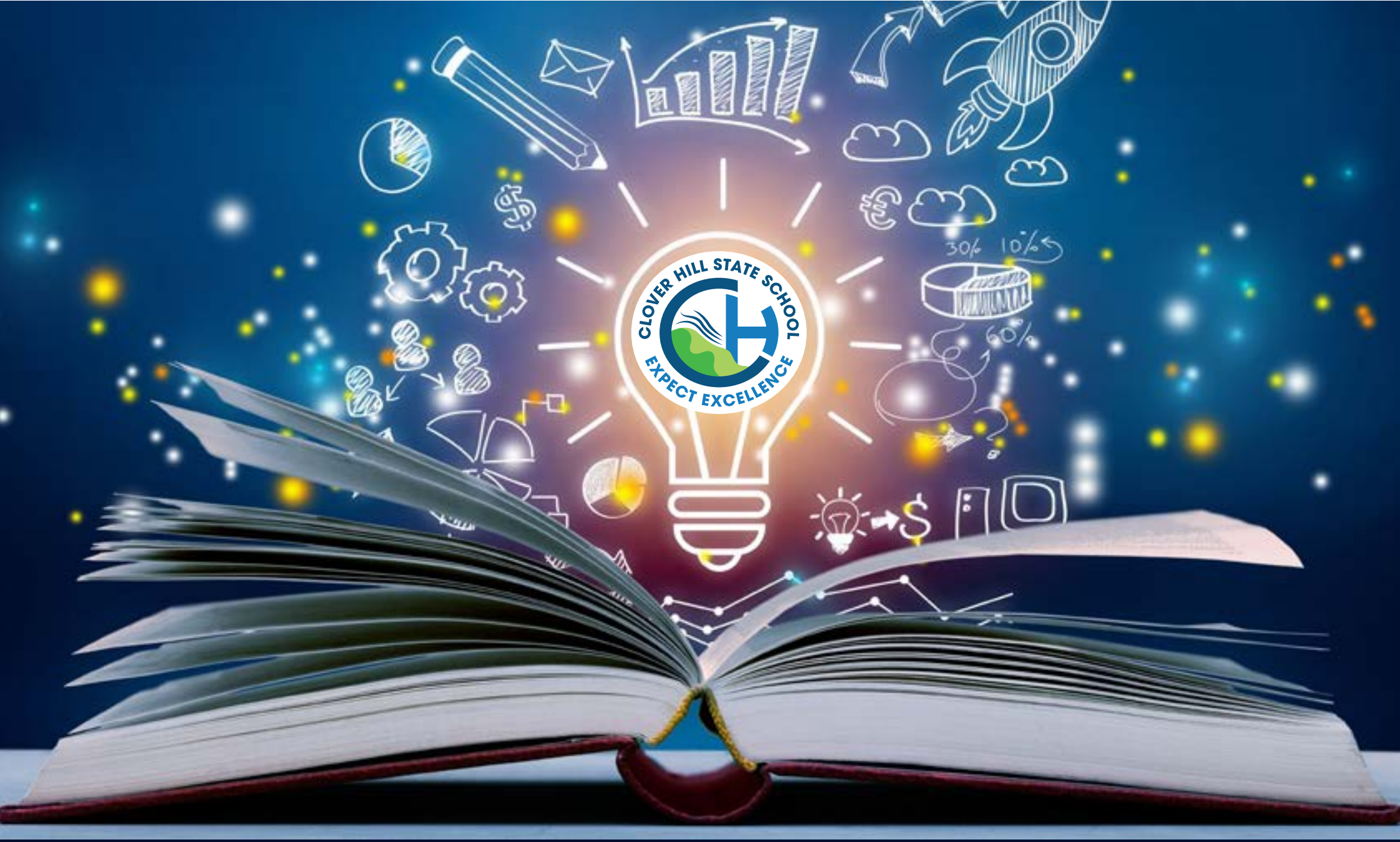


Clover Hill State School

PEDAGOGICAL FRAMEWORK

Overview

The Clover Hill State School Pedagogical Framework articulates our shared commitment to excellence in teaching and learning. It reflects the deliberate, research-informed practices that define our school's teaching and learning culture and drives our continual pursuit of improvement in our craft of teaching, and how students learn. Grounded in the Science of Learning and Cognitive Load Theory, our model outlines how effective teaching occurs through explicit, systematic and responsive instruction. It positions teachers as designers of learning and students as active and capable learners. This framework serves as both a guide and a promise to ensuring that every learner at Clover Hill experiences high-quality teaching, every day, in every classroom, and that our teaching is firmly aligned to the developing brain.

Acknowledgement

This Pedagogical Framework represents the collective work, professionalism and commitment of the Clover Hill State School staff. It reflects years of deliberate practice, deep professional learning, reflective dialogue, and the shared belief in the power of Explicit Instruction to improve outcomes for every learner. This work has been shaped through curiosity, courage, persistence, and a relentless focus on refining our craft. It stands as a testament to our staff who hold high expectations for themselves, for each other, and for the students they serve.

Our sincere appreciation is extended to Michael Rosenbrock for his partnership, guidance, and challenge throughout the development of our pedagogical model. His expertise, clarity, and commitment to evidence-informed practice have strengthened our collective understanding and sharpened our instructional precision.

Special acknowledgement is also given to Jesse Bogaert for his vision, creativity, and skill in designing both the pedagogical model and this document. His ability to translate complex ideas into a clear, coherent, and accessible framework has brought this work to life.

This framework exists because of a shared commitment to excellence. It reflects who we are as educators at Clover Hill, what we value, and the standard of practice we choose to uphold every day, in every classroom.

Martine Gill
Principal

&

Shannon Meyers
Head of Curriculum

Table of Contents

Learning does not happen by chance.
It happens by design.

What is learning?

Learning is a durable change in long term memory.

What is Explicit Instruction?

Explicit instruction is structured systematic, responsive instruction designed to support how students learn.

Introduction & Commitment

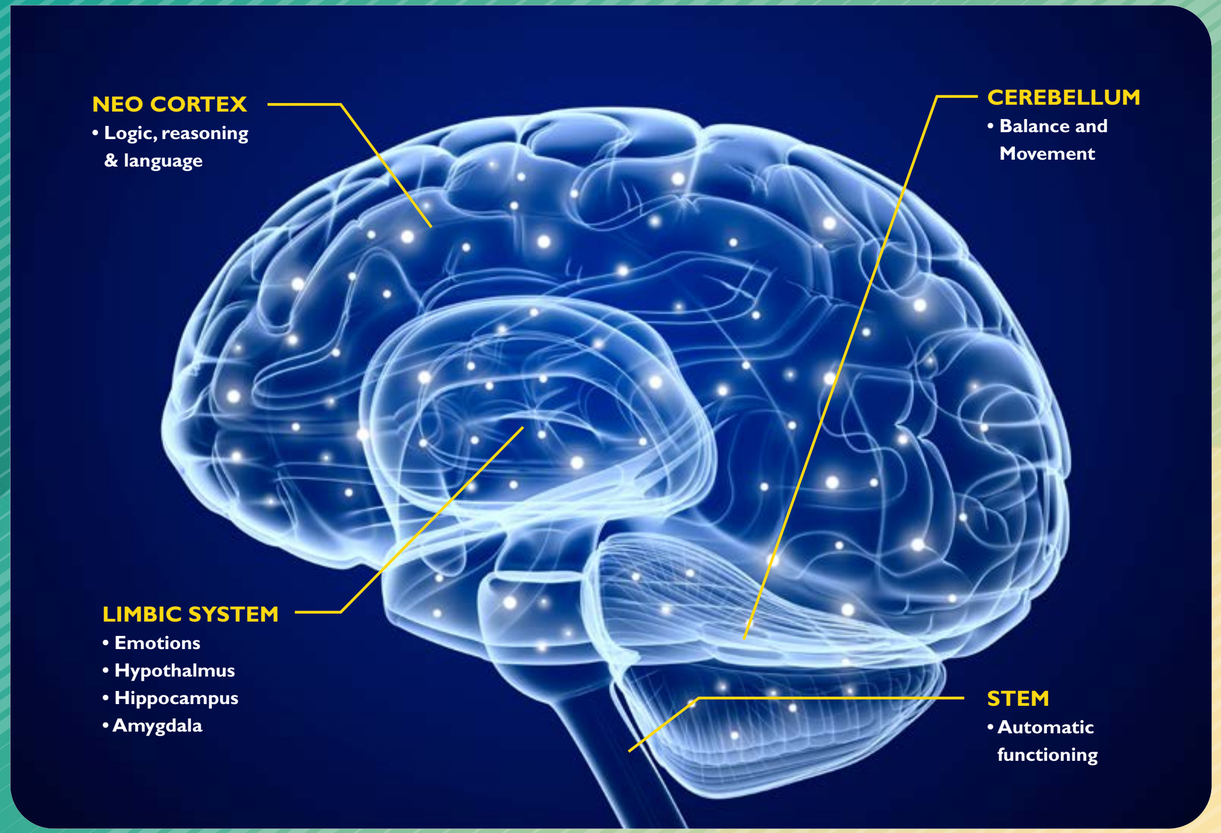
At Clover Hill State School, teaching is intentional, evidence-informed and anchored in the **Science of Learning**. Our Pedagogical Framework defines the model that shapes how teaching and learning occurs in every classroom, every day. It articulates the theory, principles and practices that underpin high-quality teaching, and reflects our shared belief that all students can achieve success when teaching is explicit, systematic and responsive.

Our framework draws from a robust body of research in cognitive science, particularly **Sweller's Cognitive Load Theory (1988), Rosenshine's Principles of Instruction (2012),** and contemporary neuroscience on how learning happens. (Deans for Impact, 2015). These foundations, combined with **Hattie's Visible Learning (2009)** and the **Australian Institute for Teaching and School Leadership (AITSL) standards**, provide the theoretical architecture for our approach.

The Clover Hill pedagogical approach is more than a framework; it is a culture of professional practice. It shapes how we plan, teach, assess and reflect. It ensures that every student receives high-quality instruction, and that every teacher is supported to refine their expertise through professional dialogue, observation, feedback and ongoing professional learning. It positions teaching as both an art and a science, where curiosity meets evidence, and precision meets care.

In embracing Explicit Instruction as our whole-school pedagogical approach, we affirm our belief that excellence in learning is not accidental. It is the result of clarity, consistency and collective efficacy.

Welcome to **Explicit Instruction** at Clover Hill State School.



The Brain and Learning

Learning is not a single process. It is the result of multiple brain systems working together. Each system plays a distinct role in how students attend, process, store, retrieve information. Effective teaching recognises these systems and designs for them deliberately.

The Brain Stem

Function: Survival and regulation

The brain stem is responsible for survival functions such as breathing, heart rate, reflexes, threat detection. It is the first system to activate when a student feels unsafe, overwhelmed, uncertain.

When the brain stem is activated, the brain prioritises survival over learning. Attention narrows. Working memory capacity reduces. Higher order thinking becomes unavailable. In learning environments that feel unpredictable or emotionally unsafe, students may appear disengaged, oppositional, avoidant. This is not a lack of motivation. It is a protective response.

For learning to occur, the brain stem must remain calm. Predictable routines, clear expectations, consistent responses, emotional safety reduce unnecessary activation. These conditions protect working memory, allow attention to shift upward to learning systems.

At Clover Hill, calm classrooms, explicit routines, clarity of expectations are not behavioural add ons. They are cognitive supports.

The Limbic System

Function: Emotion, motivation, memory tagging

The limbic system processes emotions, motivation, social connection. It plays a powerful role in determining what information is attended to, remembered, prioritised.

Emotion acts as a filter for learning. Experiences connected to belonging, interest, relevance are more likely to be encoded into long term memory. Experiences associated with fear, shame, uncertainty interfere with encoding.

The limbic system does not replace cognitive learning. It amplifies it. When students feel safe, connected, valued, their brains are more available for effortful thinking.

This system explains why relationships matter. It also explains why emotion alone is not sufficient. Positive feelings without cognitive structure do not guarantee learning.

At Clover Hill, learning readiness includes emotional readiness. Teachers intentionally build connection, reinforce expectations, reduce anxiety, establish trust. This creates the conditions where effort becomes possible.

The Neocortex

Function: Thinking, reasoning, language, problem solving

The neocortex is responsible for higher order thinking. This includes reasoning, language, planning, problem solving, applying knowledge.

This system is where learning happens. It relies heavily on working memory. Working memory is limited. It can hold only small amounts of new information for short periods.

When working memory is overloaded, learning slows or stops. When information is clearly explained, sequenced, modelled, practised, retrieved, it transfers into long term memory.

The neocortex depends on the other systems being regulated. When students feel unsafe or emotionally overwhelmed, access to this system reduces significantly.

Explicit instruction supports the neocortex. Clear explanations, modelling, guided practice, checking for understanding, retrieval practice protect working memory, strengthen memory formation.

Why This Matters for Teaching

Learning requires all three systems to work together. Survival must be calm. Emotion must be regulated. Cognition must be supported.

Effective teaching does not assume readiness. It designs for it.

At Clover Hill, our pedagogical framework intentionally addresses all three systems through learning readiness, teaching readiness, explicit instruction, engagement norms. This ensures students are cognitively available, emotionally supported, intellectually challenged.

Learning does not happen by chance.
It happens by design.

The Why and What of Explicit Instruction

Why Explicit Instruction at Clover Hill

At Clover Hill State School, our choice of explicit instruction is grounded in a strong and coherent body of research from cognitive science, neuroscience, and educational psychology. This research explains how learning occurs, why some teaching approaches are more effective than others, and how instructional design can either support or inhibit learning.

Two complementary research lenses underpin our pedagogical approach:

- The Science of Learning - which explains how the brain processes, stores, and retrieves information.
- Cognitive Load Theory - which explains how instructional design must align with the limits of working memory.

Together, these bodies of evidence clearly explain why explicit instruction is essential for reliable, equitable learning outcomes for all students.

The Science of Learning

Cognitive science defines learning as a **durable change in long-term memory.** If new knowledge is not stored in long-term memory, learning has not occurred (Deans for Impact, 2015). This has profound implications for teaching, because it shifts the focus away from activity completion and towards memory formation.

Information is processed through three interconnected memory systems:

- Sensory memory - which briefly registers incoming stimuli
- Working memory - where conscious processing occurs
- Long-term memory - where knowledge and skills are stored

Working memory is **severely limited in both capacity and duration**. Research consistently shows that working memory can hold only a small amount of new information at once and is easily overloaded (Baddeley, 1992; Baddeley, 1997). When this happens, learning slows or stops.

For learning to occur, attention must be directed to relevant information, and that information must be rehearsed and meaningfully connected to existing knowledge in long-term memory (Deans for Impact, 2015; Willingham, 2021). This means that teaching must be intentionally designed to:

- Focus attention on what matters most
- Sequence new information carefully
- Provide opportunities for guided practice and retrieval

Students do not naturally know how to manage these processes. They rely on teachers to design learning experiences that make this cognitive work possible.

Children are still developing the neural systems responsible for self-regulation, impulse control, attention, and planning. These systems are housed primarily in the prefrontal cortex, which continues to mature throughout childhood and adolescence. As a result, students require structured, predictable learning environments to support focus and engagement (Wallis, 2012).

Neuroscience research demonstrates that stress, uncertainty, and cognitive overload impair the brain's ability to encode and retrieve information. Conversely, environments characterised by safety, belonging, and clarity reduce cognitive interference and support learning readiness (Benevolent Society, 2013; Kirschner & Hendrick, 2020).

Nathan Wallis' work on brain development reinforces these findings by translating neuroscience into practical implications for schools. His work highlights the importance of regulation, routine, emotional safety, and connection as prerequisites for learning. These conditions are not separate from teaching practice. They are foundational to it.

At Clover Hill, predictable routines, explicit expectations, and calm learning environments are not compliance mechanisms. They are **cognitive supports** that free students' working memory for learning.

Cognitive Load Theory

Cognitive Load Theory (CLT), developed by John Sweller, explains how the limitations of working memory should shape instructional design (Sweller, 1988). It provides a clear and practical explanation for why some lessons result in learning and others result in confusion, fatigue, or surface engagement without retention.

At its core, Cognitive Load Theory recognises that working memory is limited. Students can process only a small amount of new information at one time. When this limit is exceeded, learning slows or stops, regardless of student motivation or effort.

Effective teaching therefore requires intentional design choices that manage cognitive load so students can focus their mental effort on learning what matters most.

Cognitive Load Theory identifies three distinct types of loads that operate simultaneously during learning.

Intrinsic cognitive load

Intrinsic load refers to the inherent complexity of the content itself. Some concepts are naturally more complex than others because they involve multiple elements that must be understood together.

For example:

- Learning letter sounds involves lower intrinsic load
- Learning multi step written division involves higher intrinsic load

Intrinsic load cannot be removed. However, teachers can manage intrinsic load by sequencing content carefully, breaking learning into smaller steps, and ensuring prerequisite knowledge is secure before introducing more complex ideas.

At Clover Hill, intrinsic load is managed through:

- Clear curriculum sequencing
- Teaching from simple to complex
- Building foundational knowledge deliberately

Extraneous cognitive load

Extraneous load refers to the unnecessary mental effort caused by poor instructional design. This type of load does not support learning and actively interferes with it.

Examples of high extraneous load include:

- Too much information presented at once
- Unclear instructions or explanations
- Split attention between multiple sources
- Decorative but irrelevant visuals
- Asking students to discover complex ideas without sufficient guidance

Research shows that when extraneous load is high, students struggle to process essential information, even when they can understand the content (Sweller, Ayres & Kalyuga, 2011). Effective teaching does not remove challenge. It removes unnecessary difficulty.

At Clover Hill, reducing extraneous load means:

- Clear explanations and modelling
- Clean lesson materials
- Explicit instruction rather than trial and error learning for new content
- Avoiding cognitive overload in task design

Germane cognitive load

Germane load refers to the mental effort devoted to building understanding, forming schemas, and strengthening long term memory. This is the productive load we want students to engage in.

Germane load increases when students:

- Practise retrieving information
- Apply learning with guidance
- Make connections between ideas
- Receive feedback and refine understanding

However, germane load can only be effective when extraneous load is minimised, and intrinsic load is carefully managed. If working memory is overwhelmed, students have little capacity left for meaningful learning.

Why the Science of Learning and Cognitive Load Theory Lead to Explicit Instruction

The Science of Learning explains **what learning is.** Cognitive Load Theory explains **how teaching should be designed** to support that learning. Explicit instruction is the practical bridge between the two.

Explicit instruction aligns with how students:

- Attend to information
- Process new content
- Store knowledge in long-term memory
- Retrieve and apply learning over time

Research synthesised by Rosenshine (2012) identifies core instructional principles that consistently improve student learning, including daily review, small steps, modelling, guided practice, checking for understanding, and cumulative practice. These principles are not trends. They are evidence-based responses to how the brain learns.

Similarly, Archer and Hughes (2011) describe explicit instruction as intentional, structured, and responsive teaching that ensures nothing essential is left to chance. This approach is particularly powerful for novice learners and for students with limited background knowledge.

Explicit instruction is not about reducing thinking. It is about **making thinking possible.**

Research consistently shows that students with stronger prior knowledge learn more easily because they can process new information with less cognitive effort (Willingham, 2021). Without explicit teaching, gaps in background knowledge widen over time.

Explicit instruction reduces this risk by:

- Making learning goals and success criteria clear
- Modelling expert thinking
- Providing guided practice for all learners
- Monitoring understanding and responding early

This makes explicit instruction an equity strategy. It ensures that all students, regardless of background, receive the clarity and support they need to succeed.

What this means for practice at Clover Hill
At Clover Hill, explicit instruction is our shared pedagogical approach because it is:

- Aligned with how the brain learns
- Supported by strong research evidence
- Responsive to learner readiness
- Consistent with our commitment to precision, clarity, and collective efficacy

At Clover Hill, explicit instruction is not about reducing thinking. It is about protecting thinking.

By managing cognitive load intentionally, teachers create the conditions for:

- Secure foundational learning
- Deeper understanding
- Successful transfer of learning
- Increased student confidence and engagement

Model of Learning

The Model of Learning, or our understanding of how learning happens, is an important underpinning of an instructional model.

The Model of Learning provides a coherent explanation for why certain teaching approaches are more effective than others. It makes explicit the processes that occur beneath the surface of classroom activity and ensures that our pedagogical model is anchored in evidence, not preference.

At Clover Hill, we use this shared language to ensure consistency of understanding across classrooms and professional dialogue. Teachers are supported to think beyond what students are doing, to what students are processing, retaining, and retrieving.

A model of how learning develops over time
Learning is not a single event. It develops over time as students move from acquiring new knowledge to applying it with increasing independence and flexibility.

The **AERO Model of Learning and Teaching** identifies four interrelated learning phases:

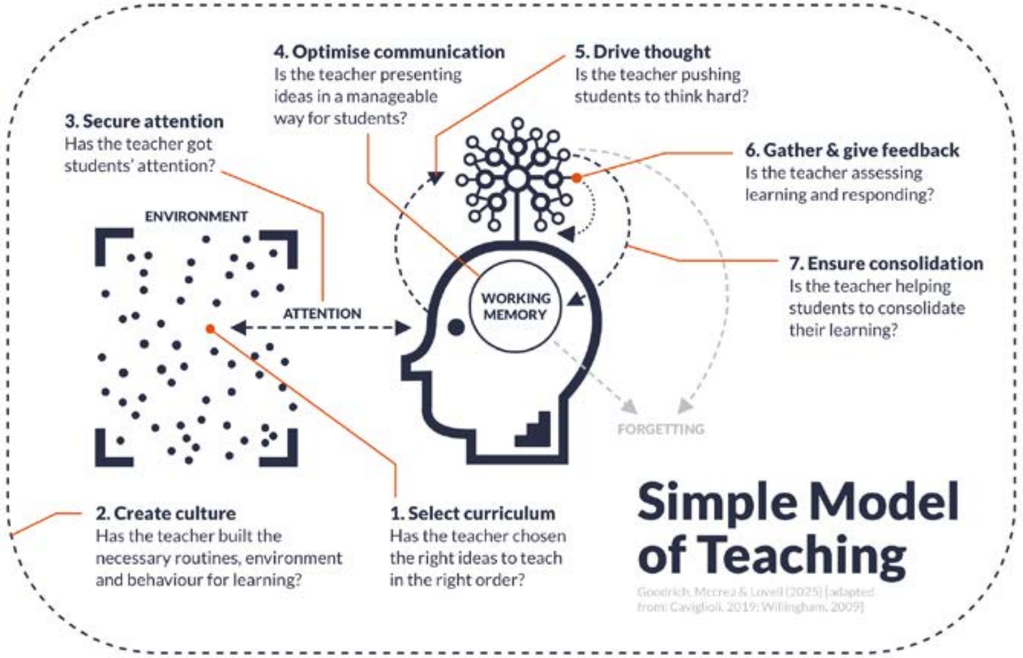
- Attention and focus
- Knowledge and memory
- Retention and recall
- Mastery and application

Each phase reflects how students engage cognitively with learning and highlights the importance of aligning teaching practices to students' stage of learning.

This model reinforces several core principles:

- Learning is a change in long term memory
- Students process limited amounts of new information
- Practice, review, and retrieval are essential for consolidation
- Mastery enables transfer, problem solving, and creative application

These principles align directly with the Science of Learning and Cognitive Load Theory and inform our approach to lesson design and instructional decision making.



Novice and expert learners

An important feature in the Model of Learning is the distinction between novice and expert learners. Students may be novices or experts depending on the specific learning objective, regardless of age or year level.

Novice learners:
- Have limited prior knowledge
- Require explicit explanations and modelling
- Benefit from guided practice and scaffolding

Expert learners:
- Have well developed schemas
- Can process information with less cognitive effort
- Are better able to apply, adapt, and extend learning

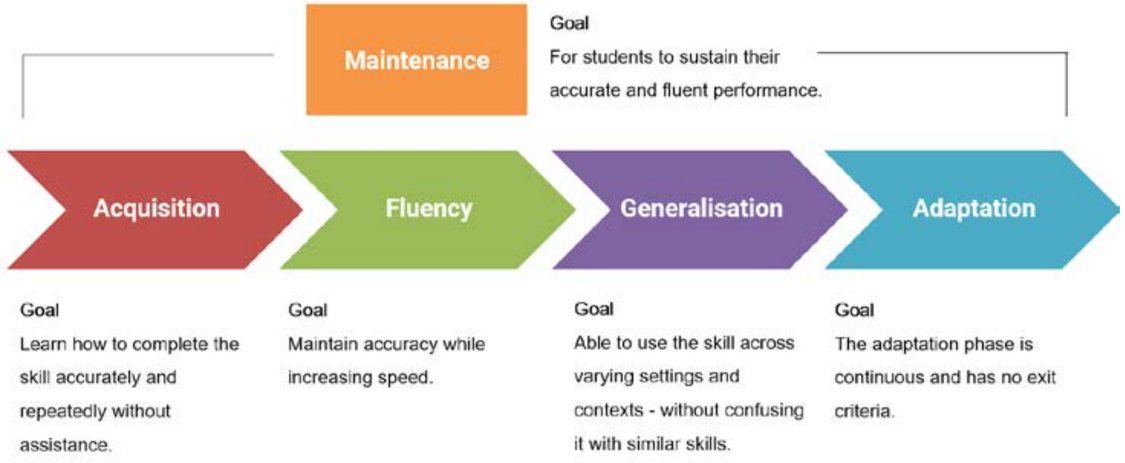
The Instructional Hierarchy describes how learning develops over time and clarifies the type of instruction required at each stage. It supports teachers to make intentional decisions about when to provide explicit instruction, when to practise for fluency, and when to extend learning through application and transfer.

At Clover Hill State School, the Instructional Hierarchy is used as a professional thinking framework to identify where students are in their learning and what instructional response will best move learning forward.

The stages are:
- Acquisition
- Fluency
- Generalisation
- Adaptation
- Maintenance

These stages are not linear checkpoints. Students may move back and forth depending on the learning objective, the level of challenge, and the context.

Instructional Hierarchy: Stages of Learning



(Haring et al., 1978; VanDerHeyden & Peltier, 2024)

Learning, teaching, and alignment

The Model of Learning at Clover Hill reinforces that how students learn and how teachers teach must be aligned. Effective teaching does not rely on a single strategy. It relies on selecting the right approach at the right time for the right purpose.

The AERO model highlights four aligned domains of teaching practice:

- Enabling conditions for learning
- Planning for learning
- Instruction that manages cognitive load
- Gradual release to maximise retention and application

This alignment ensures that teaching practice supports students to:

- Attend and engage
- Acquire and retain knowledge
- Recall learning over time
- Apply learning with increasing independence and confidence

Clover Hill's Pedagogical Model

The Clover Hill Pedagogical Model has been purposefully designed to ensure consistency of practice while enabling professional autonomy and contextual responsiveness. It is built upon the core belief that learning and teaching are deliberate acts, where teachers design, instruct and assess with precision, and students engage with clarity, confidence and agency.

The Principles of Teaching and Learning Within our Framework

At Clover Hill State School, learning does not happen by chance. It happens by design. Our principles for teaching and learning are grounded in the Science of Learning and Cognitive Load Theory and are enacted through deliberate instructional infrastructure that protects attention, reduces unnecessary cognitive load and makes learning possible for every student.

Teaching and learning are shaped by two interconnected and mutually reinforcing domains: Learning Readiness and Teaching Readiness. Together, they form the architecture that supports attention, engagement and durable learning across every classroom, every day.

Learning Readiness and Teaching Readiness are not sequential. They are symbiotic. When teachers are instructionally ready, designing lessons with clarity and managing cognitive load, they create the conditions that enhance students' readiness to learn. When students are regulated, focused and cognitively available, the impact of explicit teaching is magnified.

Together, these principles define a culture where teaching and learning are intentional, relational and firmly grounded in evidence. They ensure that attention is protected, thinking is made possible and learning is secured.

At Clover Hill State School, we design the conditions for learning first. The learning then follows.

Learning Readiness

Learning Readiness refers to the cognitive, emotional and environmental conditions that enable students to engage fully in learning. It recognises that attention, focus and motivation are not incidental to learning, rather they are prerequisites for it. Drawing from AERO's Teaching for How Students Learn model, learning readiness incorporates readiness for learning, self-regulation, safety and belonging.

Students are still developing the neural systems responsible for self-regulation, impulse control and sustained attention. As a result, they rely on teachers to design structured, predictable learning environments that support regulation and focus. Research from neuroscience and cognitive science demonstrates that stress, uncertainty and cognitive overload impair the brain's ability to encode and retrieve information, while safety, belonging and clarity reduce cognitive interference and support learning readiness (Kirschner & Hendrick, 2020; Wallis, 2012).

At Clover Hill, learning readiness is established through:

- Explicit expectations and shared norms
- Consistent routines that are taught, practised and reinforced
- Calm and predictable classroom environments
- A strong sense of belonging and connection

These conditions are not behavioural add-ons. They are cognitive supports that protect working memory and allow attention to be directed toward learning. When routines and behaviours are not automated, students are effectively asked to multitask. Attention is split. Cognitive bandwidth is drained. Without focus, memory is hocus pocus (Lee, 2026). Learning slows or stops, not because students lack motivation, but because working memory has been overloaded. By designing strong instructional infrastructure, teachers reduce extraneous load and make learning cognitively economical.

Learning readiness also depends on prior knowledge. New information is understood and retained when it connects to existing knowledge stored in long-term memory. Students with stronger background knowledge are better able to manage cognitive load and engage in deeper thinking (Willingham, 2021; Geary, 2005). Teachers therefore design lessons that activate prior knowledge, clarify purpose and remove unnecessary distractions before new learning begins.

Teaching Readiness

Teaching Readiness describes the professional capability and instructional design decisions that enable teachers to deliver learning aligned with how students learn. It reflects the understanding that teaching is both a science and a deliberate craft.

Teaching readiness begins with managing cognitive load. Cognitive Load Theory identifies three types of load that operate during learning: intrinsic load, extraneous load and germane load (Sweller, 1988; Sweller, Ayres & Kalyuga, 2011).

At Clover Hill, teachers intentionally:

- Sequence learning from simple to complex to manage intrinsic load
- Reduce extraneous load through clear explanations, modelling and clean task design
- Maximise germane load by providing guided practice, retrieval opportunities and feedback

Instruction is explicit, systematic and responsive. Teachers clearly articulate learning intentions, model expert thinking, scaffold practice and check for understanding frequently. These practices align with established principles of effective instruction that consistently improve learning outcomes, particularly for novice learners (Rosenshine, 2012; Archer & Hughes, 2011).

Teaching readiness also includes the deliberate teaching of routines and behaviours. Just as academic content must be taught explicitly, so too must the behaviours and procedures that support learning. Behaviour is taught, not assumed. By applying instructional rigour to routines, teachers further reduce unnecessary cognitive load and strengthen the architecture of attention within the classroom.

Clover Hill's 8 Core Practices

A core practice is a high-leverage instructional routine or shared teaching process that is consistently used across classes, which aligns with evidence about how students learn, supports teacher clarity and student success. These 8 core practices will become embedded as part of our school's standard operating model.

Core Practice: **Metacognition**

In a sentence

Teaching metacognition equips students to plan, monitor and evaluate their own learning.

What's the Point?

Metacognition builds student agency and improves outcomes by helping them manage their own learning processes. It addresses the problem of passive learners by making thinking visible and strategic. Thinking hard makes learning stick.

Model thinking aloud, scaffold reflection, teach strategies explicitly (e.g., worked examples, Read-Write-Discuss-Revise), and provide opportunities for students to evaluate progress.

Key considerations

- Metacognition is broad—clarify what aspect is being taught (planning, monitoring, evaluating).
- Needs explicit modelling and practice, not just telling students to 'think about thinking'.
- Connects closely to self-regulated learning and effective feedback.

See it in action/Examples

- Teacher models solving a maths problem aloud, narrating each decision ('I'm checking if I need to regroup here…').
- In science, students predict experiment outcomes, then evaluate whether their prediction matched and why.
- Year 3 English: students reflect on how they improved a draft, noting strategies that helped.
- Teacher uses 'stop and jot' breaks where students record what they found challenging and how they overcame it.
- Foundation: Teacher models sounding out words aloud while reading.
- Year 6: Students evaluate which summarising strategy worked best for research tasks.

Make it better
Start off with 'Think Alouds' and do them well. Use structured routines like the 'Habits of Discussion' (Doug Lemov) or retrieval plus reflection to deepen student independence.

Common Mistakes
- Treating metacognition as vague reflection without strategy.
- Using it only as an end-of-task add-on instead of throughout learning.
- Confusing self-talk with genuine metacognitive monitoring.

Look Fors (Implementation Indicators)
- Teacher models thinking aloud consistently.
- Students articulate what strategies they used and why.
- Students monitor progress during tasks (e.g., self-checklists).
- Teacher provides prompts for reflection at different stages.

Teacher Reflection Prompt
How often do I make my own thinking visible to students?

Impact on Students
Students learn to take charge of their own learning, becoming strategic and reflective.

Core Practice: **Chunking and Sequencing**

In a sentence
Chunking and sequencing manage cognitive load by breaking down learning into logical steps.

What's the Point?
Chunking reduces overload and sequencing ensures concepts build logically, preventing confusion and disengagement.

What to do?
- Present material in small steps, plan units with increasing complexity, and align chunks to clear objectives.
- Build in review and retrieval.

Key considerations
- Keep within working memory limits (Cognitive Load Theory).
- Sequence across lessons as well as within a lesson.
- Prior knowledge, misconceptions, and threshold concepts must be considered.

See it in action/Examples
- Breaking down long-division into single-digit practice before multi-digit application.
- Introducing 'force' and 'motion' separately before applying them together in science experiments.
- Using worked examples to model persuasive sentence starters before students create their own.
- Sequencing a history unit: timeline first, then deeper exploration of causes and consequences.
- Embedding retrieval reviews at the end of each chunk to consolidate before moving forward.
- Foundation: Teach one letter-sound correspondence at a time.
- Year 3: Sequence multiplication before division in maths units.
- Year 6: Scaffold persuasive essays from single paragraphs to full essays.

Make it better
Backwards-map units, connect to retrieval practice, and use formative assessment to refine chunking.
Focus on threshold concepts (the Big Ideas that students need to know before moving on eg: BAR Modelling)

Common Mistakes
- Breaking content into fragments without coherence.
- Over-pacing or under-pacing leading to gaps or boredom.
- Over-fragmenting content so students lose the bigger picture.
- Rushing through steps without checking mastery.
- Sequencing only by textbook order, not by learning progression.

Look Fors (Implementation Indicators)
- Content delivered in small, meaningful steps.
- Each chunk aligned to the lesson's learning intention.
- Teacher checks for understanding before moving to the next step.
- Review and retrieval built into sequencing.

Teacher Reflection Prompt
How do I decide the right size of a learning chunk for my class?

Impact on Students
Students experience success step by step, building confidence and mastery.

Core Practice: **Affirmative Corrective Feedback**

In a sentence
Feedback guides students to close the gap between current and desired performance.

What's the Point?
High-quality feedback improves learning; poorly delivered feedback can confuse or demotivate students.

What to do?
Link feedback to learning goals, make it specific and actionable, time it appropriately, and provide opportunities for students to respond and improve.

Key considerations
- Focus feedback on task, process, and self-regulation rather than personal traits.
- Balance affirmations with guidance for improvement.
- Ensure students act on feedback, not just receive it.
- Whole class feedback is more efficient and powerful for learning.

See it in action/Examples
- 'Your topic sentence is clear—now add evidence to support your idea.'
- Teacher circulates during independent writing, giving immediate feedback tied to success criteria.
- In maths, teacher spots errors via whiteboards, affirms correct strategies, and addresses misconceptions.
- Teacher uses a visualiser to display an anonymised piece of student writing, highlighting strengths and common misconceptions.
- Whole-class feedback sheet: teacher notes "WWW" (What Went Well) and "EBI" (Even Better If) after marking, then teaches these to the whole class.
- Students edit and improve their own work immediately after whole-class feedback session.
- Foundation: 'Great effort sounding out the word—next time, check the last sound.'
- Year 3: Written feedback: 'Your topic sentence is clear—add one example to support it.'
- Year 6: Feedback on essays using criteria.

Make it better

Build classroom culture where feedback is normalised. Use models/exemplars.

Build a routine: (1) Collect work, (2) Review for common themes, (3) Teach whole-class feedback with visualiser, (4) Students act immediately, (5) Follow up with individuals as needed.

Common Mistakes

- Feedback that is vague ('good job') or personal ('you're smart').
- Overloading with too much feedback at once.
- Relying on Peer feedback. This tends to be low level and is only effective when taught really well. It can be seen as 'downtime/chat time' and can lead to too many misconceptions developing.

Look Fors (Implementation Indicators)

- Feedback linked directly to success criteria.
- Students are given time to act on feedback.
- Balance of affirmations and improvement guidance.
- Feedback is specific, actionable, and future-focused.

Teacher Reflection Prompt

Do my students consistently act on the feedback I give?

Impact on Students

Students improve work quality and develop independence through feedback loops.

Core Practice: Adaptive and Responsive Teaching through the Gradual Release Model

In a sentence

Gradual release shifts responsibility from teacher to student through modelled, guided, and independent practice, with teachers adapting instruction in response to real-time evidence of learning.

What's the Point?

Gradual release is not a fixed sequence but a responsive cycle. It ensures students are supported when learning new material and prevents both premature independence and learned helplessness. Responsive teaching acknowledges that students do not learn at the same pace, and instructional decisions must change based on what students demonstrate in the moment (Bronwyn Ryrie Jones).

What to do?

- Plan lessons with clear "I Do – We Do – You Do" phases.
- Use real-time evidence (verbal, written, behavioural) to adjust pacing and scaffolding.
- Use clear worked examples that show students step-by-step how to do something.
- Sufficient practice allowing multiple opportunities to show proficiency.
- Treat guided practice as a space to diagnose, adapt, and re-teach before releasing independence.
- Expect to cycle back, not just move forward — instruction follows student need, not the clock.

Key considerations

- Balance time in each phase depending on content and student need.
- Be flexible—some lessons need extended modelling or more guided practice.
- Responsiveness happens in the moment (not only after marking).
- Misconceptions mean more guided practice, not pushing ahead.
- Different students may need different pathways through the release (e.g., some remain in "We Do" while others begin "You Do").
- Feedback loops are built into teaching, not tacked on at the end.

See it in action/Examples

- Teacher models annotating a text ("I Do"), the class annotates together ("We Do"), then the teacher repeats modelling when a common misconception appears, before returning to guided practice.
- Maths: teacher solves a problem, class solves a similar one, but students who misunderstand return to worked examples, while others continue independently.
- Science: teacher demonstrates an experiment, guides small groups, then adds a mini-lesson for groups who misused equipment or mislabelled observations.
- Foundation: teacher models blending ("I Do"), whole class blends, then students who struggle receive extra guided practice before attempting "You Do."
- Year 6: after independent attempts, teacher pulls a small group back to "We Do," while others continue applying the concept independently.

Make it better

Cycle back through phases as needed.
Use CFUs and formative assessment to guide when to move forward.

Common Mistakes

- Treating gradual release as a fixed script rather than adaptive.
- Moving too quickly to independence before students are ready.
- Over-relying on "We Do" without ever shifting to independence.
- Treating feedback as separate from instruction rather than embedded during each phase.
- Using time-based transitions (e.g., "10 minutes for We Do") instead of learning-based transitions.

Look Fors (Implementation Indicators)

- Lesson flows from 'I do' to 'We do' to 'You do'.
- Teacher adjusts pacing based on student responses.
- Guided practice allows mistakes to surface and be corrected.
- Independence comes after scaffolding, not before.

Teacher Reflection Prompt

How did student responses shape the way I moved between "I Do," "We Do," and "You Do" today?
Am I adapting the release of responsibility to student readiness?

Impact on Students

Students are supported as they move from novice to independent learners, and ultimately, in time to expert learners.

Core Practice: **Retrieval Practice and Spaced Repetition**

In a sentence
Retrieval practice and spacing strengthen long-term memory by revisiting learning over time.

What's the Point?
They combat forgetting by ensuring students regularly recall and apply knowledge, preventing cramming and shallow learning.

What to do?
Build retrieval into daily reviews, quizzes, and questioning. Plan for spacing across weeks and units.

Key considerations
- Retrieval practice + spaced repetition are non-negotiable for durable learning; forgetting and retrieval make memories stronger.
- Retrieval is about recall, not re-reading.
- Spaced practice requires intentional planning and revisiting
- Retrieval must be designed with scaffolding and feedback to avoid students retrieving incorrectly and embedding misconceptions.
- The role of the teacher is adaptive: design retrieval/spacing tasks, monitor responses, adjust scaffolds, revisit content when needed.

See it in action/Examples
- Start lessons with a 5-question mixed daily review (yesterday, last week, last term).
- Exit tickets with one question from today and one from a prior unit.
- Year 4 science: recall 'evaporation' and 'condensation' before learning 'precipitation'.
- Interleaving practice: maths reviews mix fractions, decimals, and percentages.
- Weekly low-stakes quizzes spaced across units to build durable recall.
- Foundation: Recall letter sounds in a quick-fire review.
- Year 6: Weekly low-stakes quizzes revisiting old content.

Make it better
Use varied formats (verbal, written, multiple choice). Interleave topics for stronger transfer.

Common Mistakes
- Turning retrieval into high-stakes tests. Using it only for low-level recall.
- Re-reading or copying notes instead of recall.
- Spacing as busywork without clear purpose.

Look Fors (Implementation Indicators)
- Retrieval tasks are low-stakes and frequent.
- Spacing is planned over time (days/weeks/terms).
- Errors and misconceptions are corrected promptly.
- Variety of formats used for retrieval.

Teacher Reflection Prompt
Am I embedding retrieval as a learning tool, not a test?

Impact on Students
Students strengthen memory and transfer learning to new contexts.

Core Practice: **Effective Questioning**

In a sentence
Questioning engages all students in thinking and deepens understanding. Effective questioning is about planning and delivering classroom questions that ensure every student has the opportunity—and expectation—to think, participate, and succeed.

What's the Point?
Questions uncover misconceptions, scaffold thinking, and build connections. Without it, only surface recall may be checked.

What to do?
Plan purposeful questions with the right level of challenge. Use wait time, Pair-Share, cold call, and variety in response modes.

Key considerations
- Use strategies to ensure everyone is participating and thinking hard.
- Create a safe environment for all students to participate. Use Pair-Share before cold calling.
- Balance closed and open questions.
- Use questioning to extend, not just test knowledge.

See it in action/Examples

- 'Why do you think the author chose this word?' Pair-Share before discussion.
- Cold calling with follow-ups to ensure participation.
- Science: 'What would happen if we changed this variable?' to prompt reasoning.
- Maths hinge question: 'Which diagram correctly shows 3/4?' to guide pacing.
- Teacher probes: 'Can you explain how you know?' to promote deeper reasoning.
- Foundation: 'Which picture shows the word cat?'
- Year 3: 'Why do you think the character made that choice?'
- Year 6: 'What would happen if gravity disappeared for one day?'

Make it better

Sequence questions from surface to deep. Use follow-ups and probing questions. Provide sentence stems.

Common Mistakes

- Asking only recall-level questions.
- Allowing only a few students to dominate.
- Calling on volunteers only, have a No-Opt-Out policy.
- Not probing further after an initial answer.

Look Fors (Implementation Indicators)

- All students are engaged in responding.
- Wait time is used before taking answers.
- Questions progress from recall to deeper reasoning.
- Misconceptions are addressed immediately.

Teacher Reflection Prompt

Do my questions challenge all learners, not just some?

Impact on Students

Students engage in deeper thinking and make connections across content.

Core Practice: **Goal Setting**

In a sentence

Goal setting clarifies what success looks like for both teachers and students, ensuring alignment between learning intentions, success criteria, and learning outcomes.

What's the Point?

Clear goals provide direction and motivation. For teachers, they ensure that learning intentions and success criteria drive lesson design. For students, goals make expectations visible and help track progress. Without them, lessons risk losing focus and students may disengage.

What to do?

Plan precise learning intentions and success criteria that describe what success looks like. Share them with students explicitly at the start of lessons and revisit throughout.

Key considerations

- Goals should be anchored in curriculum-aligned learning intentions and success criteria.
- Use exemplars and checklists to show success.
- Revisit and reflect on goals regularly, using them for feedback and formative assessment.

See it in action/Examples

- Teacher shares a learning intention ('We are learning to identify the main idea') with success criteria ('I can explain it in one sentence').
- Students set personal goals in reading journals ('I will summarise each chapter in three sentences').
- Maths: students use a checklist to self-monitor problem-solving steps against success criteria.
- Teacher revisits goals mid-lesson ('Have we met the success criteria yet?') to adjust instruction.
- Weekly reflections where students compare current work with exemplars to track growth.

- Foundation: 'I will write my name using a capital letter.'
- Year 3: 'I will include at least two reasons in my persuasive paragraph.'
- Year 6: 'I will compare my essay to the selection criteria and identify one improvement.'

Make it better

Make feedback actionable by linking it directly to success criteria. After whole-class feedback, students update their goal and immediately improve their work based on it.

Common Mistakes

- Setting vague or unrealistic goals.
- Presenting learning intentions without connecting them to success criteria or student action.

Look Fors (Implementation Indicators)

- Learning intentions and success criteria are explicit.
- Goals are revisited during and after lessons.
- Goals linked to exemplars, rubrics, or checklists.

Teacher Reflection Prompt

How do I ensure students genuinely use goals to guide learning?

Impact on Students

Students understand success, track progress, and take ownership of learning.

Core Practice: **Checking for Understanding**

In a sentence

Checking for understanding ensures learning is secure before moving forward.

What's the Point?

It helps teachers adapt in real-time and prevents misconceptions from embedding.

What to do?

Use varied response modes (verbal, written, action). Plan hinge questions* and monitor informally as well as formally during the lesson. Use exit tickets at the end of a lesson.

Key considerations

- Don't rely on proxies like nodding students.
- Check multiple times in a lesson.
- Anticipate misconceptions and plan CFUs in advance.
- Don't move on unless 80% of students demonstrate mastery. If not, reteach.
- Provide immediate error corrections when visible in responses. "Tick it or fix it".
- If using an exit ticket, you must follow up.

See it in action/Examples

- Mini-whiteboards: all students respond to hinge questions simultaneously.
- Exit ticket: one thing understood plus one lingering question.
- During fluency pairs, teacher listens to pairs and notes misconceptions for class feedback.
- 'Thumbs up/down/sideways' check during science to measure confidence.
- Cold-calling students to explain reasoning, surfacing and correcting misconceptions.
- Foundation: Students hold up picture cards to show responses.
- Year 3: Maths hinge question on whiteboards ('Which shape is a quadrilateral?').
- Year 6: Cold-call reasoning ('Explain why the light bends entering water').

Make it better

Mix response modes, prepare hinge questions, and use responses to adapt teaching. Use a routine that helps teachers check whether students are learning before moving on (eg; TAPPLE - It keeps thinking visible and ensures errors are corrected in the moment.).

Common Mistakes

- Not every response has to be a CFU. Some responses are for engagement and participation.
- Using CFU only at the end. Asking 'Does everyone get it?' without evidence.
- Thinking one correct student answer means all understand.
- Overusing a single mode (hands up).
- Mistaking compliance for understanding.
- Thinking all CFU is a 30 second response. Sometimes it may be a longer response.

Look Fors (Implementation Indicators)

- Teacher asks hinge questions to all, not just volunteers.
- 100% of students respond within 30 seconds.
- Teacher scans for error patterns, not just correct answers.
- Lesson pacing adapts to student responses.

Teacher Reflection Prompt

How do I know every student has understood before moving on?

Impact on Students

Students feel accountable for thinking, misconceptions are caught early, confidence builds.

In short

A hinge question decides the "direction" of the lesson.

** A hinge question is a deliberately planned check-for-understanding placed at a critical point in the lesson where the next step depends on how students respond. The question reveals whether students have grasped a key idea strongly enough to move on, or whether the teacher needs to re-teach, model again, or provide more guided practice.*

How do we ensure full and active participation during Explicit Instruction Lessons?

Engagement Norms

A key delivery component of explicit instruction that help to harness a student's attention to ensure that working memory is not overloaded.

Engagement norms are a set of tools that a teacher develops in order to keep students engaged and learning.

Active engagement in the learning is crucial. When we use engagement norms, we want everyone in the class to do the thinking.

Engagement norms ensure all students respond frequently—physically, verbally, or in writing—so learning stays active and visible every 2–4 minutes.

What's the Point?

Engagement is created, not assumed. High-frequency participation boosts attention, strengthens working memory, improves behaviour, and increases academic progress. The research is clear: more Opportunities to Respond = higher achievement.

What to do?

Teach, model, practise, and consistently use these engagement norms during instruction:

- Track with me – teacher read - students follow the text or visual cue.
- Read with me – choral read for fluency and accuracy, echo read, partner read, cloze read.
- Pronounce with me – articulating phonemes and vocabulary.
- Gesture with me – physical responses linked to concepts.
- Pair-Share (A»B, B»A) – structured, accountable talk.
- Cold Calling – selecting any student after think-time.

- Attention Signal – "Eyes up, Eyes ready!", "Eyes on the Learning!" - consistent cue for immediate focus.
- Complete Sentences – answering using full sentences.
- Whiteboard Routines – "Write it", "Chin it", "Wipe it", "Park it", "Hover it" - written response shown simultaneously.
- Choral Responses – all students respond verbally in unison to a question with one correct answer.
- Everybody Writes – students write a quick response (word, phrase, or sentence) to make thinking visible.
- Track the speaker – students turn to face the person who is speaking.

Key considerations

- Introduce norms one at a time and practise them explicitly.
- Responses must occur every 2–4 minutes to keep learning active.
- Provide wait time before Cold Call or Pair-Share.
- Make the purpose explicit to students ("This helps us think together").
- Ensure cues are consistent ("Everyone… track with me").

See it in action / Examples

- Choral Response: "What's the vowel sound? — 'A!'"
- Stop and Jot: students briefly write a prediction, summary, or answer before sharing.
- During shared reading, students track with me, then read with me using a visualiser.
- Teacher models vocabulary, class participates in pronounce with me.
- Students gesture with me to show understanding (e.g., "push," "pull," "evaporate").
- Whiteboards to show a maths answer for instant feedback.
- Pair-Share using sentence stems: "I think… because…"
- Cold Call after giving everyone 3–5 seconds think-time.

Make it better

- Integrate norms: Track » Read » Pronounce » Pair-Share » Cold Call.
- Use a visualiser to model tracking and complete sentence responses.
- Follow Stop and Jot with Pair-Share for deeper processing.
- Keep transitions crisp and purposeful.

Lethal Mutations

- Using Cold Call punitively.
- Pair-Share without sentence stems.
- Choral responses too fast, masking errors.
- Stop and Jot that takes too long and becomes a writing task.
- Inconsistent cues leading to confusion.

Look Fors (Implementation Indicators)

- All students respond at the same time.
- Routines are fast, fluent, and automatic.
- Teacher scans for accuracy, not just participation.
- Students can explain why the norm supports learning.
- Students are responding 100% of the time if not, these engagement norms lose their power.

Common Misconceptions

- "Engaged = quiet."
- "Hands up means everyone is thinking."
- "Pair-Share is noisy, so it isn't learning."
- "Choral responses are only for early years."
- "Stop and Jot slows the lesson down."
- Cold Calling is used to put students under pressure or "catch them out," when its actual purpose is to ensure everyone is thinking and ready to learn.
- Cold Calling increases anxiety, but when it is predictable, done after think-time, and used for support rather than judgement, it actually builds confidence and equity because all students' ideas are valued.

Impact on Students

Students become active participants, not passive observers. They retain information better, understand faster, and feel confident because engagement is expected, supported, and structured.

Clover Hill's Engagement Norms

Track With Me

Track With Me helps students connect spoken and written words by physically following along with text as the teacher reads it aloud. Students track on the board, in a book, or with a ruler or finger while the teacher reads first, so they build familiarity and confidence before reading it themselves. This ensures students are looking at the correct part of the text, supports fluency, and prepares them for choral reading. With struggling readers, tracking prevents guessing or getting lost, allowing everyone to read successfully together.

Any time a teacher has any text in front of the students, they should be tracking. Eg: Tracking in your math's textbook, tracking in science, HASS, LOTE.

Use a pointing stick to help track the text.

Read With Me

Read With Me is structured choral reading where the teacher and class read together. After tracking, the teacher cues the class to read aloud at the same pace. The teacher may read every word, model difficult words first, or have students read independently depending on the grade. Choral reading increases fluency, accuracy, and exposure to syntax and academic language. Because students read with the teacher, they receive immediate support with difficult words, helping all learners participate confidently. Choral reading is a safe technique for students who cannot read as they can hear it. Choral reading also provides instant feedback to the students. If a student should make an error, they will hear their error automatically. This engagement norm livens up the pace. Students could be reading just a word, phrase, sentence. Individual, groups or the whole class of students could be reading. This norm helps to keep all students on track with the text.

Pronounce With Me

Pronounce With Me introduces new academic or content vocabulary by having students say the word with the teacher. The teacher models the pronunciation first ("I say"), then cues students to repeat ("You say"). This ensures correct pronunciation before reading, writing, or using the term, especially for unfamiliar or technical vocabulary. By hearing and rehearsing the word, students are more likely to recognise it in text and use it accurately in speech and writing. It is a quick way to ensure active engagement and to encode the word in a student's memory.

You might say: "Say hyperbole", students repeat the word.

Gesture With Me

Gesture With Me pairs learning with a physical action to strengthen memory. Gestures create an additional cue for recall, helping students remember vocabulary, processes, or concepts (e.g., "push," "pull," "evaporate," "expand"). Students often recall gestures even when they cannot immediately produce the word, making this a powerful long-term memory tool. Gesturing is especially useful in early years, science, mathematics, HPE, and for supporting vocabulary development.

Pair-Share

Pair-Share creates 100% participation by having all students rehearse an answer with a partner before being selected to respond. Students receive the question and a sentence stem before sharing, giving them structure for academic language (e.g., "I think ____ because ____"). Speaking aloud helps consolidate learning and builds confidence before public responses. Pair-Share supports deeper thinking, provides rehearsal for English learners, and ensures that participation is never limited to a few volunteers.

"A talk to B" or "B talk to A"

"Water talk to Mellon or "Mellon talk to Water"

Attention Signals

An Attention Signal regains focus immediately after active talk or movement. It uses a clear call-and-response so students must stop speaking to respond to the teacher. Signals bring the class back together quickly, reset posture and direction, and ensure everyone is ready to learn. Consistent use prevents wasted time and redirects students without nagging or raising voice. Attention signals should be consistent across the school, so students can focus faster, teachers teach more, and learning time is protected everywhere.

You might say:

Teacher: "Eyes forward" — Students: "Back straight"

"Eyes on the learning!"

"Coming back in 3-2-1!"

"Eyes up, Eyes ready!"

Cold Calling

Cold Calling is a routine where the teacher selects any student to answer after the whole class has had time to think. The teacher names the student after the question and thinking time, not before. This ensures every student is accountable for learning—not just volunteers. Cold Call widens participation, prevents "opt-out behaviour," and normalises effort ("Everyone thinks; anyone may answer"). When combined with wait time, sentence stems, and no-opt-out follow-up, Cold Calling builds confidence rather than anxiety. It shifts classrooms from passive watching to active thinking. Cold Calling increases equity because it distributes cognitive work across all students, not just the confident few. Ensure that when doing a cold call, select students with the correct response. When you call on someone with the incorrect response as the first response that all students hear, their brain will start to process the wrong thing. This also provides students with an opportunity to fix their error if they realise that they have made a mistake.

You say "Could you tell me the definition of the word hyperbole, Emma." Deliberately using a student's name at the end of the question ensures all students are listening.

Complete Sentences

Complete Sentences require students to answer using full, academically accurate language. By responding in sentences (often using a sentence stem), students rehearse vocabulary, clarify meaning, and build oral and written language skills. This reveals conceptual understanding, strengthens public speaking confidence, and elevates everyday talk into academic reasoning. How to reframe a question as an answer must be explicitly taught.

For example, instead of "42!" students say "The perimeter of the park is 42 metres because perimeter means the distance around a shape."

Whiteboard Routines

Whiteboards allow every student to show their thinking at the same time, making understanding visible in seconds. They are the fastest way to gain a lot of information from students at once. They are a great window into what students are thinking. Students write their response and "chin-it"—holding the board near their chin so the teacher can scan answers without blocking others. Whiteboards are ideal for hinge questions, quick checks, error spotting, and responsive teaching. They let teachers decide whether to continue, re-teach, or scaffold immediately—no marking required.

Tip – 80% the students must have the correct response before moving on. If not, reteach.

Choral Responses

Choral Responses ask all students to respond aloud at the same time to a prompt that has a single, short correct answer (e.g., vocabulary, sounds, facts, steps, formulae). This makes thinking public, maintains pace, and ensures every student participates. The teacher first cues ("Everybody…") then signals a unified response. Choral responses are most effective after modelling and tracking, helping students rehearse academic or phonemic accuracy. When used deliberately—not excessively—they boost confidence and reduce hesitation. Choral responses build mastery when they are fast, precise, and cued.

Everybody Writes

Everybody Writes is a thinking routine where all students write a short response before any discussion or Cold Calling. Writing anchors thought, increases rigour, prevents guessing, and provides a record that thinking has happened. This simple routine supports equitable participation—no student can opt out, and all students practise retrieving and forming ideas. When followed by Pair-Share or Cold Call, it improves the quality of oral responses because students come prepared. This routine aligns strongly with whole-class feedback because it reveals class-wide needs in seconds. A word or short phrase response could be written on a mini whiteboard. A longer sentence or short response is best written in their workbook.

Track the Speaker

Track the Speaker asks students to visibly follow whoever is speaking—the teacher or a classmate. Students shift their eyes and body posture toward the speaker, signalling attention and respect. This reinforces that ideas come from many people in the room, not only the teacher. It ensures listening is active, supporting memory, behaviour, and speaking-and-listening standards. When students track one another, it strengthens peer accountability and social learning cues ("We listen because we are learning from each other"). Tracking helps make listening observable and teachable, rather than assumed.

References

Archer, A. L., & Hughes, C. A. (2011).
Explicit instruction: Effective and efficient teaching.
Guilford Press.

Australian Education Research Organisation. (2023–2025).
Explainers: How students learn series (Managing cognitive load optimises learning; Knowledge and memory; Retention and recall; Mastery and application; Knowledge is central to learning; Teaching for how students learn).
https://www.edresearch.edu.au

Australian Institute for Teaching and School Leadership. (n.d.).
Reframing feedback to improve teaching and learning.
https://www.aitsl.edu.au

Baddeley, A. D. (1992).
Working memory.
Science, 255(5044), 556–559.
https://doi.org/10.1126/science.1736359

Baddeley, A. D. (1997).
Human memory: Theory and practice (Rev. ed.).
Psychology Press.

Benevolent Society. (2013).
Shaping brains: Shaping communities.
Benevolent Society.

Deans for Impact. (2015).
The science of learning.
https://deansforimpact.org

Dehaene, S. (2020).
How we learn: Why brains learn better than any machine… for now.
Viking.

Dunlosky, J., Rawson, K. A., Marsh, E. J., Nathan, M. J., & Willingham, D. T. (2013).
Improving students' learning with effective learning techniques.
Psychological Science in the Public Interest, 14(1), 4–58.
https://doi.org/10.1177/1529100612453266

Education Endowment Foundation. (2021).
Cognitive science approaches in the classroom.
https://www.educationendowmentfoundation.org.uk

Fisher, D., & Frey, N. (2021).
Better learning through structured teaching: A framework for the gradual release of responsibility (3rd ed.).
ASCD.

Geary, D. C. (2005).
The origin of mind: Evolution of brain, cognition, and general intelligence.
American Psychological Association.
https://doi.org/10.1037/11181-000

Haring, N. G., Lovitt, T. C., Eaton, M. D., & Hansen, C. L. (1978).
The instructional hierarchy: A model for designing, sequencing, and monitoring instruction.
Research Press.

Hattie, J. (2009).
Visible learning: A synthesis of over 800 meta-analyses relating to achievement.
Routledge.

Kirschner, P. A., & Hendrick, C. (2020).
How learning happens: Seminal works in educational psychology and what they mean in practice.
Routledge.

Kirschner, P. A., Sweller, J., & Clark, R. E. (2006).
Why minimal guidance during instruction does not work.
Educational Psychologist, 41(2), 75–86.
https://doi.org/10.1207/s15326985ep4102_1

Lemov, D. (2021).
Teach like a champion 3.0: 63 techniques that put students on the path to college.
Jossey-Bass.

New South Wales Department of Education, Centre for Education Statistics and Evaluation. (2020).
What works best: 2020 update.
https://www.education.nsw.gov.au

Pearson, P. D., & Gallagher, M. C. (1983).
The instruction of reading comprehension.
Contemporary Educational Psychology, 8(3), 317–344.
https://doi.org/10.1016/0361-476X(83)90019-X

Rosenshine, B. (2012).
Principles of instruction: Research-based strategies that all teachers should know.
American Educator, 36(1), 12–19.

Sherrington, T. (2019).
Rosenshine's principles in action.
John Catt Educational.

Sweller, J. (1988).
Cognitive load during problem solving: Effects on learning.
Cognitive Science, 12(2), 257–285.
https://doi.org/10.1207/s15516709cog1202_4

Sweller, J., Ayres, P., & Kalyuga, S. (2011).
Cognitive load theory.
Springer.
https://doi.org/10.1007/978-1-4419-8126-4

Wallis, N. (2012).
The developing brain: The big picture.
https://www.nathanwallis.com

Wiliam, D. (2011).
Embedded formative assessment.
Solution Tree Press.

Willingham, D. T. (2021).
Outsmart your brain: Why learning is hard and how you can make it easy.
Gallery Books.

www.cloverhillss.eq.edu.au