

Rosenshine's Principles of Instruction

Strand 1: Sequencing Concepts and Modelling

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In 2010, Barak Rosenshine published a paper outlining 10 principles for effective lesson instruction. Tom Sherrington grouped these into four strands, which closely link to the previous section on Cognitive Load Theory.

You will also recognise current practice here as it is not new but principles that have stood the test of time. *'They are familiar and teachers trust them'* (Sherrington, 2019).

Key Principle – Provide Models

Walkthru: Live Modelling



- **Small steps**—we have already considered the importance of introducing lesson content in small chunks to minimise the likelihood of **cognitive overload**
- **Modelling**—Rosenshine presents this as one strategy to support cognitive load. Modelling involves making every step of a process or concept explicit to pupils.
- **Worked examples** are one form of modelling—they show each step of a procedure to students.
- **Think aloud**—effective teachers also talk through their thinking as they go, making each step explicit
- Our modelling should help pupils to understand what 'success' looks like. After modelling, it is important to let students practice.

Key Principle – Provide Scaffolds

Walkthru: Scaffolding



- **Scaffolding**—any action to bridge the gap in knowledge between existing and new knowledge
- At first learners are more dependent on adult support, but as they become more independent, the support can be gradually faded away.
- Concrete fadedness—one way to do this is begin with concrete materials or examples and gradually fade to more abstract ones.
- Forms of scaffolding might include: modelling and think aloud (see above); tools and resources (e.g. cue cards or a writing frame); checklists; high quality examples to compare against (e.g. WAGOLL)

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Strand 2: Questioning

2

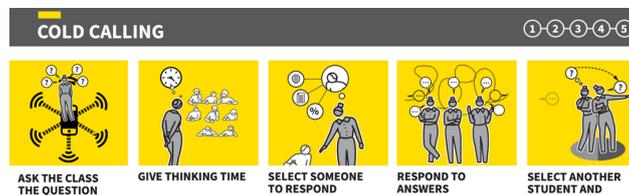


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Effective teachers ask more questions from more pupils in greater depth, checking for understanding, involving all learners and exploring thinking processes and misconceptions as well as correct answers (Rosenshine)

Key Principle – Ask Questions to Check for Understanding

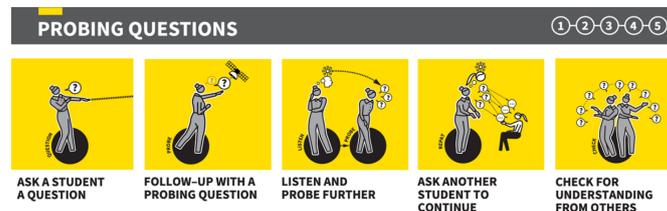
Walkthru: Cold Calling



- We ask questions for two purposes: to **check for understanding** and to **stretch & challenge** pupils' thinking.
- Rosenshine found that, not only did more effective teachers tend to ask more questions, they also found ways to **check the responses of a greater number of students**.
- Getting the most out of questions involves **high participation ratio**— having a culture where all pupils have an opportunity, and are expected to, answer questions frequently.
- **Cold calling**— this makes all pupils think and allows you to choose who answers, rather than only those who volunteer those raising their hand. It provides more accurate feedback to the teacher about how the lesson is going.
- Other questioning techniques to achieve **high participation ratio**—choral response; think-pair-share; say it again better

Key Principle – Ask Questions to Stretch and Challenge

Walkthru: Probing Questions



- We may also ask questions of pupils to get them to think more deeply about the lesson content.
- **Probing questions**—involves frequently asking 'why' or 'how' rather than just accepting the initial response.
- Other ways to promote pupil thinking include: asking for another way to answer; asking for better vocabulary; asking pupils to apply their knowledge in a different context.
- Rosenshine suggests a series of question stems to stretch and challenge pupil thinking:
 - ⇒ How are X and Y alike?
 - ⇒ What is the main idea of X?
 - ⇒ In what way is X related to Y?
 - ⇒ What do you think causes X?
 - ⇒ How does X tie in with what we have learned before?
 - ⇒ Do you agree or disagree with X?
 - ⇒ What are some possible solutions for the problem of X?

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Strand 3: Reviewing Material

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This links to guides on *Retrieval Practice* and *Cognitive Load Theory*

Key Principle – Weekly and Monthly Review

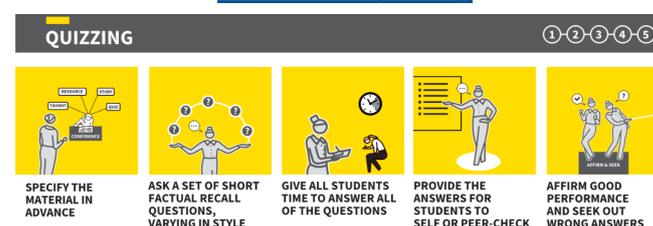
Walkthru: Weekly and Monthly Review



- A real issue for teachers is that children will naturally **forget** what they have learned. It is essential to revisit material taught regularly.
- The more we **rehearse and retrieve** information, the stronger our long-term memory of knowledge and information becomes.
- Having larger and better-connected patterns of knowledge in long-term memory frees up space in our working memory.
- The best way to become an expert at something is through lots and lots of **practice**.
- **Spaced practice**— these opportunities to practise and retrieve are most effective when spaced out with delays in between.

Key Principle – Daily Review

Walkthru: Quizzing



- Reviewing learning can help strengthen the connections among the material that we have learned.
- Rosenshine found the most effective teachers understood the importance of practice, and began their lessons with a **short review of previous learning**.
- Aim to start lessons with a review of recent learning – this will help to embed knowledge and understanding in long-term memory.
- It is better if review tasks involve actively retrieving information from long-term memory rather than just seeing it or hearing it again. This is known as **retrieval practice**.
- One of the simplest ways of using retrieval practice in the classroom is to increase the extent to which pupils need to recall previous learning, such as through **frequent, low-stakes quizzes**.

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Strand 4: Stages of Practice

4



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To excel at something, you need lots of **practice**. We need to plan lessons with this in mind!

We should:

- Provide opportunities for practise for all children
- Get children ready for independent practise
- Guide and monitor this practice

Key Principle – Guide Student Practice

Walkthru: Guided Practice



- **Guided practice**—sometimes referred to as the ‘We do’ stage of the ‘I-We-do’ model.
- Rosenshine highlights that practice is required to store what is learned in long-term memory; the best form of guided practice is **that which is guided by an expert**.
- Guided Practice also gives pupils a chance to demonstrate their level of understanding, which can highlight misunderstandings or misconceptions.
- A common mistake is to provide a short episode of guided practice and assume pupils are ready to begin independent practice when they aren’t.
- A rule of thumb that pupils are ready for independent practice is when they are experiencing a **high success rate** (Rosenshine suggests circa. 80%).

Key Principle – Independent Practice

Walkthru: Independent Practice



- Sherrington suggests this could be the ultimate goal for teaching: *‘to construct learning so that pupils are able to do challenging things by themselves’*.
- Judging when to move learners on from guided to independent practice is important and relies on the teacher really knowing their learners.
- Rosenshine suggests that the material for learners to practice during Independent Practice should be the same material used for Guided Practice.
- Providing prompts or scaffolds helps to gradually increase pupils ownership over their learning and build pupil independence, whilst ensuring pupils achieve a high success rate

Rosenshine’s Principles in Action — Reading and Resources

Blogs and Articles

- [Guided Practice](#) (Chris Drew)
- [The Importance of Regular Review](#) (CCT)
- [The Process of Modelling](#) (Zoe Enser)

Videos and Podcasts

- [Effective Questioning](#) (Durrington Research School)
- [Rosenshine’s Principles in Action](#) (Tom Sherrington)

