



**Ambition
Institute**

Early Career Teacher Programme

Pupil thinking and responses

Clinic 4

**KEEP
GETTING
BETTER**

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Teacher Clinic 4: Session introduction

Learning outcomes

- > To know we need to support all pupils to think hard in our lessons to help them learn.
- > To know pupils can only think deeply about a topic if they have the relevant content knowledge to draw on.
- > To know ‘Everybody Writes’ is one strategy which encourages all pupils to think and participate.
- > To know that ‘Everybody Writes’ can improve writing quality.
- > To know that the ‘Everybody Writes’ may require adapting for younger pupils, who are developing their writing skills.

Reflection and implementation

Time: 2 mins	> Reflect on your learning in this session and how you will implement it back in school.
<ul style="list-style-type: none">> Reflect on how will implement this strategy into your practice.> Prompts:<ul style="list-style-type: none">• What are the key ideas that you learnt about pupil participation and thinking?• Think about your next week in school and identify when you will deliver this new strategy, which you have planned/refined today.• Who will you seek support from in school to implement this?	

My key takeaways from today:

Reflection activity

Time: 6 mins > **Read the scenario and reflect on your own experience, using the prompts.**

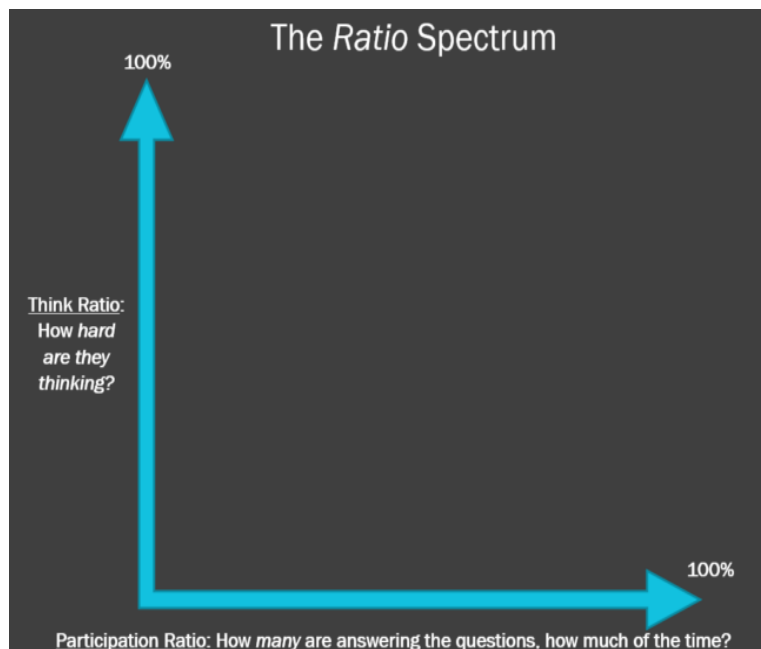
Scenario: Mr Ward finds that only a few pupils in his class put up their hand to answer his questions. He thinks the rest of the class are over-reliant on those who are doing this and so do not fully engage with the thinking planned for in the lesson. When he reviews pupils' work after the lesson, there is a lack of depth in their answers and he spots misconceptions which he could have tackled in class. This evidence from pupils' work confirms his hunch.

- > Reflect on your experience of only a few pupils responding to your questions for the whole class.
- > **Prompts:**
 - Briefly describe what happens.
 - What do you currently do to try to overcome this?

Notes:

Pupil thinking and responses: Everybody Writes

Increasing ratio



Doug Lemov, 2015. Teach Like a Champion 2.0

Thinking ratio is the quality and depth of thinking pupils are engaged in.

Participation ratio is a measure of who is participating in lessons and how often.

Positive outcomes

- > Greater engagement with learning.
- > Encourages all pupils to think deeply and learn.
- > Check understanding from a range of pupils.
- > Adapt our teaching to better meet our pupils' learning needs.

Benefits of 'Everybody Writes'

1. Check all pupils' work.
2. Better ideas.
3. Pupils remember their work more.
4. Everyone participates.
5. Steer pupils to focus on key learning.
6. Help pupils understand the purpose of writing.

7. Improve the quality of writing.

Everybody Writes: Underlying features

- > **Focused:** Purpose of the task is clear and has a clear focus
- > **All pupils involved:** All pupils are engaged in the task
- > **Timely:** Teacher provides appropriate amount of time so that pupils can think carefully about their written response, whilst not having too much time so that pupils are more likely to go off task
- > **Check pupils are meeting expectations:** Teachers check that what pupils are writing meet the task expectations
- > **Responsive:** Teacher responds to pupil writing, providing support and feedback where necessary.

Model: Ffion using ‘Everybody Writes’

Time: 5 mins	<ul style="list-style-type: none"> > Read the short transcript of a teacher modelling ‘Everybody Writes’. > Pay attention to the underlying features as you read. > Reflect on using this strategy yourself.
<ul style="list-style-type: none"> > Pay attention to these underlying features: <ul style="list-style-type: none"> > Focused: Purpose of the task is clear and has a clear focus > All pupils involved: All pupils are engaged in the task > Timely: Teacher provides appropriate amount of time so that pupils can think carefully about their written response. > Check pupils are meeting expectations: Teachers check that what pupils are writing meet the task expectations > Responsive: Teacher responds to pupil writing, providing support and feedback where necessary. 	
<p>Transcript</p> <p><i>In handwriting today, we are going to be learning the sound, ‘m’ [teacher emphasises the sound ‘mmmm’]. You would have learned the sound in reception as ‘Down Maisie, mountain, mountain’. Now in year one, we need to be accurate with how our ‘m’s look and how we form our m’s. I’m going to show you how I would do it, and I want you to pay close attention, because in a minute you will be doing it too.</i></p> <p><i>[Teacher writes on white board] I’m going to start at the top of Maisie here. I’m going to do a straight line down, straight, straight, straight, come back up and stop at Maisie’s shoulder [teacher gestures to shoulder]. I’m going to form my first mountain by going around and down, and then back up. I’ll stop at the shoulder again, just to make sure both mountains are the same size. I’m going to go around, down, straight, straight, and I’ll add a flick of grass at the end.</i></p> <p><i>Now I am going to do another one but with your help. So, where do I start? [pupil gives response]. Yes, Jessica, I need to go straight down with my pencil. And then where do I need to go... [pause while pupils call out next step]-yes, I need to come back up and then where do I need to stop Robbie? [pupil replies “at Maisie’s shoulder”] Yes-and then I go around and then what do I need to remember? [pupils respond “go straight down”] That’s right, I go straight down and add a flick of grass at the end. Now you are going to have a go at writing the letter ‘m’ in your books. I want us to take our time when writing this letter. I don’t</i></p>	

want you to rush this. I would like you to take your pencil and wait for me to say when you can start. [Teacher pauses and explicitly observes all pupils to check they are ready to start]. *Ok, off you go.* [Teacher circulates the classroom to check all pupils are writing and supports one of her pupils who is struggling to grip their pencils properly]. *I have seen so many great examples of this letter-well done! Now I would like you to turn to look at your 'm's and see which letter of yours is closest to my example on the board.*

Notes:

Ffion's plan for 'Everybody Writes'

Steps	Feature	Thought process
1. Identify the purpose	Focused	> What is the purpose of the writing? For pupils to practise correct letter formation in handwriting.
2. What will every pupil be writing?	All pupils involved	> What are they learning about? Learning to form the letter 'm' with a pencil, building on their prior knowledge of the handwriting rhyme, 'Maisie, Mountain, Mountain', taught in phonics last year. > What is the question? Do you think you can do those in your book? (point to model letter 'm').
3. What will I be doing?	Check	> What might pupils struggle with? <ul style="list-style-type: none"> • Correct pencil grip. • Accuracy of letter formation. > What support can I put in place? Model correct pencil grip and remind pupils to write a few letters well, rather than lots. > How will I check for understanding? Circulate the room, looking at pupils' writing. Checking for misconceptions to inform future planning.
4. Timing	Timely	> When will task occur in lesson? Following modelling handwriting (I and We stage) > How long for task? 8-10 minutes
5. Follow on task	Responsive	> What will pupils do? Check their work against the worked example on the board and use this to identify their 'best' letter, the one which is closest to the worked example. > What will I expect to see? Pupils selecting their most accurately formed letter.

Planning for pupil thinking and responses

Planning steps

Step 1: Identify purpose
Step 2: What will pupils be writing?
Step 3: What will I be doing?
Step 4: Timing
Step 5: Follow on task

Model plan for ‘Everybody Writes’

Steps	Plan for ‘Everybody Writes’
1. Identify purpose	<ul style="list-style-type: none"> > What is the purpose of the writing? Pupils will be writing their response to a question in order to take part in a discussion in a Key Stage 3 Biology lesson at the end of a unit of work on Ecosystems.
2. What will pupils be writing?	<ul style="list-style-type: none"> > What have they been learning about? How organisms affect, and are affected by, their environment, including the accumulation of toxic materials. > What is the question to think hard about? Pupils will be writing notes in response to this question and encouraged to draw on this current learning: <i>If ecosystems are damaged by human activity should we try and reverse this?</i>
3. What will I be doing?	<ul style="list-style-type: none"> > What might pupils struggle with? Some pupils may need reminding what the word ‘Ecosystem’ means. > What support can I put in place? Write a definition of the word, ‘Ecosystem’ on the board and remind pupils before they start writing. > How will I check for understanding? Circulate the room, looking at pupils’ written responses. Checking for misconceptions to inform future planning.
4. Timing	<ul style="list-style-type: none"> > When will the task occur in lesson? This will be the start of the lesson, to prime pupils so they are ready for the discussion on the same topic later in the lesson. Consider pupils' prior knowledge, complexity and purpose of task, as well as age of pupils to inform when in the lesson the task is most appropriate.

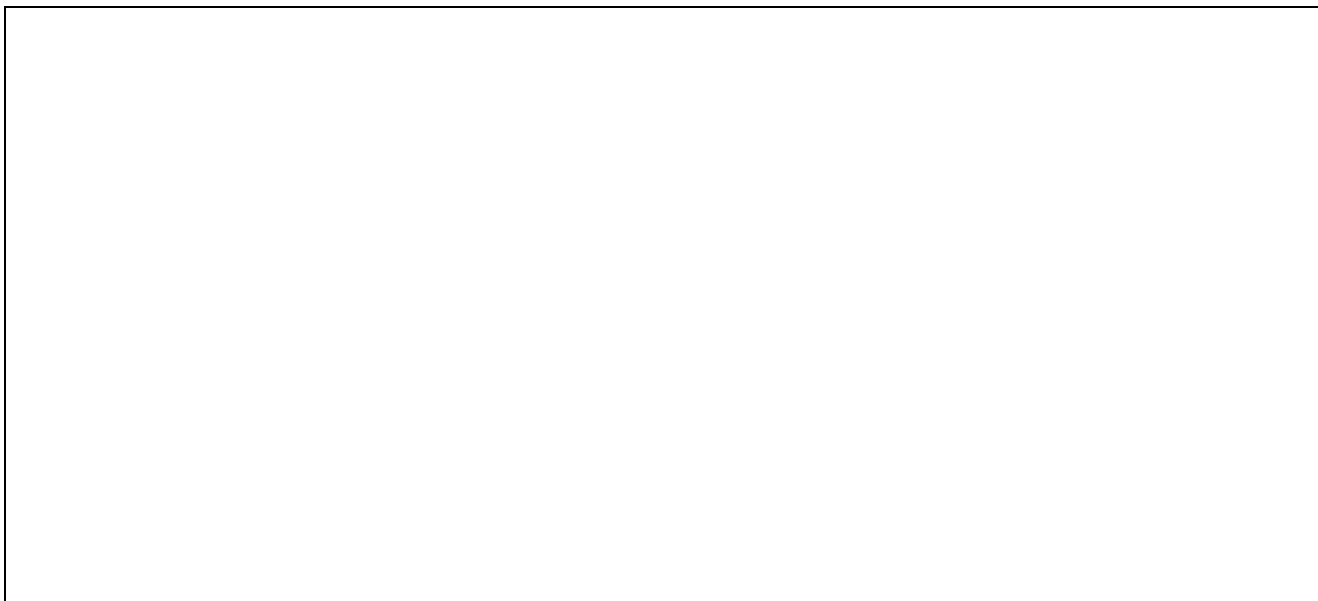
Time: 2 mins	> Complete Step 3.
> Answer the questions below to plan what you will be doing, while pupils are responding.	
3. What will I be doing?	<ul style="list-style-type: none"> > What might pupils struggle with? > What support can I put in place? > How will I check for understanding?
Time: 2 mins	> Complete Step 4.
<ul style="list-style-type: none"> > Identify when this activity will occur in your lesson. > Identify how long pupils will spend completing it. 	
4. Talk partner task for definition	<ul style="list-style-type: none"> > When will task occur in lesson? > How long for task?
Time: 2 mins	> Complete Step 5.
> Describe the task pupils will complete following their writing, using the prompts to help you.	
5. Talk partner task for model	> What will pupils do?

	<p>> What will I expect to see/hear?</p>
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Planning feedback (Optional)

Your turn: Planning feedback

Time: 8mins	> Share your planning and respond to feedback.
<ul style="list-style-type: none">> Talk through your planning with a partner.> Your partner should act as a critical friend.> Your partner should provide feedback on your planning using the success criteria.> Make changes based on feedback.> Re-share.> Swap roles.	
Notes:	



Steps, feedback cheat sheet

I like the way you...

Next time, try to...

Description	Feedback
1. Identify purpose	> Identify the purpose for using the strategy.
2. What will pupils be writing?	> Identify what pupils have been learning about. > Link the writing task to the content they have been learning. > Create a question for pupils to respond to. > Choose something which allows pupils to think deeply (may be more relevant for using the strategy with older pupils).
3. What will I be doing?	> Identify what pupils might struggle with. > Identify how you can support pupils during the writing task. > Describe how you will check for understanding.
4. Timing	> Identify when pupils will be writing. > Identify the time they have to write.
5. Follow on task	> Identify what pupils will do. > Identify what you will expect to see.

Pupil thinking and responses: Wait time

Learning outcomes

- > To know that we need to support all pupils to think hard in our lessons to help them learn.
- > To know that pupils can only think deeply about a topic if they have the relevant content knowledge to draw on.
- > To know that 'Wait time' is one strategy which encourages all pupils to think deeply.
- > To know that 'Wait time' can support pupils to increase the rigour of their response.
- > To know that the 'Wait time' may require adapting, depending on the complexity of the question being asked and developmental stages of the pupils.

Reflection

Scenario: Mr Ward finds that, when asking a pupil a question, often their response is very basic and requires him to do lots of prompting before he gets an answer which shows that pupils have thought carefully about the question. He thinks the pupils are just saying the first thing that occurs to them and can't understand why their answers sometimes aren't linked to the key content he has been teaching. Reflect on your experience of pupils providing answers to your questions which lack depth and thought.

Prompts:

- Briefly describe what happens.
- What do you currently do to try to overcome this?

Building ratio- Wait time

1. **Questioning** e.g. Wait time
2. **Writing** e.g. Everybody Writes
3. **Discussion** e.g. Turn and Talk

Importance of content

“The processes we most hope to engender in our students - thinking critically and logically - are not possible without background knowledge.”

Willingham (2009)

Key ideas-Questioning

- > Effective questioning can guide pupil thinking through checking understanding, extending pupil thinking and fostering high-quality talk in a supportive classroom environment.
- > Questioning has many purposes for teachers, including checking pupil understanding, breaking down problems and extending and challenging pupil thinking.
- > Pupils need enough knowledge, guidance and thinking time to produce quality answers.

An effective strategy for developing students’ language is asking open-ended questions to encourage students to provide answers that require more than a one-word response.

(Wasik & Hindman, 2013)

Wait time

Allowing more time for students to respond to questions may be worth the wait because it lets them think about the question and their answer.

Wasik, B. A., & Hindman, A. H. (2018).

...in many instances, teachers ask open-ended questions followed almost immediately by either a closed-ended question or their own response to the open-ended question (Hindman, Wasik, & Bradley, 2018; Ingram & Elliott, 2016). As a result, a critical factor in promoting conversations with students—giving them time to respond—is potentially lost because students are not provided with wait time to think about a response, and the benefits from the conversational exchange are potentially diminished.

Wasik, B. A., & Hindman, A. H. (2018).

Notes:

Key benefits of wait time

- > Supports pupils to think more deeply about their response, increasing the likelihood of more rigorous answers.
- > Can support pupil's language development
- > Can support pupil's understanding of high-quality dialogue

Wait time: Underlying features

- > Focused: Teacher identifies the key knowledge that they expect pupils to be thinking deeply about during the wait time.
- > Clear: The teacher gives clear instructions as to what they expect pupils to be thinking about in the time.
- > Checks: Teacher checks that pupils are following instructions and reminds pupils of what to do if they go off task.
- > Timing: Teacher provides an appropriate amount of time for pupils to think deeply about the content but not so much time that pupils get distracted or go off task.
- > Responsive: Teacher responds to pupils' responses.

Wait time Model

Read the model below and consider the following:

Feature	Questions to consider
Focused	Is the question focused on key learning?
Clear	Is the question clear? Do pupils know what they need to think about?
Checks	How does the teacher check that pupils are on task? How do they remind pupils of what to do if they go off task?
Timing	How does the teacher frame the timing provided to pupils?
Responsive	How does the teacher respond to pupils' answers?

“Ok year 9, we have been looking at female suffrage and in recent weeks we’ve learned about the suffragists and the suffragettes who had different approaches to campaigning to women’s suffrage. [Teacher points to a definition of suffrage which is on the board]. This lesson we have been comparing the two approaches from the two groups and in a moment we will be writing about the effectiveness of the campaigns. What I would like us to do now is to take a moment to consider a question which requires a lot of thought. I want us to take our time to think about which of the two do you think was most effective at getting women the vote. Take a moment now to gather your thoughts on this and to do this in silence.

[Teacher pauses for 10 seconds and is silently looking round the class to check pupils are following instructions. When a pupil tried to communicate non-verbally with another pupil, the teacher

provides a non verbal reminder to show that the pupil should be silent and thinking. Pupils start to put their hands up.]

I see we have quite a few hands up. I am just going to give us a couple more seconds to give everyone a chance to deeply consider their response....Olivia what do you think?

[Olivia responds- I think the suffragettes were more effective as they were more radical and they created more publicity for the cause.]

Great Olivia, it is really helpful to hear your opinion and good to hear you justifying that opinion. Can you explain a little further what you mean by “radical”?

Rosa’s plan for Wait time

Steps	Feature	Thought process
1. Identify the purpose	Focused	<ul style="list-style-type: none"> > What is the key knowledge I am looking to check pupils have understood? Opinions about the effectiveness of the suffragist and suffragette movements
2. What question will test this key knowledge?	Clear	<ul style="list-style-type: none"> > What question will elicit this key knowledge? Which of the two approaches was most effective in achieving votes for women?
3. What will I be doing?	Check	<ul style="list-style-type: none"> > What response am I expecting? An opinion supported by a justification > How will they communicate this response to me? Verbally > What support will I need to put in place to ensure all pupils can communicate their thoughts? <i>Definition of suffrage on the board to support pupils who struggle to use the more complex vocabulary.</i>
4. Timing	Timely	<ul style="list-style-type: none"> > How much wait time will pupils need? 15 seconds as this is a complex question
5. Follow on task	Responsive	<ul style="list-style-type: none"> > How might I respond to pupils if they answer as expected? > How might I respond if pupils give an incorrect or undeveloped response? > What prompts might I want to plan in to prompt pupil thinking further/build upon their initial response?

Planning for wait time

Step 1: Identify key knowledge
Step 2: What question will test this key knowledge?
Step 3: What response am I expecting?
Step 4: How much time to wait?
Step 5: What is the follow up response?

Model plan for wait time

Steps	Plan for 'Everybody Writes'
1. Identify key knowledge	<ul style="list-style-type: none"> > What is the key knowledge I am looking to check pupils have understood? <i>Pupils have been learning about different animals they have seen at a recent trip to the zoo. I want them to remember and use key vocabulary for the animals and key adjectives we have been using to describe the animals.</i>
2. What question will elicit this key knowledge?	<ul style="list-style-type: none"> > What is the question to think hard about? <i>Pupils will be thinking hard about their experience at the zoo and what they have been learning about in class and encouraged to draw on this current learning so as to answer the following: Based on what we have seen in class and at the zoo, how would you describe an elephant?</i>
3. What will I be doing?	<ul style="list-style-type: none"> > What vocabulary am I expecting them to use? <i>Response would potentially include the following adjectives: big, grey, hairy, gentle, kind. I would expect for pupils to maybe add in extra information which isn't related to the description of the elephant but of the pupils' experience of seeing the elephant (e.g. they were drinking water). I would want to plan in some follow up questions to support pupils to focus their attention on the description of the elephant. E.g. I may provide a sentence starter to support them to provide a relevant response.</i> > How will they communicate this response to me? <i>I would expect pupils to communicate in full sentences, using the range of adjectives explored in the lesson and previous weeks. I would also expect them to use vocabulary to express their opinion (e.g. I think that...).</i> > What support will I need to put in place to ensure all pupils can communicate their thoughts? <i>Orally but two pupils are non-verbal and communicate through visual signs so I will provide them with the symbols and they can point to them.</i>
4. Timing	<ul style="list-style-type: none"> > How much "wait time" do pupils need? > 10 seconds. <i>I needed to consider the complexity of the question, the depth of response I was expecting and the developmental stage of the pupils. For some</i>

	<i>pupils who require more processing time, I will extend this time and ask them the question later to give them 5 more seconds.</i>
5. Follow on task	<ul style="list-style-type: none"> > How might I respond to pupils if they answer as expected? Acknowledge the response (e.g. <i>that is a really well developed answer</i>) > How might I respond if pupils give an incorrect or undeveloped response? <ul style="list-style-type: none"> ○ <i>Can you be a little more specific?</i> ○ <i>What other words might we use?</i> ○ <i>How do we start sentences when we give our opinion (use of visuals/sentence starters)</i> > What prompts might I want to plan in to prompt pupil thinking further/build upon their initial response? <ul style="list-style-type: none"> ○ <i>What made you think that?</i> ○ <i>Can you explain a little more why you thought elephants are X, Y, Z?</i> ○ <i>What other animals can we think of who are of a similar colour/size?</i>

Practise planning Wait Time

Time: 2 mins	> Complete Step 1.
	<ul style="list-style-type: none"> > Consider an upcoming lesson where you could use the strategy 'Everybody Writes'. > Identify the purpose of using this strategy and record in the table below. <ul style="list-style-type: none"> ● E.g., older pupils: prepare for a class discussion or write a definition or sentence for a new key word. ● E.g., younger pupils: practise handwriting, spell a word or write a simple sentence.
2. Identify purpose	> What is the purpose of the writing?
Time: 2 mins	> Complete Step 2.
	<ul style="list-style-type: none"> > Create a question for pupils to think hard about. > Ensure that it enables pupils to do some deep thinking about a topic. > Ensure that it draws on knowledge they already have.
6. What will pupils be writing?	> What have they been learning about?

	<ul style="list-style-type: none"> > What is the question to think hard about?
Time: 2 mins	<ul style="list-style-type: none"> > Complete Step 3.
<ul style="list-style-type: none"> > Answer the questions below to plan what you will be doing, while pupils are responding. 	
7. What will I be doing?	<ul style="list-style-type: none"> > What might pupils struggle with? > What support can I put in place? > How will I check for understanding?
Time: 2 mins	<ul style="list-style-type: none"> > Complete Step 4.
<ul style="list-style-type: none"> > Identify when this activity will occur in your lesson. > Identify how long pupils will spend completing it. 	
8. Talk partner task for definition	<ul style="list-style-type: none"> > When will task occur in lesson? > How long for task?
Time: 2 mins	<ul style="list-style-type: none"> > Complete Step 5.
<ul style="list-style-type: none"> > Describe the task pupils will complete following their writing, using the prompts to help you. 	
9. Talk partner task for model	<ul style="list-style-type: none"> > What will pupils do?

	<p>> What will I expect to see/hear?</p>
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Reflection and implementation

Reflect on how you will implement this strategy into your practice.

> **Prompts:**

- What are the **key ideas** that you learnt about pupil participation and thinking?
- Think about your next week in school and identify when you will deliver this new strategy, which you have planned/refined today.
- Who will you seek support from in school to implement this?

Teacher Clinic 4 Self-study materials.

This material is also to be found in steplab and should be read prior to the clinic. However, should you wish to revisit this content, it can also be found here below:

TEACHING CHALLENGE

Ms Singh wants to ensure all her pupils are engaged when she asks pupils questions. However, she has found that it is often the same pupils who answer her questions. When she picks other pupils, they often struggle to articulate themselves in spoken and written English. What might Ms Singh do to address these challenges?

KEY IDEA

Teachers need to provide all pupils with opportunities to think deeply about key learning and engage in responding to tasks so that teachers can effectively assess pupil understanding and respond to their needs. Pupils can only respond effectively if they have the appropriate written and oral communication skills to articulate their thinking. Teachers should therefore support pupils to develop these literacy skills by modelling to pupils what effective thinking in written and spoken forms looks and sounds like.

EVIDENCE SUMMARY

Thinking ratio

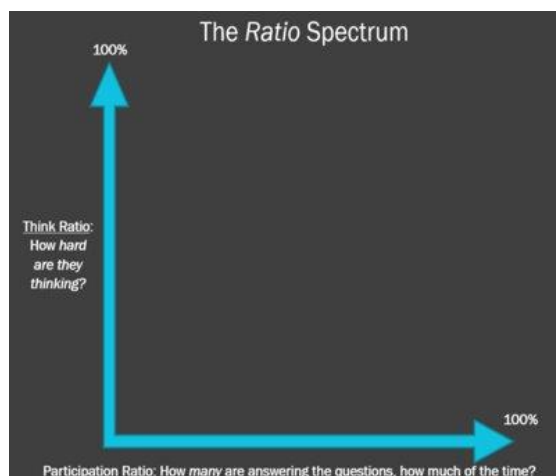
Pupils are only able to learn what they think about. As Rob Coe (2013) states, “Learning happens when people have to think hard.” The more pupils think about something, the more likely they can remember it. Ms Singh wants all her pupils to engage in deep thinking around what they are learning so that this knowledge can be stored in long-term memory.

Thinking and knowledge are interlinked. For example, pupils cannot think about pollination if they don’t have prior knowledge around how insects interact with plants. They need to use their prior knowledge to make sense of and think about new learning. Ms Singh needs to ensure that she is teaching her pupils this key knowledge and that her teaching is focusing on what she wants her pupils to think hard about. She wants the “ratio” (Lemov, 2015) of thinking to be high. Ms Singh wants *all* her pupils to be thinking hard and participating in her lessons.

Participation ratio

If Ms Singh teaches a definition of pollination and then asks a question about what pollination is but only a fifth of her class put their hands up, the participation ratio is low. This could be due to a variety of factors; some pupils may not have understood what pollination is, some pupils may not have been listening when she gave her initial definition, and some may be afraid to get the answer wrong. To gauge what her pupils have or have not understood about pollination, Ms Singh needs her whole class to participate because that way she is better able to understand which pupils may have possible misconceptions or may require further questions to stretch their thinking. In order to be a responsive teacher, she needs to be able to identify the needs of her pupils. She therefore needs the participation ratio to increase. However, it is not enough to just have her pupils participating if they are not thinking deeply about what they are learning.

The ratio of thinking and participation can be thought of in the following way:



Adapted from Doug Lemov. 2015. Teach Like a Champion 2.0

Ratio through questioning

In order to support her pupils to focus on key learning, Ms Singh wants to ensure that the questions she poses to pupils are focused on the key learning and, when appropriate, allow pupils to reflect deeply about what they are learning. For example, Ms Singh wants pupils to think deeply about pollination and why it is important. She wants *all* pupils to be thinking about this. To ensure that all pupils are thinking about pollination, she adopts the “cold call” strategy (Lemov, 2015). This strategy could involve insisting that pupils not put their hands up, but instead asking all pupils a question, giving them time to process the question and reflect on their response, before then asking a specific pupil to give their response. For example, Ms Singh could ask:

“Why is pollination important [pause for 10 seconds], Lisa?”

Ms Singh asks the question, pauses and then says the name of the pupil. While she is pausing, all pupils are hopefully engaged in thinking about the importance of pollination as anyone could be called upon to answer. Ms Singh would need to explain the rationale behind this approach to her pupils before rolling it out in the classroom. Otherwise she risks making the pupils feel singled out and therefore they may not feel comfortable answering questions in this way.

When Ms Singh is planning the questions to get pupils to think hard about what they are learning, she needs to provide time for her pupils to process the question, reflect on the question and prepare a response (Pashler et al, 2007). Providing pupils with enough time or “wait time” (Lemov, 2015) is important if Ms Singh wants pupils to give their best response. If she doesn’t give this time, it may be that pupils give an immediate answer, but it is less likely that the response will be well thought through.

Increasing ratio to develop literacy

Ms Singh wants her pupils to be able to confidently and effectively articulate their deep thinking both orally and in written form. She knows that developing pupils’ literacy skills is key to their success in all subjects and is linked to positive outcomes, beyond their school careers (Quigley et al, 2019). Developing pupils’ literacy is the responsibility of all teachers, not just the literacy lead or English specialists. Ms Singh is therefore responsible for helping her pupils develop literacy skills. There are several ways in which Ms Singh can increase the ratio in her class, at the same time as support her pupils to develop their literacy skills.

Ratio through writing

Another strategy which Ms Singh may want to adopt is having all pupils write down their reflections before asking them to discuss their responses. This strategy, “Everybody writes” (Lemov, 2015), increases both participation and thinking ratio as pupils have the time to engage in deeper thinking by putting their thoughts on paper and reflecting on how they can articulate their thoughts before having to speak.

The strategy will look different depending on what is being taught, the age of pupils and the subject. For example, Ms Singh may want to use this strategy when she is checking for pupils’ understanding of how to spell a particular word or key term, like “pollination”. In another instance, she may also use the strategy when she wants pupils to engage in deep thinking around a challenging question, for example, “why is pollination important?”

Modelling writing to develop pupil thinking

Ms Singh wants her pupils to be able to articulate and express their thoughts through their writing. Even if they have the required background knowledge (for example, they know what pollination is and why it is important), they may not have the literacy skills to express these thoughts on paper. Ms Singh therefore needs to model what effective writing looks like. Modelling what effective writing looks like particularly benefits lower attaining pupils (Hollingswoth and Ybarra, 2017).

In order to develop pupils’ thinking, Ms Singh wants her pupils to be able to articulate their knowledge in a way which can be applied to different contexts and audiences. Pupils need to learn how to modify their writing based on their audience and the purpose of what they are writing. When Ms Singh is planning how to introduce a written text on pollination, she will want to consider which form of writing she is modelling and draw pupils’ attention to this form. She may want to consider the following forms of writing to inform how she will introduce and model a piece of writing.

Genre	Example Forms
1. Narrative	> Story, poetry, fable, myth
2. Recount	> Journal, diary, newspaper article, event recount
3. Information report	> Historical report, scientific report
4. Procedure	> Instructions, procedural recount, recipe, directions
5. Persuasion	> Advert, discussion, letter, newspaper article
6. Explanation	> Scientific writing, spoken presentation

In this context, Ms Singh may choose for her pupils to narrate a story of a bee’s journey around flowers as a way of consolidating pupil understanding around pollination. In order to develop her pupils’ mental models around different forms of writing, Ms Singh may want to plan a model where she reveals the thought processes underpinning the steps she takes when planning, drafting and editing her model. By understanding the thought processes underpinning her decisions she makes as she plans, edits and drafts her writing, pupils are better able to focus on how to write in a particular form, rather than just seeing the finished product. By modelling her own thinking, Ms Singh is helping to develop her pupils’ metacognitive and cognitive skills. For further information on metacognition and self-regulation, please refer to the conference 2 materials, which you can access via Steplab.

Ratio through speaking

Ms Singh also wants her pupils to be able to articulate their deep thinking orally. Good oral language skills also help pupils to write better by improving their thinking and learning, improving the structure of their writing and improving their vocabulary (EEF, 2018). Just as she models the writing process to her pupils, Ms Singh also needs to model what high quality classroom talk looks like. She may want to consider what key vocabulary she will explicitly teach so that pupils are equipped with the vocabulary to articulate their thoughts. She will also want to model what high quality language sounds like whenever she interacts with pupils, either one to one or as a whole class. Ms Singh may consider using some of the techniques below to model high quality interactions with her pupils:

Technique	Example
• TUNING IN	Listening carefully to what is being said and observing what the pupil is doing
• SHOWING GENUINE INTEREST	Giving whole attention, eye contact, and smiling and nodding
• ASKING PUPILS TO ELABORATE	'I really want to know more about this'
• RECAPPING	'So you think that...';
• GIVING THEIR OWN EXPERIENCE	'I like to sketch at home';
• CLARIFYING IDEAS	'So you think we should cook this for longer?';
• USING ENCOURAGEMENT TO EXTEND THINKING	'You have thought really hard about this, but what can you do next?'
• SUGGESTING	'You might want to try doing it like this'
• REMINDING	'Don't forget that you said about cooking it for longer'
• ASKING OPEN QUESTIONS	'How did you?', 'Why does this...?', 'What happens next?'

When Ms Singh wants her pupils to discuss their thinking with one another, she also needs to plan carefully what that high-quality classroom talk looks like. She may provide scaffolds (for example, sentence starters) to support pupils to focus on the key learning and use high quality language in their discussions. She may want to consider modelling how she expects pupils to talk to one another so that all pupils are clear about what high quality dialogue sounds like.

Further information on how Ms Singh could develop her pupils' literacy skills is explored in the self-study materials for clinic 6.

NUANCES AND CAVEATS

When introducing the "cold call" strategy (Lemov, 2015), it is important for teachers to explain the rationale and frame this purpose in a way which ensures that pupils know that anyone can be called upon and that it is a method to help the teacher identify what pupils know and don't know, not a strategy to single out or discriminate a pupil.

The way in which the "Everybody Writes" strategy is adopted would depend on the overall purpose of the task (for example, when in the lesson it is most appropriate, the level of challenge you would depending on the pupils' contexts, pupils' needs and prior knowledge. The amount of time provided for pupils to respond to a question or statement will depend on the difficulty of the question being asked.

KEY TAKEAWAYS

- > Pupils need prior knowledge in order to engage in deep thinking around a topic.
- > 'Every teacher is a teacher of English': literacy can and should be explicitly taught in every subject, supported by whole-school approaches.
- > Modelling matters: modelling is an important tool in teaching literacy and developing pupils' thinking.
- > Pupils need enough knowledge, guidance and thinking time to produce quality answers.

Further reading

Lemov, D. (2015). *Teach Like a Champion 2.0: 62 Techniques that Put Students on the Path to College*. John Wiley & Sons.

REFERENCES

Coe, R. (2013). *Improving education: A triumph of hope over experience*. Durham, United Kingdom: Durham University: Centre for Evaluation and Monitoring.

Education Endowment Foundation (2018) *Preparing for Literacy: Improving Communication, Language and Literacy in the Early Years'*, London: Education Endowment Foundation.

Hollingsworth, J. R., & Ybarra, S. E. (2017). *Explicit direct instruction (EDI): The power of the well-crafted, well-taught lesson*. Corwin Press.

Lemov, D. (2015). *Teach Like a Champion 2.0: 62 Techniques that Put Students on the Path to College*. John Wiley & Sons. Quigley, A., & Coleman, R. (2019). *Improving Literacy in Secondary Schools*. Guidance Report. Education Endowment Foundation.

Check | Clinic 4 | Pupil thinking

Answer the questions below to check your understanding of the evidence summary. Answers are available on the previous page.

1. What is ratio? Select the correct answer(s).

- a) How many pupils are answering questions correctly.
- b) How hard they are thinking about key learning.
- c) How many pupils are answering questions.
- d) How engaged they seem to be in the lesson.

2. Which of the following statements is true about pupils thinking deeply about a topic. *Select the correct answer(s).*

- a) Deep thinking is a skill which all pupils can master, regardless of how familiar they are with the topic they are studying.
- b) Pupils can't think deeply about a topic if they don't have prior knowledge about the topic.
- c) Pupils need guidance and time to engage in deep thinking.
- d) Teachers need to explicitly plan in opportunities in the lesson for pupils to engage in deep thinking.

3. Which of the following statements is true about the importance of modelling to pupils? *Select the correct answer(s).*

- a) Modelling effective written work only benefits lower attaining pupils.
- b) Modelling written and spoken language supports the development of all pupils' literacy skills.
- c) Modelling written and spoken language is only required in Early years and at primary level.
- d) All oral interactions between teacher and pupils are an opportunity to model high quality spoken language.

4. Which of the following statements is true about developing pupils' literacy skills? *Select the correct answer(s).*

- a) All teachers (across all phases and subjects) are responsible for developing pupils' literacy skills.
- b) Modelling what effective speaking and writing looks like to pupils helps them develop these literacy skills.
- c) Oral language skills support pupils' writing skills.
- d) All teachers need to consider which key vocabulary they need to teach pupils for them to access their subject.

QUIZ ANSWERS

1. b, c
2. b,c,d
3. b,d
4. a,b,c,d