



SENDMattersUK





High-quality teaching and SEND: what the evidence suggests.

Consider the greatest practice for pupils with SEND that you have in your school.



What does it look like?



Do we plan our lesson for pupils who have...

ADHD

Dyslexia

Social, Emotional and Mental Health Needs

Moderate Learning Difficulties

Autism

Speech, Language and Communication Needs

A celebration event

Or do we plan our lessons for pupils who...

...struggle to pay attention in class

...struggle to read and write at an age-appropriate level

... feel anxious at school

...find it hard to remember the things you've taught

...find it hard to get along with their peers

...don't have a wide vocabulary

The EEF commissioned an **Evidence Review that** points towards 5 recommendations for mainstream schools



Database name	Sea	rch platfor	m			
British Education Index	Ebsco					
Education Research Complete	Ebsco					
ERIC	Ebsco					
PyscINFO	Ovid					
Cross-searching tools		Figure 13 Numbe	er of systematic review	vs by review topic a	nd stage of reviewin	g process
Scopus	Else	CALLS.	1.10.20			TOLK.
Web of Science/Social Science Citation Index	Cla	stage	inclusion	Leadership	Assessment	quality

Stage	Inclusion	Leadership	Assessment	High quality teaching	Using targeted interventions	Use of TAs	Working with external support	Working with parents
Abstracts*	325	9	204	1273	492	23	392	147
After Screen 1	58	1	14	128	182	9	45	27
Downloaded	58	1	14	115	141	9	44	27
After full text PICOS	21	1	4	75*	75*	4	8	3
Data extraction	21	1	4	75	61	4	8	3
Used to answer RQ	21	1	4	38	29	3	3	3

Figure 16 Summary of the strength and relevance of the evidence in relation to the review questions, mapped to levels of context

Environment/ Context	Review topic Review question/s	Strength of evidence reviewed (details, where required)	Relevance to England's mainstream schools
	High quality teaching for pupils with SEND 1. What does high quality teaching mean for pupils with SEND? Are there particular adaptations/considerations?	High	High
	2. How should teachers effectively work with pupils with SEND? For example, to what extent should they ensure that learners have independence and autonomy in their learning in order to support progress?	Medium to High	High

Create a positive and supportive environment for all pupils, without exception



Build an ongoing, holistic understanding of your pupils and their needs







Complement high quality teaching with carefully selected small-group and one-to-one interventions



Work effectively with teaching assistants

5



EEF Recommendations



EEF Recommendations



EEF Recommendations



So what stops this from happening?



Ensure all pupils have access to high quality teaching



School A's response to 'Boy with quiff':



Specialist assessment

Intervention

EHCP application

Referral to specialist teacher

Alternative Provision

School B's response to 'Boy with quiff':



A teacher who understands him and allows her understanding of him to change

A teacher who supports peers to understand him

A teacher who has secure routines and provides a consistently predictable learning environment

A teacher who stays calm when things go wrong and starts every day afresh

A teacher who makes small but frequent adjustments to meet his needs

The 'five-a-day' approach



What constitutes high-quality teaching for SEND?

- To a great extent, good teaching for pupils with SEND is good teaching for all.
- It starts with what teachers already know.
- The research suggests 5 teaching strategies:
- -flexible grouping;
- -cognitive and metacognitive strategies;
- -explicit instruction;
- -using technology to support pupils with SEND; and
- -scaffolding.

What constitutes high-quality teaching for SEND?

Explicit instruction – teacher-led approaches focused on teacher demonstration followed by guided practice and independent practice.

Cognitive and metacognitive strategies – explicitly supporting students with the process of learning and with the process of thinking about learning.

Scaffolding – temporary support provided so that pupils can successfully complete tasks that they could not yet do independently.

Flexible grouping – allocating groups flexibly and responsively.

Using technology – finding ways to incorporate digital technology in how the lesson is taught and/or how students access or record their learning.

Explicit instruction refers to a range of teacher-led approaches focused on teacher demonstration followed by guided practice and independent practice. Several reviews of the research on effective support for pupils in mathematics and reading have provided support for explicit instruction.^{11,31} One popular approach to explicit instruction is Rosenshine's 'Principles of Instruction'.

- teaching skills and concepts in small steps;
- using examples and non-examples;
- using clear and unambiguous language;
- anticipating and planning for common misconceptions; and
- highlighting essential content and removing distracting information.

Explicit instruction is not just 'lecturing', 'teaching by telling', or 'transmission teaching'; it usually begins with detailed teacher explanations, followed by extensive practice of routine exercises, and later moves on to independent work.³² Common aspects of explicit instruction include:

Explicit instruction DAILY REVIEW M0 WE FR

Daily review is an important component of instruction. It helps strengthen the connections of the material learned. Automatic recall frees working memory for problem solving and creativity.



02 NEW MATERIAL IN SMALL STEPS







Our working memory is small, only handling a few bits of information at once. Avoid its overload — present new material in small steps and proceed only when first steps are mastered.



03 ASK QUESTIONS



The most successul teachers spend more than half the class time lecturing, demonstrating and asking questions. Questions allow the teacher to determine how well the material is learned.





Students need cognitive support to help them learn how to solve problems. Modelling, worked examples and teacher thinking out loud help clarify the specific steps involved.



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I do - we do - you do
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Students need additional time to rephrase, elaborate and summarise new material in order to store it in their long-term memory. More successful teachers built in more time for this.



06 CHECK STUDENT UNDERSTANDING

Less successful teachers merely ask "Are there any questions?" No questions are are taken to mean no problems. False. By contrast, more successful teachers check on all students.





A success rate of around 80% has been found to be optimal, showing students are learning and also being challenged. Better teachers taught in small steps followed by practice.

08 SCAFFOLDS FOR DIFFICULT TASKS

Scaffolds are temporary supports to assist learning. They can include modelling, teacher thinking aloud, cue cards and checklists. Scaffolds are part of cognitive apprenticeship.





Independent practice produces 'overlearning' — a necessary process for new material to be recalled automatically. This ensures no overloading of students' working memory.





The effort involved in recalling recently-learned material embeds it in long-term memory. And the more this happens, the easier it is to connect new material to such prior knowledge.



From Moor House School: recommendations for teaching learners with Developmental Language Disorder



whether spoken or written model the language

- Does this model describe your current practice?
- Does this model offer anything additional for pupils with SEND?



The 'five-a-day' approach




Recommendation 3: Ensure access to high-quality teaching

Cognitive Strategies



You are about to see a list of the 11 countries in the world that have 4 letters in their name.

I will display this list for 10 seconds.

Without writing them down, how many can you remember?

 Chad Cuba •Fiji •Iran Iraq Laos Mali •Niue •Oman •Peru Togo

How did you complete that task?

1.Relying on prior knowledge.

2.Using your working memory.

3.Identifying a cognitive strategy (grouping them geographically, looking for patterns)

It's clear why pupils with SEND may benefit more from an explicit process of being taught cognitive strategies.

How do we commit things to long-term memory?

1. Understand the content securely.

Cognitive strategies help things to remain more securely in long-term memory.

2.Recall them frequently.



- Supporting pupils to think about/remember content
- Making the process of learning more explicit for pupils
- Factoring in pupils' cognitive load when planning and delivering lessons
- "You might remember this by..."





Cognitive strategies mnemonic interventions: acronyms and acrostics

> "The findings of this review strongly support the efficacy of mnemonic interventions across study methods, educational settings, student ages, and disabilities in the improvement of academic performance, typically measured by recall of word meanings or factual information."

(Wolgemuth et al, 2008)

Cognitive strategies mnemonic interventions: acronyms and acrostics







Brackets Indices Divide & Multiply Add & Subtract



"Across several conditions, settings, and features, the use of graphic organizers was associated with increases in vocabulary knowledge, comprehension, and inferential knowledge."

Dexter et al, 2011









Pros	Cons
 hem 1 hem 2 hem 3 	• Item 1 • Item 2 • Item 3









Cognitive strategies - graphic

organisers

		°
Name: 1 Title:	Jate:	what am I finding o
What I want to find out:		
		What I need
What I think might happe	n:	1
Why:		2
What I need:	What I will observe:	
		What I will do?
Things I will keen the	What I will need to	10 12 9 3
same to make it a fair test:	change:	What will happen?
How I will do the investig	ation:	
		× ,
What do I need to do to stay safe?	Teacher checked	What happened?
sul suist	pian:	

Vhat am I finding out?	
What I need	
1. 2. What I will do?	
What will happen?	
What happened?	
? Why did it happen?	

Cognitive strategies knowledge organisers



"You might remember this by..."

- Mnemonics (acronyms, acrostics)
- Graphic organisers
- Knowledge organisers

Cognition is the mental process involved in knowing, understanding, and learning. Cognitive strategies are skills like memorisation techniques or subject-specific strategies like methods to solve problems in maths. Cognitive strategies are fundamental to learning and are the 'bread and butter' of effective teaching.²⁹





Topic title: Energy	Links to: Year 8: Heating Year 9: GCSE P6.1	Energy	
Key knowledge: An energy store allows work to be done, it provides the ability to do things.	Conservation of energy		In any energy transfer, energy is always conserved (the amount of energy stays the same)
Energy cannot be created or destroyed, but it can be stored and transferred. In any energy transfer, energy is always conserved (the	Kinetic energy	000-000	The energy stored in a movin object
amount of energy stays the same). • There are 5 main energy stores: • Chemical • Kinetic	Gravitational potential energy	1	The amount of energy an object has due to its position in a gravitational field
Thermal Gravitational potential Elastic potential	Elastic potential energy	Barris	The energy stored in a stretched or compressed object, eg. a spring
Energy is measured in joules (J). Energy is stored in food and fuel. Energy in food is measured in kJ and displayed on food	Thermal store		The total kinetic and potentia energy of all the particles in a substance
		the second secon	



Recommendation 3: Ensure access to high-quality teaching

Metacognitive Strategies

"Teaching metacognitive strategies such as self-regulation, planning and monitoring are also effective high-quality teaching for pupils with SEN."

EEF SEND Evidence Review, page 126

Toolkit Strands ↓2	Cost ↓≞	Evidence 1	Impact 18
Metacognition and self-			
regulation	(E) (E) (E) (E) (E)		47
Very high impact for very low cost based on extensive evidence.	00000	88888	
Reading comprehension			
strategies	$(\mathbf{E})(\mathbf{E})(\mathbf{E})(\mathbf{E})(\mathbf{E})$		+6
Very high impact for very low cost based on extensive evidence.	00000	88888	
Oral language interventions	00000	00000	

(£)(±)(±)(±)

Very high impact for very low cost based on extensive evidence.

Metacognition refers to the ways in which pupils **monitor and purposefully direct their thinking and learning**. Metacognitive strategies are **strategies we use to monitor or control our cognition**, such as checking whether our approach to solving a mathematics problem worked or considering which cognitive strategy is the best fit for a task.

- TREE (Topic sentence, Reasons, Examine reasons, Ending), or
- POW (Pick my ideas, Organize my notes, Write and say more) + TREE,
- or strategy instruction (e.g. modelling, collaborative planning, scaffolding, drafting/revising, and collaborative revising).



1. Planning (start of the task):

How will you approach this learning task and why?

2. Monitoring (during the task):

Is your plan working or do you need to try something else?



3. Evaluating (after the task):

What have you learnt about yourself? How will this change your approach next time?

Support pupils to think metacognitively before they begin a task:

Have you done a similar task before?

What strategies have you used to solve this problem in the past?

Do you have what you need to begin the task?

Support pupils to think metacognitively during a task:

Are you making progress to meet the learning goal?

Is your chosen strategy working?

Are you finding this challenging? How are you dealing with that challenge?

Support pupils to think metacognitively after a task:

Did you accomplish your goal?

Could you do the task without support next time?

Did you stay motivated throughout the task?

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Cognitive and Metacognitive Strategies

Cognitive strategies

- 1. What examples of cognitive strategies do we already use?
- 2. Where might additional *cognitive strategy instruction* better support pupils' learning?

Metacognitive strategies

- 1. How effectively do we support pupils to think metacognitively?
- 2. How might we support learners in our subject area to be more metacognitive?







Recommendation 3: Ensure access to high-quality teaching

Scaffolding

Consider the metaphor. Why do we use the term 'scaffolding'?



Scaffolding

Scaffolding is a metaphor for temporary support that is removed when no longer required. It may be visual, verbal or written.

Visual
Verbal
Written

- A task planner
- A list of the steps a pupil needs to take
- Model examples of work
- Images that support vocabulary learning

What do I meed?	1 2 1	_:_	
What do I need to	aio?		
<u>85</u>			
2			_ 0
a			
Anything atta?			
Research		aw long?	(

Scaffolding

Scaffolding is a metaphor for temporary support that is removed when no longer required. It may be visual, verbal or written.

- Visual
 Verbal
 Written
- "Let's look at this together ... "
- "What have you done before, that will help you with this task?"
- "Don't forget, your work needs to include..."



What worked well? Did you have any challenges? What are your next steps?

Self-scaffolding

Prompting

Remember when we started with the largest digit? (refer to previous learning) Could you use a number line? Which number would you start with, the largest or the smallest? Clueing

Correcting/

Where should we start? What did I do first? What do you need first? What will you do next? Which way do we ...? How could we ... You have a think....

I am going to show you .. Watch carefully .. First I am going to .. Next I am doing .. I'm reading the instructions to follow .. When I've finished, it will be your turn

Scaffolding

Scaffolding is a metaphor for temporary support that is removed when no longer required. It may be visual, verbal or written.

- VisualVerbalWritten
- A word bank
- A writing frame
- Sentence starters



Recommendation 3: Ensure access to high-quality teaching

Scaffolding

- 1. How well-embedded are scaffolds in our school?
- 2. What needs to happen in order to provide more effective scaffolds for pupils?





Flexible grouping

All pupils need support sometimes.

Intelligence is not fixed.

Responsive grouping.





Joey





Removing him from good teaching

Targeting the wrong thing

Lowering expectations of what's possible

Flexible grouping - 'within-class' groupings

4. One advantage of within class grouping might be flexibility in grouping arrangements. Pupils progress at different rates so regular monitoring and assessment is important to minimise misallocation and ensure challenge for all pupils. The teacher builds in formative assessment, so they can obtain an accurate and current understanding of which pupils need support.

The teacher notices that 4 pupils haven't yet mastered new content.

During independent practice, the teacher takes those 4 pupils to the spare desk in the classroom, to reteach a key aspect of the content.

Following the reteach, the teacher uses further formative assessment to gauge that pupils have now moved past this misconception. They return to their desks and begin their independent work.
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Flexible grouping

- 1. How much is it a part of your current practice to provide within-class interventions as a teacher?
- 2. What would need to change in order to develop this further?

Using technology

A visualiser

Speech-text software

Apps that support procedural practice



2) The revival of patrest in greak and Ripman thought during the and the fill Readsome. I Chiacosurdithe use of light and shade indrawing and Aristian sp B B) Exaltert offert considering you had missed al esson(s) usesday Dre sertence on what diascuro is. 2) What Caused the Renaissance? The main Cause was the 20th Pritiog Press which was a machine with uses movable to Print words J Sp. X revival

2) What is Hummism? The Service thought during the Remissionce

The Indulgence Trade

who dud he choose to be a Winen did Pope Gregory I brome Pope

In 590, a new man became Pope. He was known as Pope Gregory I, or Saint Gregory the Great, because he believed deeply in the teachings of Christianity and wanted to spread them throughout Europe. Gregory was an earnest man who believed it was his duty to convert others to his faith. He knew that many people in Britain were not Christians and he wanted to ensure that they all became members of the Church during his time as Pope. He chose a monk called Augustine to become his messenger to the Anglo-Saxons.

0

Augustine had spent much of his life in a monastery which followed the Rule of St

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Using technology

- 1. Is technology a help, a hindrance or an irrelevance to our current practice?
- 2. Do we make best use of the technology available, to support pupils to understand, record and/or learn content?





Within your department, how well/how consistently are these five approaches embedded?



Five-a-day reflection tool

Use the reflection tool to consider your own teaching practice for pupils with SEND.

REFLECTING ON YOUR PRACTICE Every teacher as a teacher of SEND

The EEF's Evidence Review found strong evidence that teachers should use 5 'adaptive teaching' strategies as part of improving outcomes for students with SEND.



Use the questions below to reflect on how consistently you embed these '5-a-day' into your current teaching practice:

		To what extent do I	Reflections
1	Explicit instruction	use clear and succinct language in my teaching, checking pupid' understanding frequently?	
		use dual opding to aid students' understanding of new content?	
		model how to complete a task before expecting pupils to work independently?	
2	Cognitive and metholognitive strategies	support all students to recall previously learned content, before moving on to new content?	
		help students to organice their thinking by "chunking" the content and introducing new material in small steps?	
		support students to plan, monitor and evaluate their own learning?	
3	Scaffolding	provide scatfolds (visual, verba) and oral) that allow all pupils to above the learning?	
		provide scatfolds in a non-stigmatising way (providing them at the whole-class level, allowing students to opt-in to a scatfold for a particular task)?	
4	Flexible grouping	group students in a way that reduces stigma, by ensuring such groups are based on current difficulty rather than being fixed?	
		promote peer tutoring, placing my students in groups in which they learn from one another?	
5	Using technology	« utilise technology such as a visualiser when modeling work for students?	

use technology to bein students to record their





Questions, comments, reflections?

Thank you

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