

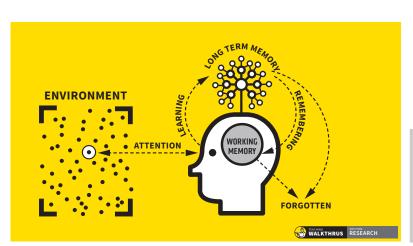
Great teaching:

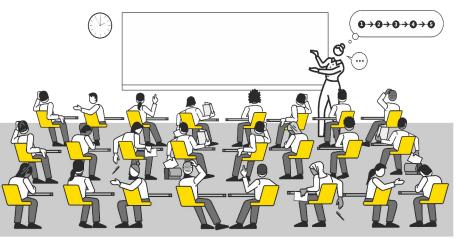
every lesson, every day, for every child

OAT ANNUAL LEADERSHIP CONFERENCE

How we can Teach Every Child

Tom Sherrington @teacherhead









Principles of teaching



1. Ambition for all

Everyone can excel: children achieve more than they thought possible because teachers uphold the highest expectations of engagement, effort, work ethic, and academic challenge.



5. Ambitious communication

Carefully sequenced instruction ensures new knowledge and skill are acquired quickly: children are highly engaged because learning is made memorable and meaningful.



2. Climate for success

Creating the right conditions for deep learning and flourishing: a climate of warmth, positive relationships, mutual respect and trust ensures children feel valued, safe and have the resilience to enjoy the challenge.



6. Purposeful practice

With guided practice and rehearsal, children become more confident, more fluent, and more independent to consolidate learning and apply in new situations.





3. Intellectual preparation

Teachers are experts and are passionate about what they teach, how they teach it and who they are teaching.



7. Checking for understanding

Diagnostic strategies sample the understanding of all children so that teachers know how well new knowledge and skills have been received and tackle any misconceptions in the moment.





4. Adaptive teaching

Excellent preparation ensures that the ambitious curriculum is made accessible and challenging for all children: teachers know children well and understand their needs and talents.

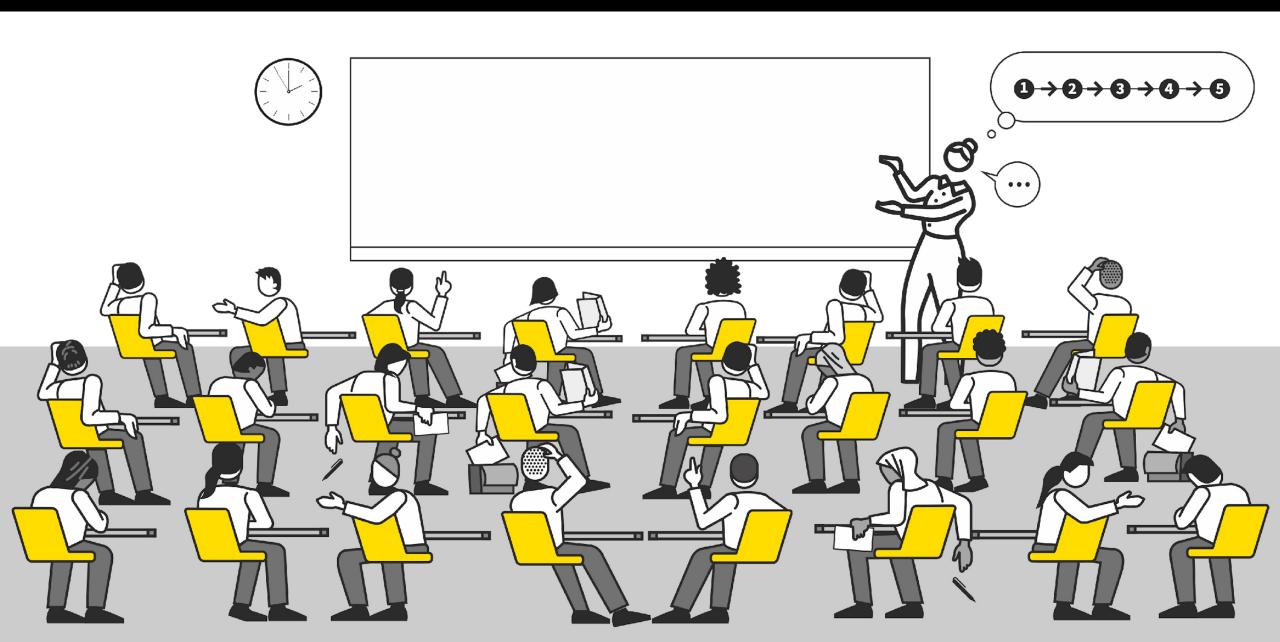


8. Effective feedback

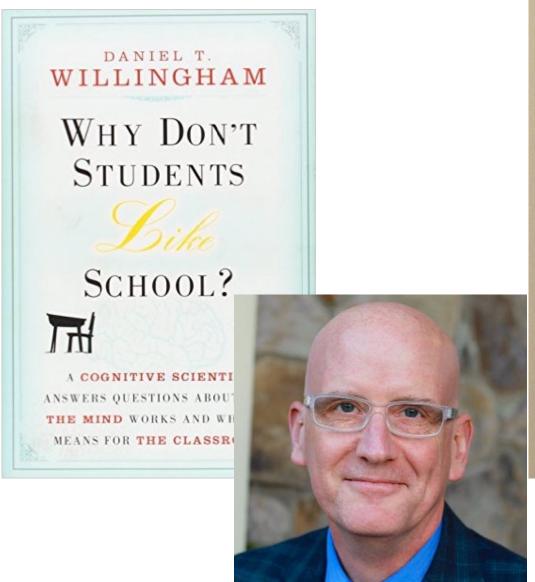
Children's self-awareness, confidence and performance are improved: teachers create regular opportunities for meaningful feedback that moves learning forward and focuses on the current gaps in knowledge, skills or behaviour for learning.

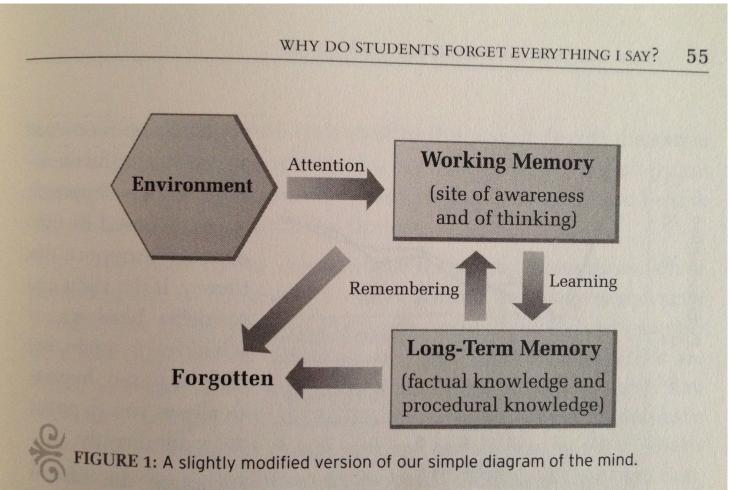


The classroom | complex environment



The research | A model for learning

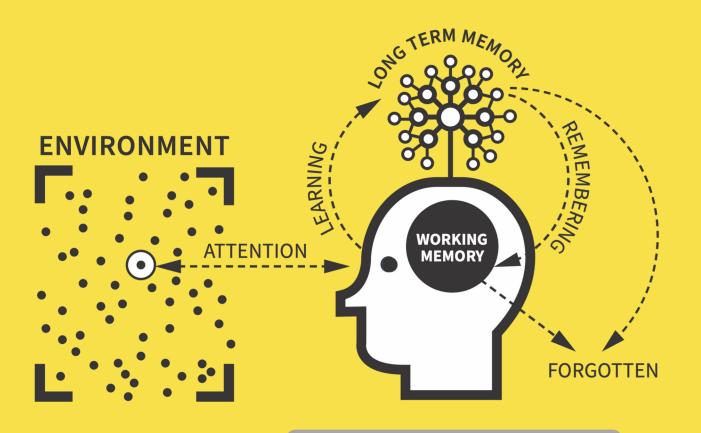






Memory model | teachers too

Lack of prior knowledge



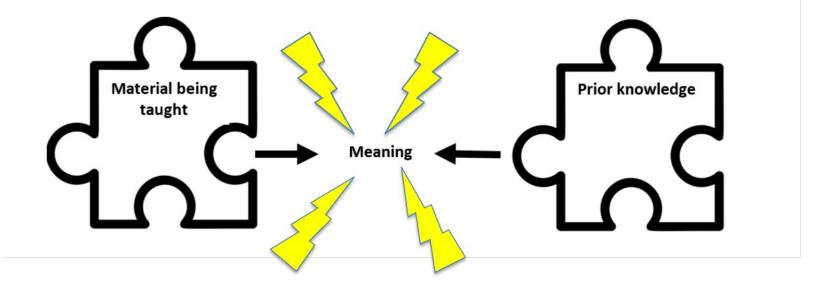
Insufficient fluency of recall
Task completion: poor proxy for learning

Memory overload

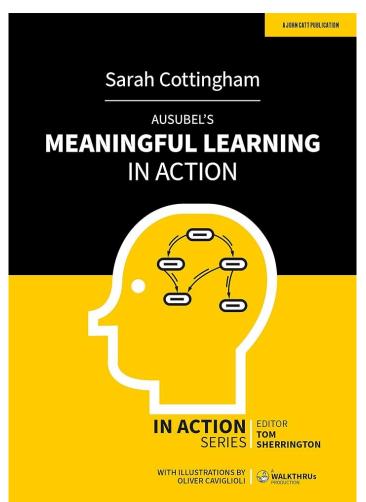


The research | A model for learning

When relevant aspects of new material you are teaching meet related ideas in pupils' minds, meaning emerges (Ausubel, 2000).



Sarah Cottingham: overpractised.wordpress.com





The research | A model for learning

Responsive Teaching:

instructional inputs, eliciting evidence, adaptive feedback loops

Creating conditions such that

ALL

students are:

Thinking

attention, goals, activating knowledge

Making Meaning

prior knowledge --> secure schema

Practising

consolidation, fluency, application



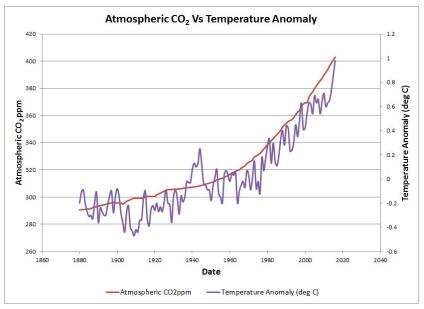
Why do we need wind farms?

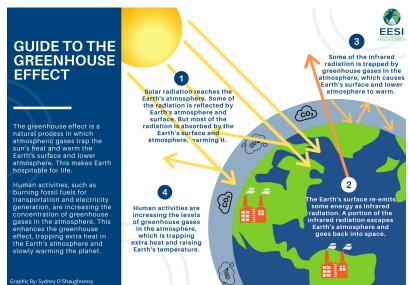




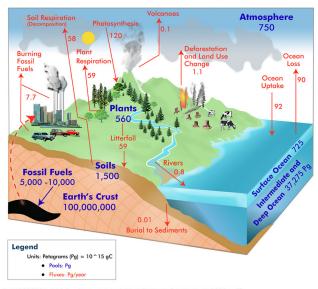








Global Carbon Cycle



Copyright 2010 GLOBE Carbon Cycle Project, a collaborative project between the University of New Hampshire, Charles University and the GLOBE Program Office.

Data Sources: Adapted from Houghton, R.A. Balancing the Global Carbon Budget. Annu. Rev. Earth Planet. Sci. 007.35:313-347, updated emissions values are from the Global Carbon Project: Carbon Budget 2009.

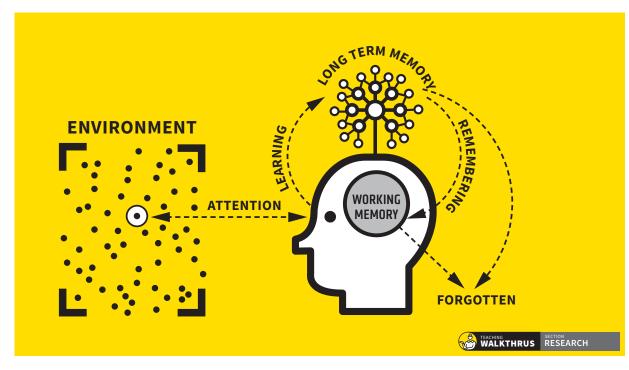
Why do we need wind farms?





Lack of prior knowledge

Attention deficits



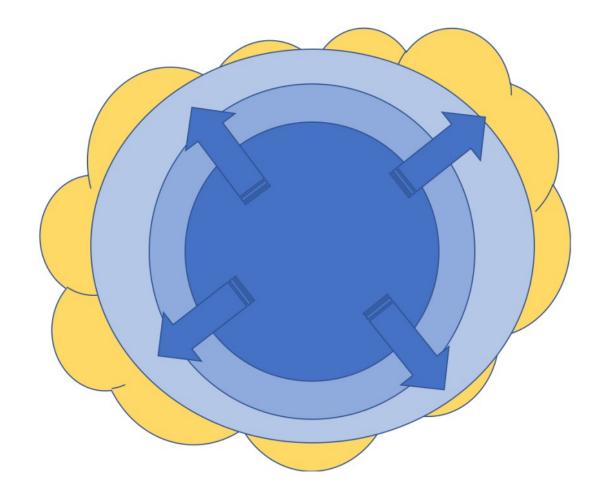
Poor fluency of recall

Memory overload (transience)

Task completion poor proxy for learning



To address underachieving groups, teach everyone better





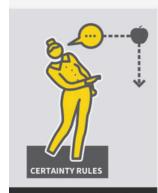
Walkthrus A toolkit for teachers

WALKTHRUS

VISUAL STEP-BY-STEP GUIDES TO ESSENTIAL TEACHING TECHNIQUES

A John Catt Publication

TOM SHERRINGTON
&
OLIVER CAVIGLIOLI



BEHAVIOUR & RELATIONSHIPS

Establish classroom conditions essential for effective learning



Create a coherent, well-sequenced knowledge-rich curriculum



Make sense of complex ideas to support students in building secure schema



Use responsive teaching methods to check students' understanding and move them forward



Build secure long-term memory and fluency



Deliver a range of learning experiences to deepen and extend learning

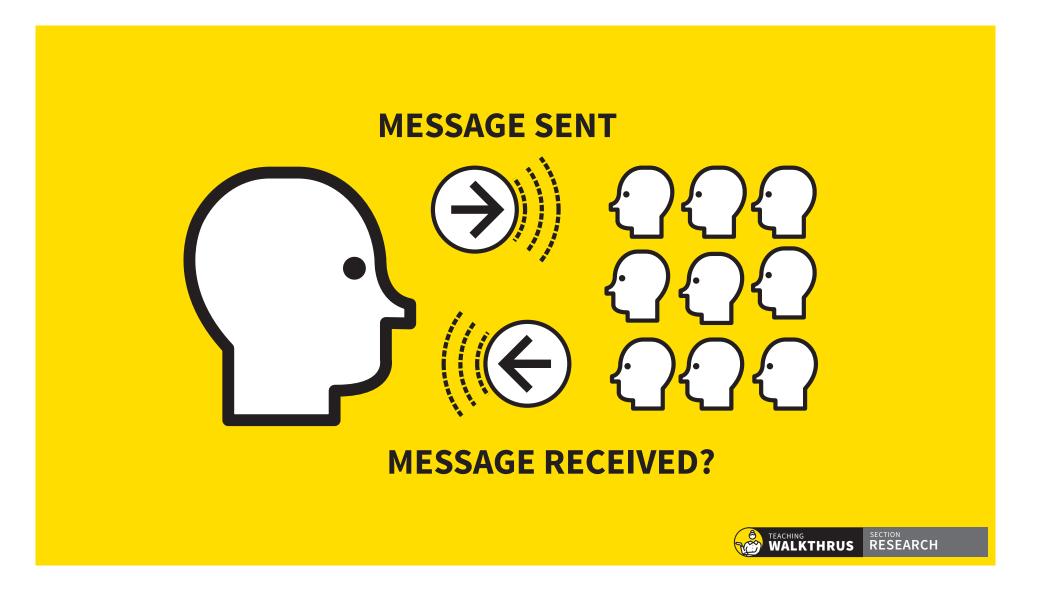


1.Teacher mindset

- 2. Effective testing and checking protocols.
- 3. Checking for understanding.
- 4. Effective questioning techniques
- 5. Effective scaffolding
- 6. Deliberate Vocabulary Development



Six Core Strategies | Teacher Mindset.





Six Core Strategies | Teacher Mindset.





Six Core Strategies | Teacher Mindset.

Solution: switch into the right mindset:

From "Does anyone know"? to "Does everyone know?"

From "Can anyone do it?" to "Can everyone do it?"

From "Well done to those getting it right" to "Let's find out who still can't get this right and help them out".

From a dominant emphasis on seeking affirmation in correctness to familiar routines around seeking out residual errors and difficulties.



Six Core Strategies All, not just some.

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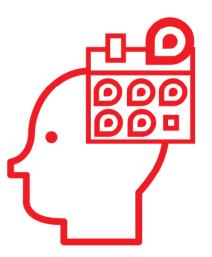


REVIEWING MATERIAL °

Daily review

Weekly and monthly review







Elaboration

Concrete Examples

Interleaving



Retrieval Practice

Spaced Practice

Dual Coding



QUIZZING





SPECIFY THE MATERIAL IN ADVANCE



ASK A SET OF SHORT FACTUAL RECALL QUESTIONS, VARYING IN STYLE



GIVE ALL STUDENTS TIME TO ANSWER ALL OF THE QUESTIONS



PROVIDE THE
ANSWERS FOR
STUDENTS TO
SELF OR PEER-CHECK

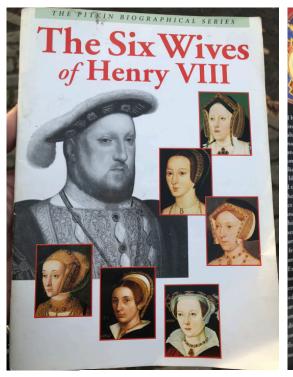


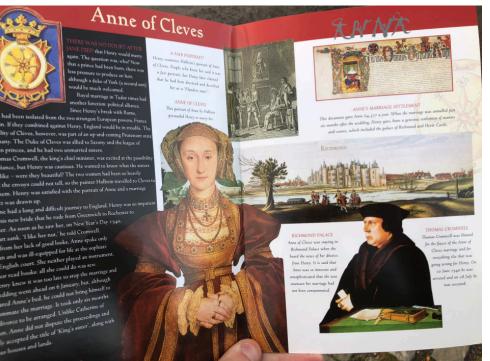
AFFIRM GOOD PERFORMANCE AND SEEK OUT WRONG ANSWERS

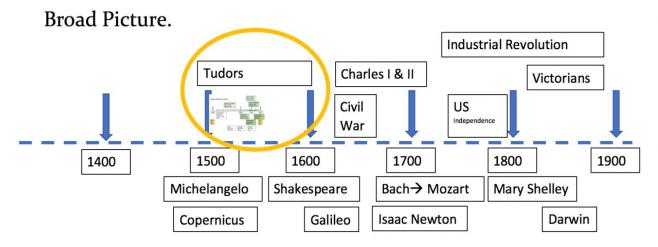














	Catherine of Aragon	Anne Boleyn	Jane Seymour	Anne of Cleves	Catherine Howard	Catherine Parr
Years as Henry's Wife	1509 – 1533	1533-36	1536-37	1540 Six Months	1540-42	1543 until his death in 1548.
How known to Henry	Married to his brother 1501	Courtier. Consorted with Henry 1526-32	Lady-in-waiting to her predecessors.	Met just before marriage. Arranged for alliance building	Anne of Cleves' Lady in Waiting	Known to family. Friend of Mary.
Heirs?	Mary Later Queen No male heir.	Elizabeth Later Queen	Edward Later King	No	No	No
What Happened	Divorced so H could marry AB. Henry changed law so divorce not blocked by Pope.	Beheaded Tower of London	Died with childbed fever.	Divorced. Marriage annulled after six months.	Beheaded	Survived Henry Died a year later in Childbirth with new marriage.
Significant information	Catholic From Spain Daughter of Ferdinand and Isabella. 'Pious' Divorce was origin of separation from Rome leading path to England as Protestant state	From Norfolk European Education Miscarriages Accused and sentenced for treason and adultery.	Henry 'grief stricken'. Then not married for over two years.	From Germany A Protestant state. Strategic marriage but a disaster Thomas Cromwell blamed for arranging it - amongst other things - and was also beheaded.	Found to have had affairs before marrying Henry and during marriage. Henry 'wept with rage and self-pity'	Cared for Elizabeth and Edward. Later married Thomas Seymour, Jane's brother. Had child with Thomas but died with child-bed fever.





Why did Henry break from Rome?

Love? Power? Faith? Money?

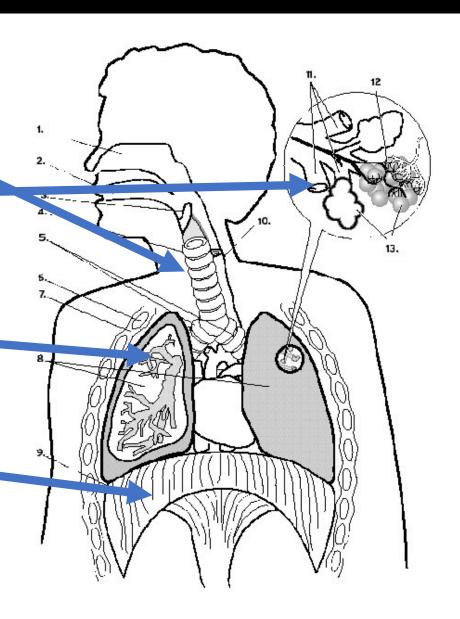


Trachea

Alveolus

Bronchiole-

Diaphragm





Six Core Strategies All, not just some.

- 1.Teacher mindset
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The research | Checking for Understanding

Have you understood?

What have you understood?



Recreational

Dependent



Six Core Strategies | Checking for Understanding

METACOGNITION AND
SELF-REGULATED LEARNING
Guidance Report









Six Core Strategies | Checking for Understanding

Ask "process questions"

• What is 7 cubed? → How did you work it out?

 What is the main cause of global warming? → Why did you chose that one?

 What do you think Heaney means by 'space is a salvo'? → How did you come to that conclusion?

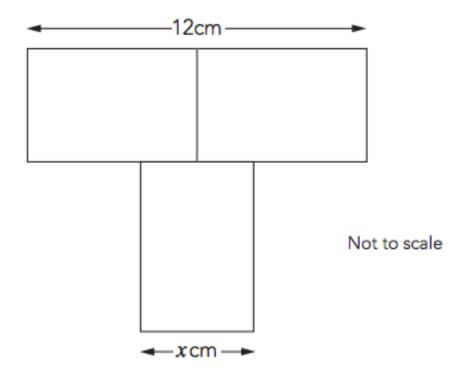


Six Core Strategies | Checking for Understanding

4

Here is a T-shape made from 3 identical rectangles.

The area of the T-shape is 90cm²





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Six Core Strategies | Effective Questioning Strategies

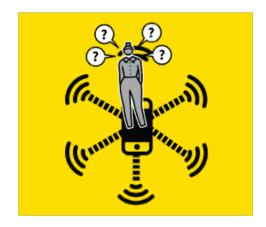




Six Core Strategies | Effective Questioning Strategies

COLD CALLING

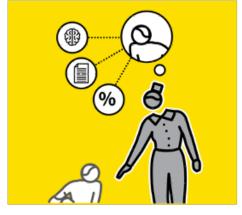




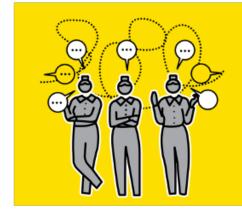
ASK THE CLASS THE QUESTION



GIVE THINKING TIME



SELECT SOMEONE TO RESPOND



RESPOND TO THE ANSWERS

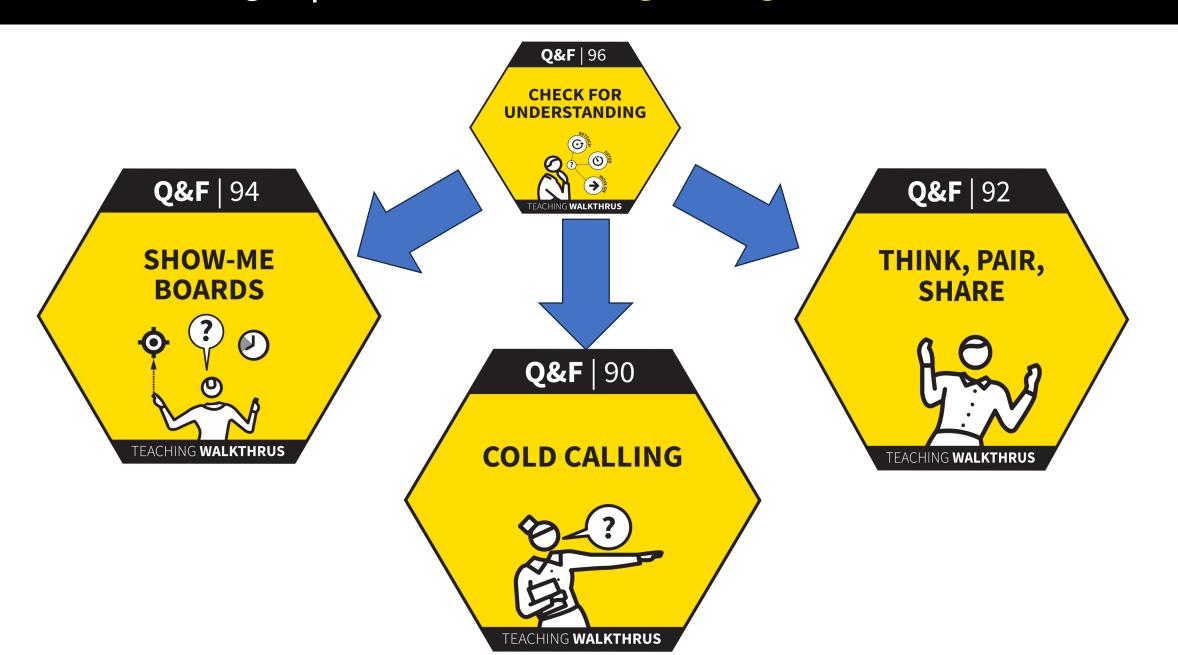


SELECT ANOTHER STUDENT AND RESPOND AGAIN



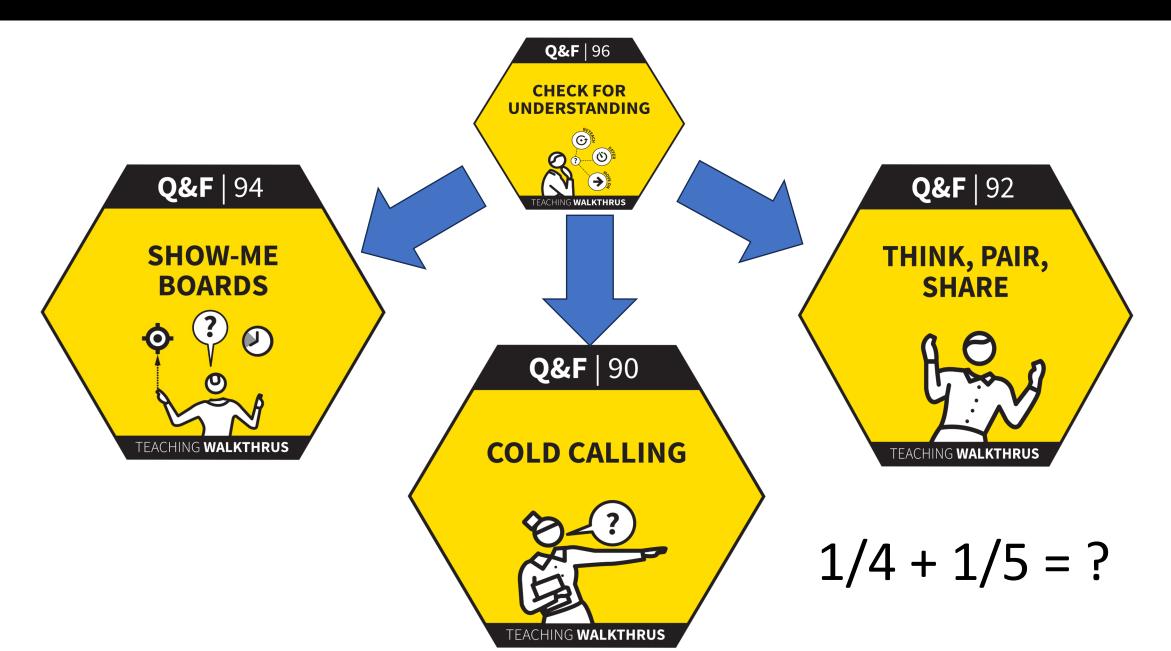


Six Core Strategies | Effective Questioning Strategies





Six Core Strategies | Effective Questioning Strategies





Six Core Strategies | Effective Questioning Strategies



Give three reasons for charging people to climb Snowdon. *Firstly, secondly, and finally...*

Suggest two opposing reasons for and against charging people to climb Snowdon.

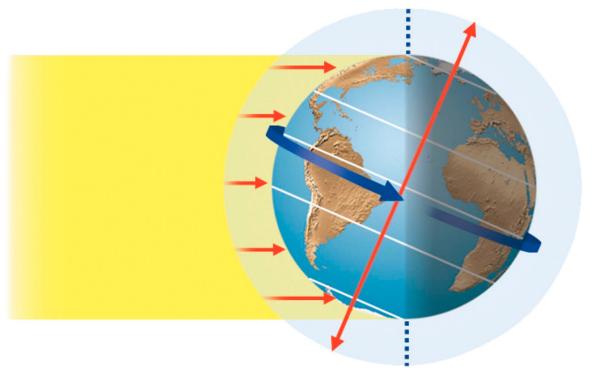
On one hand but on the other hand..



Six Core Strategies | Effective Questioning Strategies

Why does the sun rise in the East?







Six Core Strategies All, not just some.

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- 3. Checking for understanding.
- 4. Effective questioning techniques
- **5.Effective scaffolding**
- 6. Deliberate Vocabulary Development



SCAFFOLDING





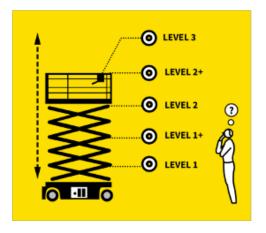
MAP OUT THE COMPONENTS OF A TASK



PROVIDE SUPPORTS AT A DETAILED LEVEL



PROVIDE SUPPORTS AT OVERVIEW LEVEL



PREPARE SCAFFOLDING SETS OFFERING VARYING LEVELS OF SUPPORT



TAKE THE SCAFFOLDING DOWN

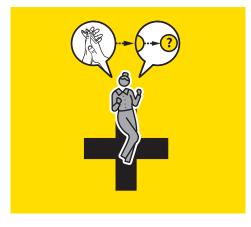


SAY IT AGAIN BETTER





ASK A STUDENT A QUESTION



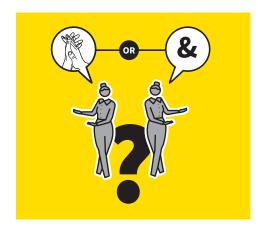
ACKNOWLEDGE THE FIRST RESPONSE



GIVE SUPPORTIVE FORMATIVE FEEDBACK



INVITE STUDENT TO "SAY IT AGAIN BETTER"



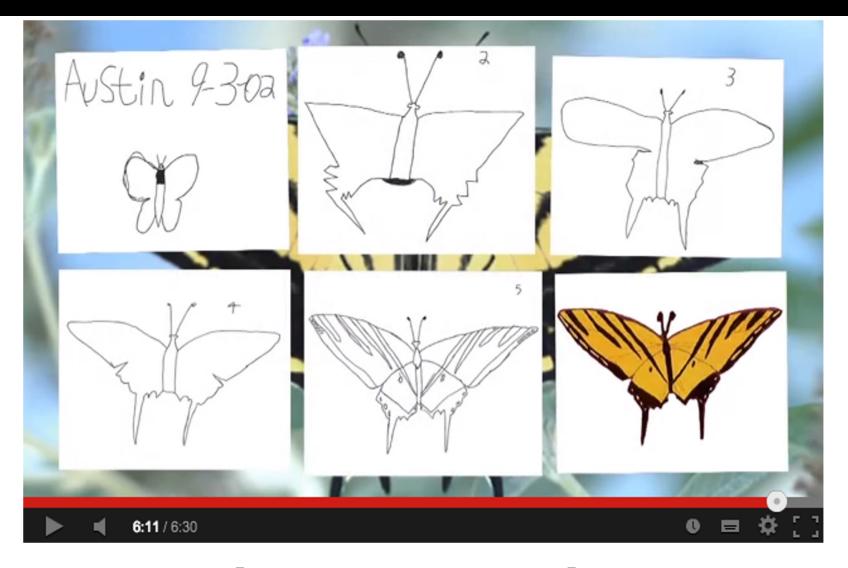
RESPOND TO THE IMPROVED RESPONSE



Six Core Strategies | Scaffolds for dialogue

- Full sentences. *An example of a non-metal is...*
- At first..... Then
- In my opinion...
- Firstly.... Secondly.... And finally...
- On one hand.... On the other hand.
- An advantage of whereas a disadvantage...
- X happens because...
- If X happens... this in turn causes...





Critique → Redrafting → Excellence



Six Core Strategies | Scaffolding: Worked Examples

$$= 0.18 \times 65$$

$$= 0.37 \times 120$$

$$= 0.68 \times 1050$$



Frankie: annotations

Piece A: Short story	Key
Prior to writing a short story set during World War 1, pupils wrote these short pieces to practise their skills in developing suspense and building tension in a familiar, everyday situation.	[C] composition [GP] grammar and punctuation [T] transcription

These 2 short pieces describe a midnight fridge-raid from contrasting third and first person perspectives, demonstrating confident control over language, sentence structures that are carefully chosen for effect and precise vocabulary choice.

A tense atmosphere is created across both paragraphs through the use of short sentences and phrases, and apt vocabulary choices (darted, grabbed, bolted). This is lightened by juxtaposing humour with tension (distant snoring; his heart raced) and the succinct integration of dialogue ("Ewan!") as the climax to the first paragraph.

A range of cohesive devices links ideas

Opening the Fridge

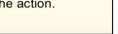
Slowly, Ewan peeped through the crack in his door. All was black. He took a step out. He could hear distant snoring as he creeped crept across the landing.

As his heart raced he stared into the darkness; he could hear the fridge urging him on – willing him to move.

Now the stairs. The tricky bit. Suddenly a THUD!... He raced down the creaking stairs - even the seventh one that makes an earsplitting noise creak. He could see the re white rectangle straight ahead of him. Then he opened it.

A series of short phrases in quick succession creates a sense of urgency and excitement, echoing Ewan's thoughts as he sneaks downstairs. The structure of the scene and the language employed mirror that from scenes in adventure or ghost narratives, applied here to a more humorous context. [GP]

The selection of verb forms - past and present tense - distinguish between the past tense narrative and the current state of the seventh stair, placing the reader at the heart of the action. [GP]





All of a sudden, the door flew open. It was Dad.

All of a sudden, the train stopped. She gripped her seat.

All of a sudden, it poured with rain. They ran for cover.

All of a sudden, the lawn-mower exploded.

All of a sudden, ______. ____.



Throughout the novel, the	a structure that helps to discuss a
author	long-running theme.
At first glance, the character	a structure supporting comparison
appears however	between surface and deep features
	of a character.
Both poems	a structure for comparing two
However, poem A	poems.
whereas poem B	



Write an account of how events in Hungary became an international crisis during 1956. [8 marks]

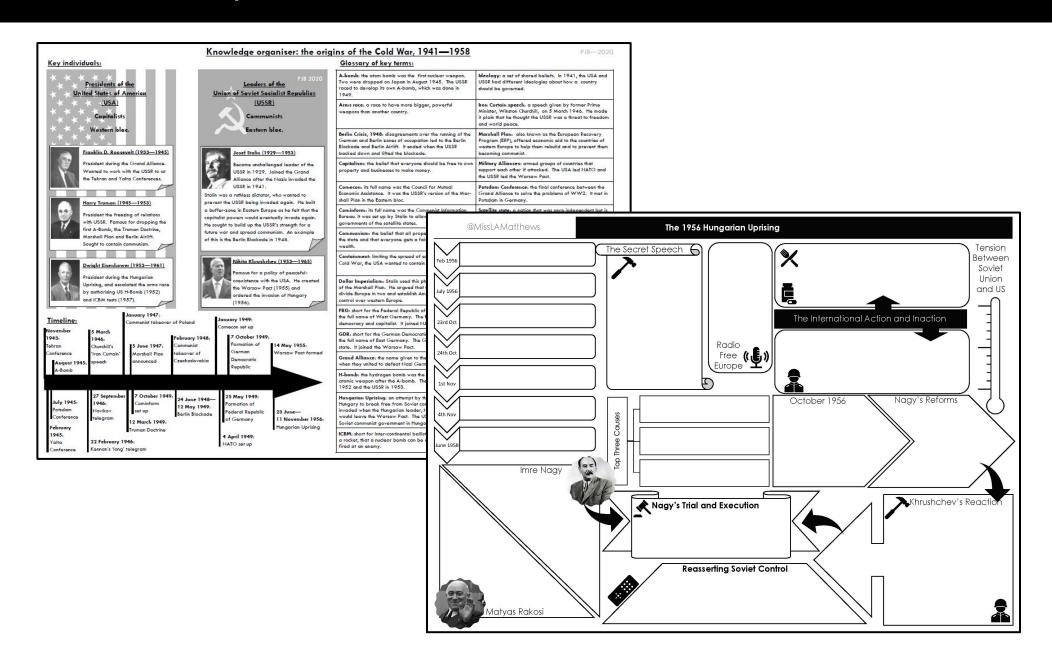




One reason how events in Hungary became an international crisis was that the West criticised the violent Soviet reaction. For example, when Nagy threatened to leave the Warsaw Pact, Khrushchev was afraid that this would weaken communist power. Khrushchev decided to send thousands of soldiers and tanks to Budapest, which resulted in over 10000 people being killed. This was an international crisis because it led to a war of words between the USA and USSR after the US objected and President Eisenhower openly criticised the Soviets.

Another reason why it was an international crisis was because it was the end of peaceful co-existence between the USSR and the West. For example, before the Hungarian Uprising, Khrushchev tried to ease relations between the USSR and the West, releasing political prisoners and criticising Stalin. However, after he was criticised in the UN by the USA and its allies, Khrushchev ended this policy. This was an international crisis because the thaw ended and relations in the Cold War were damaged after the West said that the USSR couldn't be trusted, which led to more problems in the 1960s.





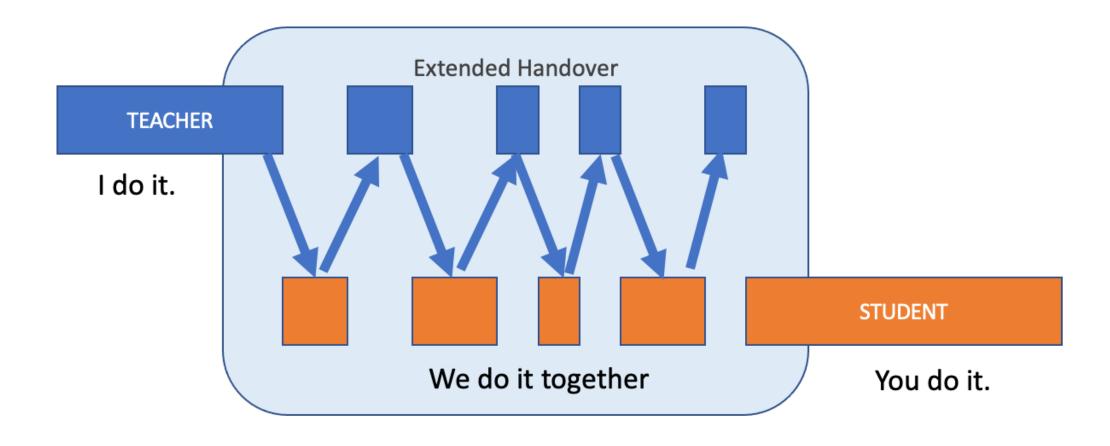


Passing the baton....





Six Core Strategies | Modelling handover





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DELIBERATE VOCABULARY DEVELOPMENT





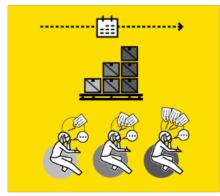
SPECIFY AND DEFINE THE WORDS



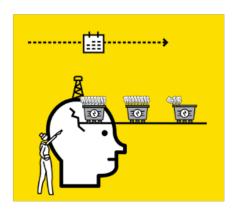
SAY THE WORDS



READ WORDS IN CONTEXT



PRACTISE USING THE WORDS VERBALLY AND IN WRITING



ENGAGE IN WORD-BASED RETRIEVAL PRACTICE





Vocab Test

- Stercoraceous
- Sesquipedalian
- Defervesence
- Eucatastrophe
- Commensalism
- Prosopagnosia



Tom's talk at the OAT Conference

In a panic about his prosopagnosia, Tom scanned the room. He drew a blank as usual. Thank goodness; he could feel the defervesence after having eaten that stercoraceous porridge for breakfast.

He hoped for a degree of commensalism between himself and the audience - despite his habitual sesquipedalian delivery - and the usual eucatastrophe as he delivered the punchline.

Laughter. Relief. It was over.



Word	Meaning
Stercoraceous	consisting of or resembling dung or faeces.
Sesquipedalian	characterised by long words; long- winded.
Defervesence	the abatement of a fever (cease boiling)
Eucatastrophe	a sudden and favourable resolution; a happy ending.
Commensalism	two organisms; one benefits; the other derives neither benefit or harm
Prosopagnosia	inability to recognise faces of familiar people.



Word	Meaning
	consisting of or resembling dung or faeces.
Sesquipedalian	
	the abatement of a fever (cease boiling)
Eucatastrophe	a sudden and favourable resolution; a happy ending.
Commensalism	
	inability to recognise faces of familiar people.



Which is correct?

- A. Sesquipedalian people are in their 70s.
- B. The man felt sesquipedalian after his operation.
- C. John was a rather sesquipedalian speaker; his audiences would sometime lose focus.
- D. The speech was full of sesquipedalian facts that didn't support her main argument.

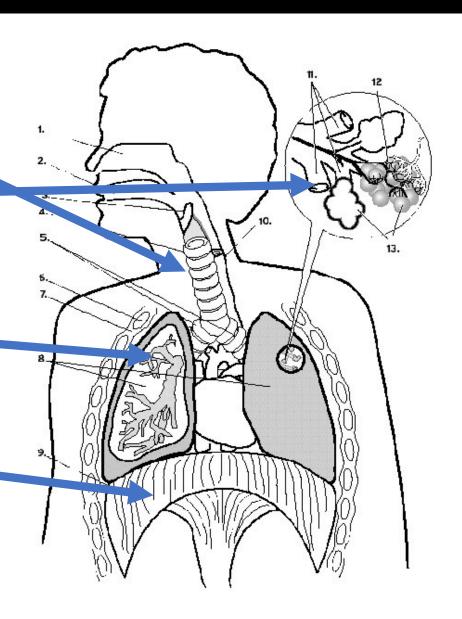


Trachea

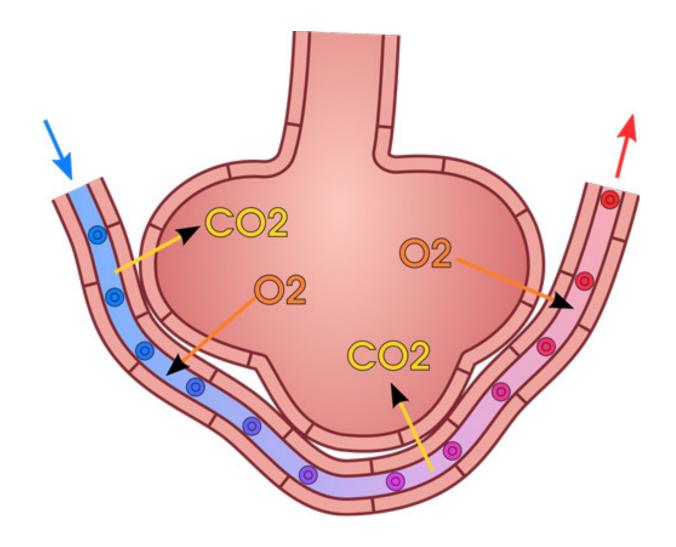
Alveolus

Bronchiole-

Diaphragm







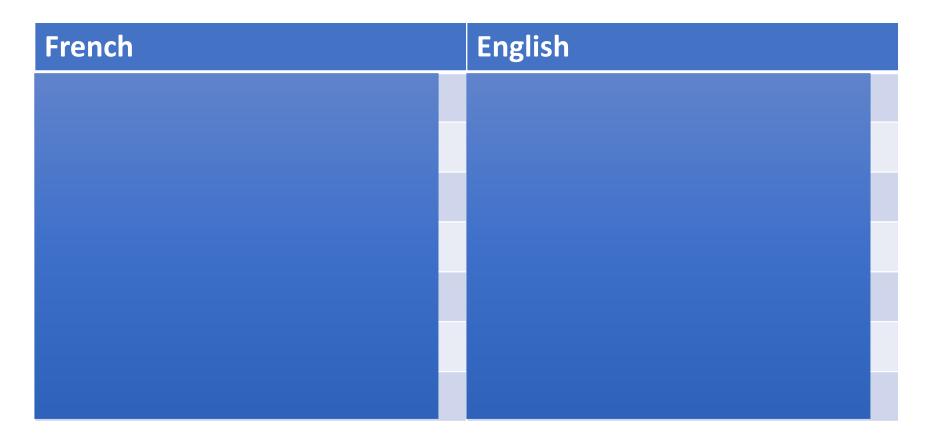


Key concepts

- Capillary small, bring blood close to surface
- Oxygen from air needed for respiration
- Carbon dioxide waste product of respiration
- Diffusion (high conc to low conc)
- Large surface area; gas exchange
- Deoxygenated; oxygenated

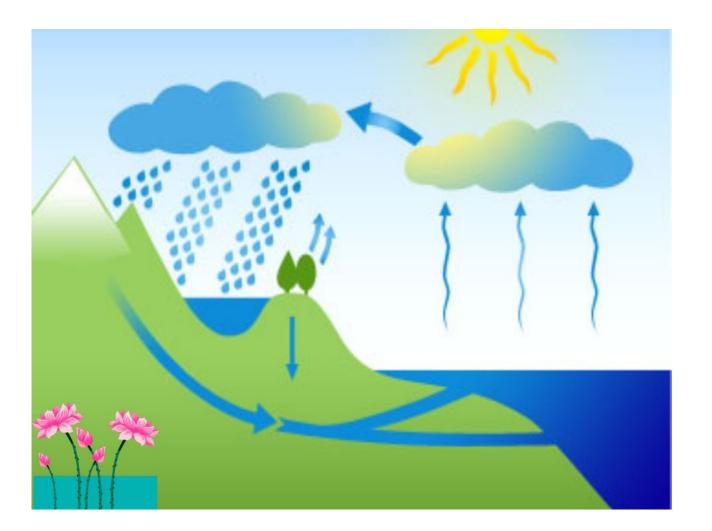


French: Specific phrases to be learned:





Summarise the process: "Tell the story" Harness narrative structures.



Key Words

Evaporation

Convection

Condensation

Precipitation

Energy

Warm/Cool

Flow

Vapour

Fall/rise



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Carefully sequenced instruction ensures new knowledge and skill are acquired quickly: children are highly engaged because learning is made memorable and meaningful.



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With guided practice and rehearsal, children become more confident, more fluent, and more independent to consolidate learning and apply in new situations.





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Teachers are experts and are passionate about what they teach, how they teach it and who they are teaching.



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Diagnostic strategies sample the understanding of all children so that teachers know how well new knowledge and skills have been received and tackle any misconceptions in the moment.





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Excellent preparation ensures that the ambitious curriculum is made accessible and challenging for all children: teachers know children well and understand their needs and talents.



8. Effective feedback

Children's self-awareness, confidence and performance are improved: teachers create regular opportunities for meaningful feedback that moves learning forward and focuses on the current gaps in knowledge, skills or behaviour for learning.

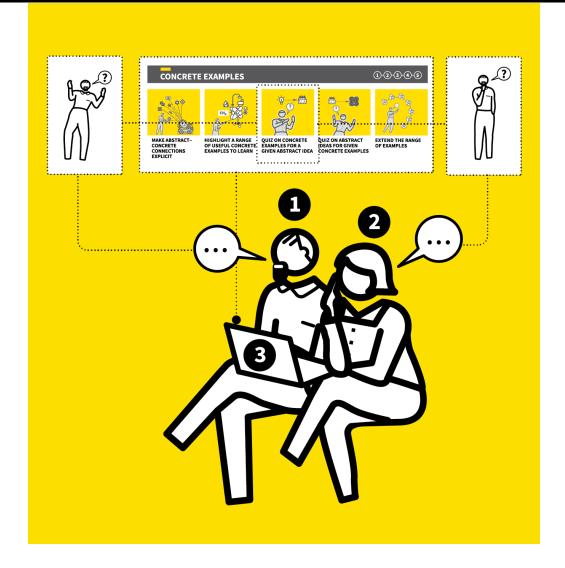


Simple Version | Three Checks...





The process | CPD, Coaching



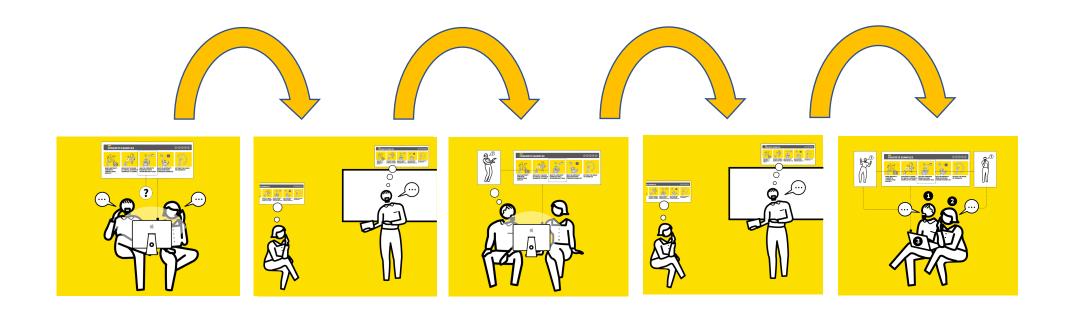
INSTRUCTIONAL COACHING

- 1) INVITE, SELECT & APPLY THE A|D|A|P|T PROCESS
- (2) COACH MODELS THE WALKTHRU IN ACTION
- (3) REVIEW THE OBSERVATION & ANALYSE THE PERCEPTION
- (4) COACH OBSERVES THE TEACHER'S WALKTHRU
 - MEET FOR REVIEW, FEEDBACK & PLANNING





The process | CPD, Coaching





Thank you.

Tom Sherrington @teacherhead

teacherhead.com



