TOM SHERRINGTON & DAVID GOODWIN

FIVE WAYS

A series of short posts and one-pagers summarising some everyday classroom practices.

What's inside?

The Authors

TOM SHERRINGTON is a consultant CPD provider and author. Most of his time is spent supporting teachers and school leaders with the challenges of teaching effectively, helping schools and colleges to design powerful professional development and coaching systems. His work as an author has most recently focused on the Teaching Walkthrus five-step visual guide series co-written with Oliver Caviglioli. This has led to the development of walkthrus.co.uk where schools join as members to access a range of CPD tools. Tom's blog teacherhead.com has now been going for 10 years.

DAVID GOODWIN is an Assistant Principal, a Geography Teacher, and a writer and illustrator of education ideas. He is also a specialist leader of education (SLE) and evidence lead education (ELE). His debut book, co-authored with Oliver Caviglioli, was 'Organise Ideas, Thinking by Hand and Extending the Mind'. He also wrote and illustrated Annie Murphy Paul's the Extended Mind in Action alongside Emma Turner and Oliver Caviglioli and, more recently, Year One with Michael Chiles. David has a background in graphic design, and you can find him on Twitter @MrGoodwin23.

Our Five Ways one-pagers emerged from a recognition of the amazing appetite teachers seem to have for teaching ideas expressed simply, concisely and in an easily accessed visual format. Each of our one-pagers started off as a blog post on teacherhead.com - you can follow the hyperlinks on each page to read the full post. The problems we're addressing have been selected based on Tom's experience observing teaching in multiple contexts. The themes emerged organically — so it's not meant to represent a definitive set of problems — they are just 10 ideas that suggested themselves as good contenders for this kind of approach.

The idea of 'five ways' is to present teachers with a range of practical actions they can take to address the specific problems, in any order or combination. They are all realistic, implementable ideas. It would be worthwhile simply picking one of the five ways for one of the areas as a focus for trying to improve lessons and student outcomes before, perhaps, adding them in combination for an even greater effect.

The visual summaries are intended to make it easy for busy teachers to engage with the five ideas without having to wade through a lot of text. They can be easily distributed by email or a display but our main hope is that they provide a stimulus for team discussions or personal reflection with a focus on putting the ideas to use in the classroom.

We dedicate this booklet to Oliver Caviglioli. Like so many, we have benefitted from his encouragement and advice. It is fair to say that were it not for his generosity and expertise, this booklet, and arguably the one-pager concept, would not exist. We salute you, chum.

CONTENTS

Five Ways To: Weave Reading into the Curriculum

> It's uncontroversial – uncontested – that reading fluency is a key component in students' wider learning capacity and confidence and yet it is actually possible for some students to go through a school day or week without doing very much reading at all.

There is a combination of factors that can reduce students' reading volume

Here are a few. The first, and arguably the easiest to fix, is students encounter too many ideas via their teacher's PowerPoints. Secondly, students often engage with the content by listening to their teacher or peers but do not necessarily have to read along. Thirdly, there is little motivation for students to read if there are no expectations for them to do something meaningful with what they learn. Finally, English is the only subject where students encounter extended prose.

Five ways to weave reading into the curriculum

1	Present info via text rather than powerpoint
2	Buy textbooks or prepare workbooks
3	Develop accountable reading routines
4	Develop oral or echo reading routines
5	Set accountable reading tasks for homework

Mix up how you present info

Where could you switch and mix things up so that students have text to read instead of relying on your slides? Be conscious that unless you present information via reading text, students will have to rely on your presentations which are full of transient information and often unreadable at the back of the room.

Textbooks & workbooks

To make planning easy, source or create resources that embed the reading material well in advance. This ensures the materials are relevant to your curriculum, of high quality and makes lesson planning more about how you engage with the reading and weave it into an instructional teaching sequence.

Accountable reading routines

Students need to expect to have to do something meaningful with the content of the text to force them to make the mental effort needed to get properly stuck in. Make reading accountable by providing unseen and search questions, and summary tasks.
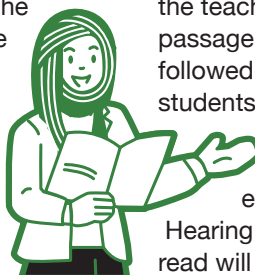
Oral or echo reading routines

Echo reading helps develop students' reading fluency. The technique works by the teacher reading a passage of text, followed by her students reading the same text aloud to each other. Hearing an expert read will likely improve students' fluency, and the repetitive nature of the task helps consolidate their understanding of the content.

Accountable homework

Have students read more outside of school by giving text to read at home and setting activities in the classroom to check their understanding. Tasks might include summarising the key ideas or answering substantial knowledge check questions.

Five Ways To: Check for Understanding

Ask students *what* they've understood not *if* they've understood

In Rosenshine's Principles of Instruction, he stresses the importance of Checking for Understanding. It is important to ask students *what* they've understood, not *if* they've understood, engaging two or more of them in short probing dialogues. Rosenshine suggests several ways that effective teachers check for understanding. Each works particularly well when paired with Cold Calling, so all students develop attentional habits in readiness to share their understanding if and when they're asked.

So, that's how a valley is formed. Let's try to summarise the main steps? …Jenny, have a go.

> Developing this repertoire of methods for different situations, switching between them in planned and spontaneous moments, can make teaching highly responsive, adapting to the feedback students are giving through their responses.

Five ways to check for understanding

1	Summarise the story so far
2	Repeat instructions
3	Agree or disagree
4	Think aloud as you plan
5	Explain or defend your position

Summarise the story so far

Whether reading a story or text or giving an explanation of any kind, stop at key moments to ask a student to summarise what they've understood so far. This prevents you from the delusion that it's all somehow just *going in*. You stop to check! Also, summarising is a good thinking process for the students who are asked.

Repeat instructions

This seems so obvious, but it's not routine for everyone, and it makes a big difference – saving time compared to having to interrupt and redirect confused students later on. Whenever you've given instructions for a task, an activity, or some homework…. get a couple of students to repeat them back to you to check that they understood the details.

Robert, let me check.. what do you think I've asked everyone to do?

Agree or disagree

This has two useful applications. One is to help students form their own opinions — allowing them scope to agree or disagree. The other is as a way to secure attention when other students are talking — a soft check for listening and engagement as well as for understanding. Embedded in this is the follow-on *and why?* Students should give their reasons.

Think aloud as you plan

This takes time to embed as a normal routine — because students are largely used to thinking privately — in the hidden way we all do. Promoting metacognitive talk is a powerful approach in general and normalising *thinking aloud* can help to explore students' thought processes as they work out how they'll approach a task.

I agree with Ashly becasue …

Explain or defend your position

When students express opinions or give an analysis, it's helpful to check they understand the underlying concepts rather than having learned stock responses without a supporting schema. So, when students make an initial response, probe further, asking them to explain key points or to defend their position, perhaps with a counterargument as a reference.

Five Ways To: Sustain Student Attention

Sustained attention takes a lot of effort

To learn new conceptual ideas and new skills, we need to focus our attention — our conscious thinking — on the material we're trying to learn. In most cases, sustained attention takes effort; it requires motivation — it's not something we should take for granted — from ourselves, let alone our students. Teachers need to find ways to orient students' attention to help them overcome the many things vying for their attention.

| Short-loop Generative Learning Tasks | Questioning with accountability | Listening with accountability | Prediction | Make it personal |

Questioning with accountability

This is one of the main goals of a good repertoire of questioning techniques: to create a culture where students default to expecting to answer all the questions, thinking for themselves. Attention is secured by students knowing that they could be asked a question about what is happening – more or less at any time. Make questioning accountable by using cold call and pair share.

Short-loop Generative Learning Tasks

A generative task requires students to select and organise information, engaging with new knowledge using their prior knowledge, thereby integrating it into a deeper schema. This could be to organise information into a sequence, summarise a story, explain a concept to someone using the key vocabulary or create a structured mind map -with four key categories. Students have to do these things solo for the task to be generative. The short loop is about the task being quick enough to do and then checking a) that it's been done by everyone and b) that it is as valid or accurate as the material requires, without diverging too much.

Prediction

This harnesses the power of narrative structures where we naturally run ahead to imagine future story arcs and possible outcomes. These hooks are useful for securing attention in any exposition or story-telling scenario

Oooh, interesting! It's getting tense now isn't it. What do you think will happen to the rabbit next? … Suzie? Robert? Let's turn the page…

Listening with accountability

During class discussions and Q&A exchanges, students who do not feel involved can drift off. Similarly, during an extended explanation, demonstration or text reading, students can lose attention. Accountability for listening is reinforced by punctuating these inputs with checks.

The expectation is that students follow the discussion, not just focus on their own view of things. Creating cross-class accountability for listening is a means of sustaining attention to what is being discussed a useful check for understanding. Directing students to rephrase the words of their peers, show the speaker everyone was listening. Elaboration also re-exposes students to content.

Class, let's track Sam please.

APPRECIATE

REPHRASE
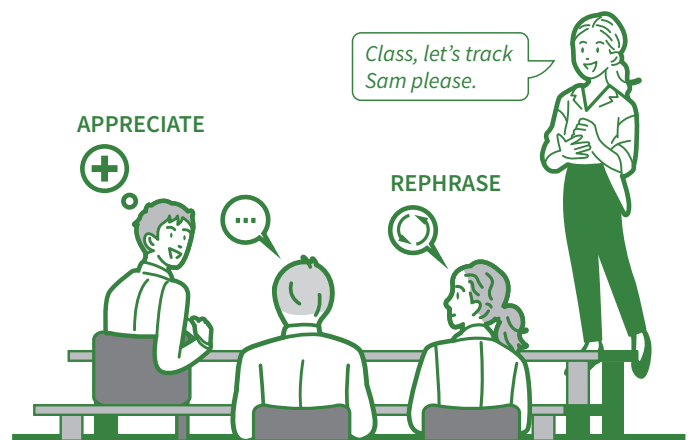
Make it personal

If you can tap into students' personal investment in a set of ideas, it helps them filter out distractions and sustain attention.

The aesthetic question: In MARGE, Shimamura suggests that the 'aesthetic question' is powerful for motivating learning; 'What do you think? How does it make you feel? Why is it good?

Make it theirs: Give students some ownership – something tangible so they're invested in the discussion. This could be handling materials when discussing their properties or reading part of a text that has been allocated to a student.

Put them in the centre of things: sustain attention by placing real or hypothetical decisions in students' hands so that they feel invested.

Click here to read the blog

Five Ways To: Scaffold Classroom Dialogue

The essence of scaffolding is that students are elevated to a level of performance and thinking they would struggle to achieve unaided. Supported practice extends their knowledge and develops new habits. As the teacher gradually withdraws their support, students learn to use their knowledge independently. Teachers commonly use scaffolding to support students' written responses, but it can be equally effective at assisting student talk. Scaffolds help students organise their ideas during discussions and questions, eliciting more sophisticated responses.

| Full Sentences | Step-up the vocab | Sequence the ideas | Express an opinion | Comparison and analysis |

Full Sentences

Students often offer half-formed minimal answers. Asking them to reframe responses in complete sentences makes them practise a broader range of vocabulary, consolidating their understanding and building fluency with formal speech.

> *What's the key difference between these types of materials?*

> *Metals and non-metals.*

> *The main difference is that some of the materials are metals but the others are non-metals.*

> *Well done. Now put that in a sentence.*

Step-up the vocab

Students naturally gravitate to using words they are already comfortable using, avoiding newer words, worried they are wrong or because they're not yet confident enough to use them. Use specific target words, write them on the board, or refer to them in a text and then ask students to reframe answers including these words.

> *Let's describe the graph. What pattern does it show?...... Abdi?*

> *The line goes up and then goes up less steeply.*
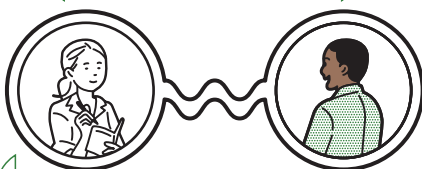
> *Yes. Good – but now let's include some of the key words: – and say what is actually changing. (gradient, increase, decrease are written on the board)*

> *Ok…. the temperature increases but then after two minutes, the gradient decreases which means temperature rises more slowly.*

Sequence the ideas

Presenting and organising more than one idea into a sequence can be challenging. These scaffolds help students do that. For example, ask students to describe a series of events, use Think Pair Share for rehearsal and then ask them to give their response in the specific form of the scaffold.

> ***At first*** *the ice was heating up; then it began to melt.*

> ***Firstly****, they would build a castle;* ***secondly****, they would defend it with archers and* ***finally****, they would fire a cannon towards the opposing army.*

> ***If*** *water seeps into the cracks,* ***then*** *it will freeze and expand creating pressure on the rock.*

Express an opinion

Several simple scaffolds can be used to support students to express opinions in formal manner, helping them to explore their ideas and distinguish between facts and opinions in general.

> ***I agree that*** *Picasso's work is the most significant,* ***because*** *he had the most radical influence on other artists' work.*
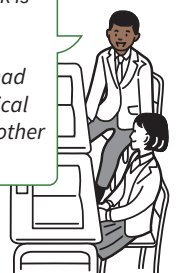
Comparison & analysis

A common form of analysis and schema-building is to compare, contrast and categorise. Students often benefit from prompts that support this kind of response.

> *On one hand... but on the other hand…*

> *An advantage is... ; a disadvantage is...*

> *In the past ... but now...*

> *Both, however, whereas*

> *An* ***advantage*** *of producing more is that the price comes down; a* ***disadvantage*** *is that it creates more waste.*

Five Ways To:
Do Daily Review

Teachers often begin lessons with retrieval practice. There are good reasons to start by reviewing what was covered in the last lesson so students can activate acquired knowledge and make early tenuous connections. The Do Now concept from Teach Like a Champion, the Lesson Starter concept or Rosenshine's Daily Review from principles of instruction will likely influence your review routines.

QUIZZING. TEST AND CHECK

QUIZZING CAN BECOME repetitive if you always do a five-a-day quiz of the same style every lesson. You need to seek to create variety in your quizzes.

In all three quizzing examples below, all students review what they know and what they've forgotten, allowing the teacher to focus on common errors.

BOARD QUIZ
Students are given time to answer questions from the board before self or peer checking their responses.
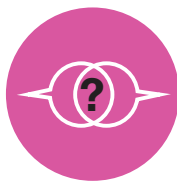
PAIRED QUIZ
Students take turns quizzing each other using a knowledge organiser or similar resource.

SELF-QUIZ
Students quiz themselves using cover and check resources, such as flash cards and unlabelled diagrams.

PAIR SHARE: REVIEW AND CHECK

ASK STUDENTS TO review the previous lesson or a specific concept and compare notes with a peer. Use Think, Pair Share to guide students to summarise the key ideas from last lesson or to rehearse an explanation of a central concept.

> Summarise yesterday's key learning points in three sentences
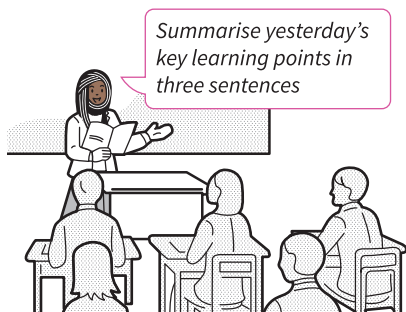
WRITE A PARAGRAPH

THE TASK IS to activate recent knowledge by writing about it in a short checkable paragraph. This can be structured or more open-ended, depending on student confidence.

Students can then share their paragraphs via a 'show call' process or by the teacher spotting good answers when circulating, sharing them via a visualiser or reading them out.

MULTIPLE-CHOICE CHECK FOR UNDERSTANDING QUIZ

SET A SMALL NUMBER based on the recent lesson material. There are several main advantages to this approach. You can use mini-whiteboards, broadening your insight into what all students are thinking. Secondly, MCQs are good at diagnostically identifying misconceptions. Finally, you can design a range of questions requiring students to engage with all potential answers. For example, which of these is the best correct answer and why?

SOLVE FAMILIAR PROBLEMS

> Read the passage and write down as much as you can about the language features.

TRY SETTING QUESTIONS or a task using ideas students were tackling in the last lesson. Problem sets are a set of questions like yesterday's so students can check they can remember how to do them. Goal Free problems are more open-ended. For example, students read a passage and write down as much as they can about the language features.

Five Ways To: Build Confidence

Learning can sometimes be overwhelming, especially for students who lack confidence. More often than not, the confident students dominate lessons; they are asked more questions, complete more activities and get more time to rehearse. The students who need the most practice — those lacking confidence — are sometimes not getting it.

> There's a lot to learn! Sometimes it feels overwhelming – especially to students with the least confidence; the weakest knowledge; the most tentative grasp of the ideas. Something I observe fairly often – and is worth reflecting on in your own lessons – is that the students with the most confidence dominate lessons.

FIVE WAYS TO BUILD CONFIDENCE

1 **Consolidate. Consolidate. Consolidate.**

2 **Explicit Rehearsal**

3 **Repeated Short Feedback Loops**

4 **Scaffold the details**

5 **Retrieval with Agency**

CONSOLIDATE. CONSOLIDATE. CONSOLIDATE

Go over content repeatedly to give students the chance to over-learn and consolidate. Take time to summarise the key points, and ask students to rehearse them individually and with a peer. When a student shares a good answer, check other students' understanding of it.

EXPLICIT REHEARSAL

Give all students the time to rehearse the knowledge you teach. Make sure all students use the new phrases, can clarify a new method, outline the steps in an argument, explain a key metaphor in a poem and so on. Inclusive questioning and pair talk provide more rehearsal and opportunities to build confidence.

REPEATED SHORT FEEDBACK LOOPS

Try creating short tasks with the explicit aim of creating short feedback and improvement loops. These loops build students' confidence as students see how to improve and produce something of quality rather than a series of mediocre things. Try to shorten the distance between the task and giving feedback.

SCAFFOLD THE DETAILS

Students who struggle to offer detailed answers verbally or in writing find it difficult to organise their ideas. Use scaffolds to help students structure their verbal and written responses. For example, *On one hand, an advantage of tourists visiting Snowdon is that… On the other hand, a disadvantage is…*

RETRIEVAL WITH AGENCY

Quizzing can boost students' confidence if they have success. Try giving students study resources and advance notice of when and what you will be quizzing. For students who struggle to form study habits, why not give them the questions and answers in advance to rehearse?

Five Ways To: Enrich learning for everyone, not the few.

SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5
Organic, tutorial-style discussions	Group Tasks	High Challenge Problem-solving	Student-led inputs	Open-ended Tasks

TOM SHERRINGTON

The buzz and dazzle created from the responses of a few students – or even most students – can mask the slow drifting and falling back of the students with the least confidence and knowledge.

Some teaching methods can feel rewarding but allow some students to lag, not participate or depend too heavily on the work of their peers. It's not that these techniques are wrong, but they can be insufficient for enriching all students. Tasks that focus on teaching to the top, such as high-challenge open-ended tasks, are most prone to running this risk. Unless we do something about it, the less confident students will feed confused and opt-out. Here are five scenarios Tom frequently sees on his school and college visits.

CONSOLIDATE ORGANIC DISCUSSIONS

The teacher shares her wisdom, making random notes as she goes: the modern-day chalk and talk. The issue here is some students aren't contributing, and the board of notes gets confusing. The solution is to run through the main ideas with the least confident in mind: simplify, summarise, generally spell things out, consolidate and practise.

STRUCTURE GROUP TASKS

Unstructured group work results in some students learning almost nothing. To solve this, state in advance that each group will have one representative at the end of the task, but don't declare who. Also, inform the class that each group only succeeds when all its members complete the task and allocate sub-tasks to specific individuals.

TIER CHALLENGE IN PROBLEM-SOLVING TASKS

Classes often contain high-performing students ready to tackle challenging problems and students who still haven't grasped the main ideas. One solution is to create tiered sets of problems and tasks that have incremental levels of challenge. The idea is that everyone needs to reach a certain level before beginning independent practice.

MAKE STUDENT-LED INPUTS INTERACTIVE

Generative learning shows using students to teach one another works. But it's important both deliverers and recipients benefit equally. To achieve this, build in checking for understanding routines and tasks that require the listener to engage with the material. Make time for all students to present; this doesn't have to be in the same lesson.

SCAFFOLD OPEN-ENDED TASKS

Open-ended tasks allow students to use a range of responses, content and media for sharing them. They provide a break from the daily diet of instructional teaching. To get the most from these tasks make them occasional, provide scaffolds, worked examples and all the resources your class will need.

Click here to read the blog

Five Ways to
Secure Progress Through Modelling

It would be inexcusable for a driving instructor to hand her client the keys and expect them to *figure it out*. Why should it be different in teaching?

Successful modelling is essential to help secure student progress. The challenge is bridging the gap between showing students how to do something and the students being able to do it themselves. Modelling is context-specific, but there are some general principles that you can adopt to secure student progress.

1 SHOW THE WHOLE PROCESS – NORMALLY, THEN SLOWLY

2 BREAK DOWN INTO PRACTISABLE STEPS

3 NARRATE YOUR THINKING; CHECK FOR THEIR UNDERSTANDING

4 USE MULTIPLE EXAMPLES WITH BACKWARD FADING

5 RUN MULTIPLE, SHORT WE DO/YOU DO LOOPS

## 2 BREAK DOWN INTO PRACTISABLE STEPS.

A whole task will always have individual steps that you can model. Identify each step, model them and provide opportunities for students to practice them. In writing, this will be sentence and paragraph types as students build towards finished essays.

*Air ascends at the equator **because***
*Air ascends at the equator **but***
*Air ascends at the equator **so***

3 NARRATE YOUR THINKING; CHECK FOR THEIR UNDERSTANDING.

Metacognitive talk — narrating your thinking — is a vital part of modelling. But it doesn't matter how good your explanation is if you don't check students' understanding. Narrate your thinking as you show each step. Model, narrate, check for understanding and repeat.

EXPLAINING

UNDERSTANDING
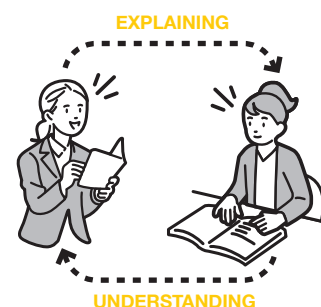
## 1 SHOW THE WHOLE PROCESS – NORMALLY, THEN SLOWLY.

Whatever you are modelling, it helps to show it in its entirety — at full speed — before showing it slowed down. Providing worked examples shows students what to aim for, but breaking it and slowing it down shows them how to get there.

Here it is at full speed

4 USE MULTIPLE EXAMPLES WITH BACKWARD FADING

Showing multiple examples reveals the required steps; for example, modelling two similar math problems side-by-side shows how the method works. After modelling the two methods, provide partially worked examples that gradually become less completed.

Let's compare these two problems
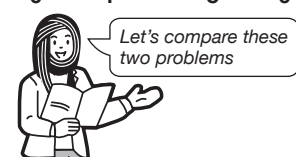
5 RUN MULTIPLE, SHORT WE DO/YOU DO LOOPS

The I do, We do, You do principle offers structure to the modelling process. The trouble is that the teacher can't know if her students will be successful on their own until they give it a go. But unlike a baton exchange, where competitors only get one shot, you can repeatedly re-run the We do, You do phases of instructional modelling. Work on a task with your students using backwards fading, and then let students try it solo. Re-run the We do phase for those that aren't successful before handing the baton over again for the You do part.

2 WE DO   **3** YOU DO
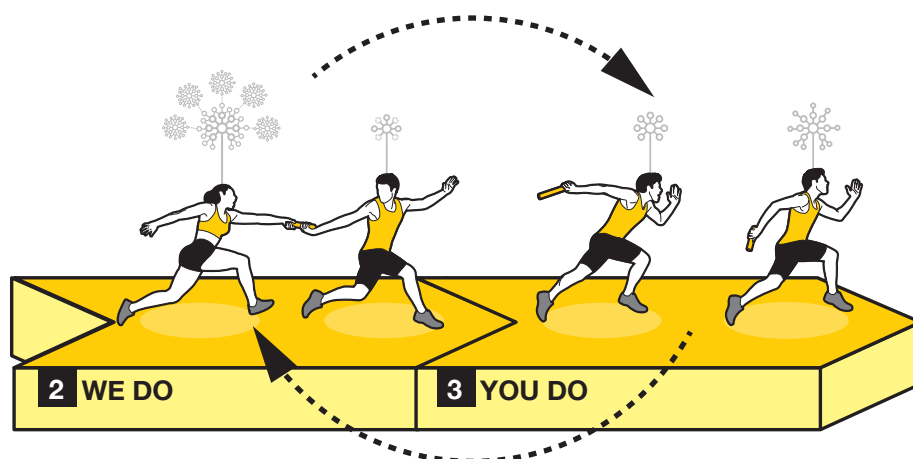
Five Ways to
Foster Student Agency

#9 of series. Created by: **TOM SHERRINGTON & DAVID GOODWIN**
@teacherhead | @MrGoodwin23
www.teacherhead.com | www.organiseideas.com

I've had a lot of experience with students who, once encouraged to develop agency, driving their own learning – have seized the opportunity.

TOM SHERRINGTON

| **1** FOSTER NORMS AROUND EFFORTFUL INDEPENDENT WORK AND HOMEWORK | **2** SHARE THE BIG PICTURE OF CURRICULUM & ASSESSMENT | **3** DEVELOP HABITS AROUND READING FOR STUDY | **4** ESTABLISH SELF STUDY, SELF TEST LOOPS | **5** SET OPEN RESEARCH AND REPORT TASKS |

We want students to develop the attitudes and skills that, together, mean they can and will engage in learning processes in their own time, with effort and persistence, in a self-motivated manner. However, students will struggle to build the necessary habits unless we break down independent learning into actionable tasks. Here are five ways to foster student agency so students can decide for themselves without you needing to overcontrol everything.

1 **FOSTER NORMS AROUND EFFORTFUL INDEPENDENT WORK AND HOMEWORK.**

Aim to nurture a culture where you have high expectations of homework. Let your students know homework matters, that it will help them learn, and that homework is a normal part of the everyday school/learning flow. To achieve this, set explicit homework goals with success criteria and deadlines. Praise students that produce exceptional work by showcasing their efforts. And rigorously set homework so that it becomes the norm.

2 **SHARE THE BIG PICTURE OF CURRICULUM AND ASSESSMENT**

Give students the lay of the land at the start of each new unit by reviewing the contents page of a textbook, a knowledge organiser or a specification overview. Doing so will give students a big schema map and allow them to gauge their progress — this is especially true if you provide regular opportunities for students to take stock. The same is true of assessments. Students should know when and how they will be assessed.

Let's get the lay of the land. In this unit, we will learn...
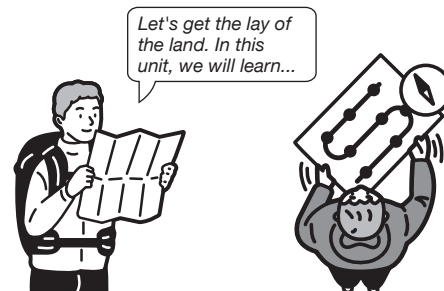
3 **DEVELOP HABITS AROUND READING FOR STUDY**

Empowering students to read is a crucial part of student agency because it helps students to explore independently. To achieve this, you must make it a staple part of students' learning diet, first in class and then extending to homework. Try using text-based resources to drive learning, making reading accountable, teaching note-taking and frequently setting reading as a part of homework.

4 **ESTABLISH SELF STUDY, SELF TEST LOOPS**

Certain materials, for example, recalling a set of quotes, are learnable through self-study and self-testing loops. Support students by modelling how to self-study and self-test by exploring the content, reading, discussing and engaging in retrieval practice. Show students how to create loops by identifying their own knowledge gaps, re-studying and re-testing.
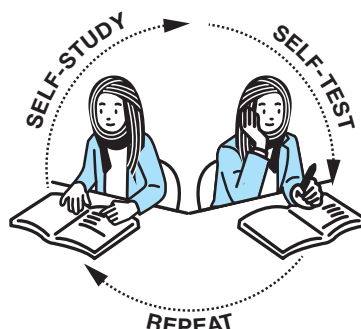
5 **SET OPEN RESEARCH AND REPORT TASKS**

Provide your students with carefully scaffolded choices about their learning. Do so by identifying points in the curriculum where students can choose an area of study within the topic. This could include selecting poems from the anthology to compare. Invite students to report back in a variety of formats. They might write a report, make a slide deck, video or podcast.

SELF-STUDY → SELF-TEST

REPEAT

Five Ways to
Build Fluency

Where we lack fluency it can seriously inhibit our capacity to engage with newer knowledge.

Fluency is the idea that students can recall from memory with minimal effort and a level of automaticity. Being able to do and say things, retrieving them with relative ease, reduces the burden on students' working memory. Fluency building applies to many scenarios: sports, playing an instrument, retrieving facts and learning a new language.

1 VERBAL REPETITION

The quickest way to get students to say new words is to have the whole class say them in unison. Make choral repetition a feature of students' daily learning diet. Have the whole class say the words and then follow up by selecting a row or group of students before cold calling a few individuals. Use call and response when trying to connect ideas; this can be paired or teacher-led. In science, this might be: *Speed? Distance over time*.
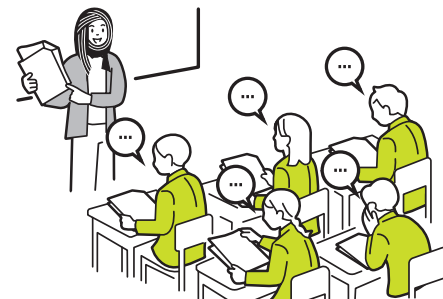
2 DRILL FOR ACCURACY AND SPEED

Drilling is the idea of doing the same thing repeatedly in quick succession. If you find the term drilling hard to digest, think of it as intensive practice. Examples include playing piano scales, hitting a forehand shot in tennis, touch typing, reciting timetables and saying *j'aime jouer au foot, le steak est bien cuit* – with accurate pronunciation and a good accent. The key is to have students use the knowledge accurately and then increase the speed.

3 FLEX IT. DRILL ONE WAY AND THEN THE OTHER

Students must learn how to flexibly apply their knowledge. Fluency-building needs to work towards this explicitly by drilling the same concepts in related but different ways. For example, in languages, students translate from English to French and French to English. With concrete examples, *which of these words is a verb?*' and then also, *what type of word is "walked" an example of?*

I went to the cinema

je suis allé au cinéma

nous sommes allés au cinéma

We went to the cinema

4 WORKOUTS: FROM HIGH FREQUENCY TO SPACED REVISITS

Rehearsal focuses on building fluency of small knowledge elements to construct connected knowledge chunks. But to use these chunks requires students to retrieve them. Therefore we need to space retrieval opportunities over time. So, for fluency in most areas, we need to start students with high-frequency repeated rehearsal and then revisit at intervals over weeks and months. Learning to play a musical instrument and formal language fluency are good examples of this strategy.

5 INCREASE THE RANGE; BUILD UP THE ELEMENTS.

First, students fluently learn individual elements to form chunks. Schema building involves students building fluency with these chunks. For example, students first become fluent with a set of words and phrases, then a set of sentence structures and finally with an expanding range of vocabulary and grammar.

PARAGRAPH

SENTENCES

WORDS AND PHRASES
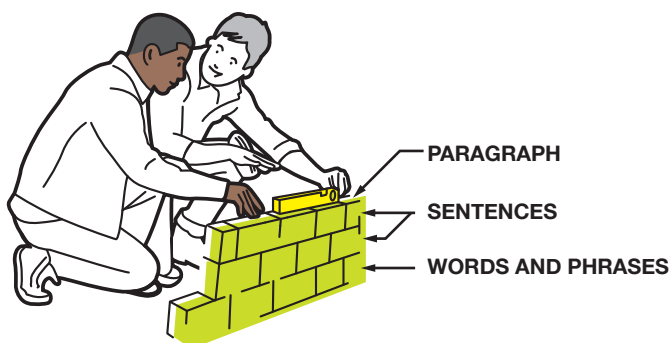
Books by Tom Sherrington

Teaching WalkThrus 3: Five-step guides to instructional coaching
with OLIVER CAVIGLIOLI

Teaching WalkThrus 2: Five-step guides to instructional coaching
with OLIVER CAVIGLIOLI

Teaching WalkThrus 1: Five-step guides to instructional coaching
with OLIVER CAVIGLIOLI

The Learning Rainforest Fieldbook

Rosenshine's Principles in Action

The Learning Rainforest: Great Teaching in Real Classrooms

Books by David Goodwin

Organise Ideas: Thinking by Hand, Extending the Mind
with OLIVER CAVIGLIOLI

Annie Murphy Paul's The Extended Mind in Action
with EMMA TURNER & OLIVER CAVIGLIOLI

Year One: Lighting the path on your first year in teaching
with MICHAEL CHILES