

Teaching and Learning Newsletter – Autumn Term 2021

“The best available evidence indicates that great teaching is the most important lever schools have to improve pupil attainment. Ensuring every teacher is supported in delivering high-quality teaching is essential to achieving the best outcomes for all pupils, particularly the most disadvantaged among them.”

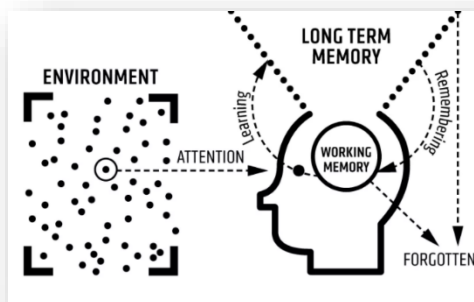
(Education Endowment Foundation)

Despite being an outstanding school that delivers exceptional lessons and achieves excellent pupil outcomes, we continue to review our practice and refine what we do. September 2021 saw an increased focus on using research-based innovation to enrich teaching and learning provision at NGHS. All teaching staff have participated in ongoing teacher development through the use of Rosenshine’s Principles of Instruction to support students with deeper understanding, and the long-term retention of knowledge.

The Learning Process

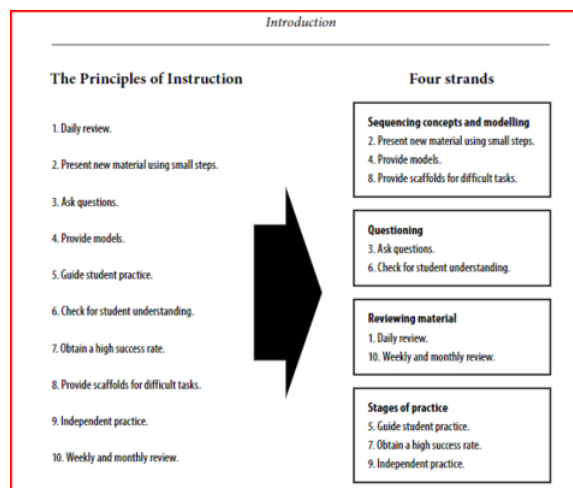
Our role as teachers includes:

- Supporting students with processing information presented to them from the environment (an unlimited source).
- Encouraging deeper understanding by linking new information to prior knowledge.
- Developing students’ ability to move information from their working memory (a limited store) to their long-term memory, by helping them relate it to prior knowledge.
- Ensuring that students are using and recalling information in their long-term memory to avoid it being forgotten in the future.

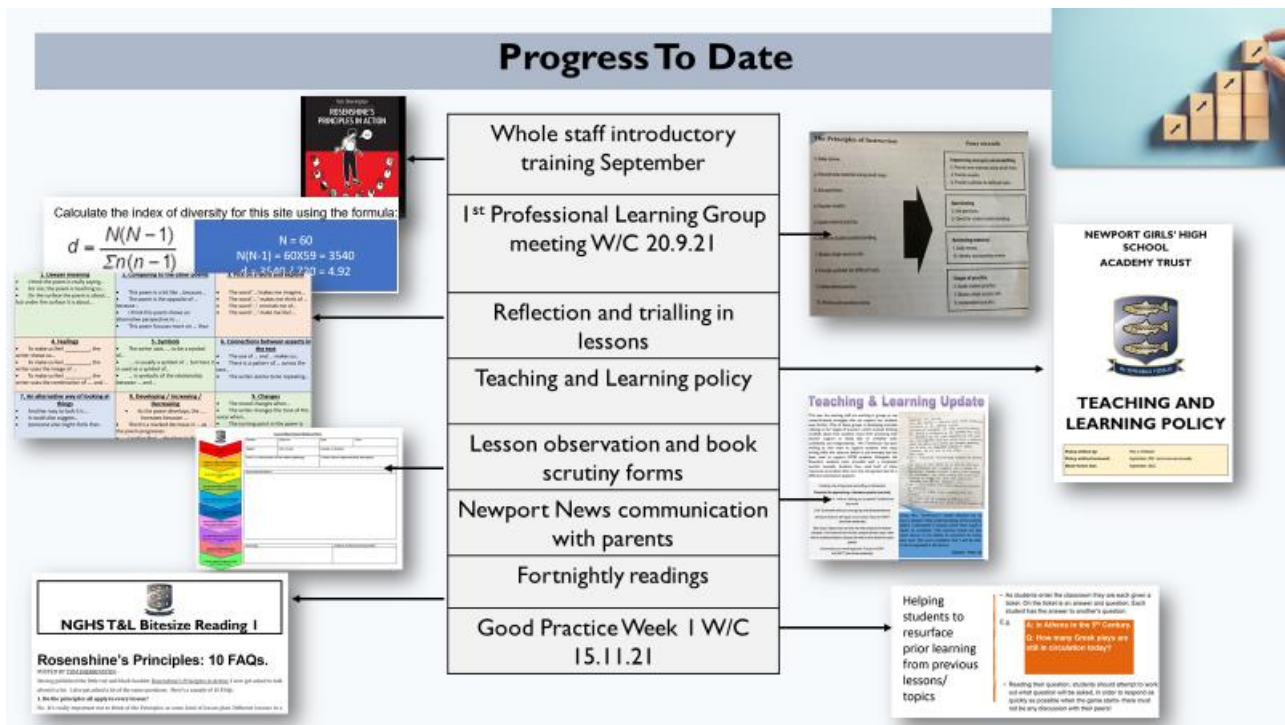


Rosenshine’s Principles

Rosenshine initially created a list of 17 principles, that have since been refined into 10. These 10 can be further grouped into 4 categories that are remaining our focus for this academic year and have provided the basis for each Professional Working Group. As a school, we are exploring how these principles can be used to support our high ability cohorts and how they can be best used depending on the subject. All four strands align themselves with our key aims of encouraging deeper understanding by relating new concepts to existing knowledge, and the ability to retain knowledge.



Our Journey So Far...



PD Day on Monday 6th December 2021

As part of our teaching and learning focus this year, we are looking at how we can make use of educational research in the classroom. As well as teaching for a deep level of understanding, staff are actively developing ways to help students with ensuring knowledge moves into their long-term memory and can be recalled when needed. On Monday 6th December, our teaching staff took part in an INSET training session where they reflected on the excellent practice that has been occurring in classrooms this term, and shared ideas and techniques they have been trialling in lessons. Excellent practice has included 'Say it again, better' where students are encouraged to reframe their answers, for example, by adding development or through using key terminology. Structure strips have also been used in some subjects to help support students with how to begin approaching longer exam questions and the key content to include in each paragraph. Whilst gradually over time these supports can be removed, they have really helped build confidence with exam technique. It is so important that we spend time talking with colleagues to share ideas and reflect on our own practice to get the very best outcomes for all our students.

Sequencing concepts and modelling (PLG Leader K Gill)

What does this mean?

This strand focuses on how we introduce new concepts to students in a manner which maximises their understanding. We need to ensure we break down such concepts into small steps which can be practised. This should include worked-examples in order to reduce cognitive load along with the use of scaffolding that can then be gradually withdrawn over time.

What does this look like in the classroom?

Typically, this will be when a teacher is introducing a new idea or concept to a class, giving a live demonstration or modelling how to solve a problem. At a later stage, it might take the form of students completing tasks with some scaffolding, such as planning grids or sentence starters.

Three Strategies to Try

Three effective and appropriate strategies trialled this academic year, taking into consideration the high-ability nature of our cohort:

1. Structure strips

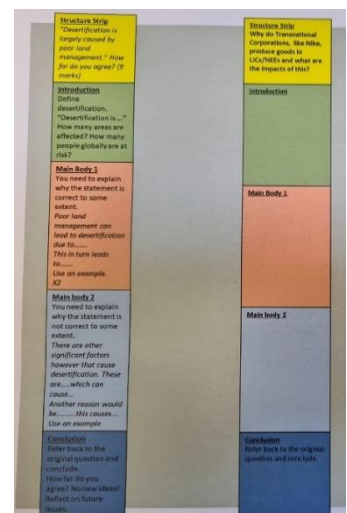
- Create a structure strip that students can stick in the margin to support students with how to write their response. Divide the strip into sections that act as a guide for the content, order and relative size of each part of their response.
- Over time, remove the amount of guidance on the structure strip as students become more confident with how to answer questions.
- Remember that these won't work for every topic and it's important that students don't expect them to! You will need to be careful not to harness creativity.

2. Live Modelling – Teacher Challenge!

- Select an examination question or questions.
- The teacher then plans and writes their response live in front of the students rather than sharing a pre-prepared answer.
- Whilst writing the response the teacher can 'think out loud'. This could either be with or without student input. This enables students to understand the thought processes involved in completing an answer and can also be a way of demonstrating to students that everyone makes mistakes that can be corrected along the way.

3. Scaffolding Discussion Work

- Create a single slide that includes sentence starters and prompts in order to aid students when completing discussion work on a new topic, concept or text.
- Consider breaking this down into smaller steps and allocating different steps to students in pairs or groups.
- These steps can then be put together as part of a whole class discussion of the new topic, concept or text.



<p>1. Deeper meaning</p> <ul style="list-style-type: none"> I think the poem is really saying... For me, the poem is teaching us... On the surface the poem is about ... but under the surface it is about... 	<p>2. Comparing to the other poems</p> <ul style="list-style-type: none"> This poem is a bit like ...because... The poem is the opposite of ... because ... I think this poem shows an alternative perspective to ... This poem focuses more on ... than ... 	<p>3. Pick on a word and explore</p> <ul style="list-style-type: none"> The word '...' makes me imagine... The word '...' makes me think of ... The word '...' reminds me of ... The word '...' make me feel ...
<p>4. Feelings</p> <ul style="list-style-type: none"> To make us feel _____, the writer shows us... To make us feel _____, the writer uses the image of ... To make us feel _____, the writer uses the combination of ... and ... 	<p>5. Symbols</p> <ul style="list-style-type: none"> The writer uses ... to be a symbol of... ... is usually a symbol of ... but here it is used as a symbol of... ... is symbolic of the relationship between ... and ... 	<p>6. Connections between aspects in the text</p> <ul style="list-style-type: none"> The use of ... and ... makes us... There is a pattern of ... across the text... The writer seems to be repeating...
<p>7. An alternative way of looking at things</p> <ul style="list-style-type: none"> Another way to look it is ... It could also suggest... Someone else might think that... 	<p>8. Developing / Increasing / Decreasing</p> <ul style="list-style-type: none"> As the poem develops, the ... increases because ... There's a marked decrease in ... as the poem progresses I notice that ... develops in the poem 	<p>9. Changes</p> <ul style="list-style-type: none"> The mood changes when... The writer changes the tone of the voice when... The turning point in the poem is when...

Questioning (PLG Leaders R Crevis and J Capaldi)

What does this mean?

Questioning is the most important tool in a teacher's toolkit. The main message here is to ask more questions, involving more students, probing in more depth and taking more time to explain, clarify and check for understanding.

What does this look like in the classroom?

Questioning takes many forms, but it is important that all students are engaged, as hands up questioning can sometimes result in some groups of students switching off and letting others do the work. It is important that teachers use a varied range of questioning techniques.

Three Strategies to Try

Three effective and appropriate strategies trialled this academic year, taking into consideration the high-ability nature of our cohort:

1. Say it again, better

- When receiving student responses or answers, accept initial answers but ask them to say it again, better. Encourage them to re-form responses with greater depth and sophistication, or using more technical vocabulary.
- You could also offer specific feedback to support them with this e.g. 'That's a great answer, now can you say it again but better by adding in X and linking to Y?'
- Ensure all students are actively listening so that the responses benefit everyone. For example, they could be asked to write down the reformed response.
- You could ask another student to reform someone else's response, however, it's important to always return to the original student to ensure they can confidently express their answer in this more sophisticated way.

"Say it again, better"

"Great answer but can you say it again and include...?"

"Brilliant idea, but can you say it again using some of our key terminology for this topic?"

"That's a great start; how can you rephrase your answer to also link in..."

Example:

Teacher: How could you test for chlorine gas?

Pupil: It makes litmus paper white.

Teacher: Good start, but what could you say instead of 'it' and 'makes'? Can you be more specific with the litmus paper?

Pupil: Chlorine bleaches? Not sure about the litmus.

Teacher: OK, let's say it again, better. How could you test for chlorine gas using damp litmus paper? Don't use 'it' and 'makes' in your answer.

Pupil: Chlorine bleaches damp litmus paper white.

2. Think Pair Share

- Pose a question and ask students to independently jot down their initial ideas or answers. Post-it notes and mini whiteboards are useful tools here.
- Students then pair up and share their ideas. They can add to their notes using a green pen if appropriate.
- The class then come back together as a class and the teacher select pairs to feedback using a 'cold call' approach. This strategy is an effective way of building the confidence of students who are more reluctant to response to questions in class.

3. No Opt Out Questioning

- Move the questioning culture in the classroom away from students putting their hand up to answer a question. Tom Sherrington talks about this in his masterclass on questioning and discusses how this can often lead to a teacher engaging in a very meaningful discussion, but with just a small number of students.
- Instead, build a culture where no hands questioning is the norm and one in which students know that it is okay to not get something right the first time.

Reviewing Material (PLG Leader J Wade)

What does this mean?

This strand focuses on knowledge retrieval and activating prior learning. It is used to help students to store knowledge in their long-term memories rather than their short-term memories.

What does this look like in the classroom?


This will often be found towards the start of a lesson and works well as the focus of a starter task.

Three Strategies to Try

Three effective and appropriate strategies trialled this academic year, taking into consideration the high-ability nature of our cohort:

1. Learning Platforms

- Create a list of recap questions on a topic of your choice.
- Increase the level of difficulty as students move up the learning platform, with the higher tier questions requiring students to apply their knowledge as well as recall it in order to really challenge the most able in the room. Remember that students should be able to answer the first few questions very quickly so that those that are confident with recalling the topic are not held back.
- Students answer first without using their notes, so they are having to use their memory. When they cannot answer any more questions, use a different colour to complete with their notes. This allows the teacher to see what they could and couldn't remember.

Learning Platform		Pricing Methods : Retrieval Practice	
	Most challenge	Explain the cause and consequence of changing pricing strategy in the decline stage of the Product Life Cycle	
	More challenge	Explain how the price elasticity of demand would affect the choice of pricing strategy for a business	
Basic		Why might predatory pricing be used? What might be the result ?	
		4. For the pricing method below, identify it and a potential issue with its use	
		3. Fixed costs for a business are £4000 and variable cost is £3 per item. Assuming 20000 items are sold, what would be the unit selling price with a 50% profit margin. Show working	
	2. Why might a business prefer a skimming pricing strategy. Give an example of a product		
	1. What is the name of the pricing strategy which is based around competitors prices ?		

Star tip: Consider introducing this idea with your exam classes. They could be given a learning platform for previously taught topics e.g., Y11 on Y10 work so that they are regularly reviewing material rather than just in the time coming up to assessments.

2. Just a Minute

- Based on the long running BBC Radio 4 show, this is a way of turning retrieval practice into a game and building students' confidence when speaking in front of an audience.
- A student comes to the front of the classroom and is given a minute to explain a topic that has been covered recently in class, aiming to avoid repetition or hesitation.
- This adds a competitive edge to retrieval practice that can engage and energise students.

2. Questions and Answers Game

- As students enter the classroom, they are each given a ticket. On the ticket is an answer and question. Each student has the answer to another's question. Ask all students to stand up and start a timer.
- The aim of the game is to complete the loop of questions as swiftly as possible. Each student should sit down once they have read out the answer and then posed their question.
- Students can then swap cards and repeat the activity, aiming to beat the time set previously. When this was observed in a drama lesson the colleague visiting the lesson commented how students were enthused by this rather than pressurised.

Stages of Practice (PLG Leader A Highway)

What does this mean?

This strand refers to the steps teachers and learners need to take in order to move from guided practice to independent practice.

What does this look like in the classroom?

The idea is that teachers need to closely monitor students' initial attempts in order to ensure they are not making too many errors and to address any misconceptions that may form at the early stages of learning something new.

Three Strategies to Try

Three effective and appropriate strategies trialled this academic year, taking into consideration the high-ability nature of our cohort:

1. Peer Support Strategy

- Students work as a pair or a small group to rehearse and fine-tune their answers to a set of questions that are set by the teacher.
- Students listen to each other carefully and give feedback on the quality of the answers given and advice on how to polish the response.
- Students then share their answers with the whole class, having been given the opportunity to perfect their answers before this. This was a strategy that was observed in a psychology lesson and the visitor to this lesson commented on how it successfully built students' confidence when moving towards more independent practice.

2. Using Mini Whiteboard for Guided Practice

- When introducing a new skill, students worked in pairs using mini whiteboards. This is particularly useful when students are approaching solving a new problem, such as in Mathematics.
- This helps to remove the fear of making a mistake at this early stage and students can be encouraged to record their thinking on the whiteboards too.
- The working out or written thinking on the white boards can then easily be shared with other students and staff in order to spot any mistakes or misconceptions and address them at the earliest opportunity.

3. Creation of Step-by-Step Worksheets

- Break down a task into the smallest possible steps and number the steps. This works well as one single worksheet, like the example from a French lesson here.
- By breaking the larger task into smaller 'chunks' the teacher is also modelling the thinking process on the page and students can practise each stage before moving on to the next one.
- This provides many opportunities to address mistakes or misconceptions, as the task is broken down into the smallest possible parts.

1. Watch this Video on bitesize	
2. Translate the following into English. Some may have more than one possible answer <i>Exemple: Je la regarde. Réponse: I watch it/her OR I look at it/her</i>	3. Simplify the following sentences by removing the underlined nouns and replacing them with a pronoun <i>Exemple: Je porte mon uniforme pour aller au collège Réponse: Je le porte pour aller au collège</i>
1. Il m' <u>écoute</u> . 2. Nous les <u>mangeons</u> . 3. Tu m' <u>aimes</u> ? 4. Mon frère <u>te prend</u> . 5. <u>Vous le comprenez</u> ? 6. <u>Us les achètent</u> . 7. Elles nous <u>aiment</u> . 8. Je <u>vous vois</u> . 9. Tu l' <u>as bu</u> ? 10. Nous <u>allons la voir</u> .	1. Je fais <u>mes devoirs</u> tous les soirs à sept heures. 2. Il met <u>son jean</u> pour sortir à la fête. 3. Elle attend le bus devant le cinéma. 4. Nous finissons <u>le travail</u> que le prof nous a donné. 5. Tu sais <u>la réponse</u> ? 6. Vous visitez <u>les monuments</u> de Paris souvent? 7. Je regarde <u>mes e-mails</u> tous les jours. 8. Je parle <u>le français</u> depuis 5 ans. 9. Il vend <u>sa voiture</u> à son ami. 10. Nous aimons <u>le livre</u> que tu as recommandé.
4. Now choose the correct pronoun (le/la/l' or les) and write the answer in full	5. Rearrange these to make correct sentences <i>Exemple: manges / la / tu Réponse: tu la manges</i>
1 Je prépare le petit déjeuner = Je <input type="text"/> prépare. 2 Elle regarde la télévision tous les soirs = Elle <input type="text"/> regarde tous les soirs. 3 J'aime bien les tartes aux pommes = Je <input type="text"/> aime bien. 4 J'adore ma tante = Je <input type="text"/> adore. 5 Vous allez voir Patrick mardi soir ? = Vous allez <input type="text"/> voir mardi soir ?	1. nous / <u>portons</u> / <u>te</u> . 2. me / <u>quelqu'un</u> (=someone) / <u>sert</u> . 3. nous / <u>laisse</u> / <u>elle</u> . 4. Marguerite / encourage / nous 5. les / nous / <u>invitent</u> . 6. <u>préfères</u> / tu / me 7. <u>prend</u> / le / on 8. <u>elles</u> / <u>effraient</u> / les