ANTHECOLOGY



TEACHING & LEARNING HANDBOOK 2021 | 'To Improve, Not Prove'



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TEACHING & LEARNING HANDBOOK 2021 'To Improve, Not Prove'

Issue 6 | Summer 2021



www.samuel whitbread.org.uk

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ACKNOWLEDGEMENTS

We would like to thank Tom Sherrington and Oliver Caviglioli for their professional generosity in helping us develop our 5 Teaching and Learning Principles and, importantly, the format, style and approach of our new Anthecology Teaching and Learning Handbook.

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Context

Samuel Whitbread Academy is a large rural upper school of 1650 students aged 13-19 which includes 450 in the Sixth Form and is the largest school in Central Bedfordshire Local Authority.

We are part of the Bedfordshire Schools Trust. BEST offers exceptional all-through educational provision across Bedfordshire. Provision begins at our BEST Nurseries and culminates at the Samuel Whitbread Academy Sixth Form, where students enter either Higher Education or employment.

In recent years, we have developed a powerful research culture at Samuel Whitbread Academy working closely

with the University of Cambridge, through the School-University Partnership for Educational Research (SUPER) and Nazarbayev Intellectual Schools (NIS) Kazakhstan Internship since 2014, as well as (CUREE) the Centre for the Use of Research in Education.

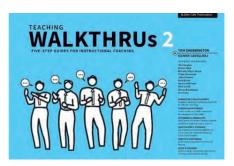
This year, inspired by the work of Tom Sherrington, we have launched our 5 Teaching and Learning Principles and coupled with our coaching approach to sharing best practice we have entered an exciting phase of collaborative professional development to improve teaching.

Foreword





Congratulations to the team responsible for the publication of this issue of Anthecology. It's an impressive piece of work and Oliver and I are delighted that you've been inspired by Teaching Walkthrus in your creation of your visual guides for key strategies. Our view of the value of walkthrus is in their capacity to foster shared understanding. If you are talking about a teaching strategy - either prior to implementing it or in reviewing observed practice - it is so useful when everyone is looking at the walkthru description. This ensures a level of fidelity to the original idea that is sustained over time and across a department or school - the ideas don't continually distort and dissipate. It also provides a useful agenda for the discussions. For us, the steps in a walkthru are not a rigid recipe all must follow - they are a framework for conceiving of the ideas and for shaping the conversations around them. The visual aspect helps to avoid transience - we're not just holding onto ideas in our heads hoping we're thinking the same things; the images allow us to engage in a more focused and sustained manner throughout any reflection process.



We are always keen to stress the importance of our ADAPT process. However well you define an idea, it is still up to teachers to deliver them in context. You've done a great job of making the ideas subject specific but even here, contexts will vary so teachers will need to develop and adapt strategies to fit the specific learning challenges that their students present them with. The nature of education research means that whilst certain ideas are evidenced as good bets for supporting learning, there's nothing that says every lesson should include any specific element or follow any particular rigid structure. Teachers need to make judgements continually about what might work best in any given scenario based on a good understanding of the underlying principles. This is why any discussion of your walkthrus needs to include the rationale and the limitations. When we understand why strategies work well, we're more likely to sustain our commitment to them to truly change our habits in a sustained way.

Good luck with implementing all these ideas in your teaching. Oliver and I will look forward to hearing how it all goes.

Tom Sherrington July 2021

Welcome

teaching and learning principles in September, to drive improvement, began the wave of an unexpected thread of professional development during a pandemic, manifesting in a variety of exceptional C.P.D. events to support the implementation of the curriculum via remote, hybrid and in-class learning.

Our drive for school improvement lies in the creation of our new C.P.D. framework, underpinned by our 5 Teaching and Learning Principles: Deliberate Practice; Clear Explanation; Questioning and Discussion; Modelling and Scaffolding and Assessment and Feedback; approaches extrapolated from Rosenshine's Principles of Instruction to enable our teachers the opportunity to refine and improve their professional practice in order to secure students' knowledge of the curriculum.

We believe our five principles, regularly practiced, encompass and underpin effective teaching so that students can master knowledge: through deliberate practice students can secure knowledge in their memory; through clear knowledge is manageable and accessible; through questioning and discussion success can be diagnosed and understanding developed; through modelling and scaffolding difficult tasks and complex ideas can be finally, through secured and, assessment feedback any gaps in students' knowledge can be expertly identified and remedied.

Our 10 C.P.D. Champions, Amy, Jason, Alex, Alan, Charlotte T., Charlotte L., Emma, Tracy, Dave and Katie each researched and delivered on one of our principles, all the while adapting their presentations to support the ever-changing context of remote, hybrid and in-class learning; their impressive response to agile teaching and learning has been second-to-none and has meant that our C.P.D. programme has

continued to serve our teaching and student body in a way we could never have anticipated!

This year's Anthecology Teaching and Learning Handbook pulls together the work of our C.P.D. Champions and acts as a written symposium of the practice teachers have explored and developed demonstrating how C.P.D. has been turned into practice.

Inspired by the Walkthru community and the format of the Teaching Walkthrus book by Tom Sherrington and illustrations by Oliver Cavaglioli, we have presented issue 6 of the Anthecology using a dual-coding approach. The motivation behind this year's journal lies in the title's metaphorical meaning, not though conveying the relationship between plants and pollinators but one between teachers disseminating ideas and sharing best practice across departments. To this end, our 6-step Walkthrus model the impressive approach employed by Sherrington and Cavaglioli so that the dissemination of best practice can be easily conveyed and understood and, therefore, teachers and leaders can endeavour to improve, not prove, their professional classroom practice, whatever the context.

Each section of the Anthecology Teaching and Learning Handbook is headed by one of our five principles and includes the content of our C.P.D. events, the 6-step Walkthrus for instructional classroom approaches culminating in 'Handbook Handiwork' activities to be undertaken collaboratively in teams to help teachers to consider ways to improve practice. Our calendared C.P.D. programme, found on page 5, acts as a framework for our teachers and leaders to guide their professional development in such a way to empower autonomy and agency over their everyday practice next year and beyond.

Katie Bridge July 2021

SWA 5 Teaching & Learning Principles











CPD 2021 – 2022

DATE	EVENT
3rd September (TD)	Training Day CPD Vision for our 5 TandL Principles
18th October	CPD Event 1 All Teachers: 'TeachMeet' 6 Step Walkthru
1st November (TD)	Training Day Review of CPD event 1 Preparation for Collaborative Classroom Fortnight
W/C 8th and 15th November	Collaborative Classroom Fortnight 1
13th December	CPD Event 2 CPD Champions: 'SWA Principle and'
4th January	Training Day Review of Autumn term CPD Preparation for CPD event 3
7th February	CPD Event 3 Department collaboration: SWA Principles and effective revision
28th February	CPD Event 4 HoD Driven: Anthecology Handbook write-up
WC 7th /14th March	Collaborative Classroom Fortnight 2
9th May	CPD Event 5 HoD Driven: Anthecology Handbook collaborative write-up COMPLETION
W/C 13th / 20th June Collaborative	Classroom Fortnight 3 'All 5 Principles and' and 'All 5 Principles and Revision'
4th July	Teaching and Learning Event 'To improve, not prove' – what have we learnt?



What is Deliberate Practice?

Rosenshine suggests that the most effective teachers provide more time for guided practice; if students are going to be successful in becoming confident and independent with curriculum knowledge, the teacher needs to use strategies to ensure they are forming strong ideas early on.

To develop effective deliberate practice teachers could:

- Use retrieval practice strategies, so that information is cemented in the long-term memory.
- Guide students as they begin to practice, so their understanding is accurate, through questioning and checking for understanding.
- Prepare students for independent practice, so that they have the opportunity to consolidate understanding before going it alone through partially worked examples.
- Monitor students when they begin independent practice to ensure they are getting it right through questioning and assessment.

DELIBERATE PRACTICE IN THE CLASSROOM – CPD LEADS







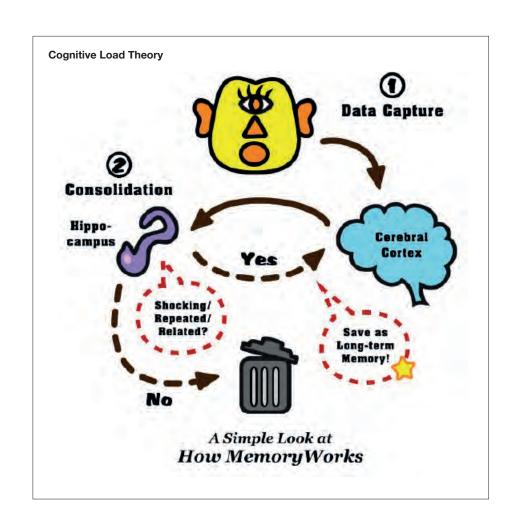


SESSION CONTENT:

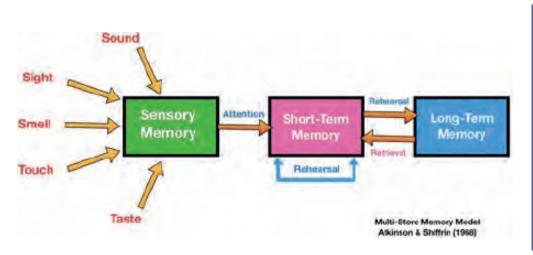
- 1. What does the research say?
- 2. Geog Your Memory
- 3. Retrieve It! Implement It!
- 4. Reading Retrieval
- 5. Geog Pod

HOW MEMORY WORKS:

- To change a pupil's long term memory, you need great teaching quality.
- Relatable, shocking and repeated content will activate memory.
- The brain 'dumps' what it sees as non-value information – sell it's value!



TEACH INFORMATION, USE THE INFORMATION, USE IT AGAIN, AND USE IT AGAIN:



Rule of 3....
Use it!
Use it again!
Use it again!

RETRIEVAL PRACTICE

When we teach something once, then want to do more to help students learn it better. Instead of just reviewing the content, we're better off giving something like a quiz. In other words, if we do more asking students to PULL CONCEPTS OUT OF THEIR BRAINS rather than continually TRYING TO PUT CONCEPTS IN they will learn better.

Retrieval practice is NOT THE SAME
AS ASSESSMENT. Although it can
look like testing, it is a learning
stratergy not a tool for measuring
or grading students.

WHAT IT LOOKS LIKE

- Think-pair-share
- Low-stakes quizzes
- Flashcards
- Brain dumps

USING IT WELL

Include feedback

Tell students if they got the answer right or wrong

Space your practice

Rather than doing retrieval all at once spread practices out over time

Match practice to assessment

If you will assess for basic recall of facts, retrieve with those. If you will require higher-order thinking on tests. Include higher-order questions during retrieval.

Retrieval Practice Placement

What keywords did you use or learn last lesson?

State 3 key facts from last lesson.

Explain a key concept of idea from last week in your own words.

Ask your partner 3 questions based on the content covered this term.

No notes allowed!

Discuss with your partner what we were studying in the lesson last week.

Retrieval Practice in Geography

STRATEGY 1

Geog Your Memory – (GYM) 3-5 starter questions based on learning from a previous lesson, a few lessons ago and a previous topic.

- Often, the same GYM is used as a starter and a plenary using the information again, and again!
- 1-2 minutes of task time, 1-2 minutes of discussion time.
- · Minimal planning, maximum memory.
- No notes just the brain.
- Easily adaptable across subjects: Maths Minute, Biz Quiz etc.

STRATEGY 2

Retrieve It! Implement It! – 10 short low stakes questions based on a particular area and then practice questions based on that:

- Geography now has a 2-type homework strategy: Retrieval Reading, and RIII.
- A direct repeat of some of the lesson outcomes/learning points
 with additional use of information, and exam practice.
- Tiered approach questions get more difficult, but phrases given to enhance student understanding of 'using' the information.

<u>Homework 1: Causes of Volcanoes and Earthquakes</u> Retrieve it! What can you remember?

What is a plate?	
Name the three plate boundaries	
Give one named example of a plate boundary.	
What is Pangea?	
What is magma?	
What is a subduction zone?	
Where can you find earthquakes?	
Where can you find volcanoes?	
Name one example of a volcano.	
Name one example of an earthquake.	

STRATEGY 3

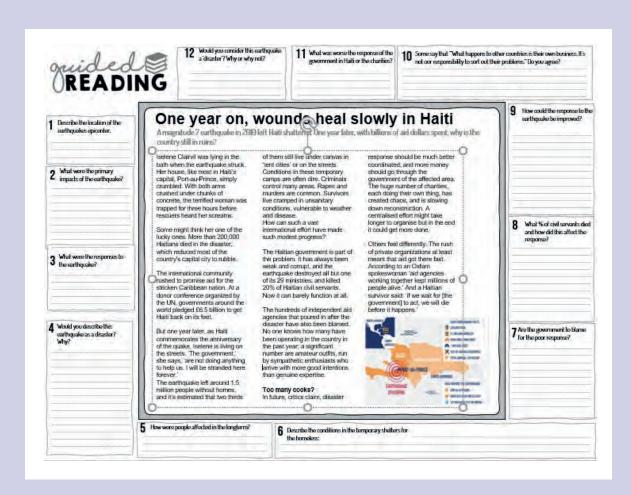
Retrieval Reading – guided reading comprehensions.

- Retrieval or Guided Reading aims to reproduce very similar content reading to lesson outcomes, but through story / real life cases.
- Questions are tiered generally getting more difficult.
- Could be adaptable in other subjects for example, use of theories, experiments etc.

STRATEGY 3

Retrieval Reading – guided reading comprehensions.

- Retrieval or Guided Reading aims to reproduce very similar content reading to lesson outcomes, but through story / real life cases.
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STRATEGY 4

The Geog Pod – recorded podcasts/ conversations

A revision and retrieval technique-recorded 20 minute sessions on specific parts of topics.

- Two teachers one presenter (main speaker) and one challenger (questions and clarifies).
- Can be used as a video or a podcast whatever the student prefers!
- Could be used on a whole range of things.
- We aim to produce two for every topic we teach. Research ongoing with pupils for their feedback.



- Spaced Learning: where knowledge is rehearsed for short periods over a longer period of time,
- Interleaving: Rather than 'blocking' learning, we instead mix practice of A, B and C (e.g. ABCABCABC). There is growing evidence that this can improve retention, and research in mathematics is particularly promising (Richland et al, 2005; Rohrer et al, 2015).
- Retrieval Practice: involves recalling something you have learned in the past and bringing it back to mind.
- "Deliberately recalling information forces us to pull our knowledge "out" and examine what we know." Agarwal, 2019
- Struggling to learn through the act of practising what you know and recalling information is much more effective than re-reading, taking notes, or listening to lectures. Slower, effortful retrieval leads to long-term learning.
- Needs to occur a reasonable time after the topic has been initially taught and ideally to take the form of testing knowledge, either by the teacher (for example questioning using flash cards, a test or getting pupils to write a concept map) or through pupil self-testing.
- It is important that feedback on accuracy is provided either by the teacher or by the pupil checking accuracy for themselves.
- When used constructively, research has demonstrated that retrieval practice improves pupils' memory and recall. In turn, it can also improve children's application skills and their ability to transfer their knowledge to new concepts and new situations.

Knowledge Retrieval in Music Lessons

- Last lesson we looked at the following:
 - Features of a musical
 - Context
 - Instrumentation and techniques
 - Structure
- Write down everything you can remember, without looking back at your notes!
- You should aim to get a minimum of 2 points for each element.

Keeping it simple:

Students need to explore their memory to check what they know and understand; this can be as simple as removing cue-cards, prompts; it means closing the books and thinking for themselves.

Knowledge Retrieval

- What year was the piece written?
- What 3 instruments play on the track?
- Describe the texture after the guitar solo (2)
- How does Melody B differ from melody A?
- What rhythmic device, commonly found in Bossa Novas, is featured through the piece?

Starter activity recalling what students can remember about the set work, currently studying from previous lessons. The set work playing over the top to support. This also develops their listening skill which is needed for the exam.

Melody or not?

- Homophonic
- Sequence
- Conjunct
- Perfect cadence
- Ornamentation
- Synthesiser
- Ascending
- Stretto
- Monophonic
- Pedal

EASY

LIST The key terms and write YES or NO next to them depending on whether they are a melody word or not.

MEDIUM

As above PLUS if Not a melody word which musical element is in linked with (think DR T SMITH)

HARD

As above PLUS provide a definition

This activity is used before learning about the melodic devices in the set work. This actually is used as an opportunity to identify misconceptions of regular key terms as well as enabling students to practise recalling which key terms go with which musical element and make links from previous set works with the set work currently being studied.

TIME SIGNATURE CHANGES REGULARLY FROM 2/2 TO 3/2 TO 4/4

Rhythm Context Texture Structure Features of musical The metre is The texture is **Distinct Verse-Chorus** include; scenery, 4/4 throughout. monophonic at the structure. Syncopation and start before moving dance routines. Tempo changes help costumes and dotted rhythms can to homophonic to be found throughout. Spoken dialogue Monophonic Define the different sections Melody Instrumentation **Tonality** Harmony Mostly melismatic Scored for large Whilst the opening There is a pedal and angular although orchestra and note at the end is ambiguous, the there are some 2 female voices. overall key of the of the piece. syllabic and What string technique piece is D major step wise moments. is used? with very little key changes. Tremelo Switch them round!

This is a consolidation activity to support with a revision lesson/consolidation lesson. Students will listen to the track and identify 'red herrings' and correct them whilst developing their listening skills. This acts as a starter activity but can be done at any point in lesson/curriculum. It encourages students to recall and develops the skills needed for the examination.

Knowledge RetrievalKey Principles and Strategies

KEY PRINCIPLES

INVOLVE EVERYONE:

Good techniques involve all students checking their knowledge, not just a few and not just one at a time as you might do when questioning.

MAKE CHECKING ACCURATE AND EASY:

It should be possible for all students to find out what they got right and wrong, what they know well and where they have gaps. Every technique involves students testing their knowledge and then checking their work for accuracy and completeness. (This is not the same as giving students extended mark schemes to mark longer assessments)

SPECIFY THE KNOWLEDGE:

Where appropriate, it's better if students know the set of knowledge any retrieval will be based on, so they can study, prepare and self-check. It must be possible for students to check their own answers which has implications for the way the knowledge requirements are laid out.

MAKE IT TIME EFFICIENT:

The idea of each technique is that they can be used repeatedly in an efficient manner without dominating whole lessons.

MAKE IT WORKLOAD EFFICIENT:

None of these methods involve the teacher checking the students' answers, creating unsustainable workload.

STRATEGIES

- Embedding into routine of each lesson.
- Using quick knowledge quizzes in different formats.
- Open ended questions to encourage knowledge retrieval.
- Exam style questions.
- Asking pupils to 'speak like an expert'
- Students as teachers.
- Using working memory challenge grids.
- Using flashcards.
- Analysing and connecting images.
- Using quick knowledge quizzes in different formats.
- Applying retrieval practice within bingo games.



Spaced learning is the principle that information is more easily learnt when it is repeated multiple times, with time passing between the repetitions. The approach known as 'spaced learning' is contrasted with a 'massed learning' approach, where content is learnt all at once with no spacing. (Education Endowment Foundation).

In Fluent Forever: How to Learn Any Language and Never Forget It, Gabriel Wyner writes:

Spaced repetition...[is] extraordinarily efficient. In a four-month period, practising for 30 minutes a day, you can expect to learn and retain 3600 flashcards with 90 to 95 percent accuracy. These flashcards can teach you an alphabet, vocabulary, grammar, and even pronunciation. And they can do it without becoming tedious because they're always challenging enough to remain interesting and fun.

In Mindhacker, Ron and Marty Hale-Evans explore further:

Our memory is simultaneously magnificent and pathetic. It is capable of incredible feats, yet it never works quite like we wish it would. Ideally, we would be able to remember everything instantly, but we are not computers. We hack our memory with tools like memory palaces, but such techniques required effort and dedication. Most of us give up, and outsource our memory to smartphones, cloud enabled computers, or plain old pen and paper. There is a compromise...a learning technique called spaced repetition which efficiently organizes information or memorization and retention can be used to achieve near perfect recall.

STRATEGY 1

A starter for one...



Starters allow us to introduce new content, but they also allow us to work on and develop **recall and retention**.

DELIBERATE PRACTICE

Example: -

Monday

 Introduce new content – set the scene of learning what do they know?

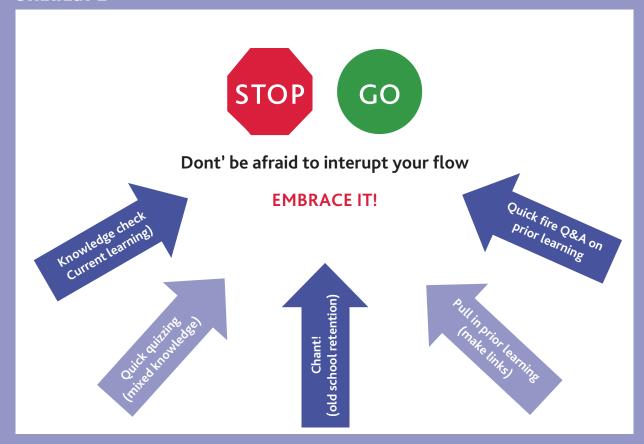
Wednesday

 Start the lesson checking they can 'recall' the lesson learnt from Monday

Friday

• Start the lesson with applying what they learnt from Monday

STRATEGY 2

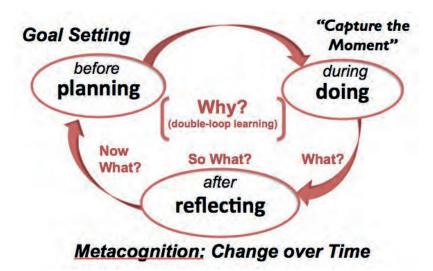


STRATEGY 3



- Historic knowledge checking
- Quick check information
 - current and historic learning
- Keep 'old knowledge' live

STRATEGY 4



Use PLENARIES as STARTERS with an added extra

A little bit like 'looped-learning' ... What? So what? Now What? ... and then, why?

Using modelling/self-assessment to form part of practice: building on prior knowledge It helps to:-

- Identify what the students can do.
- Understand how they can make progress from it.
- Understand how to identify the criteria within 'expert' and 'own' models.

Why do we Model? What do we Model?

- To practise formulating answers.
- To develop and extend.
- To show examples of good writing.
- To show and teach thought processes.
- To demonstrate how you to meet criteria.

What do we get the students to do with modelling?

Teach them how to identify the criteria



Turning CPD into Practice

BUSINESS

CPD session attended: Deliberate Practice Led by Jason Hatchel











What practice did you note?

We attended Jason's session which focussed on retrieval practice. During the session he shared information on how the brain works. He discussed the importance of great teaching to help embed learning into long term memory. He conveyed to us the idea of knowledge as relatable, shocking and repeated as approaches to activate memory.

Teaching the subject of Business, we have a large content-driven specification that students struggle to remember and recall. Furthermore, some topics include a variety of misconceptions, so the retrieval practice approach of embedding regular starters every lesson will hugely benefit our students.

We noticed that Geography's use of 'Geog Your Memory' starters could work really well within the Business department!

How have you adapted this for the department or classroom?

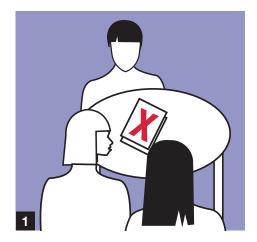
We identified key topics across the specification where students often have misconceptions, and discussed how often topics should be repeated using different questioning techniques. We covered a range of assessment questions across the specification including: calculation, short answer, long answer questions etc.

We then adopted the catchy title 'The Biz Quiz' and embedded this retrieval practice across every year group as starter activities at the beginning of every lesson. These questions include a mix of calculation, knowledge definitions and exam questions.

What has been the impact so far?

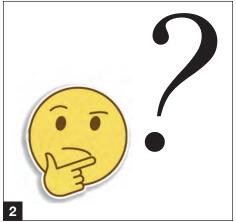
The impact of 'The Biz Quiz' starters has been excellent. Students enjoy the mix of topic areas and our research has identified that the students find it really helpful to recap different topics every lesson. This has meant that students can identify areas that they need to improve and revise. The impact has been evident in the recent Y11 mock which has been our strongest set of data on this specification.

Biz Quiz Starters: Exam style questions and knowledge retrieval based on previously learnt topics given in question format at the start of every lesson.



IDENTIFY AND MISCONCEPTIONS

Sit as a team and identify the common misconceptions within a topic area. Consider the pitfalls, misunderstandings and areas of underperformance. Once these topic areas are identified, you're ready to move onto the next stage!



PLAN FOR SPACED QUESTIONS FROM DIFFERENT AREAS OF THE SPECIFICATION

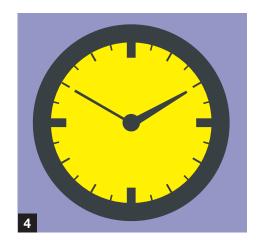
Decide upon the number of questions to be used at the start of the lesson. Consider timing to complete the quiz factoring in time to feedback, revisit and even re-learn. Include questions from different areas of the topic as well as synoptic links across the specification. To improve long-term memory and knowledge retrieval consider content from the most recent lesson, the previous week, month and even year if possible.



DESIGN THE QUESTIONS

Discuss as a team the format and design of the questions. On doing this, consider time, marking and feedback. Include questions such as:

- Short fact-check questions
- Problem solving queries
- · Multiple-choice questions
- True/ false
- Definitions / quotes
- · Labelling diagrams



DEDICATE TIME AT THE START OF EVERY LESSON

Take time to embed the quizzes into presentations. This allows for consistency among the team and ensures the students are asked the right, specially designed questions.



PROVIDE THE ANSWERS FOR STUDENTS TO SELF OR PEER-CHECK

Once the students have completed the quiz, provide answers for them to check. Reveal the correct answers on a slide or visualiser. Provide explanation for the common misconceptions or mistakes.



AFFIRM GOOD PERFORMANCE AND SEEK OUT WRONG ANSWERS

In addition to the retrieval practice itself, a useful outcome from quizzing is that each student learns where they have gaps in their knowledge and the teacher learns what the common gaps are. Give praise for good performance and take time to explore mistakes and the reasons for them.

Turning CPD into Practice

DANCE

CPD session attended: Deliberate Practice Led by Charlotte Tabert











What practice did you note?

Charlotte shared a range of strategies of retrieval practice that she uses in her Music lessons. She shared at the start of the session, the idea that learning is at least in part defined as a change in long-term memory. She used a quotation from Sweller et al (2011), 'if nothing in the long-term memory has been altered, nothing has been learned'. One of the main strategies she uses is a starter quiz at the beginning of each lesson, on a PowerPoint slide, to recap the previous lesson and to gain an understanding of the students' knowledge of that before moving on to learning new information.

How have you adapted this for the department or classroom?

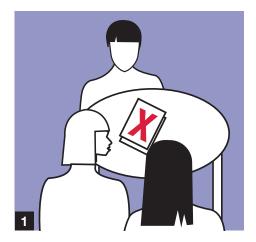
We decided to adopt this approach, and adapt it for the learning climate that came with the second lockdown as all students were learning from home again! This meant that we were able to utilise websites such as Satchel One, using the quiz facility. Students were able to access the quiz, which had been tailored to the knowledge gaps that needed filling for our year 10 students. Using the performance scores of the quiz, we were able to gain instant data to assess how the students had fared and who needed extra support during the lesson.

On the return to classroom-based teaching, we are adapting this again and using them as verbal quizzes on PowerPoints along with match-up tasks with resources to check understanding.

What has been the impact so far?

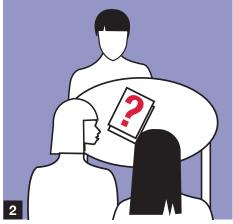
The impact of the retrieval practice starter quizzes has meant students are more confident in the knowledge learnt during lockdown, and are more equipped to move on to new information once they feel each set work from the previous term had been consolidated for them. It has also helped embed the knowledge for their long term memory.

Quizzing for Starters: A strategy for knowledge retrieval in order to dispel misconceptions, provide information about what has been learned and where gaps still exist.



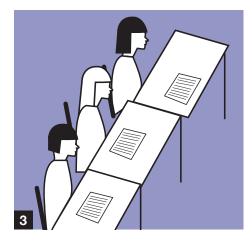
IDENTIFY MISCONCEPTIONS

As part of the short and long-term planning, identify common misconceptions in the topic area. Choose content which covers a range of content over a wide period of time. This helps with long-term memory and retrieval.



DESIGN THE QUESTIONS

Use a range of question techniques. Closed questions such as multiple-choice questions allow for easy and quick access to data. Multiple Choice Questions are a method of assessment that allow us to check knowledge and unpick misconceptions.



STUDENTS TAKE QUIZ

For online teaching, set the quiz to go live at the start of the lesson. Students can take the quiz on Google Classroom before meeting the rest of the group. The teacher can access the result instantly.



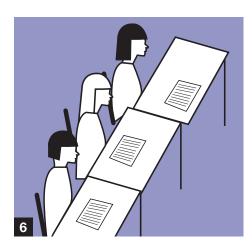
PROVIDE INSTANT FEEDBACK

Provide explanation for the common misconceptions or mistakes. Revisit learning, where appropriate, to improve students' knowledge and understanding.



AFFIRM GOOD PERFORMANCE AND SEEK OUT WRONG ANSWERS

The quiz performance shows where students have gaps in their knowledge and the teacher learns the common areas for development. Give praise for good performance and take time to explore mistakes and the reasons for them.



PLENARY – RESIT THE QUIZ

Set the same quiz as a plenary at the end of the lesson to give students the opportunity to improve on their knowledge and demonstrate the clarity of their understanding.

FILM STUDIES

CPD session attended: Deliberate Practice Led by Jason Hatchell











What practice did you note?

Jason shared his strategies for knowledge recall, using a variety of different tasks to help students retain subject knowledge. The main strategy that inspired us was 'Geog Your Memory.' For this, students were given a series of questions as part of a starter activity; whereby they had to discuss with their partner for 1-2 minutes, and were given the same amount of time to answer the questions. This strategy requires minimal planning and maximum memory. Students were not allowed to use their notes and have to use their long term memory to access the information needed.

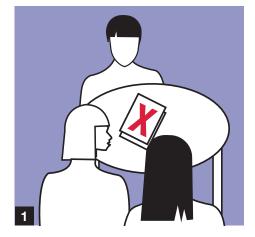
How have you adapted this for the department or classroom?

In Film Studies, we have adapted Jason's strategy and have implemented 'FLASHBACK!' Initially, we used this strategy to ask closed knowledge retrieval questions, as a way of addressing misconceptions from the mock exams. These questions were low stakes and simply required students to remember key social, historical and political context. However, throughout the year, we contemplated ways of making these questions more valuable. We decided to develop questions for a range of mediums, including homework quizzes and short form exam questioning. This has proved incredibly effective, as we have been able to see the value of these questions in a quantifiable way, through Google Forms and mock exams. This has helped to improve our SOWs for each topic, ensuring that our students are able to retain their subject knowledge throughout the year.

What has been the impact so far?

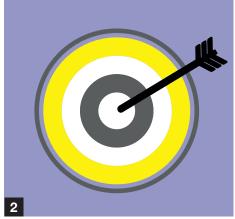
From looking at our mock exam performance from November to May, we have seen a great deal of improvement in our students' short form exam question responses. Our 9-4 grades have increased by 15% overall, with students accessing more marks in the shorter form questions, which were perhaps previously overlooked in favour of the 15 mark questions. Moreover, we have completed further assessments combining our FATCAT mnemonic as part of our previous academic year's pedagogical study, with our knowledge recall style questions. The impact of this will be apparent in our final TAG grades for this year.

Knowledge recall starter activities: These tasks ask students to revisit past subject content, focusing on key contextual information and themes. These questions allow for students to store information in their long- term memory.



IDENTIFY MISCONCEPTIONS

Identify student misconceptions. To do this, re-visit schemes of learning including previous feedback lessons which will highlight mistakes and areas for development e.g you might notice that students neglect to include key contextual information in short and extended exam responses or miss opportunities to develop a point.



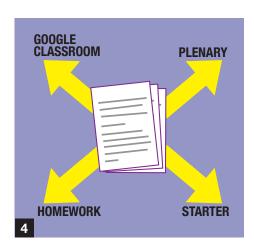
IDENTIFY TOPICS/ AREAS OF UNDERPERFORMANCE

Review student mock exam responses to identify the topics that need to be addressed. Prioritise the topics that are due to be assessed in the next round of mocks, so that students have time to practice and prepare. Find ways to categorise questions so that that students can develop and link these ideas into further detailed arguments.



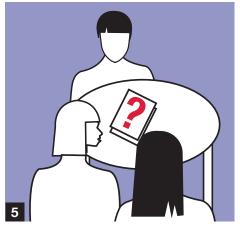
QUESTION DEVELOPMENT/ FORMATTING

Design a series of questions that could be used across the curriculum and exam components. Consider for these questions to be both open and closed, in order to stretch and challenge students. Consider these activities to be completed in assessment books to highlight the importance of the questions and for them to act as a future revision tool.



ADAPTATION FOR DIFFERENT MEDIUMS

Consider formulating the questions to suit remote/blended learning including using them as starter activities, in addition to homework quizzes. Remember to embed these into schemes of learning for future use in the classroom.



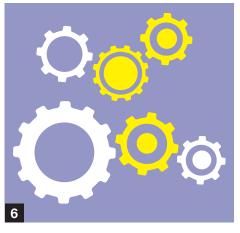
DESIGN THE QUESTIONS AND DISPLAY THE ANSWERS

Consider a range of question styles:

- Short answer fact check
- Short problem solving
- Labelling diagrams
- Recitation of quotes
- Completion of definitions

Consider how to go through the answers:

- Show all answers simultaneously
- · Go through one-by-one
- Automated marking for the teacher to decide how to re-visit



REFLECTION AND ADAPTATION

To refine, polish and improve the quality of the questions, take time to reflect and evaluate student response and consider whether the questions are working as was the intention.

GEOGRAPHY

CPD session attended: Deliberate Practice Led by Jason Hatchell











What practice did you note?

Homework in the Geography department has had a change of approach from being research driven to focus more on retrieval practice and knowledge retention. The previous homework strategy was not regular, consistent and focussed on a particular outcome, and therefore re-framing homework to all focus on one particular outcome was key.

We liked the idea of all students in Key Stage 4 all having similar formats of homework with a common purpose. We could also see the value in this type of strategy for consistency and standards of expectations being the same for all students. Finally, we thought that this was a strategy that could tie in nicely with other retrieval strategies we already used in department – creating holistic deliberate practice.

How have you adapted this for the department or classroom?

The Geography department has designed 3 different types of retrieval homework strategy as a result of our CPD;

- 1. Guided Reading
 - reading an article/extract and answering questions surround the content.
- 2. Retrieve It, Implement It!
 - 10 closed questions, followed by a linked exam practice question.
- 3. Retrieval Pop Quiz
 - Interleaving knowledge-based quizzes which build up in depth over time.

The department spent a CPD day with key roles for each topic on the GCSE curriculum, to design each of the above homework's.

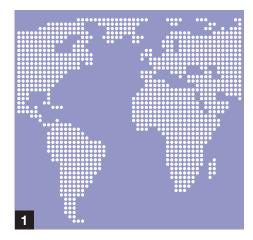
We researched and chose an appropriate article for each of the topic areas of study in the Geography curriculum. We used our Knowledge Organisers from student's Knowledge and Assessment booklets to create banks of pop quiz questions specific to each topic. We also chose appropriate exam questions for each topic and sequenced then in the homework cycle so that student's completing them for homework were doing so at an appropriate time.

All of this has meant that each topic of our GCSE now has 4 homework's only, but each one has a key retrieval outcome and has reduced teacher workload.

What has been the impact so far?

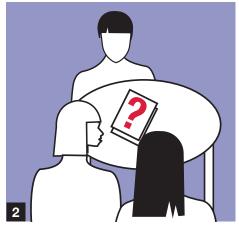
The impact on this strategy has been really positive. There has been a definite increase in completed homework by students. Using these homework's as starter discussions in lessons has enabled retrieval conversations to take place and high-level verbal feedback. Students like the competitive side of the pop quizzes and have taken ownership of the self-marking aspect of it at home. Although the whole homework strategy is still in its early stages, it has so far been successful in simplifying department's homework approach, increasing student completion, and reducing teacher workload.

Retrieval Practice Homework: This homework strategy has been designed to simplify the homework process, gain maximum benefit of knowledge retrieval for students, and therefore lead to higher outcomes.



MAP OUT YOUR HOMEWORK CURRICULUM

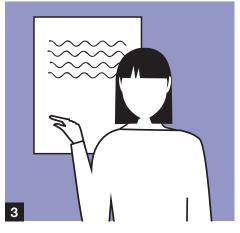
Identify where you would like homework to take place in your curriculum sequencing so that you have an idea of the numbers of homework tasks you need. Make a decision on the types of retrieval practice homeworks you would like to take place and when (e.g. Retrieval Pop Quiz – mid topic for review).



DESIGN THE HOMEWORK ACTIVITIES

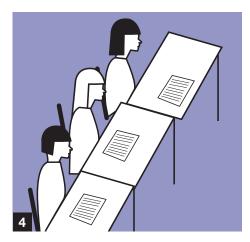
Design your three types of homework for each topic, ensuring they recall recent and historic knowledge. These can take a variety of styles such as:

- Exam question practice.
- · Self-marking pop quizzes.
- · Retrieval Reading.
- Retrieve knowledge and practice.



DESIGN ANY SELF-MARKING TOOLS

For any pop quizzes, or short questions retrieval practice, design a simple tool students can use as a secondary homework or start to a lesson to self-mark the answers. These can then be recorded later for the tracking of students' progress on their homework.



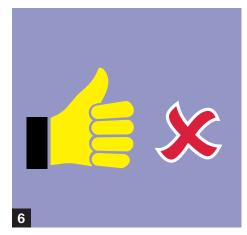
PRACTISE IN LESSONS!

Take the opportunity to introduce the styles of homework to students in lesson and use them as a revision activity. This reduces misconceptions and increases understanding to make your overall homework strategy more successful.



SET THE HOMEWORK AND CHECK THE CHALLENGE!

Set the homework at the appropriate time in the curriculum sequencing, and set a second additional homework afterwards for self-marking quizzes. Check students understanding and progress as a start in lesson and gauge the level of challenge – some students may need an extra level of challenge!



ADAPT, AFFIRM PERFORMANCE AND USE!

Adapt any homeworks you think need more challenge based on your checking of students' understanding. Affirm student performance in lesson and track their retrieval knowledge over time. Refer to the homework during the lessons continually referencing the knowledge they have reviewed and use it as revision.

Turning CPD into Practice

HISTORY

CPD session attended: Clear Explanation Led by Amy Rolleston | Deliberate Practice Led by Jason Hatchell











What practice did you note?

We noted the practice of using scaffolding and the breaking down of skills during the process of answering examination questions from Amy's presentation. We linked that to the CPD session led by Jason that discussed the use of 'GeogPods' as a method of revision and retrieval.

During Amy's session, she spoke of the importance of clear explanation as a central feature of effective teaching in enabling students to develop their knowledge and understanding of ideas. She shared strategies for clear explanation including breaking large chunks of material into small steps. We decided to fuse this with the concept shared by Jason of the 'GeogPod' podcast.

How have you adapted this for the department or classroom?

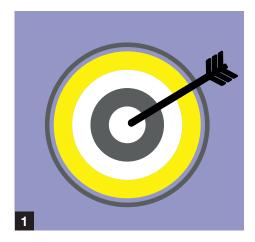
We adapted these two CPD opportunities and linked it to a focus on 'Teaching to the Top'. This was aimed at preparing students to answer exam questions as part of their revision process. We completed this to ensure that revision not only included knowledge, but also the effective application of relevant and specific knowledge in exam answers. As a department we have used our strength and experience as examiners to make sure that students are completely clear on how to answer the questions.

To successfully achieve this, we created a series of 'HistPods' that clearly explained how to answer exam questions. They incorporated high level exemplar answers to precisely establish how students could successfully meet all of the assessment objectives on the exam papers for this year. These 'HistPods' broke down the questions, then went through the level of specific examples that they are expected to include, modelled the use of the language of explanation and evaluation as required, as well as how to incorporate a sustained judgement. The different skills listed here were highlighted in different colours to show clearly where and how they are being used. These were provided on google classroom for Years 10, 11, 12 and 13 to use as part of a comprehensive revision package.

What has been the impact so far?

Students have had a positive response to this, watching it with staff and in their own time. They have noted that they have used them on a number of occasions as part of their revision approach. This was implemented across both year 11 mocks, as well as for the year 10 mock. It is also continuing to be part of our revision packages leading up to the Year 12 IPE.

HistPods: These are recorded podcasts which include expert commentary over a PowerPoint presentation to demonstrate and explain what a model answer looks like for History GCSE



IDENTIFY THE SKILLS AND CONTENT

Identify the key skills and assessment objectives students are required to demonstrate in exam answers; using mark schemes, examiner reports and exam marking experience to do so.



WRITE THE ACCOMPANYING POWERPOINT PRESENTATION

Produce a simple summary slide on a PowerPoint to explain the essential skills that students are required to demonstrate.



SET THE STANDARDS THROUGH MODEL ANSWERS

Set the standards for the work that will be completed by creating model answers. These should demonstrate the skills at the highest level. This exemplifies 'Teaching to the Top' providing an exemplar that would gain full marks to students. Carefully choose the most appropriate question/s which will demonstrate the skills most effectively.



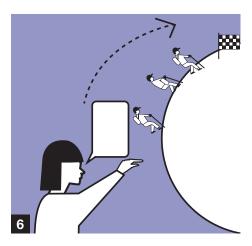
RECORD THE COMMENTARY

Plan and script the narration to accompany the model answers and PowerPoint slide/s using pertinent language of the exam board, mark scheme and examiner reports. Record an expert commentary over the PowerPoint to go through the model answers and clearly point out where and how the relevant assessment objectives had been met. Use colour in the presentation to highlight the use of specific relevant examples of the skills identified in the mark schemes.



MAKE THE RESOURCE ACCESSIBLE

Once the recording and presentation is complete, ensure it is easily accessible to the students in the way it is intended to be used for example, The HistPod recording was uploaded into Google Classroom and formed part of a comprehensive revision package that also included big picture 'stories'.



EVALUATE AND REFLECT

Use the students' work, assessments, mocks and classroom contributions to evaluate the use of and efficacy of the podcast/PowerPoint presentations. Monitor and evaluate the numbers of students accessing the resource; this can be evidenced in student work or a quick survey of the class through a show of hands.

COMPUTER SCIENCE

CPD session attended: Deliberate Practice Led by Jason Hatchell











What practice did you note?

We observed Geography's use of a range of strategies for knowledge retrieval which included "Geog Your Memory" starter questions, "Retrieve It!, Implement It!" Homework strategy and "The Geog Pod" Podcasts, all of which could be implemented within our Department. We recognised that long term knowledge recall was an area we needed to work on within the department to enable students to retain challenging theory. Computer Science involves a significant amount of theory which can be challenging for students to recall with sufficient detail required at GCSE.

Of particular note from this session were the points about how our memories work – that great teaching can hook the students' interest, should be relatable, shocking and repeatable (without them knowing).

How have you adapted this for the department or classroom?

Our focus has been on using starters to recall previous content. We picked particularly difficult topics to start with which students find difficult to remember key terms and concepts, in particular, working definitions for short answer questions, tracing through algorithms to better understand programming constructs, and steps involved to solve problems. In order to support students' development of these skills and in order to align this with the assessment objectives we have incorporated the use of exam style questions which help highlight issues students have with recall. This includes actual exam questions or parts of structured questions, as might be found in ExamPro (supporting software for AQA). Since starting this we have pulled together a bank of starter resources designed to embed retrieval throughout the curriculum. We work on a last lesson, 1 month, 3 & 6 month retrieval cycle, although this has been difficult to consistently implement due to COVID delivery adjustments.

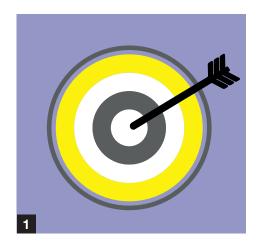
Whilst we have been unable to implement Pod Casts at this point, we have found the inclusion of AQA exam questions as starters within lessons very helpful for both knowledge retrieval and engagement. Homework has also been primarily focused on completing extension tasks set in Google Classroom, rather than retrieval.

What has been the impact so far?

We have found using these starters that students are able to recall, with greater accuracy and depth of understanding, previous lesson content long term. We believe the time invested to deliver the starters will reduce the time needed later to revisit content, although this has been difficult to prove due to COVID and the need to revisit some content covered during lockdown.

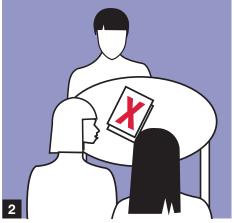
As well as encouraging accurate knowledge retrieval, Students have developed a deeper understanding of how they will be assessed. We also observed an increase in confidence from students when answering starter questions. The questions have proven to improve outcomes for repeated end of topic assessments, even after some months.

Jog your Memory: Helping students remember key terms and concepts through knowledge retrieval starters.



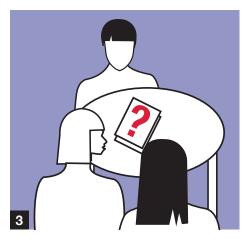
IDENTIFY TOPIC AREAS & ADD TO YOUR PLAN

Identify topic areas from past lessons within the scheme of learning and plan in a revisit. Focus on those topics students find challenging, but include a mix of all past content within your plan.



IDENTIFY PARTICULAR DIFFICULTIES

Identity particular difficulties or misconceptions students may have within the topic student area. If a class or cohort has particular difficulties keep a note in the back of your planner or highlight the area on your curriculum maps.



CHOOSE THE QUESTIONS

Choose appropriate exam questions from the resource bank or ones from a text book, and identify further questioning which may be explored around the topic.



POSE THE QUESTION, TRACK PROGRESS

Put the question up during registration to give students sufficient time to process and answer. Use a marksheet as a simple tracker ticking off students who have answered questions to help ensure all students get involve during the subsequent lessons. All students need the time to access all questions.



PRAISE AND MODEL THE ANSWERS

Praise involvement and model exam board answers as appropriate. Take time to explore misconceptions, mistakes or omissions made by students.



REVISIT AGAIN

Revisit the same topic in 1 month, 3 or 6 months using similar questions. It can be helpful to look at the different wording used for similar questions.

Turning CPD into Practice

MATHS

CPD session attended: Deliberate Practice Led by Jason Hatchell











What practice did you note?

The CPD introduced us to 'Geog your memory' which were repeated questions in different lessons. So over the series of lessons it was possible to identify misconceptions which were then used to plan questions for the following lessons. Jason has embedded this strategy across the Geography department; it involves 3-5 starter questions, based on learning from a previous lesson, a few lessons back and an earlier topic. The same 'Geog your memory' task is used as a starter and a plenary, using the information again and again.

How have you adapted this for the department or classroom?

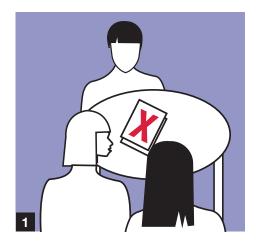
As a maths team, we used the concept of practice and rehearsal to apply to the testing of processes and topics in maths.

Using the online platform Desmos, testing knowledge and understanding of current topics, we decided to design bespoke questions to use as rehearsal, practice and retrieval during maths lessons. We aimed to use the Desmos platform to identify misconceptions and provide instant feedback to students. This facilitated the opportunity for students to revisit their work and actively correct it. In doing so, they were able to develop their understanding of the mathematical process.

What has been the impact so far?

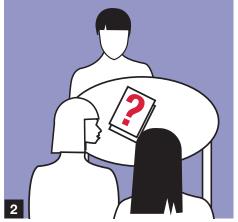
Desmos has been implemented effectively with various classes across the maths department. By receiving instant feedback, it has been noticed that students are enabled and more confident to correct their work; in doing so we envisage that they have been able to learn from their mistakes and improve their learning. This has been evidenced by teacher feedback on completion and performance on some of the topic areas.

Desmos for retrieval practice: A software package which can be tailored to the needs of a topic area.



IDENTIFY MISCONCEPTIONS

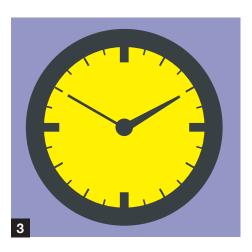
Teach a series of lessons on a topic and meet with the team to discuss and establish the common misconceptions.



WRITE THE QUESTIONS ON DESMOS

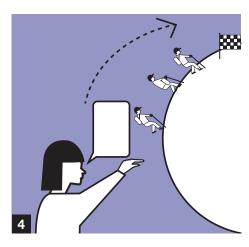
The available types of questions available to use on Desmos are:

- Matching
- Multiple choice
- · Short answers
- · Long answers
- Graphing



PROVIDE TIME FOR STUDENTS TO COMPLETE THE TASK

Give all students time to answer all of the questions. The aim is to check that all students know all the material on the grid.



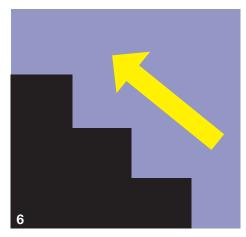
INDIVIDUAL FEEDBACK: REINFORCE AND CLARIFY

Give time for feedback by embedding it into the lesson planning. Provide explanation and feedback to students clarifying misconceptions, modelling processes and questioning thinking. Praise and affirm good performance and effort.



MAKE CORRECTIONS

Provide time for the students to correct work based on feedback so that their understanding is reinforced.



PLAN NEXT STEPS

Make a note of the misconceptions, mistakes and areas where the students faced the most barriers to completion and use this to inform and plan the next steps. Include areas of challenge in the next retrieval practice Demos activity so that the students have the opportunity to re-visit and rehearse processes.

Turning CPD into Practice

MATHS

CPD session attended: Deliberate Practice Led by Jason Hatchell and Alex Blinkhorne-Mason











What practice did you note?

In Jason's presentation, he spoke of the importance of retrieval practice. The "Retrieval Practice Placemat" slide gave three focal points to retrieval practice; Include feedback, space your practice, match practice to assessment.

Similarly, Alex discussed the concept of spaced learning; when information is more easily learnt when it is repeated multiple times, with time passing between the repetitions.

How have you adapted this for the department or classroom?

In the light of the CPD sessions we decided to improve memory of mathematical processes by introducing half termly retrieval tasks at the start of every lesson. We felt that this supported the concept shared by Alex, of spaced learning where the students would have the opportunity to practice and repeat the ideas and processes they had been taught in the relevant maths topic.

To do this we created skills review booklets where students address 6 different topics per week, and then meet the same topics the following week, then, again the following week repeating throughout the half term.

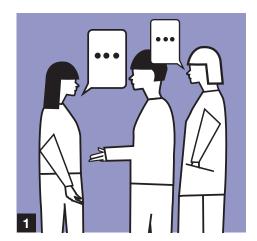
Teachers went through the answers with the class, giving instant feedback and further examples were modelled where necessary to reinforce learning and embed into long-term memory.

What has been the impact so far?

Anecdotal evidence to date has been positive regarding the new half-termly retrieval tasks. Furthermore, teachers have witnessed students in lesson showing signs of improvement through use of the starter. Students are certainly growing in confidence in their ability to tackle those topics covered in the exercise.

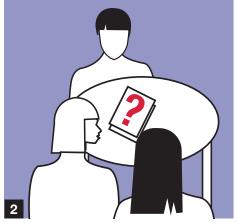
There is some evidence of improvement in results between assessments in October 2020 and the assessment in May 2021. This is in part to the use of the retrieval material as students are scoring correctly on topics only visited this academic year through the booklets.

Skills Review Booklets: A booklet which includes pre-written questions on 6 topics in weekly segments.



IDENTIFY TOPICS

Consider as a team the topics needing review. To support the process use a mixture of GCSE exam reports, mock performance, topic tests, homework performance and RAG sheets.



LOCATE THE MOST EFFECTIVE QUESTIONS

Take time to consider which questions will best suit the task, highlight gaps in understanding and shed light on misconception. Search through text books or Exam Board websites and other online resources. Ensure suitability for use in the booklet, for example the time needed to answer the questions.



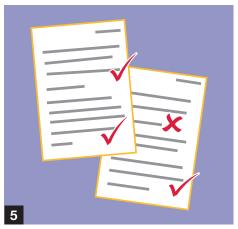
CREATE THE RESOURCE

The questions can be inserted onto a PowerPoint resource alongside a hard copy booklet. Insert the questions being sure to space them over a period of time for example, weekly. And ensure they cover the topics identified in step 1. Duplicate the questions over time to ensure rehearsal, practice and repetition.



TIME THE LAUNCH

Decide upon the best time to launch the retrieval practice strategy. The start of a term or topic may be a good starting point. Conduct the retrieval practice activity at the beginning of each lesson for the first 10 - 15 minutes.



ADDRESS MISCONCEPTIONS

Allocate time to include feedback from the teacher, identifying and addressing common errors. Use live modelling to clarify and re-visit mistakes.



EVALUATE AND RETURN TO STEP 1

Identify which of the topics addressed have been sufficiently mastered and those which need revisiting in the next half term. Use this information to make new retrieval practice booklets (step 1.)

Turning CPD into Practice

MFL

CPD session attended: Deliberate Practice Led by Charlotte Tabert and Alex Blinkhorne-Mason











What practice did you note?

During Alex's CPD session she shared with us the concept and importance of spaced learning and its relevance to memory. We were particularly interested in the research by Wyner who conveyed that through practising for 30 minutes a day, you can expect to learn and retain 3600 flashcards with 90 to 95 accuracy. This was relevant to us as a MFL department to enable us to facilitate the learning of vocabulary and pronunciation.

Alex shared strategies for recall and retention including historic knowledge checking, quick check information and the importance of keeping 'old knowledge' live. She shared ideas for retrieval practice and linked it to spacing learning over the course of a week or cycle.

How have you adapted this for the department or classroom?

In MFL we use retrieval practice grids to facilitate memory and recall. We made the decision to extend the retrieval grid practice into all key stages including specific topic-based revision retrieval grids. This ensured consistency across the department and across teachers. After much consideration we agreed on a formatting approach for all key stages as this was something that prior to this process was left to teacher discretion.

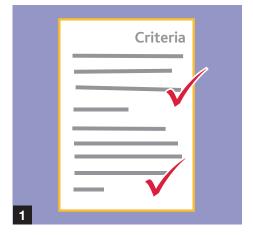
Initially, retrieval grids were used as a starter activity but throughout the year they have developed into a vital tool in not only assessing students' prior knowledge but also to ensure the students are retrieving the cross-curricular grammatical elements required to succeed in Modern Foreign Languages.

What has been the impact so far?

Increased consistency across department has led to students being more secure in their formation of grammatical elements and are clearer about the expectations and requirements for assessments which enables more focussed revision. A common student complaint with MFL is that they don't know how to revise but this process has enabled us to provide students with a guided revision tool that allows us to give scaffolded support for SEN and low ability students whilst also challenging our high ability students by incorporating our Level Up strategies (see last year's Anthecology entry 'A Recipe for Success').

PRINCIPLE: Deliberate Practice

Retrieval grids: Knowledge recall strategy used to memorise topic specific vocabulary and grammatical elements in MFL.



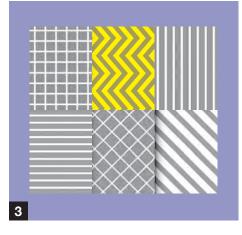
DECIDE UPON THE SUCCESS CRITERIA

What do you need your students to recall and remember? Use the specification or Subject Learning Checklists to agree as a department on key elements for students to be able to demonstrate by the end of the topic ('start with the end in mind' Stephen Covey).



DESIGN THE GRID

Create an agreed format for your grid. Consider the medium this will be displayed through, for example projected on a white board or photocopied onto paper. Consider colour coded boxes and points to allocate according to topic area, time span since learning the content, specific assessment questions or the level of challenge. Decide upon the number of boxes in relation to questions asked.



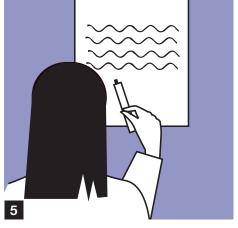
DIFFERENTIATE THE GRID

For subjects that set students according to ability or that have tiered papers such as foundation or higher, adapt the grid accordingly whilst always being mindful of not watering-down the content and 'levelling up'!



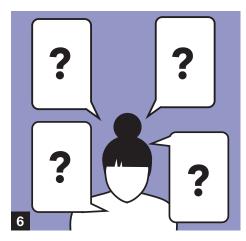
PROVIDE TIME

Give all students time to answer all of the questions. The aim is to check that all students know all the material on the grid.



PROVIDE CLEAR EXPLANATION

Explain the purpose and motivation behind the retrieval grid in order to give agency to the students. Break it down into small steps and ensure they have time to access all the questions.



EMBED THE CONTENT INTO THE LESSON

Refer back to the retrieval grid throughout the lesson and use it to refer to the learning outcomes; this helps to embed the learning. Use questioning techniques to support this process including cold-calling and posepause-pounce-bounce.

Turning CPD into Practice

MUSIC

CPD session attended: Deliberate Practice Led by Charlotte Tabert and Jason Hatchell











What practice did you note?

Some of the ideas that Charlotte shared were through starter activities that enabled students to explore their memory to check what they know and understand, by removing prompts and giving them the opportunity to think for themselves.

The starters can vary in task, from 'write what you can remember' to specific questions, through to linking the key term to the musical device.

Other Ideas that Charlotte shared were consolidation activities, such as; enabling students to note down everything they can remember before leaving the lesson and then adding to this to develop their revision; as well as making students the expert of a particular area in order to reteach content to other members of the class.

How have you adapted this for the department or classroom?

Knowledge Retrieval in the Music department has been developing over the last couple of years. The ideas that Charlotte shared, have been embedded into the department throughout all year groups.

Questions will be embedded into schemes of work; however, these can be changed depending on the group's particular area/s of need.

Quizzes on show my homework have also been set, from year 9 to develop and recall knowledge of key terms, to GCSE and A Level to recall set work knowledge.

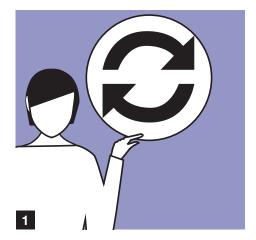
This includes students recalling knowledge from not only the last lesson and the current topic, but also from other topics that they have studied previously. This has been developed in particular for A Level so that students can make links to all pieces studied, as well as making links within this to Historical, Cultural and Social context, which plays a large part of the extended writing within the exam.

What has been the impact so far?

The impact on this strategy has been really positive. All students engage positively. Students' confidence in recalling previous knowledge is improving, this is evidenced in the pace of cold-call questioning. A Level students have been able to confidently use their knowledge in exams, evidenced in recent mock performances on the written paper, in particular when recalling historical, cultural and social contexts.

PRINCIPLE: Deliberate Practice

RETRIEVAL PRACTICE HOMEWORK: This homework strategy has been designed to simplify the homework process, gain maximum benefit of knowledge retrieval for students, and therefore lead to higher outcomes.



WHAT DO THEY NEED TO KNOW?

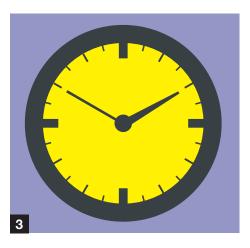
Plan through the scheme of learning – what order do students learn things, what things have they learnt previously? What things have they learnt in other topics? Can they make any links?



DESIGN THE QUESTIONS

Design the questions:

- Short answer fact check
- · What can you remember?
- Match key terms to definitions
- True or false



PROVIDE TIME

Give all students time to answer all of the questions. This must be without accessing knowledge content in their resources / books.



PROVIDE THE ANSWERS FOR STUDENTS TO SELF OR PEER-CHECK

Provide the answers and allow students time to mark and correct answers. Take time to seek out misconceptions, wrong answers and praise good performance and effort.



ALLOW TIME FOR STUDENTS TO CORRECT

Allow time to develop their knowledge and understanding by explaining knowledge and content, clarifying the misconceptions and mistakes and ascertaining where the misunderstanding comes from.



CREATE THE NEXT SET OF QUESTIONS

Dependant on the outcome of the previous set of knowledge retrieval, students should be given the opportunity to develop the misconceptions. Repeat the question if needed. Repeat steps 2-6.

Turning CPD into Practice



CPD session attended: Deliberate Practice Led by Jason Hatchell











What practice did you note?

The "Geog" pod is a pre-recorded 20-minute podcast covering a specific part of the Geography curriculum. The department have recorded a variety of Geog-pods for students to tap into as a method of revision and knowledge retrieval strategy.

I liked the idea of year 11 students listening to the podcast on their phones in a variety of different ways. I could see them listening as they were travelling to school, at home or during lesson time as a revision technique. I thought it was a very modern way of trying revision and something that the PE department could adapt and put their own spin on.

How have you adapted this for the department or classroom?

In the light of attending the CPD session, the PE department has created 5 PE podcasts called "2 PE's in a pod". Kieran Brasier has taken this area on and has invited "special guest" PE teachers to join him on the Pod to discuss different areas. We then asked a year 13 art student, recommended to us by Cheryl Burgoyne, to design the artwork below:



Following this we asked Sam Page to link the artwork to the sound recording and have uploaded it to our YouTube Channel. They have been uploaded to the google classroom as an alternative revision strategy. Many of our PE students (mainly boys), have employed this new way of information retrieval. We have also used these in cover lessons to support learning supervisors.

What has been the impact so far?

We are still in the early stages of using these, however the videos have had over 100 views each so far. These topics also link well to our end of unit tests that students have been using for revision. We used these alongside our live lessons during lockdown which proved useful for some students that were having issues logging in or attending live lessons.

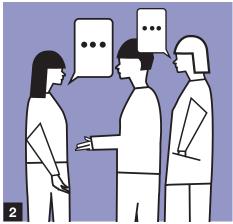
PRINCIPLE: Deliberate Practice

Podcast: a digital audio file made available on the internet for downloading to a computer or mobile device, typically available as a series,



ATTEND CPD, DISCUSS AND STRATEGISE

We attended Jason Hatchell's CPD and was really impressed with his ideas for retrieval. We felt they were really good and very modern. As a department we discussed how we could use his ideas for our students.



DECIDE THE TOPICS

Once we decided on the podcast we met as a group of GCSE teachers and decided on the topics we wanted to address. We discussed whether to address common misconceptions, however felt we could make it more useful if we linked it with end of unit tests.



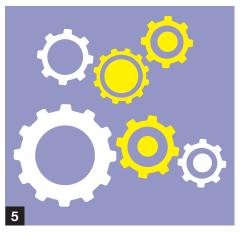
PLAN, PREP AND FORMAT THE PODCAST

Prior to recording the podcast, we planned out what we were going to cover. We discussed content as well as opportunities to present in different methods.



RECORD THE PODCAST

We recorded the podcast on a phone as a voice recording. The aim was to make it sound like a conversation between 2 PE teachers that would cover the key content areas. Each podcast varied on length with a rough time of 20-30 minutes



REVIEW AND ADAPT

Before sharing the podcast we ensured that the quality of recording was appropriate and edited out and bits we didn't like. This was easily achieved on our phones by deleting the sections we didn't want. On some podcasts we felt we needed to add some extra content so that we covered it in enough detail.



UPLOAD

We then combined the artwork with the voice recordings to enable it to be a video. We then created a YouTube channel (very easy) and then uploaded the content to that. We then shared the links to the video's via google classroom, twitter etc so that students could listen.

PHILOSOPHY, RELIGION & ETHICS

CPD session attended: Deliberate Practice Led by Jason Hatchell











What practice did you note?

During the CPD session on Enabling Memory and Knowledge Recall, Charlotte noted the importance of knowledge retrieval and clear explanation; and they paired nicely with other retrieval strategies we already used in department – creating holistic deliberate practice. The retrieval strategies were used to embedd curriculum knowledge and build student confidence.

How have you adapted this for the department or classroom?

We were inspired by Charlotte's session and used this to consolidate our approach to starter activities using memory platforms as well as in-lesson progress checks.

Deliberate practice through memory platforms has been used consistently within the Philosophy and Religious Studies Department; we have adapted it to change our approach to checking understanding and student progress and, in doing so, also creating an improved approach to establishing productive routines at the start of a lesson.

The Department has designed a consistent memory platform approach alongside 'pitstops':

- 1. **The memory platform**; 5 questions 4 on prior learning and 1 on the current lesson.
- 2. **The 'pit stop'**; a review moment after each learning outcome to ensure the objectives for the lesson have been achieved.

What has been the impact so far?

The impact of this strategy has been a really positive one. The routine created by the consistent style of starter has established a productive and positive climate at the start of each lesson. Students of Philosophy know what is expected of them when they come into the room.

The memory platforms have helped us, the teachers, to diagnose gaps in learning and decide whether to re-visit or re-teach content. Furthermore, the nature of the approach has increased opportunities to affirm and praise students!

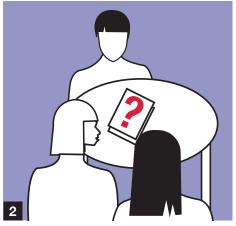
PRINCIPLE: Deliberate Practice

Memory platforms: A spaced learning technique, usually completed at the start of a lesson, to improve long-term memory and knowledge retrieval.



IDENTIFY THE TOPIC AREAS

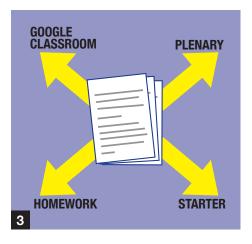
Discuss the curriculum identifying the topic areas for a series of potential questions to ensure a smooth and effective sequence of memory platforms which follow lesson sequencing.



PLAN THE QUESTIONS

Design the questions so that there are:

- · Links to the previous lessons/ learning.
- A range of ideas / concepts covered;
- · A range skills covered;
- Links to the current lesson.



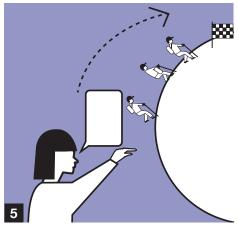
SET THE MEMORY PLATFORM

The memory platform should be visible to the students as they enter the classroom allowing them to commence immediately e.g. projected on a white-board or supplied on a piece of paper by the teacher on entrance to the classroom.



PROVIDE THE ANSWERS FOR STUDENTS TO SELF OR PEER-CHECK

Once the students have completed the memory platform, provide answers for them to check. Reveal all answers simultaneously on a slide or visualiser. Provide explanation for the common misconceptions or mistakes.



CHECK FOR UNDERSTANDING OR MISCONCEPTIONS

Use questioning to check progress and understanding; use cold-calling technique, think-pair-share or other approaches. Revisit knowledge by referring to the learning outcomes and take a 'pit stop' to clearing explain.



RECYCLE THE MEMORY PLATFORM

Reuse memory platforms throughout each unit of work to enable students to rehearse knowledge, recall knowledge. And for teachers to check learning and progress.

Turning CPD into Practice

SOCIOLOGY

CPD session attended: Deliberate Practice Led by Jason Hatchell











What practice did you note?

Jason shared a range of strategies of retrieval practice that he and his team use in Geography. One of the starter activities he shared was a knowledge retrieval challenge grid. The goal of this activity is to secure students' knowledge into their long-term memory through asking questions on information learnt in the previous lesson, previous month, previous term and previous year.

To make the activity engaging points are awarded according to the time past which adds a competitive element to task. The activity also allows for the teacher to assess understanding and plug any knowledge gaps.

How have you adapted this for the department or classroom?

In sociology we have begun to include the knowledge retrieval challenge grid as a starter activity to some of the lessons. In the main, we use short answer fact check questions and writing the definitions style questions. In sociology, students are required to recall studies, theory and concepts so the challenge grid is an effective way to enable students' fluency in storing and retrieving this information.

What has been the impact so far?

The impact from this challenge grid starter is greater student engagement at the start of the lessons and an improvement in their ability to retrieve information from their long-term memory. It has also added to the teachers' repertoire of assessing students' learning, clarifying misconceptions and filling any knowledge gaps.

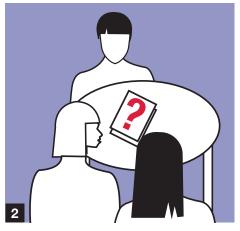
PRINCIPLE: Deliberate Practice

Retrieval Practice Challenge! This starter activity helps to secure students' fluency in storing and retrieving knowledge from their long-term memory drawing on learning from the recent and distant past.



CREATE THE CHALLENGE GRID!

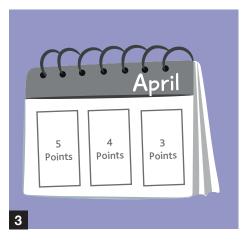
Create a 3 x 4 grid of 12 tiles. Colour fill four lots three tiles in four different colours. Each set will come to represent a different point in time: last lesson, last month, last term, last year.



DESIGN THE QUESTIONS

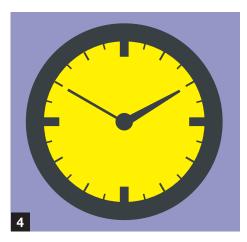
Design three questions for each time point checking for recall. These can take a variety of styles:

- Short answer fact check
- Short problem solving
- · Labelling diagrams
- · Recitation of quotes
- · Completion of definitions



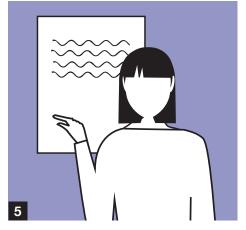
AWARD THE POINTS

Insert points according to award for each question with the highest points awarded for the correct answer to the question from a year previous and the lowest points for the previous lesson.



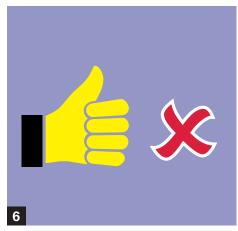
PROVIDE TIME

Give all students time to answer all of the questions. The aim is to check that all students know all the material on the grid.



PROVIDE THE ANSWERS FOR STUDENTS TO SELF OR PEER-CHECK

Once the students have complete the challenge grid, provide answers for them to check. Reveal all answers simultaneously on a slide or visualiser. Provide explanation for the common misconceptions or mistakes.



AFFIRM GOOD PERFORMANCE AND SEEK OUT WRONG ANSWERS

In addition to the retrieval practice itself, a useful outcome from the challenge grid is that each student learns where they have gaps in their knowledge and the teacher learns what the common gaps are. Give praise for good performance and take time to explore mistakes and the reasons for them.



CONSIDER A TOPIC YOU/YOUR TEAM ARE DELIVERING THIS TERM:

learning? Wh	iich 6-step Walkthru could you tweak to secure students' knowledge of concepts?
their learning	e 'big ideas' in the topic without knowledge of which a student will not be able to mast g? Which 6-step Walkthru will work best to enable students to recall and store information g-term memory?

Handbook Handiwork

Where does retrieval practice fit in this topic / scheme of learning / lesson?				



What is Clear Explanation?

Rosenshine suggests that more effective teachers recognise the need to deal with the limitations of working memory and succeed in breaking down concepts and procedures into small steps.

Clear explanation, using subject-specific technology; modelling 'big ideas' and new knowledge act together to provide clarity to secure students' knowledge.

Clear explanation can help to 'remove the fog' and support cognitive development.

Strategies to clearly break down procedures to enable students to develop concepts include:

- Step-by-step planning;
- · Writing frames;
- Explanation grids;
- · Modelling through explanation.

CLEAR EXPLANATION IN THE CLASSROOM – CPD LEAD





CLEAR EXPLANATION AND WRITING FRAMES

BENEFITS

- Curing the 'I don't know how to start' syndrome that often results when students are confronted with a blank sheet of paper.
- · Encourage planning.
- Providing students with a sense of what they are writing. Writing frames offer a structure and overview for the piece of writing along with the appropriate pronouns (I, you, he, it etc.) and joining words and phrases (connectives) that form the links within the text.
- Reducing the 'and then' style of writing by giving students a range of appropriate sentence beginnings and related connectives.
- Raising motivation and esteem by helping students write successfully.
- Helping students understand the appropriate structure and style of essay writing.
- If planned appropriately, writing frames are an excellent way of differentiating tasks to meet the needs of all students.

DANGERS

- Limiting creativity. Writing frames were developed to support analytical writing, not creative writing.
- Students do not have to stick to the frame.
- Students becoming too dependent on frames.
- They do not always allow scope for adaptation and development.

READING JOURNALS

In English we focus on students' reading as a starting point and support their reading by breaking down comprehension through a reading journey.

This enables us to gauge understanding and clarify any misconceptions of the texts and provides the teacher with opportunity to clearly explains what is happening in a text.

Literature context What part of the novella is the extract from? How does it compare with the 2. Why does the Ghost have such a profound affect on Scrooge in this Stave? How can it be argued that this is the beginning of Scrooge's transformation in the novella? Language, question 1 List four things you learn about The Ghost

of Christmas Present from the extract (4

marks)

1. .

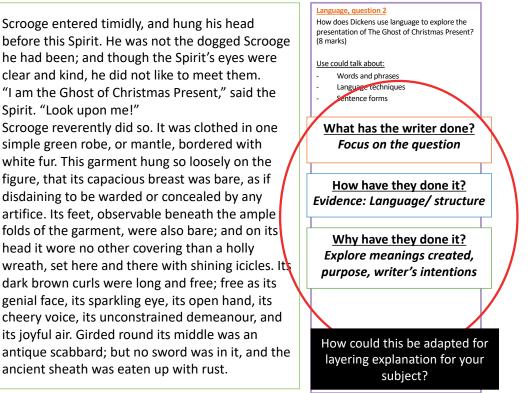
2.

3.

Scrooge entered timidly, and hung his head before this Spirit. He was not the dogged Scrooge he had been; and though the Spirit's eyes were clear and kind, he did not like to meet them. "I am the Ghost of Christmas Present," said the Spirit. "Look upon me!" Scrooge reverently did so. It was clothed in one simple green robe, or mantle, bordered with white fur. This garment hung so loosely on the figure, that its capacious breast was bare, as if disdaining to be warded or concealed by any artifice. Its feet, observable beneath the ample folds of the garment, were also bare; and on its head it wore no other covering than a holly wreath, set here and there with shining icicles. It dark brown curls were long and free; free as its genial face, its sparkling eye, its open hand, its cheery voice, its unconstrained demeanour, and

its joyful air. Girded round its middle was an

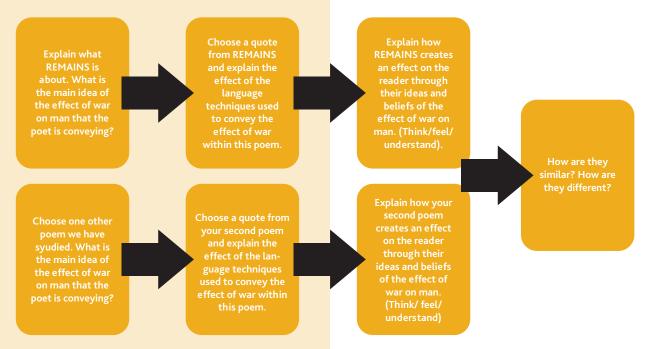
ancient sheath was eaten up with rust.



Tables to help break down concepts:

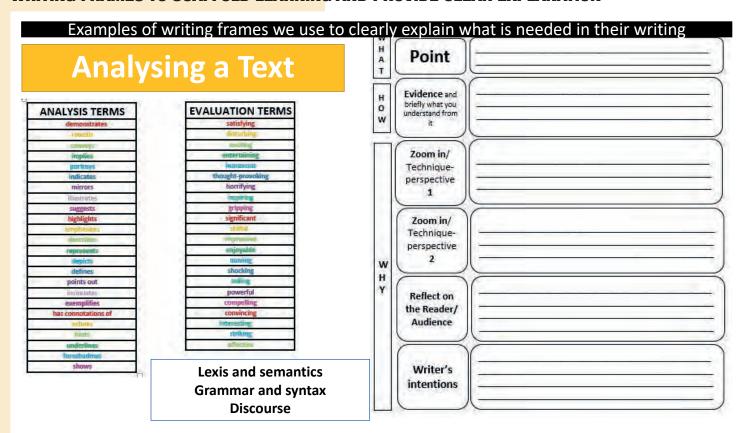
Key word/s effects of conflict	The message and intention of the poem (focus on essay title key words = effects of conflict)	The events the poetic persona finds himself / herself involved in	Relevant contextual factors	The poet's use of language (e.g. imagery, symbolism, verb tense, adjectives, adverbs, emotive language) to show effects of conflict	The poet's use of form and structure (e.g. stanzas, sentence length/ types, enjambment, caesura) to show effects of conflict
Poem 1 –					
Poppies					
Poem 2 –					

FLOW CHARTS TO BREAK DOWN CONCEPTS



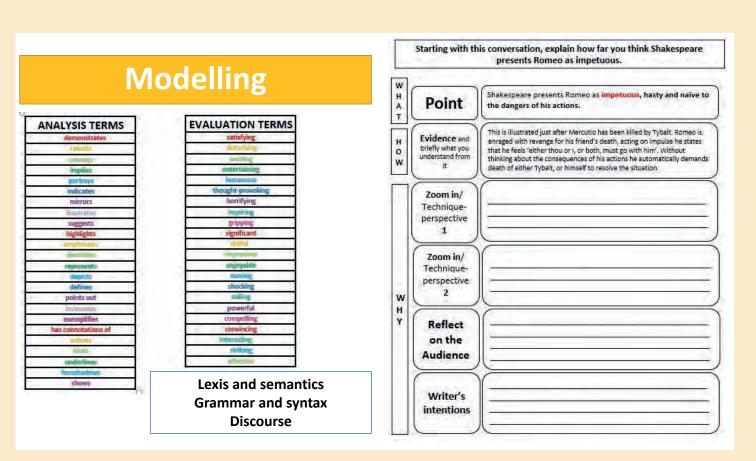
Flow Charts are another great way to break down each part of a response or concept. Similarly, they can be used as a visual to aid understanding of a process (e.g. cause and effect; mathematical process) How could this be applied to your subject?

WRITING FRAMES TO SCAFFOLD LEARNING AND PROVIDE CLEAR EXPLANATION



Point **Summary Example** HOS **Evidence EVALUATION TERMS ANALYSIS TERMS** e Inference ought-prove lowever, On the other hand, Contrastingly, On the contrary, Alternatively, Contrasting to this... Point points out **Evidence** ow 1 Inference Lexis and semantics **Grammar and syntax Discourse**

WRITING FRAMES TO MODEL PRACTICE



CLEAR EXPLANATION AND BREAKING DOWN THE EXAMINATION PAPERS

ENGLISH LANGUAGE, PAPER ONE

Question 2 (Language analysis)

Write an overall statemer to answer the question:

The writer uses

The writer uses language to

METHOD: The writer's use of the ______ (ensure you include

accurate subject terminology).

EVIDENCE: " "

Give an example of the method you have identified from the specified part of the text.

The features you select need to be PIER.

ANALYSE: What does this method

suggest?
What connotations does
the word/technique have?
How does it make the
reader feel?
What tone/atmosphere

does it create?This suggests/conveys/

Repeat this 2-3 times. Ensure you are analysing language from the section specified in the question.

Question 3 (Structural analysis)

Write an overall statement to answer the

The writer uses
 structure to

METHOD:

- The writer begins the extract...
- The writer shifts focus
- The writer uses a

ANALYSE:

How does this structure features interest the reader?

need to be STOPASEC.

- This allows the reader to focus on...
- This remind the reader
 that
- This intrigues the reader
 herause

Repeat this 2-3 times. Ensure you use the full extract in your response.

Question 4 (Evaluating)

Respond to the statement:
• I agree with the statemen

METHOD: The writer's use of

(This could be character, setting, any language features or structural features)

EVIDENCE: "_____" is used

Give an example of the method you have identified from the specified part of the text.

NAI VSE

Explain how the method supports/contradicts the statement.

- This supports the statement
 as
- This challenges the statement
- I believe that this suggests..
- This is effective as it...My own impression is...
- My own impression is... which is supported by the writer's.....

Repeat this 2-3 times. Ensure you are EVALUATING how the writer achieves something.

Question 5 (Narrative Writing)

DROP

Focus on something interesting that will engage the reader.

Use this paragraph to establish the setting of your story or the character of your story. What can they see? What can they hear?

Skills: use of ambitious adjectives, a simile, one simple sentence, one complex sentence

SHIFT

Shift to another time/place.

Use a contrasting atmosphere e.g. a happy/sad memory.

Skills: flashback, an adverbial start, a compound sentence

ZOOM IN

Go back to the setting from the first paragraph and zoom in on something to describe in detail.

Describe the sound, texture, condition, shape, size, material, colour etc.

Skills: a short sentence to create tension, metaphor

ZOOM OUT

Zoom out to something larger/the whole atmosphere.

What is your character going to do? How do they feel? How can you end your narrative?

Skills: ending with a rhetorical question, use of a colon to introduce a list

Complete ONE of the question options given.

Ensure you use the picture to support your writing.

ENGLISH LITERATURE, PAPER ONE

Section A: Shakespeare POINT: Make a relevant point relating to the question. Use your knowledge of the play as a whole to inform your point. Firstly, Shakespeare presents _____ EVIDENCE: Select a reference/quotation from the extract/play to support He creates this impression by stating that '____ The character states ' EXPLANATION: Explain the point you have made. in this way because Shakespeare presents ANALYSIS: Using accurate subject terminology, pick out a language technique or the word that has the biggest impact in your quotation. Explain what it shows and the effect it has on the reader. Shakespeare's use of ______ is effective because _____. Shakespeare uses the noun/adjective/verb/adverb "............" in order to The repetition of the word "..... CONTEXT: Explore what the writer is trying to show us about society/culture at the time the text was written/what the writer wants the reader to understand about the meaning of the text. Shakespeare uses the character to represent society's view that hakespeare highlights Jacobean values of EFFECT: Explain the way audiences at the time would have reacted to the play. You may also want to talk about how modern audiences would react A contemporary audience may have thought _ This would make the audience feel like _____ In comparison, a modern audience would think that Repeat this 2-3 times.

Use the extract given but attempt one PEACE paragraph using your

knowledge from another part of the play

Section B: 19th Century Literature **A Christmas Carol** POINT: Make a relevant point relating to the question. Use your knowledge of the novella as a whole to inform your point. Firstly, Dickens presents _____ EVIDENCE: Select a reference/quotation from the extract/novella to support He creates this impression by stating that '___ The character states ' **EXPLANATION: Explain the point you have made.** in this way because ANALYSIS: Using accurate subject terminology, pick out a language technique or the word that has the biggest impact in your quotation. Explain what it shows and the effect it has on the reader. Dickens' use of _ is effective because _ Dickens uses the noun/adjective/verb/adverb "....." in order to ... The repetition of the word "....." shows.. CONTEXT: Explore what the writer is trying to show us about society/culture at the time the text was written/what the writer wants the reader to understand about the meaning of the text. Dickens uses the character to represent society's view that · Dickens highlights Victorian values of EFFECT: Explain the way readers at the time would have reacted to the novella. You may also want to talk about how modern readers would react differently. A contemporary reader may have thought This would make the reader feel like

Repeat this 2-3 times.

Use the extract given but attempt one PEACE paragraph using your

knowledge from another part of the novella.

In comparison, a modern reader would think that _

Turning CPD into Practice

ART

CPD session attended: Deliberate Practice Led by Jason Hatchell | Clear Explanation Led by Amy Rolleston











What practice did you note?

We took inspiration from the PE department who created '2PEs in a Pod' podcast who, in turn had participated in Jason Hatchell's CPD presentation on retrieval practice. The "Geog pod" is a pre-recorded 20-minute podcast covering a specific part of the Geography curriculum. The department has recorded a variety of "Geog-pods" for students to tap into as a method of revision and knowledge retrieval strategy. We grasped this concept for creating art How to? Demo Clips. The use of visually-formatted recordings in addition to the Artist contextual packs for students, that we have been developing, would be an extremely useful tool to supporting students outside of the classroom.

How have you adapted this for the department or classroom?

We have already been creating Artist contextual packs, to enable students (particularly disadvantaged students) to access information and have created PowerPoints to include a range of inspiring artists' work along with exemplars of previous student research work and modelled research. Students are able to select an artist's work that they find inspiring, to help them develop their own work. Using photos and scans of sketchbook pages we have shown examples of high and low ability students' work and used them to prompt discussion and reflection with our current students; these have helped students to identify and discuss, strengths and weaknesses in their own work.

Due to Lock down, we had to adapt, model and demonstrate how the students would respond to the work of their chosen artist/s, within the constraints of online lessons. Using inspiration from the CPD sessions, the concept of How to? Demo Clips emerged and has enabled this to be accessible to our students.

We took the idea of a visual recording and adapted it, into the form of instructional / demonstrational clips, to aid knowledge on how to create work in response to various artists, using water colour, coloured pencil, tonal drawing, acrylic and oil painting techniques. So, in the absence of being able to demonstrate in class, the clips would allow students ability to follow the clip and produce their work simultaneously, or pause, or replay the clip to help them learn the new technique.

What has been the impact so far?

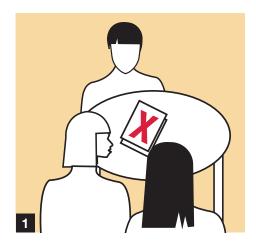
Students using the artist packs have been enabled to gain relevant, in-depth insight into the work of artists and the context under which the work was produced; building on an area of weakness in lower ability students and acting as a starting point to the research and enquiry of higher ability students.

The 'How to?' clips, have enabled self-isolating students and students in lockdown to still learn how to apply media, without the teacher present. The clips are specific for the task set for the students.

The clips can continue to be added to, to create a 'Bank' of clips that can be accessed in the curriculum area for all students. The 'How to?' Demo Clips for year 9 have allowed more in-depth knowledge for students who are passionate about art as the clips enable more in-depth instruction than is possible during an hour's lesson.

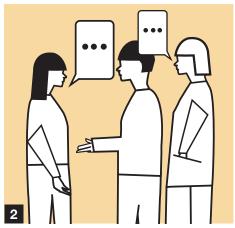
PRINCIPLE: Clear Explanation

How to? Demo Clips and Information packs: Bespoke audio, visual and written resources to support students with key content area.



IDENTIFY COMMON MISCONCEPTIONS

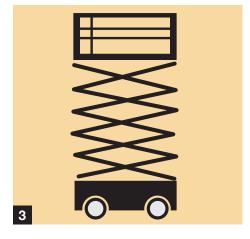
As part of the short and long-term planning, identify common misconceptions in the topic area, decide upon the area/s of the curriculum that students find challenging or underperform on.



DECIDE UPON THE STRATEGIES

Discuss and agree as a department the content and sequence of the How to? Demo Clips and Information Packs.

Divvy the clips and packs amongst the team to give each teacher a responsibility for each Demo Clip and pack.



USE EXEMPLARS TO MODEL EXPECTED WORK

Identify and use the most effective models and scaffolding which support student learning. Consider the use of previous students' work as exemplars of the different grade boundaries.



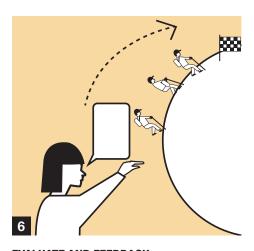
CREATE THE 'HOW TO?' DEMO CLIPS

Record the 'How to?' clips ensuring they include modelling and demonstration which is specific for the task set, success criteria of the assessment/ learning.



ENSURE EVERY STUDENT HAS THE TOOL TO ACCESS THE HOW TO? DEMO CLIPS ONLINE

Ensure all students can access the How to? Demo clips and information packs. These can be posted online or saved in a shared area.



EVALUATE AND FEEDBACK

After the students have used the How to? Demo Clips and Information Packs assess What went well? What could be improved? Ideally the feedback relates to the content of the How to? Demo clips and Information Packs so that the student can revisit and improve.

PSYCHOLOGY

CPD session attended: Clear Explanation Led by Amy Rolleston











What practice did you note?

During Amy's presentation she shared the importance of breaking down information into small steps in order to provide clear explanation. To model this, Amy showed scaffolding examples for essay writing where the different skills were broken down and labelled vertically along the page. She modelled how to break down the exam paper into specific elements whereby each style of question on the GCSE English exam paper is used as a header with scaffolding to support the sequencing of the answer.

How have you adapted this for the department or classroom?

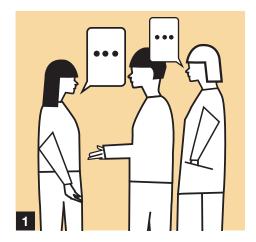
The concept of breaking down large amounts of information has been used by the Psychology department to create knowledge organisers for each section of the Psychology GCSE course. However, rather than using the tradition approach to knowledge organisers where the key information is already presented to students, the psychology team were each assigned a topic area and tasked with creating a useful template for students to stick into their class books and complete once the material had been taught. This gives ownership to the students. So that students do not insert extended prose into the template, the team included sub-headings, diagrams and blank charts to act as a focus for the content the students would insert.

What has been the impact so far?

Students have praised the new initiative and have stated that they find it useful having an a ccessible overview of a topic where the key knowledge and material can be found in one place. Many said they have actively used it as part of their revision strategy.

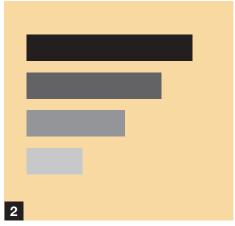
PRINCIPLE: Clear Explanation

Knowledge Organisers: A sequenced template containing key content features of a topic or curriculum specification.



IDENTIFY THE TOPIC AREA

Knowledge organisers can be used to cover the material required for the teaching of a topic area. As a team, decide which topic areas you would like students to have access to a knowledge organiser.



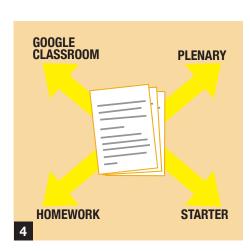
CHUNKING DOWN

Design the template so that the key information is presented in a format that enables self-quizzing. Useful designs include: tables with headed columns; bullet point prompts; flow charts; space for diagrams or timelines.



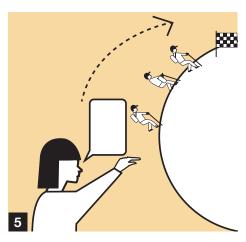
PLANNING FOR COMPLETION TIME

Direct students to complete sections of the knowledge organiser after the teaching of a section of the course. Focus on specific elements of the material so that they insert the relevant and key information. By the end of the topic, the knowledge organiser should be complete and ready for rehearsal, retrieval and recall activities.



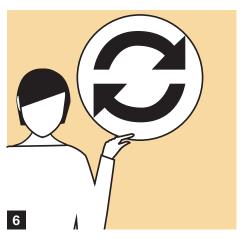
USE AS A STARTER / PLENARY

Ask students to read through their knowledge organiser, covering it and saying it aloud. Design some questions to suit the start or end of the lesson for the students to independently or in pairs to complete.



USE AS A MID-LESSON REVIEW

Before moving on in a lesson it might be relevant to refer to the knowledge organiser to show how the next section of the course fits into the bigger schema of knowledge. Use this as an opportunity to use cold-calling questions, pose pause pounce bounce questions or other retrieval strategies so that the students are ready to be introduced to the next section of the course.



USE AS A REVISION TOOL AT THE END OF THE COURSE

By the end of the course the knowledge organiser will span a large amount of material therefore it can be used in a variety of ways:

- · Look, cover, say
- Quiz questions
- Pair testing
- Chanting out loud



CONSIDER A TOPIC YOU/YOUR TEAM ARE DELIVERING THIS TERM:

organiser to bre						
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Handbook Handiwork

3. To what extent are the most sophisticated, complex concepts taught in small steps?



What is Assessment and Feedback?

In his book, 'Embedding Formative Assessment', Wiliam identifies 5 Key Strategies that support the implementation of effective formative assessment. These include:

- Clarifying, understanding, and sharing learning intentions
- Engineering effective classroom discussions, tasks and activities that elicit evidence of learning
- Providing feedback that moves learners forward
- · Activating students as learning resources for one another
- · Activating students as owners of their own learning

For Wiliam, assessment should be used primarly to impact on learnings, and importantly, the teaching should be contringent on what students have learnt, so that whilst teaching, evudence about where the students are should be elicited by the teacher in order to make adjustments to subsequent teaching to enable students' to achieve the learning goals.

ASSESSMENT AND FEEDBACK IN THE CLASSROOM - CPD LEADS







TEACHING DURING A PANDEMIC: IN-LESSON ASSESSMENT Behind the 2m safety line

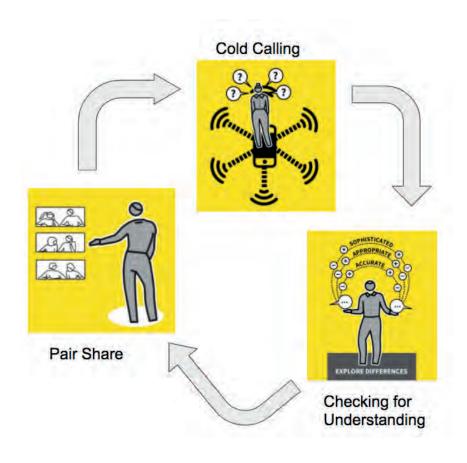
The Problem:

- We can't move around the room so cannot see 'live' student working;
- We can't sit with groups to discuss misconceptions;
- We don't know what books look like until we mark them or have a book look when the moment has been lost;
- It's harder to notice wrong answers;
- It's harder to notice when students haven't learnt it.

The Solution:

Tom Sherrington calls for a layered approach to questioning in order to reach the far corners of the room:

- To change a pupil's long term memory, you need great teaching quality.
- Relatable, shocking and repeated content will activate memory.
- The brain 'dumps' what it sees as non-value information sell it's value!



Cold Calling (so that every student is alert and engaged in anticipation of being called upon to share their thinking at any time)



Pair-Share (because this is an excellent way to ensure all students are practising using the concepts and airing their thoughts verbally.)



Check, check, check – assume nothing! Use strategies to check understanding from the entire group.

DYLAN WILIAM SUGGESTS HINGE-POINT QUESTIONING AS AN INCLUSIVE DIAGNOSTIC ASSESSMENT TOOL.

- A hinge question is based on the important concept in a lesson that is critical for students to understand before you move on in the lesson.
- The question should fall about midway during the lesson.
- Every student must respond to the question within two minutes.
- You must be able to collect and interpret the responses from ALL students in 30 seconds

To do this:

- Create plausible options so that students have to think deeply about the new learning.
- Use hinge-point questions on the subject-content you know students usually make mistakes on so that you can clarify understanding and flush out errors.
- Encourage students to practise the new learning so that their understanding becomes embedded.
- Be prepared to move some students on and take time to clarify knowledge with others.



ACCORDING TO TOM SHERRINGTON, FEEDBACK SHOULD FOLLOW THE 5 'R's'

The 5 R's of 'action' feedback



Re-do

Go back to edit and improve certain areas of your work.

or Repeat

Go back and practise again and again to master specific skills. Respond

Go back and practise by answering more similar questions.

Re-test

Go back and make sure you understand previous learning.

Record

Go back and develop your work with deeper insight and wider references.



What are multiple-choice questions?

- Multiple Choice Questions (MCQs) are a method of assessment that allow us to check knowledge and unpick misconceptions.
- As we are restricted with our movement around our classrooms, this is more important than ever.
- You can't rely on ready made quizzes. Effective quizzing will be designed by you, for your classes.

What does the research say?

- Fletcher Wood argues that MCQ's are a powerful diagnostic tool, allowing teachers to make useful inferences about students' learning.
- Willingham's research into retrieval practice has shown that repeated frequent quizzing is more effective in remembering than restudying. MCQ's offer this opportunity as part of the learning process.
- Joe Kirby also points out the benefits on reducing workload but does acknowledge Christodoulou's point that 'they are very difficult to write', needing strong subject knowledge and time to get right.
- · Further Reading:
 - Christodoulou: Making Good Progress
 - Fletcher Wood; Responsive Teaching Harvard: The Effortful Educator

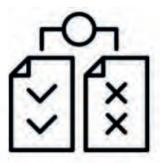
Positives of Multiple-Choice Questions:

- 1. They make assessment more reliable
- 2. They make marking far less labour-intensive
 - they can be digitised and marked automatically
 - created with an upfront workload, shared between a few subject experts,
 then used for years to come saving lots of time down the line.
- 3. They make pupil understanding more visible to teachers
 - precise diagnosis
 - can target specific support for individuals and identify clearly the content to reteach/revisit to the whole class.

Multiple choice questions test breadth of understanding across a much wider range of content, compared to essay questions that test depth in a narrowly selected area.

7 Principles for Designing Mulitple Choice Options

- 1. The proximinity of options increases the rigour of the question.
- 2. The number of incorrect options increases rigour.
- 3. Incorrect options should be plausible but unambiguously wrong.
- 4. Incorrect options should be frequent misconceptions.
- 5. Multiple correct options make a question more rigorous.
- 6. The occasional negative question encourages pupils to read the questions more carefully.
- 7. Stretch questions can be created with comparisons or connections between topics.



Do's and Don'ts

Follow these research led tips when designing your multiple choice questions:

- Clear and concise question
- Offer 3-4 answer options
- Keep incorrect answers linked to the topic and use common misconceptions
- A questions should test a single skill or concept
- Give the option 'I don't know yet' to avoid guesses
- Offer multiple correct answers to increase rigour
- The question stem should not confuse or gives clues
- Avoid using "all or non of the above" as options
- Incorrect answers must not be obviously wrong/silly
- The question should not be answered based on opinion
- Avoid using negative wording e.g. 'Louis Pasteur did NOT discover these'

Examples:

The proximity of options increases the rigour of the question

For instance, the question is, what year was the battle of Hastings?

Options 1065, 1066, 1067, 1068 or 1069 are more rigorous than options 1066, 1166, 1266, 1366 or 1466.

Of course, the question itself also determines the rigour: '80 is what percentage of 200?' is much easier than '79 is what percentage of 316?'

The number of incorrect options increases rigour

Three options gives pupils a 33% chance of guessing the correct answer; five options reduces the chances of guessing to 20%; always create five rather than three or four options for multiple choice questions.

A 'don't know' option prevents pupils from blindly guessing, allowing them to flag up questions they're unsure about rather than getting lucky with a correct guess.

Incorrect options should be plausible but unambiguously wrong

If options are too implausible, this reduces rigour as pupils can too quickly dismiss them. For instance, in the question: what do Charles Dickens and Oliver Twist have in common, an implausible option would be that they were both bank robbers. However, if answers are too ambiguously similar, this creates problems.

For instance, in the question, 'What happens in the plot of Oliver Twist?', these options are too ambiguous:

- a) A young boy runs away to London
- b) An orphan falls in with a street gang of street urchins
- c) A poor orphan is adopted by a wealthy gentleman
- d) A criminal murders a young woman and is pursued by a mob
- e) A gang of pickpockets abduct a young boy

Multiple correct options make a question more rigorous.

Not stating how many correct options there are makes pupils think harder.

For example:

Which characteristics of "Elegy Written in a Country Churchyard" can be seen as Romantic?

- A) It celebrates the supernatural.
- B) It is written in iambic pentameter.
- C) It emphasises emotion over reason.
- D) It deals with the lives of common people.
- E) It aspires to nature and the sublime.

Incorrect options should be frequent misconceptions where possible

For example, if you know pupils often confuse how autobiographical 'Oliver Twist' is, create options as common confusions.

These distractors flag up what pupils are thinking if they select an incorrect option:

- a) Both were born in a workhouse
- b) Both were separated from their parents and family
- c) Both were put in prison for debt
- d) Both had families who were put in prison for debt
- e) Both were orphans

The occasional negative question encourages students to read the questions more carefully.

Once they get a question like 'Which of these is NOT a cause of World War 1?' wrong, and realise why, they'll work out they need to read questions again to double-check on what it is they're asking.

Stretch questions can be created with comparisons or connections between topics.

What was common to both the USA and Germany during the Great Depression?

- a) Jewish immigration increased
- b) Membership of Ku Klux Klan increased
- c) Public works projects were implemented
- d) Government social programs were reduced

Turning CPD into Practice

DRAMA

CPD session attended: Modelling and Scaffolding Led by Tracy Montague | Assessment and Feedback Led by Katie Bridge











What practice did you note?

During Tracy's session, How Can Visualisers Help Students Learn? she spoke about the importance of live modelling as a key feature of deliberate practice. Tracy used the Gradual Release Model to explain the benefits of teachers talking through a learning process through modelling, highlighting pitfalls, narrating thoughts, using key subject terminology in order for students to ultimately go it alone.

In Katie's session she shared assessment and feedback techniques, inspired by the work of Tom Sherrington, during COVID teaching; teaching behind the 2m safety line as well as remote teaching and learning. Katie shared the importance of checking for understanding, diagnosing gaps in learning before moving on.

I was inspired by these sessions to deliver live feedback during online teaching and learning.

How have you adapted this for the department or classroom?

From the CPD sessions, I really liked the idea of giving live feedback based on live learning from a particular lesson. Student confidence with writing in Drama can sometimes be quite low, despite the need for confidence for performance work. Instant feedback, along with instant improvement advice would be a great way to improve confidence from lesson to lesson, rather than trying to improve it over a long period of time.

We trialled this during the Winter lockdown, at a time when our Y11 students needed to complete their coursework and were unable to complete practical work. We adapted it so that it could be used remotely and in school so that students valued it as a new way of working rather than a "fill-in" activity.

At the start of the coursework lessons, all students had to open a Google Doc and share it with their teacher. This meant that we would be able to see who was working, what they were doing and help instantly if differentiation was required, for example we were able to share writing frames or model paragraphs live and see how students were using it to help them in their own work. In each lesson, we were able to check in on every student to look at their progress by using the same link to their document shared at the start.

What has been the impact so far?

So far, the impact has been that the coursework process has not taken as long as usual. We usually complete it as a mixture of homework and class time, which is reliant on students completing necessary parts without help. It has helped to create a hybrid way of completing the work, although it is independent work, it brought a feeling of controlled assessment back whereby students were very focussed on their own piece of work, without the distractions of being in a class and working at the pace of others. We were able to complete the whole process in two weeks, which included giving feedback for students to tweak their work before final submission.

The other advantage has been in reporting progress to parents as it was very clear to see who had been completing work, the last time edits were made and whether or not they had responded to instant feedback from staff.

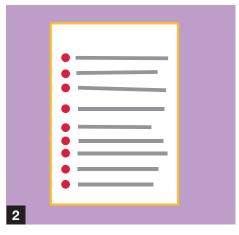
PRINCIPLE: Assessment and Feedback

Live Feedback: The process of supporting students in their knowledge of their performance on a piece of work/ task and providing them with instantly actionable feedback so they can secure improvements.



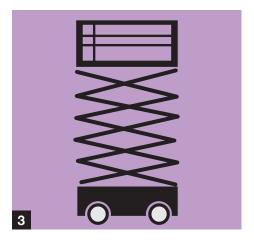
CREATE THE PLATFORM FOR LIVE MARKING

Either create a Google Doc and 'make one for all students' or ask the student to create their own one and share it with you.



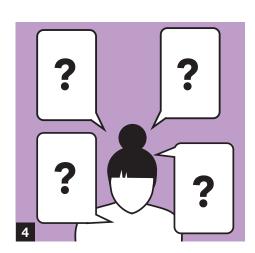
SET THE TASK

Provide clear instructions for the task, assessment, coursework that you want the students to complete. Explain to the students what your role will be, how much time you will spend giving live feedback and what you want them to do with your live feedback. Provide students with time to set up and start.



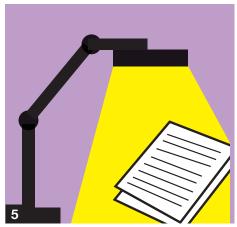
INSERT MODELS AND SCAFFOLDING

Once students start to complete the work, identify students that need any extra guidance and insert either a writing frame or a model paragraph into their work in a different colour. Model how to use it to encourage them to use it to help scaffold their own work.



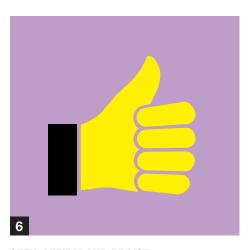
POSE QUESTIONS

For those students who are confident with the writing structure, read their work and pose questions for them to consider and use to help to improve their work either there and then, or during the next lesson.



PROOF READ READY FOR FINAL SUBMISSION

Once students have used the live feedback in each lesson, ask them to proof read before submitting the work. Reflect and evaluate whether the feedback has helped to improve work. If there is evidence that a comment/model paragraph or frame has been used effectively, delete it from the student's work.



SEEK, AFFIRM AND PRAISE

Assess the work and take time to notice.

DESIGN & TECHNOLOGY

CPD session attended: Assessment and Feedback Led by Charlotte Linehan











What practice did you note?

During this presentation on Designing Effective Quizzes, Charlotte shared how multiple-choice questions are a powerful diagnostic tool, allowing teachers to make useful inferences about students' learning. She conveyed how quizzing can make student understanding more visible for teachers. An interesting part of the presentation was the different modelling of what makes an effective question, one which really encourages students to discriminate between potential answers and think deeply about their knowledge.

How have you adapted this for the department or classroom?

As a department we decided that adopting quizzing as a technique in Design and Technology we would add to our repertoire as teaches to assess student understanding and plug any knowledge gaps. Through the process of testing, the retrieval strength of the material would make it easier for our students in Design and Technology to remember and recall and importantly therefore, not forgetting curriculum content.

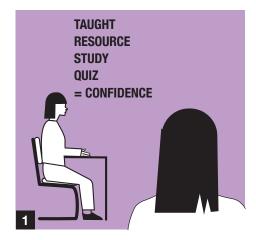
To improve retrieval through quizzing we created quizzes using Google Docs. We used these to provide both formative and summative feedback. We have adopted this for both practical and theory-based lessons and have embedded cross-curriculum links.

What has been the impact so far?

We have seen evidence of students' improved knowledge recall in supporting them to recap on previous learning. Quizzing proved particularly effective during the transition period between lockdown and the return to school as it enabled teachers of DT to assess the impact of online remote learning and enabled the team to plug any knowledge gaps. We also saw a growth in the confidence of our students as quizzing played a role in bolstering the esteem of those who got the questions correct!

PRINCIPLE: Assessment and Feedback

Quizzing for a starter and plenary: A set of knowledge-based questions with a corresponding answers to support rehearsal, practice and retrieval in the classroom.

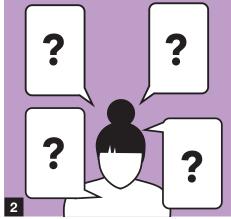


SPECIFY MATERIAL IN ADVANCE

Ensure the knowledge has been taught prior to setting the quiz.

Ensure the students have the information and resources required to access the quiz.

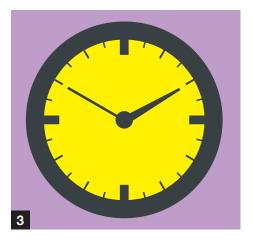
A good quiz should aim to give students the confidence to aim high.



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

Ask at least 5-10 questions, checking for recall in different ways

- 1. Short fact answers
- 2. Problem solving
- 3. multiple choice questions
- 4. true/ false questions
- 5. Labeling diagrams
- 6. bullet points
- 7. Long quizzes depending on the time available



GIVE TIME TO ANSWER

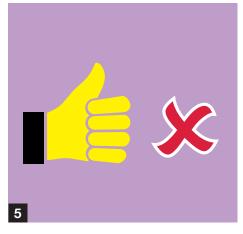
- ALLOW EXTRA TIME FOR
THOSE WHO NEED IT

Provide time for all students to complete ensuring the wording is clear and the content is accurate.



PROVIDE ANSWERS, FOR SELF/ PEER MARKING OR USING TECHNOLOGY I.E GOOGLE FORMS

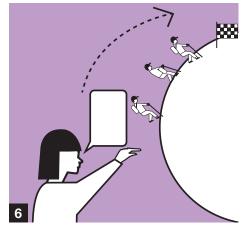
Reveal the answers allowing for checking time. The most time efficient process is to reveal all the answers on a slide, but if you need to feedback on the answers, reveal them individually. The key is that students can see the answers and compare their accuracy. Peer marking is a useful way of marking the work.



AFFIRM GOOD RESPONSES AND SEEK OUT WRONG ANSWERS

A good outcome from a quiz is each student will learn where their gaps in their own knowledge is. This also helps the teacher to see where the gaps are in the subject area.

Provide praise for good overall performance, but also give students time to go through the questions that they got wrong, and also re-teach if necessary.



REVISIT AREAS OF COMMON GAPS

Re-teach the content if quiz data shows a gap in curriculum knowledge.

Redo the quiz to check for improvement, praise effort and engagement.

ENGLISH

CPD session attended: Assessment and Feedback Led by Katie Bridge











What practice did you note?

Katie Bridge's CPD session on assessment and feedback (ref: Sherrington and Wiliam) explored whole class feedback with reference to the five Rs (re-draft/ re-do; rehearse/ repeat; revisit/ respond; relearn/ re-test; research and record). The goal of this activity was to look at how to make feedback informative, whilst considering the impact that marking and feedback can have on teacher workload.

How have you adapted this for the department or classroom?

In English, we have started to introduce the concept of whole class feedback throughout the department, trialling it with different groups/ teachers so that we are able to see where and how it can be used effectively.

We looked at the Blog by Kaley Riley (HOD&Heart) and used her model to help generate our own templates, considering what information we would like to feedback to our students following the completion of their work. We have found that going through the process of focusing on feedback, rather than on the generation of a mark/ score, has enabled us to become more analytical and critical of student work, and have found that the process is more informative with planning and AFL.

Resources explored:

- Whole Class Feedback: Reducing workload, amplifying impact and making long-term change in the learners.
- HoD and Heart (wordpress.com)
- Kat Howard: Stop talking about workload.

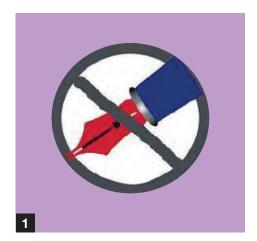
What has been the impact so far?

The impact of using Whole Class Feedback is:

- For students of lower ability, it allows feedback to be more direct and explicit. This has helped to limit/stop the comments of 'I don't understand' and 'What am I doing' as the feedback is directed and easy to navigate. The teaching element of the common misconceptions explicitly supports learners. It helps to re-frame understanding and learning.
- Focusing on common misconceptions and looking for trends across a class, rather than marking a piece of work in isolation, ensures that feedback is underpinning the teaching as it informs areas that need to be re-visited, repeated or rehearsed.
- Using student's work as 'model' to scaffold feedback in the lesson enables positive praise to be used consistently in class, as well as providing 'live examples' of best practice to show how criteria has been met.
- Students have to actively participate in the marking process by reading through their own work, identifying the misconceptions and errors, as well as reflecting on their own work and what process they need to go through next time.

PRINCIPLE: Assessment and Feedback

Whole class feedback: Shifting focus from marking being about producing summative feedback, and looking at identifying trends: positives and areas for development across a class to support and underpin progress/ learning



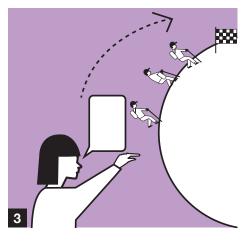
READ STUDENT WORK WITH NO PEN BEING PUT TO PAPER

Put your student books into a pile, and start reading.



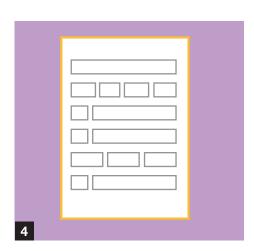
MAKE NOTES WHILST READING

Whilst you are reading through student responses, make notes about areas for development, misconceptions, common SPAG errors and any strengths that have appeared consistently. Don't forget to make a note of your 'most valuable players (best work).



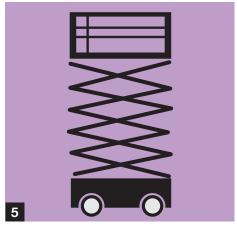
IDENTIFY THE 'BIGGEST' AREA FOR DEVELOPMENT

Create your MRI/ DIRT task based on the three most common misconceptions that have appeared across the class. You can use these to direct your students to which task they should be completing. Tier the tasks depending on need.



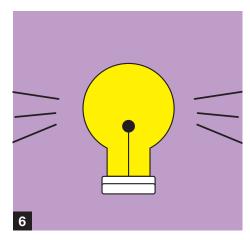
COMPLETE THE WHOLE CLASS FEEDBACK FORM

Design your whole class feedback sheet to suit the needs of your class and the work that you are reporting on.



GUIDE AND ADDRESS

Students to read through their work and correct their spellings and grammar errors. Students are to then complete the MRI/ AFD (my response is / area for development) tasks as indicated on the Whole Class Feedback sheet. Teachers to 're-teach' the misconceptions.



REFLECTION AND NEXT STEPS

Students to identify the areas that they need to improve upon and comment on how they will address these areas for development in future work.

HEALTH & SOCIAL CARE

CPD session attended: Assessment and Feedback Led by Katie Bridge











What practice did you note?

During Katie's session she referenced Tom Sherrington's approach to whole class feedback. She spoke about the importance of formative assessment processes and in particular Sherrington's suggestion of giving feedback as actions including: re-draft or re-do; rehearse or repeat; revisit and respond; re-learn and re-test and finally, research and record. These approaches are action-based and encourage students to be active agents in their own progress, development and improvement.

How have you adapted this for the department or classroom?

A key area we aimed to develop within our department was in providing effective whole class feedback in response to mock analysis. Each teacher within the department designed activities for students to complete that would assist them in developing their skills and knowledge; the goal was to produce actions to support their learning with the focus: 'what can students could do to improve their areas of weakness?'.

One of the strategies was to 're-draft or re-do'. To do this we created model answers for each of the grade boundaries so that students could see what they needed to do to reach the next stage. We also incorporated the 're-visit' action where students overcame barriers and understood common misconceptions.

We also made the decision to record each session being delivered so students could go back on the GCSE learning platform to revise from these at a later date.

Finally, we wanted students to understand the role of an examiner and encouraged peer and self reflection. They were given 'time' to understand each question and this was important in our delivery.

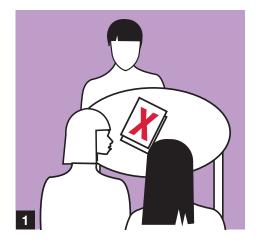
What has been the impact so far?

Overall, students felt positive about tackling longer style questions. They understood the difference between each of the command words and knew to revise key points from the examiners' tips on each of the revision slides.

Students shared positive feedback at the end of each session and all of them improved their raw mark in their second mock.

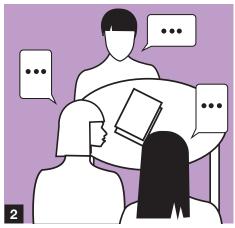
PRINCIPLE: Assessment and Feedback

MRI action-based feedback: Teacher feedback that concentrates on Tom Sherrington's '5 Rs of feedback' re-draft or re-do; rehearse or repeat; revisit and respond; re-learn and re-test and finally, research and record.



REVIEW AND IDENTIFY

As a team, on reviewing the mock marking, identify the common misconceptions, barriers to learning, skill coverage and areas of underperformance.



DISCUSS STRATEGIES

As a team, discuss strategies that will enable students to practice, re-visit, re-draft, re-learn and rehearse. Consider the examples of misconception in the mock analysis and find ways to present these examples to the class making it clear that the material is not correct. Divvy up the actions amongst the team.



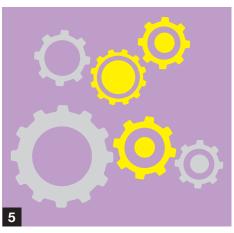
CREATE THE RESOURCE

To gain consistency across the department create a template PowerPoint for each staff member to complete and produce a number of different activities with the focus 'what can students do to improve their areas of weakness?'



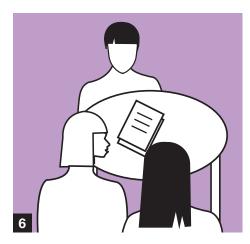
QUALITY ASSURE

Meet as a team before presenting to students. Will the activities enable students to improve? How do you know? What do you want the outcomes to look like? Is the feedback action-based? Have appropriate models been used? Does everyone on the team understand the thinking behind colleagues' ideas?



ADAPT AND TWEAK

In the light of the discussion in step 4, adapt the activities ensuring agency is given to students to act on the feedback and improve on the areas identified in step 1.



RECORD AND REVIEW

Use subsequent assessments to review the impact of the shared MRI approach. To what extent did students make progress in the areas for development? To what extent did the action-based feedback strategies support this improvement? What was missing? What were the most successful strategies and why?

PSYCHOLOGY

CPD session attended: Assessment and Feedback Led by Charlotte Linehan











What practice did you note?

During Charlotte's presentation she shared the importance of highly considered designing of quiz questions and the role this plays in providing information to both the student and teacher about what has been learned and where gaps remain.

Furthermore, the session alluded to the process of testing knowledge and comprehension in strengthening retrieval.

How have you adapted this for the department or classroom?

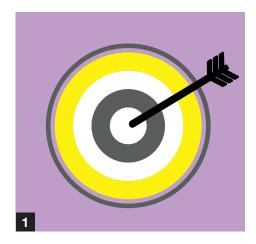
The psychology department has devised 20 questions for every GCSE topic. These questions span a wide amount of material covering the full spectrum of the topic area. The team of teachers in the psychology department use the questions as a resource in a variety of ways with some using them as a starter or plenary and others for completion as homework. The students are familiar with them as a resource and will often use them in conjunction with their psychology knowledge organisers. They have proved an effective resource in checking for understanding and facilitating recall covering a broad spectrum of concepts, ideas and theory.

What has been the impact so far?

Both teachers within the psychology team as well as students recommend the use of the comprehension questions. Using them, teachers have been able to diagnose gaps in learning and as such this has directed them to re-visit topic areas, to sometimes recap or reteach. Students have shown a sense of urgency in realising the breadth of content and the importance of them balancing spaced practice over time.

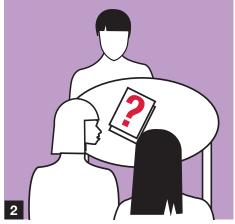
PRINCIPLE: Assessment and Feedback

Comprehension Questions: Specifically designed sets of questions of large parts of the topic/ course spanning a wide area of material.



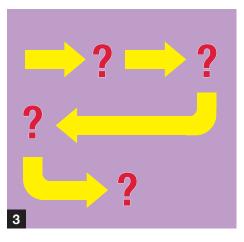
IDENTIFY THE TOPIC AREA

Consider the topic areas that would benefit from having a broad range of knowledge-based questions being answered by the students. On giving the students the questions it's essential the material has already been taught.



DESIGN THE KNOWLEDGE-BASED QUESTIONS

For any given area of content generate between 15-20 knowledge-based questions including: short answer fact-check, short problem solving, multiple choice or True/ False, recitation of quotes or definitions.



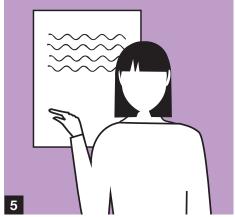
INCLUDE THE QUESTION SET IN THE PLANNING OF THE CURRICULUM AND LESSON

Embed the newly designed set of knowledge-based questions into the schemes of learning and lesson plans/ presentations. This will ensure they come at the right time in the sequence of learning, that is, after the content has been taught, and so that the teacher doesn't forget to use this valuable resource!



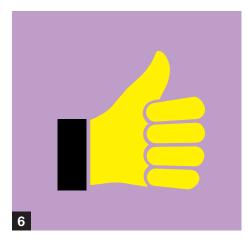
GIVE ALL STUDENTS TIME TO ANSWER ALL OF THE QUESTIONS

Provide time for all students to answer all questions, not bouncing one or two questions around the room and hearing from only one or two students. They can be used as a mini-test or as an activity where the students have the opportunity to apply to demonstrate their learning.



PROVIDE THE ANSWERS FOR STUDENTS TO SELF-OR PEER CHECK

Once the students have completed the set of comprehension questions provide the answers for them to check. To do this, reveal the answers simultaneously on a slide, visualiser or in paper form.



PRAISE AND DEVELOP

It might be necessary to re-visit areas should you have assessed that there are gaps in understanding. Similarly, where students have shown understanding and knowledge, praise good performance and effort.

SOCIOLOGY

CPD session attended: Assessment and Feedback Led by Katie Bridge











What practice did you note?

During Katie's session on assessment and feedback she explained Dylan Wiliam's ideas on hinge-point questions and the important role feedback plays in securing students' learning. Teaching during a pandemic under COVID restricted conditions, Katie conveyed the usefulness of hinge-point questioning while teaching behind the 2m safety line in the classroom. In order for questioning to be effective, particularly during restricted teaching conditions, the far corners of the room need to be reached so that as a teacher you are aware of students' understanding so that you have the opportunity to secure improvements in students' knowledge and performance.

How have you adapted this for the department or classroom?

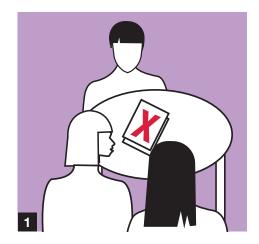
The use of WOWO boards is a key feature of teaching and learning in the sociology department so this has been quickly applied to the implementation of hinge-point questioning. This means that all students are expected to engage, participate and really think about the knowledge being tested in the hinge-point question. For the question to be the right one, be useful and effective, the key is to find the common areas of misconceptions, so the team regularly discuss where these are in the curriculum and use the multiple-choice concept of the hinge point questions to shed light on these areas.

What has been the impact so far?

The impact of the use of hinge-point questioning in sociology is active and wide engagement of all students within the class which has enabled teachers to identify gaps in knowledge, clarify misunderstanding and work to ensure that the common areas of misconceptions are secure in students' knowledge.

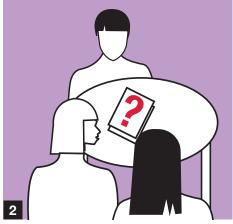
PRINCIPLE: Assessment and Feedback

Hinge-point questions: These are diagnostic questions asked at the point in the lesson called the 'hinge' where you need to check if your students are ready to move on. The responses give evidence about what you and your students need to do next.



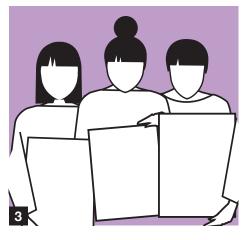
IDENTIFY COMMON MISCONCEPTIONS

As part of the short and long-term planning, identify common misconceptions in the topic area. Use hinge-point questions on the subject-content you know students usually make mistakes on so that you can clarify understanding and flush out errors.



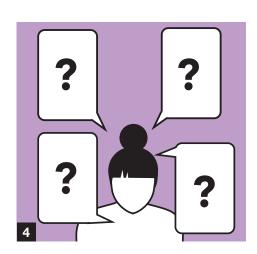
DESIGN THE QUESTION

Design a question, to come mid-way during a lesson, one which will identify those who understand the content crucial to know before moving on, and those who don't. Create multiple plausible options so that students have to think deeply about the new learning.



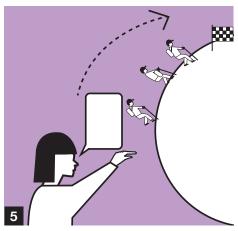
ENSURE EVERY STUDENT HAS A TOOL TO RESPOND TO THE QUESTION

Ensure every student has a mini-white board and pen to show their response. Alternatively, students can use their finger e.g. one finger for A, two fingers for B and so on. It's essential the teacher can quickly see who has got the question right or wrong.



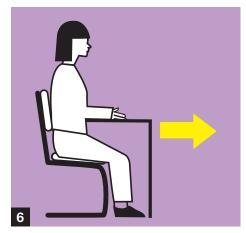
ASK THE QUESTION

Ask the question about midway during the lesson. Every student must respond to the question within two minutes and the you must be able to collect and interpret the responses from ALL students in 30 seconds.



MAKE THE DECISION

On the basis of the students' responses to the hinge-point question, decide whether to move on, re-cap or completely re-teach.



PREPARE FOR ALL EVENTUALITIES

Create tasks and resources for those students who will move on and likewise, be ready to re-teach or re-visit learning for those who have not understood.



CONSIDER A TOPIC YOU/YOUR TEAM ARE DELIVERING THIS TERM:

	of the topic would benefit from an effective quiz? Watch the CPD screen recording the control of
improve thei	
improve thei	r assessment schedule. To what extent does your feedback secure students' learning ar r skills? Re-visit Tom Sherrington's The 5 R's of 'action' feedback and consider how the embedded into your approach to feedback.
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Handbook Handiwork

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What is Modelling and Scaffolding?

Providing models is a central feature of giving good explanations. According to Tom Sherrington, Models can be:

- Physical representations of completed tasks exemplars that can be used as scaffolds, such as a model paragraph in an essay or model answer.
- Conceptual models such as the one we need to form to understand the behaviour of particles in solids, liquids and gases.
- Explicit narration of our though processes when thinking through how to solve problems or undertake a creative activity.

Rosenshine argues that it is important for students to undergo a form of 'cognitive apprenticeship' whereby they learn cognitive strategies from a master teacher who models, coaches and supports them as they develop a level of independence. The key is that the scaffolds are temporary so that students don't become reliant on them. Examples include:

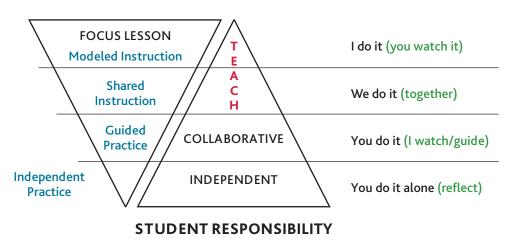
- · Writing frames;
- Sentence starters;
- Exemplars;
- · Partial answers.

MODELLING AND SCAFFOLDING IN THE CLASSROOM – CPD LEAD



'THE GRADUAL RELEASE MODEL'

TEACHER RESPONSIBILITY



The employment of a visualiser is perhaps an underused piece of classroom equipment; this said, during the pandemic, some have come to see it as an essential part of the teaching process.

The visualiser can be used in a variety of ways, from teaching a new idea or concept, narrating thinking processes to developing self/peer assessment technique.

A key theoretical approach to using the visualiser is the Gradual Release Model. This model has 4 key stages:

- Stage 1: The Teach and Model Phase. This stage of practice is used to demonstrate the skill, idea or concept. To do this, some practitioners emphasise the importance of students observing the modelling and listening to the teacher's thinking and use of key language so that they gain a deep sense of the knowledge and content.
- Stage 2: this is The Shared Instruction Phase. This stage involves student contribution. The visualiser is still used, but it involves whole-class student input on the choices and decisions the teacher is making. The visualiser can create a whole class response with written work. It culminates in creating a written/visual piece of work where the students have

collaborated and contributed to the process. The outcome/ product can then be compared with the original teacher's model from stage 1.

- Stage 3: this is The Collaborative Phase. In non-COV-ID times, this stage involves the teacher and student sitting side-by-side, but during restricted movement imposed by COVID measures, the visualiser can be employed. Students can work collaboratively in groups or pairs. They can then place the production of their group collaboration onto the visualiser and share their ideas with the class. Another group can use the visualiser to show their group solutions to the barriers others in the class may have faced.
- Stage 4: this is The Independent Phase. This stage involves students completing work independently; at this point they should have seen enough modelling and work, they should have experienced barriers when they worked collaboratively as well as working as a whole class, they've seen mistakes and witnessed them being solved. They've had access to several responses/products including the teacher's first model and group responses, so they are now ready in this stage to go it alone.

Turning CPD into Practice

SCIENCE

CPD session attended: Modelling and scaffolding Led by Tracy Montague











What practice did you note?

During Tracy's session on Using Visualisers, How can visualisers help us learn? She shared the theory behind the 'Gradual Release Model of Learning'. This approach promotes the idea of a teacher / expert modelling a concept / idea / assessment marking etc, then working with the learner, collaboratively completing the task. This shared instruction is an intended feature of the teaching process. This then transfers to 'guided practice' where the student attempts the task under the watchful eye of the teacher / expert until the point at which they are equipped and confident enough to do it alone, independently.

Tracey modelled how this teaching approach can be utilised through the use of a visualiser.

How have you adapted this for the department or classroom?

We were inspired by the idea that all students could gain a clearer picture of how to complete problems. We have used the visualisers to help model answers, drawing graphs and other scientific processes. We have also used them to video/ record science practicals both in classrooms and for at home learning. This has been extremely important in the current situation of COVID teaching where practicals cannot be undertaken and movement around the classroom is limited.

We believe and have noticed that students gain a much clearer and improved view of demonstrations and it is much easier to model answers. Furthermore, the visualiser has aided the teacher of complex maths questions where we can model the mathematical processes with ease. The visualisers are also able to take photos which can be used in the google classrooms.

For our departmental next steps, as videos can be recorded and shared on our science website, we particularly want to develop their use in this area even further.

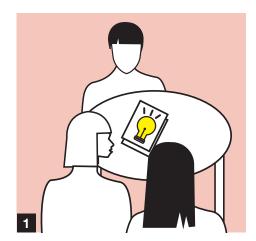
What has been the impact so far?

Online lessons are much more engaging, so much so that ITV News came to report on the interactivity offered by the live streaming of practicals!! Students' feedback has been incredibly positive as they say they are able to understand the concepts better. Students with medical needs were able to watch back recorded practicals which increased inclusivity for them.

These are then able to be saved for posterity for students, student teachers and new staff to the department. The modelling of answers gained fantastic feedback from students as they can see exactly the same worksheet being completed enabling metacognition.

PRINCIPLE: Modelling and Scaffolding

LIVE MODELLING: Showing students how to do things highlighting key procedures and the thinking that underpins them



IDENTIFY THE PROCESS OR PRACTICAL PROCEDURE THAT YOU WOULD LIKE TO MODEL

For any given content, identify the areas for which live modelling would benefit student learning and understanding for example practical procedures, marking processes, concepts and ideas.



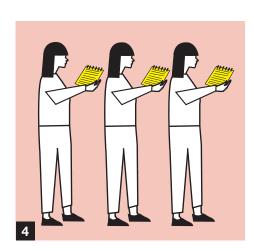
PLAN AND PREPARE

Plan what the students are going to see and prepare the resources and information that you need for example what resources will you need (for a practical model)? What exam question might you model (for a marking model)?



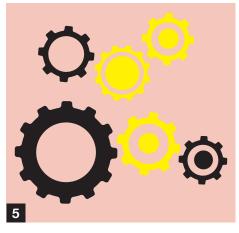
PLAN THE NARRATION

Devise an unstructured script of the key processes, concepts, learning features required for understanding. Consider sharing your own thought processes and thinking to support students in developing their ability for metacognitive thinking.



PRACTICE AND REHEARSE

To ensure the modelling through the use of the visualiser has the intended learning outcome, rehearse the modelled instruction first. This will help to identify the pitfalls and optimise the conditions for recording (should the intention be to up-load for remote learning).



CRITICAL REFLECTION

Critically evaluate the practice. Stand back from your modelled example and review it, check for understanding of the stages, and make the required improvements before recording or presenting the final modelling.



POLISH AND PUBLISH

Edit, improve, annotate and save for future use and publication to help impact student learning and revision.



CONSIDER A TOPIC YOU/YOUR TEAM ARE DELIVERING THIS TERM:

You do it' appro	ents effective at peer / self-assessment? How might you employ the 'I do it; We do bach? Watch Tracy Montague's CPD screen recording and use it to develop modelling eer assessment.

Handbook Handiwork

3. 'I don't understand what the question is asking me to do' — Is this a common mantra from your students? Have you tried modelling your own metacognitive approach to exam questions? Choose a challenging question from the assessment schedule and plan how you would model how to answer it.



What is **Questioning and Discussion?**

According to Tom Sherrington, effective questioning lies at the heart of great teaching. The key to effective question is:

- · Ask a large number of questions and check for understanding.
- Ask students to explain what they have learned.
- Check the response of all students reaching the far corners of the room.
- Provide systematic feedback and corrections.

Strategies include:

- · Pose, Pause, Pounce, Bounce.
- Cold Calling* (see Assessment and Feedback section).
- Hinge-point Questioning* (see Assessment and Feedback section).
- Quizzing* (See Assessment and Feedback section).
- Think, Pair, Share.
- Say it again, better.
- · Probing.

QUESTIONING IN THE CLASSROOM – CPD LEADS







? ? Emma Risebrow: Questioning & Discussion

The 'Pose, Pause, Pounce, Bounce' technique structures questioning in to four key stages to ensure that pupils have thinking time, that a range of pupils are selected and that pupils work together collaboratively rather than competitively exploring ideas and building on each others responses.

- ➤ Pose: higher order questioning.
- ➤ Pause: wait time.
- ➤ Pounce: hands down and random pupil selection.
- ➤ Bounce: involving multiple pupils.

1. Pose



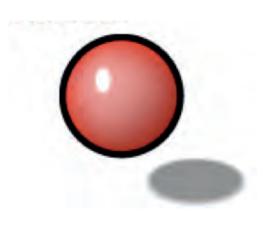
1. Pause



1. Pounce



1. Bounce





Pose:

- ➤ Both lower and higher order questions for different reasons, the PPPB technique aims to involves the application of logical, reflective and creative thinking skills.
- ➤ Insist on hands down before you pose the question.
- ➤ Pose to the class not an individual

"Lower-order questions require children to remember, and higher order questions require them to think. As a general rule, lower-order factual recall questions tend to be closed with a single right answer ... Higher order tend to be open – with a range of possible responses." Hastings (2006).



Pause:

➤ Holding silence however uncomfortable this may be.

Mary Budd Rowe's 1986 research findings, that increasing the wait time improved the number and quality of response. "For lower order recall, three seconds was the optimum wait time, while more than 10 seconds produced even better results with higher order questions".

"The silence seems interminable, and both instructor and students know that the power to end the pain lies with the instructor who created it to begin with." (Allen, 2002).



Pounce:

- ➤ Teacher to then select a pupil to answer the posed question.
- ➤ Differentiation- this is where you as the teacher can select a lower ability pupils to give their answer first and then develop the question further working through to the higher able students.



Bounce:

The teacher assists the bounce phase as it prevents the teachers immediately reacting to each student's answers and passes the opportunity to the students to evaluate "whether the answer is correct, voicing more of the student talk and ideas." (Harrison, 2009).

McGill (2011) summarises this phase, suggesting we ensure teachers take the time to work with pupils to tease out understanding since this is "far more important than moving onto the next page in the lesson. That's what learning is about."

The technique aims to move away from lower order questioning of a single pupil, to posing higher order questions that involve many pupils in deeper thinking and the development of a response.

It aims to aim enable teachers to explore pupils' ideas, to tease out understanding and develop higher order thinking.

It aims to differentiate learning experiences for pupils and move away from closed questioning.

Promote higher order responses.

Higher order thinking is triggered when a pupil is faced with an unfamiliar problem which Tom Sherrington and PPPB

- It is a sampling processalthough all can be thinking of the questions and have an answer, you only sample a few responses.
- Not everyone gets an opportunity to recall their answer out loud and gain verbal feedback.
- Process of verbalising tells us a lot about the students gaps in their knowledge and understanding of the topic.
- 'If teachers routinely sample students' understanding after any exchange, comparing answers and exploring differences, more students are rehearsing their thinking and the teacher gets a much better idea of how the learning is going.'

THINK-PAIR-SHARE

- Questioning pairs
- The discussion should have a goal
- Time limit
- Check for understanding
- Summarise the points throughout
- Compare and contrast
- Analysis of questionshigh ordering thinking/results

USING ALL THREE STRATEGIES ALLOWS:

- Everyone to think about the particular questionengagement
- Exploration of gaps in knowledge
- Exploration of deeper thinking
- Assessment and feedback from students
- Thinking and processing
- Scaffolded learning



Goals of Questioning Students:

- · What is possible to ask from this scenario
- Always, sometimes, never true.
- How many different ways can you provide the same argument.
- What problem has the most arguments to support.
- Reasoning convince me.
- Change one think to make the statement different/stay the same.
- What is and is not possible? Can you think of why this is the case?
- · And another, and another

What's possible?

A standard question:

Jo and Ali share 30 sweets in the the ratio 3:7.



How many do they each have?

A good strategy to provoke thinking rather than doing is to ask what might be possible for each aspect:

What ratios are possible with 30 sweets?

How many sweets could there be in the bag if they are divided 3:7?

What would happen if the ratio was 4:7?

What would be a good number of sweets to have in a pack?

Bringing in reasoning

• In what ratios can 15 sweets be shared?

Can you explain why this is the case?



Can you give an example of when they do add to 15?

Can you give an example of when they do add to less than 15?

Can you give an example of when they do add to more than 15?

Provocative ratio questions

There are half as many boys as girls

There are 10 girls in the class

There are 24 pupils altogether in the class

The ratio of boys to girls in a class is 2:3 Whicj of these statements could be true? ... is definitely false?

The ratio of boys to girls is 4:6

There are 20 boys in the class

2/3 of the class are boys

Improve on this...

- Use a tree to find the prime factors of 40
- How many different trees can we find?
- Now can we find another number that has the same number of distinct trees?

Which 2 digit number has the greatest number of distinct trees?

Can you think of why this is?

Change one thing...*

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... in 2 4 Buy one get one free approach
-÷- Students will answer this first
3 7 Before attempting the challenge
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... so that the answer becomes larger

What other challenges could students set each other using these starting fractions?

*From 'Thinkers', pub ATM

Open or closed... or neither?

"We find it necessary to go beyond this simple categorisation and ask questions which, whether interpreted as open or closed, promote thought about the structure of a concept.

Such questions depend not on recall, but on students' willingness to participate in a collective struggle for understanding.

Answers are unlikely to be wrong in a traditional sense, because they are genuine responses to genuine enquiry, rather than a form of testing.

A sensitive teacher will listen to answers and think: "what does that reveal about understanding?" and adjust the lesson accordingly."

Watson & Mason, Questons and Promts for Mathematical Thinking, ATM

MY RATIONALE:

Trying to encourage students to develop their longer writing through more self and peer questioning, and less teacher prompting.

- Every student can rehearse their thinking, engaging in generative recall and self-explanation, working out what they know and don't know; there's plenty of space for uncertainty and tentative first steps.
- There's a depth to classroom exchanges, beyond the surface of short responses; we can get into the details. (Sherrington)

Critical thinking is still a luxury good. This crucial set of skills and dispositions, including reasoning, analysing multiple perspectives, and displaying the healthy sense of scepticism needed to seek evidence to support or refute claims is notoriously hard to teach. Complicating manners further, critical thinking is even harder to teach across different contexts. The critical thinking required to ponder complex questions in medicine, for instance, requires insight into subject-specific expertise and contexts vastly different questions a social media marketer or agricultural expert would explore. But difficulty alone cannot explain the cognitive dissonance that exists when we claim critical thinking is such a crucial aspect of future-readiness for all students, but face a reality where only 1 in 10 educators teach critical thinking. (Seale)

What I've tried:

- Structured/scaffolded classroom discussions where students are defined with set roles.
- This means the students ask or prepare the questions rather than you.
- They have time to address their particular skill or focus, meaning they feel more comfortable to respond.
- Student roles can be differentiated depending on need to reinforce areas of strength or to develop areas of weakness.
- Aims to reduce the need for standard teacher 'prompting' questions what's our evidence? What do we think the writer's intention is? etc

WHAT THIS LOOKS LIKE:

What is your opinion?

I think that...
It could be argued that...
In my opinion...

Key skill: How can you use emotive language?

Just imagine... Consider the feelings of... Place yourself in this situation... What is your reasoning or evidence?

This is due to... The evidence suggests... For example...

Topic

Can you think of a counter?

Alternatively... However... On the other hand...

WHAT THIS LOOKS LIKE:

What is your opinion?

I think that...
It could be argued that...
In my opinion...

Key skill: How can you use emotive language?

Just imagine... Consider the feelings of... Place yourself in this situation... Social Media does more harm than good What is your reasoning or evidence?

This is due to... The evidence suggests... For example...

Can you think of a counter?

Alternatively...
However...
On the other hand...

HOW CAN THIS BE ADAPTED:

- 1. Silent debate
- 2. Voice note recording of discussion to aid with writing frames
- 3. Using the colour scheme to provide a scaffolded sequence

SOCIOLOGY

CPD session attended: Questioning and Discussion Led by Alan Stupple and Emma Risebrow











What practice did you note?

Alan's session looked at the concept of posing provocative questions to students to encourage them to think, problem solve and master a concept, process and idea. He shared in his presentation the idea of relational understanding of an idea or process to enable learners to delve deep into their thinking to gain an intrinsic understanding of the material. Through the use of provocative questions learners have the opportunity to develop learning, so rather than using questions simply to diagnose or clarify understanding (albeit essential and important processes in a teacher's repertoire), they are used to develop and extend thinking and understanding.

Emma reviewed the pose, pause, pounce, bounce strategy for questioning and evaluated its effectiveness along with sharing the context for when this approach is most useful: to differentiate questioning and develop skills-based assessment objectives.

How have you adapted this for the department or classroom?

In sociology, we have adapted ideas from both CPD sessions. From Alan's session we used the insight he gave on provocative questioning to probe conclusion writing. A conclusion in a sociology essay is essential as it pulls together the critical evaluation from the body of the essay. We have used provocative questioning to probe students' thinking about what their conclusion might be before writing the essay. To do this, students would have to critically evaluate the evidence and create a thesis statement which they would build upon in the body of the essay.

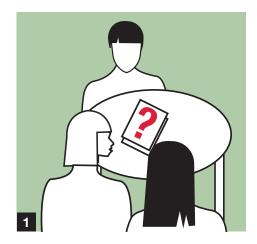
During a pandemic when movement around the classroom is restricted, questioning seems to have become even more crucial to a teacher's repertoire. In sociology we have used the pose, pause, pounce, bounce approach to reach all four corners of the room ensuring that all students are engaged and thinking about the content of the lesson; we have used it to diagnose and clarify understanding before moving on in the lesson.

What has been the impact so far?

The writing of conclusions is an improvement component of essays amongst students of sociology. This is evident in the GCSE scripts we have reviewed during our CPD meetings and have since used as models for subsequent lessons. Furthermore, we have noticed greater engagement and understanding, particular, amongst our year 12 cohort whose recall as a result of pose, pause, pounce, bounce strategy, is confident and shows consistency from lesson to lesson.

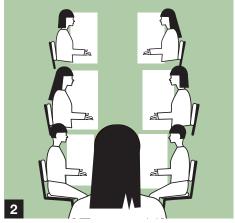
PRINCIPLE: Questioning and Discussion

Pose, Pause, Pounce, Bounce: a questioning technique technique that structures questioning into four stages ensuring that pupils have thinking time, that a range of pupils are selected and that pupils work together collaboratively building on each other's responses.



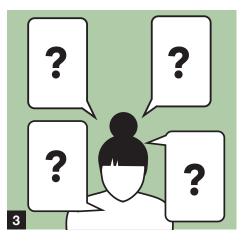
DEVISE THE QUESTIONS AND KNOW YOUR STUDENTS

Devise a range of questions to challenge and stretch a all students in the class. Devise content laden questions with both closed and open-ended approaches. Higher order thinking is triggered when a pupil is faced with an unfamiliar problem which involves the application of logical, reflective and creative thinking skills.



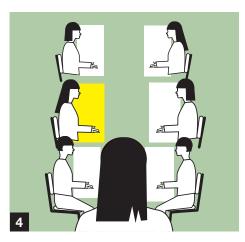
ENSURE ALL STUDENTS ARE ALERT AND READY

Ensure all students are alert and ready to be chosen to answer a question; anticipation of a question encourages engagement and thinking. Explain to the group that anyone, even everyone will be asked!



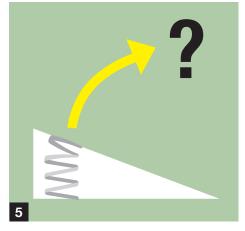
POSE THE QUESTION

State the question once or twice. A carefully designed question need not be stated in different ways and can be left in hanging in the air for thinking time.



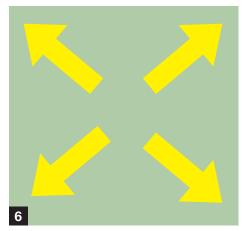
PAUSE THEN POUNCE

Hold the silence. This is essential as it allows for thinking time. A cold calling approach to posing the question can be used; this gives agency to the teacher in knowing which questions to use for particular students. This is important as it allows for all students to be stretched and challenged in their thinking and cognition.



BOUNCE THE QUESTION

Once the question has been answered, the teacher should 'bounce' a further question which relates to the previous one but is a development of it, to a different student e.g. 'to what extent is this theory accurate?'. Similarly, it can be a question that is facilitated by the teacher e.g. 'Olly, what did you understand from what Megan was saying about the poem?'



ENSURE YOUR QUESTIONS HAVE REACHED ALL 4 CORNERS OF THE ROOM

Ensure the PPPB session covers all four corners of the room, that it extends to a wide range of students so that you, as teacher, are able to diagnose misconceptions, identify misunderstanding, challenge and develop thinking and rehearse knowledge.

SOCIOLOGY

CPD session attended: Questioning and Discussion Led by Dave Hetherington











What practice did you note?

During Dave's presentation he spoke of the skills required to develop students' critical thinking skills including reasoning, analysis of multiple perspectives and demonstrating scepticism and their link to the mastery of subject knowledge.

In sociology, both at GCSE and A level, students are required to show a healthy sense of scepticism and be able to question the assertions made by renowned academics. This is one of the most challenging aspects of writing sociology essays so Dave's presentation served us well in refining our pedagogical skills in developing the skill of critical thinking.

How have you adapted this for the department or classroom?

During the teaching of the curriculum the motivation behind our questioning is to extend the students' thinking to enable them to debate, challenge, criticise and probe. We put contentious statements on the board, those which are often the focus of 12 mark essay queations at GCSE level and divide the class into two large groups. We provide them with time to plan their take on the statement drawing on sociological studies and evidence to support their ideas and use questioning prompts to scaffold the process in order to develop their responses.

Reaching a logical conclusion, one that is sensitive to the needs of the title is a key component of the success criteria in the highest grade boundary when writing a an essay in sociology, at both GCSE and A level. Questions such as 'what is your opinion?', 'what is your reasoning or evidence?' and 'Can you think of a counter?' support the process of formulating an evaluative, evidence-based conclusion.

What has been the impact so far?

The impact of the use of questioning to support essay and conclusion writing is evident in the students' timed written responses. They act as a scaffold or framework to developing a point or reaching an evaluative conclusion.

Many students now begin their conclusions with phrases such as 'whilst x shows that......' or 'Although, some sociologist would argue that.....' demonstrating critical thinking in their written assessments.

PRINCIPLE: Questioning and Discussion

Questioning for critical thinking: A questioning technique that provides a depth to classroom exchanges so that students develop their longer writing responses.



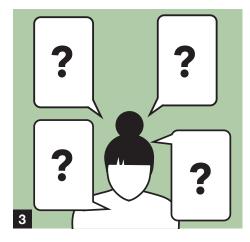
IDENTIFY THE CONTENTIOUS STATEMENTS

Use past papers to search for the recurring themes within the curriculum. Devise contentious statements or extrapolate them from essay questions ensuring they will provide a breadth of discussion.



SHOW THE CONTENTIOUS STATEMENT SO THAT IT IS VISIBLE TO ALL

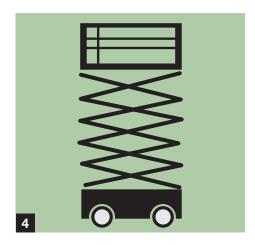
Project the statement on the board and add a dividing line at the centre adding AGREE / DISAGREE to show there is more than one view on it.



ADD THE QUESTIONS TO THE PLANNING PROCESS

To scaffold the planning process add the questions:

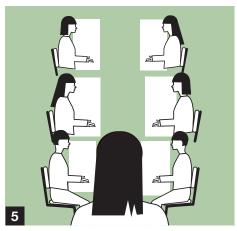
- What is the viewpoint?
- · What is your reasoning or evidence?
- · How can you use emotive language?
- Can you think of a counter?



PROVIDE A SCAFFOLD

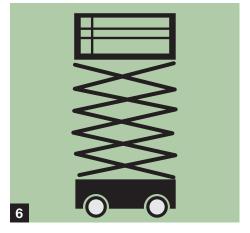
Beneath each question insert some prompts so that all students are enabled to produce detailed arguments:

- It is claimed that
- It could be argued that
- This is due to
- The evidence suggests
- For example
- X argues that
- Consider the idea that
- Alternatively
- However



HIGH CHALLENGE, LOW RISK

Set the expectations of the class discussion by providing ground rules, ones where all views are respected and where everyone's voice counts. Reinforce the need for evidence, for every point and the importance of adopting subject terminology. A climate of high challenge and low risk encourages a wider and rich contribution by all.



PROVIDE A MODEL

Create a model paragraph or model conclusion and use clear explanation to show how the questions which framed the planning process in the 6-step plan are evident. Provide time for the students to use their planning to write their own responses.



CONSIDER A TOPIC YOU/YOUR TEAM ARE DELIVERING THIS TERM:

classroo	style of questioning for your subject? How do you consider reaching the far corners of n to ensure you receive feedback from ALL your students?
	you make your students think with your questioning? Which CPD / 6-Step Walkthru have nted with to improve your questioning technique?

Handbook Handiwork

3. Which areas of the topic are essential to understand before moving on? How might you use Quizzing or Hinge-Point Questioning to ensure all students have fully understood the material?

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