get through in the curriculum, might the debate be a luxury they can't afford?

Discussion Questions:

- Is it right to view talk as a luxury?
- How can we structure speaking and listening activities to support learning?
- Where should discussion activities sit within lessons and lesson sequences?

The importance of talk across the curriculum

Talk is a powerful tool for learning and literacy.⁴² It can improve reading and writing outcomes,^{54,55} enhance communication skills,⁵⁶ and increase students' understanding across the curriculum.⁵⁷

In many subject areas—not only English—developing students' skills of communication and argument is also a curricular end in itself. For example, Jonathan Osborne, an American academic, contends that in Science: 'Critique is not some peripheral feature [...], but rather it is core to [the subject].'⁵⁷

While all students benefit from classroom discussion activities, talk also appears to be particularly beneficial for students who have been struggling, and those from disadvantaged backgrounds.⁵⁷

Accountable talk

Quality of talk is likely to be more important than quantity. Improving quality means much more than getting students to talk more, or, as a teacher, trying to talk less. Instead, quality is more likely to be improved by considering structure and variety.⁵⁶

One helpful structure for thinking about discussion in the classroom, developed by the academic Lauren Resnick and colleagues, is known as "accountable talk".⁵⁸ The framework highlights the importance of accountability to:

- **Knowledge**—for example, by seeking to be accurate and true;
- **Reasoning**—for example, by providing justifications for claims; and
- **Community**—for example, listening and showing respect to others.

Importantly, the framework encourages teachers to think about the subject specific features of discussion. For example, in seeking to make students accountable to knowledge during a debate, a Civics and Citizenship teacher could prompt speakers to refer to quotes from key



texts. Likewise, the teacher will be prepared to step in to correct misconceptions that arise as the debate develops.⁵⁸

Reasoning is also often subject specific. The word 'evaluate' has different meanings across different subjects. Some subjects will require students to assess the reliability of sources, while others will invite personal responses. While some students may pick up these subtleties implicitly, the majority are likely to benefit from explicit teaching of how to reason within each discipline.^{57,58}

There is likely to be commonality in the ways students are accountable to community in different subjects and schools may find it useful to consider curriculum-wide routines and expectations, for example, listening carefully and speaking calmly. However, in addition to expectations about conduct, accountability to community also emphasises the importance of making students feel that their contributions in class matter, for example, by emphasising the value of errors.⁵⁸

Metacognitive and self-talk

Students also benefit from metacognitive talk, which focuses on the processes of learning, and on dealing with barriers to learning.^{29,40} For example, in home economics, metacognitive talk seeks to answer questions like: 'What equipment do I need before I begin cooking?' or 'What will I do if I fall behind my time plan?'

Metacognitive talk will often be task and subject specific. For example, after introducing a range of strategies that can be used to break down an as-yet unseen poem, English teachers might ask students to discuss, in pairs, the strategies they have previously used, plan which strategy they will use to tackle a new example, and review whether this strategy helped them tackle the poem.

Evidence is also emerging related to 'self-talk'. Two forms of self-talk are elaborative interrogation, which requires students to generate explanations for why something is true (for example, 'Why does performing the same operation on both sides of an equation not change the answer?') and self-explanation, whereby students are prompted to ask themselves questions about what they are studying (for example 'How does this pair of equations compare to others I have solved?'). In both cases, there is promising evidence related to understanding and retention of information, but it would be valuable to conduct more studies exploring medium- to long-term effects.^{59,60}



Figure 6: Based on the model of 'accountable talk', developed by Resnick et al.⁵⁸



Putting it into practice

Effective ways of promoting high quality talk might include:

- Teachers modelling what effective talk sounds like in their subjects. This includes using subject specific language and vocabulary, explicitly introducing the ways of reasoning that matter within their discipline, and the ways in which experts use metacognitive talk.
- Deliberately sequencing talk activities alongside reading and writing tasks to give students opportunities to practise using new vocabulary, develop ideas before writing, or discuss ways to overcome common challenges ('tell your partner what to do if they get stuck').
- Using sentence starters and prompts to help students to structure and extend their responses. For example, starters such as 'my claim is based on the fact that...' can help students link to evidence, while a shorthand like ABCQ (Agree, Build, Challenge, Question) sets out different ways to contribute to a discussion. Teachers can prompt students to extend their answers with questions, e.g. 'Can you use 'moreover' to link to a second piece of evidence?'^{58,61}
- Selecting questions that are open-ended, well-suited to discussion and allow opportunity for authentic student response rather than direct replication of teaching: for example, where there are several plausible answers and where students' own views might develop.⁶¹
- Setting goals and roles, particularly for small group discussions. By ensuring students have a clear goal—for example, a question to answer—it is more likely that talk will be focused and that students fully participate. It can also be beneficial to assign roles, such as summariser or questioner,⁵⁸ though as students become more used to routines, it may not be necessary to make roles explicit. This type of approach can overlap with some reciprocal reading activities (see [Recommendation 3](#)).
- Using wait time to develop students' responses, by leaving a pause after they have first given an answer, which gives them a chance to reframe, extend, or justify their reasoning.
- Giving precise feedback relating to different elements of accountability. For example, in addition to praising a student's use of evidence, teachers might praise the way in which students follow the norms of discussion, for example, by naming classmates or linking new contributions explicitly to previous points.⁵⁷ Students can also be trained to provide peer feedback during talk activities, for example, related to the use of new vocabulary.
- Considering how to promote high quality talk as part of departmental and whole school training. It may be helpful to create some whole school routines, for example, related to behaviour expectations, while other approaches, such as the use of prompts, may be subject specific.





15:30

After school support



At the end of the day, the Year 7 coordinator has arranged a catch-up session for a group of students that started the year with low levels of literacy.

The coordinator knows that the needs of the group are diverse. Some of the students are new arrivals in Australia, have low levels of English, and no prior assessment data. Others performed below the expected level in PAT-R and NAPLAN and have struggled to adjust to secondary school.

The coordinator wants to be able to provide tailored support to students, depending on their needs. However, he is unsure how to interpret the assessment data he has and knows that unless the students catch up quickly, there is a risk of them falling further behind their peers.

Discussion Questions:

- What types of interventions are most likely to have an impact?
- Who should provide targeted support?
- How will the impact of the intervention be monitored?

Tiers of support

High quality teaching across the curriculum will reduce the need for extra literacy support. Nevertheless, it is likely that a small number of students will require additional support—in the form of high quality, structured, targeted interventions—to make progress.^{24,43,62}

Students who start secondary school with low levels of literacy are a group in need of support. In 2018, PISA data indicated that approximately 41% of Australian students had not met the National Proficient Standard in reading literacy (level 3).⁶³ Crucially, the consequences of low literacy are highly likely to be felt across the curriculum.

While providing additional support should not be an alternative to investing in efforts to improve the quality of teaching in the classroom,⁴³ preparing a strategy that offers tiers of support to struggling students is recommended.

Tiers of support move from whole class teaching through small group tuition to one to one support, increasing intensity with need. In most cases, schools should consider small group tuition as a first option, taking care to bring together students who are struggling in the same area of literacy or subset of skills (for example, decoding), before moving to one to one tuition if small group tuition is ineffective.²⁴



The role of assessment

Effective intervention is impossible without robust and reliable assessment, which can be used to: (i) identify students requiring additional support; (ii) identify their needs so that support is well-targeted; and (iii) assess progress and the impact of interventions.

There are a wide range of literacy problems that secondary-age students might have, related to speech, language and communication, phonics, reading fluency, vocabulary and reading comprehension. In addition, students may have wider difficulties, for example, related to eyesight. Unless interventions are well-matched to underlying difficulties, they are unlikely to be effective.

Some assessment can be undertaken by teachers as part of regular monitoring and assessment in class. However, while classroom teachers are likely to be able to identify broad categories of challenge, in many cases, this should be followed up with more detailed diagnostic assessments,⁶¹ including standardised tests.

Schools may also use data from standardised tests when identifying students, targeting interventions and monitoring progress. Five useful questions to ask when interpreting this data are:

- What did the standardised test measure and not measure? For example, if scores relate to a word reading task and a student receives a low score, this would indicate word reading support is needed. However, it does not tell us whether this student also needs support for reading comprehension;
- What kind of scores do we have and how can they be interpreted? Often reading ages are provided by standardised tests. While these appear intuitive, they can be misleading. Other scores, such as percentile ranks, are likely to be more helpful, and communicate how many students in this age range are likely to perform lower than this student. The average range for students is from the 16th to the 84th percentile, which equates to a 'standard score' (like an IQ score) of 85–115;

- What do the scores tell us about progress? Percentile ranks and standard scores that stay the same show that students have made expected progress. If they go down then progress is less than expected, if they go up, more progress than expected has occurred;
- How do the results we have compare to other tests and data? It is important to contextualise the results of standardised assessments by comparing them with teacher assessments and other sources of data; a judgement of need is likely to be more reliable when it is supported by information from across these sources, and it is not advised to rely too heavily on the results from a single assessment.
- What is the data being used to assess? When students are identified as struggling, it can be tempting to introduce a range of interventions at the same time. However, a drawback of this approach is that it is difficult to identify the impact of any individual approach.

Literacy programs

Many literacy programs claim to be supported by evidence, but it can be challenging to assess these claims or make comparisons between different programs. The following free online resources provide a good starting point for assessing claims by summarising the available evidence:

- The [EEF's Promising Projects](#) include a range of high-quality literacy interventions; and
- The [Institute of Effective Education's Evidence for Impact database](#)—a summary of programs available in the UK.



Relatively few programs available in Australia currently have robust evidence of effectiveness. Therefore, it is necessary to consider carefully how well aligned a program is to the recommendations in this report and if it has the following features common to effective targeted interventions:

- Regular sessions that are maintained over a sustained period and carefully timetabled to enable consistent delivery;
- Training from experienced trainers or teachers;
- Structured supporting resources and/or lesson plans with clear objectives;
- Assessments to identify appropriate students, guide areas for focus, and track student progress;
- Tuition that is additional to, and explicitly linked with, normal lessons; and
- Connections between the out of class learning and day-to-day whole class learning.

Getting the details right

Even the most promising intervention will fail with poor implementation. Once an approach has been identified and matched to students' literacy needs, it is important to take the time to train the staff involved, monitor the delivery of the approach, and consider how to sustain it over time.

Supporting teachers and TAs to deliver structured programs that have been robustly evaluated is likely to be more effective than asking teachers or TAs to devise their own approaches. Some recent reviews suggest that when following structured programs, well-trained TAs can be as effective as teachers.⁴³

Importantly, the highest effects for TA-led interventions occur when TAs receive ongoing, high-quality support and structured training. When TAs are deployed in more informal, unsupported instructional roles, they can impact negatively on students' learning outcomes. In this context, structured evidence-based programs provide the most promising means of aiding high-quality delivery. Training is important to ensure high quality implementation.

E4L's Guidance Reports [Putting evidence to work: a school's guide to implementation](#) (see [Acting on the evidence](#)) and [Making best use of Teaching Assistants](#) also provide advice on introducing interventions.

Motivating students to engage with literacy interventions is also a common challenge.¹⁷ Few high-quality studies have examined the impact of approaches explicitly designed to improve literacy outcomes of struggling students by increasing student motivation.⁶⁴ However, some principles drawn from wider research might include:

- Seeking to develop students' feelings of self-efficacy—for example, by carefully scaffolding tasks and by explicitly linking the use of particular strategies to improvement;⁶⁵
- Selecting tasks that are engaging—for example, some collaborative learning approaches have been found to be effective at improving adolescent literacy, particularly when students are required to work as a team towards a common goal;²⁴
- Sharing strategies between teachers in different subjects;⁴³ and
- Ensuring students have an opportunity to use skills from the intervention setting in the classroom and across different subjects.

Acting on the evidence

There are several key principles to consider when acting on this guidance:

1. These recommendations do not provide a 'one size fits all' solution. It is important to consider the delicate balance between implementing the recommendations faithfully and applying them appropriately to your school's particular context. Implementing the recommendations effectively will require careful consideration of how they fit your school's context and the application of sound professional judgement.
2. The recommendations should be considered together, as a group, and should not be implemented selectively. For example, although teachers should develop students' ability to read complex academic texts ([Recommendation 3](#)), this must go hand in hand with targeted vocabulary instruction ([Recommendation 2](#)) so that students are able to attach meaning to their reading.
3. It is important to consider the precise detail provided beneath the headline recommendations. For example, schools should not use [Recommendation 7](#) to justify the purchase of lots of interventions. Rather, it should provoke thought about the most appropriate interventions to implement.

Inevitably, change takes time, and we recommend taking at least two terms to plan, develop, and pilot strategies on a small scale before rolling out new practices across the school. Gather support for change across the school and set aside regular time throughout the year to focus on this project and review progress.

Evidence for Learning has produced '[Putting evidence to work: a school's guide to implementation](#)', a Guidance Report which could be used as a guide as you make changes. [Figure 7](#) provides an overview of the implementation process which schools can apply to any implementation challenge.

The stages of implementation

Foundations for good implementation

- ✓ Treat implementation as a process, not an event. Plan and execute it in stages.
- ✓ Create a leadership environment and school climate that is conducive to good implementation.

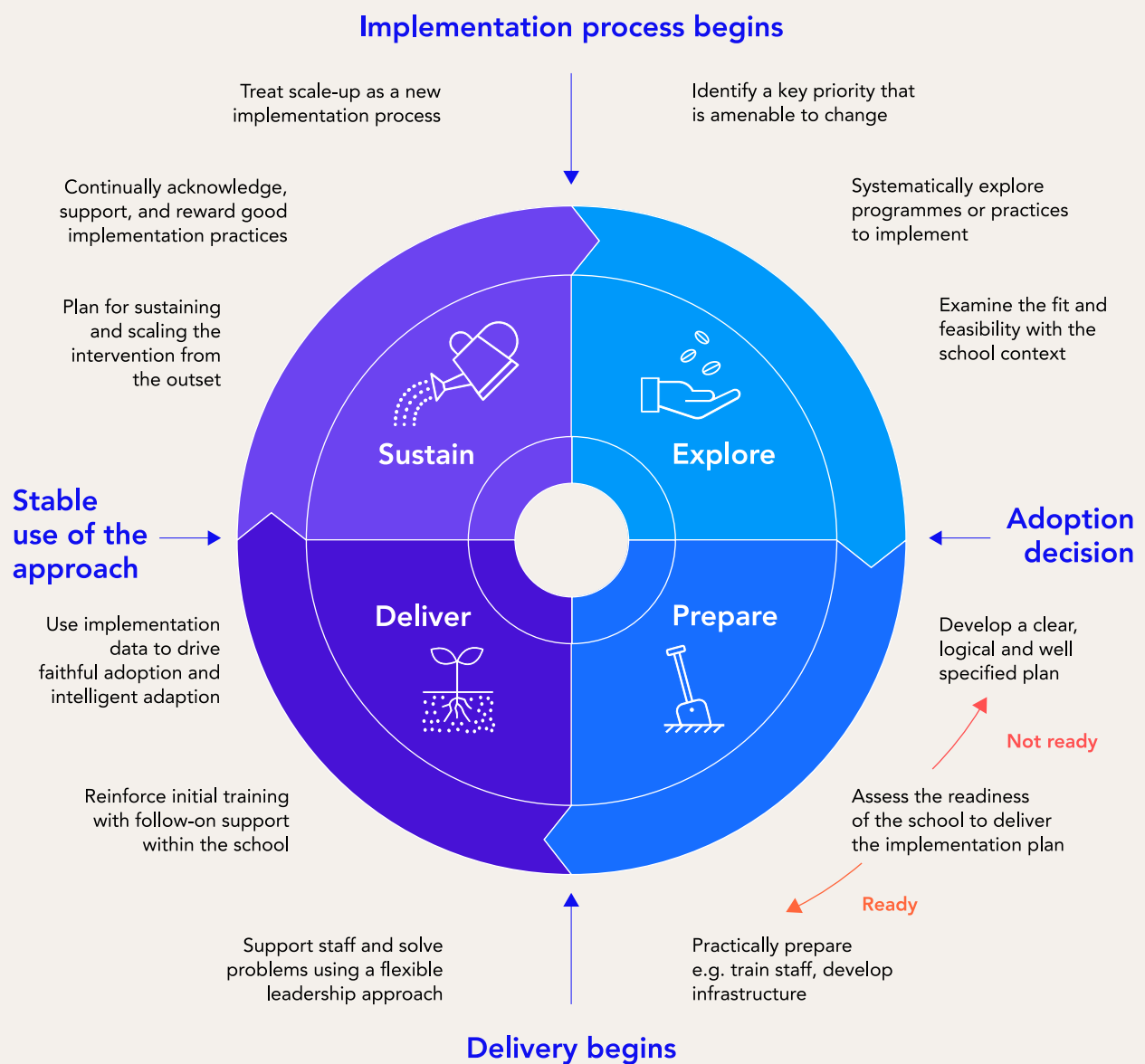


Figure 7: The foundations and stages of implementation

How was this guide compiled?

This Guidance Report draws on the best available evidence regarding improving literacy in secondary schools. It is informed by three reviews, and draws on additional studies, including EEF evaluation reports and those in Evidence for Learning's [Teaching & Learning Toolkit](#).

We at Evidence for Learning added to this Guidance Report through consultation with Australian researchers and practitioners.

The Guidance Report was created over four stages:

- 1. Scoping.** The EEF consulted teachers and academics about the scope of the report.
- 2. Evidence reviews.** The review team conducted searches for the best available international evidence using a range of databases, including new analysis on the common elements of effective programs (you will find these in the further reading section of this guide).
- 3. Writing recommendations.** To develop the recommendations, the EEF worked with the Advisory Panel to review the best available international research and consulted experts to arrive at key principles for effective literacy teaching.
- 4. Translation for Australia.** E4L worked with Australian academics and practitioners to update content to ensure that the report is both rigorous and relevant to the Australian education system.

The EEF Guidance Report was written by Alex Quigley and Robbie Coleman (EEF) with invaluable support from Amy Ellis-Thompson (EEF) and advice and support from many others.

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Further reading

First stop for further reading



Recommendation 1

'What is Disciplinary Literacy and Why Does it Matter?'
by Timothy and Cynthia Shanahan (2012)



Recommendation 2

'Reading comprehension and vocabulary: what's the connection?'
Professor Kate Nation, University of Oxford (2017)



Recommendation 3

'Ending the Reading Wars: Reading Acquisition from Novice to Expert'
Anne Castles, Kathleen Rastle, and Kate Nation (2018)



Recommendation 4

'Teaching Secondary Students to Write Effectively'
What Works Clearinghouse (2017)



Recommendation 5

'Disciplinary Writing Guides'
(Various Subjects) Harvard University (n.d)



Recommendation 6

'Accountable Talk: Instructional dialogue that builds the mind'
Lauren Resnick, Christa Asterhan and Sherice Clarke (2018)



Recommendation 7

'EEF Promising Projects'
Education Endowment Foundation (2020)

Evidence for Learning

Evidence for Learning's Guidance Reports contain relevant information for the implementation and application of this guide.

- [Putting evidence to work: a school's guide to implementation](#)
- [Improving literacy in upper primary](#)
- [Metacognition and self-regulated learning](#)
- [Making best use of Teaching Assistants](#)
- A resource for teachers about the [Simple View of Reading](#), which will be updated for Australian Educators in 2020.

The Centre for Independent Studies

'Read About It: Scientific Evidence for Effective Teaching of Reading', Kerry Hempenstall published by The Centre for Independent Studies (2016).
dataworks-ed.com/wp-content/uploads/2016/05/Kerry.pdf

Macquarie Online Test Interface (MOTIf)

MOTIf is an online platform for the administration and scoring of cognitive tests developed at Macquarie University motif.org.au

Australian Curriculum and Reporting Authority (ACARA)

The ACARA website contains resources for school leaders and teachers that will assist in the implementation of the recommendations outlined in the Guidance Report.

- Australian Curriculum General Capability: Literacy australiancurriculum.edu.au/f-10-curriculum/general-capabilities/literacy/
- Australian Curriculum Learning Area: English (F-10) acara.edu.au/curriculum/foundation-year-10/learning-areas-subjects/english-foundation-to-year-12
- Australian Curriculum: English (senior secondary) australiancurriculum.edu.au/senior-secondary-curriculum/english/

Three evidence reviews that informed the development of this Guidance Report

A Quantitative Synthesis of Research on Writing Approaches in Years 3 to 13
educationendowmentfoundation.org.uk/public/files/Writing_Approaches_in_Years_3_to_13_Evidence_Review.pdf

Evidence review on Literacy Development, from the Centre for Advances in Behavioural Science at Coventry University
educationendowmentfoundation.org.uk/public/files/Literacy_Development_Evidence_Review.pdf

Reading Programmes for Secondary Students
educationendowmentfoundation.org.uk/public/files/Reading_Programmes_for_Secondary_Students_Evidence_Review.pdf

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