DO NOW: Retrieval Practice Quiz

1. What is meant by Retrieval Practice?

- a) Just one piece of a complex puzzle when it comes to teaching and learning
- b) The act of recalling learned information from memory
- c) The act of recalling learned information from memory (with little or no support) and every time that information is retrieved, or an answer is generated, it changes the original memory to make it stronger!

3. Learning can be defined as...

- a) An alteration in our long term memory.
- b) Connecting new and existing knowledge.
- c) Developing fluency and unconsciously apply knowledge and skills.

2. The aim of Rosenshine's Principles is to:

- a) Ensure that each principle is present in each and every lesson we teach.
- b) Bridge research and classroom practice by providing a set of principles that support how students learn best.
- c) Provide the latest and best strategies for teaching and learning.

4. Cognitive load theory says that:

- a) Stretch and challenge forces our memory to overload.
- b) Because short-term memory is limited, learning experiences should be designed to reduce working memory 'load' in order to promote schema acquisition.
- c) In order to learn we must have to think hard.

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Session aims:



- What is a deep dive?
- Background why a change of framework?
- Curriculum models your department
- Do's and Don'ts
- WAGOLL (what an effective lesson looks like)
- The importance of memory
- Effective use of assessment
- The deep dive Lesson visits, discussions with subject teachers
- Key points summary
- Action points, what next?

What is a deep dive?



Deep dives are a methodology that Ofsted inspectors use to gain a deeper understanding of a **school's curriculum**. Through close inspection of a number of subjects, the inspectorate say that **they can make a better judgement** about the overall **quality of the education** delivered by a school.

Depending on whether Ofsted is carrying out an inspection over one or two days and the size of a school, inspectors will usually take a deep dive into between three and six subjects.



Judgements: our working hypothesis in detail Ofsted

Quality of education

Intent

 Curriculum design, coverage and appropriateness

Implementation

- Curriculum delivery
- Teaching (pedagogy)
- Assessment (formative and summative)

Impact

- Attainment and progress (incl national tests & assessments)
- Reading
- Destinations

Behaviour and attitudes

Personal development

Leadership & management

- Attitudes to learning
- Behaviour
- Exclusions
- Attendance
- Bullying
- SMSC
- Fundamental British Values
- Careers guidance
- Healthy living
- Citizenship
- Equality & diversity
- Preparation for next stage
- Vision & ethos
- Staff development
- Staff workload and wellbeing
- Off-rolling
- Governance / oversight
- Safeguarding

Why deep dives?

Why a change in framework?

The Quality of Education

- The **curriculum** lies at the heart of education
- It determines what learners will know and be able to do by the time they have finished that stage of their education
- Research found that the curriculum was narrowing in schools due to a lack of attention to the aims and ends of education which has led to a focus on academic achievement in a small number of curriculum subjects
- PP/disadvantaged students were less likely to take Ebacc subjects compared to non-PP pupils of the same prior attainment
- Evidence of **teaching to the test** becoming more common
- In KS4 equating curriculum with the examination board syllabus

The Curriculum



- No one size fits all
- Knowledge rich mastery of subject specific knowledge
- **Knowledge-engaged** knowledge and skills are intertwined and taught alongside each other
- **Skills-led** designed around skills, emphasis on skills, including learning behaviours

What curriculum model is in place in your department?

Why is this the best curriculum model for your subject delivery?



Some do's and don'ts



- ✓ Curriculum knowledge
- Subject knowledge is solid
- How students learn (cognitive science)
- The curriculum is monitored
- The curriculum is regularly reviewed

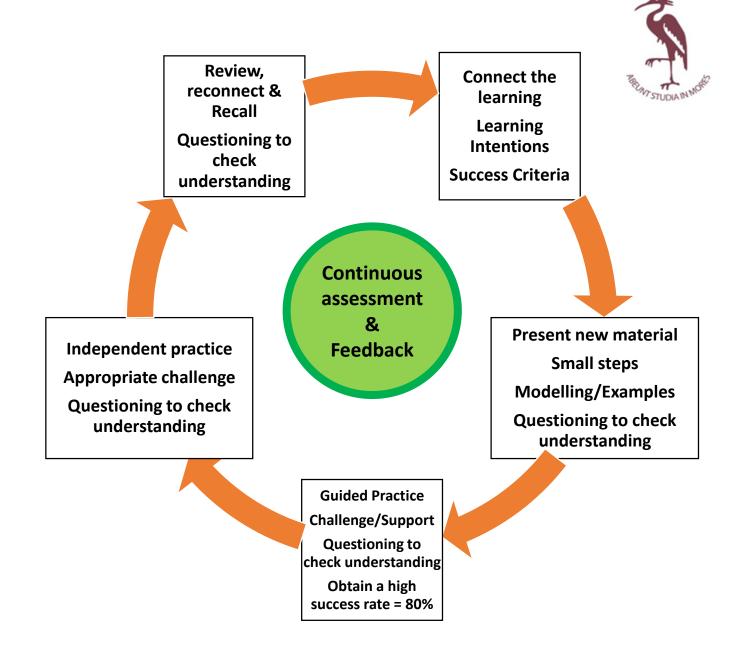
- A lack of challenge and support
- Weak base/subject knowledge
- Lack of opportunities to develop subject knowledge
- X Lack of support for NQTs
- X Lack of support for nonspecialists



Teaching effectiveness is the single most important factor in school effectiveness.

What does an effective lesson look like?





Teaching effectiveness is the single most important factor in school effectiveness.



What an effective lesson looks like...

- Learning intentions (objectives)
- Outline content to be covered and identifying transitions between parts of the lesson.
- What are we learning?
- Why are we learning it?
- Calling attention to the main ideas

Teaching effectiveness is the single most important factor in school effectiveness.



- Reviewing the main ideas to reinforce learning and aid memory
- Appropriate pace and instruction (explain what is meant by teacher instruction as it's often mistaken)
- Effective questioning no hands up!

Instruction is frequently associated with the term 'curriculum' and generally refers to the teaching methods and learning activities that a teacher uses to engage students and to deliver the curriculum in the classroom.

- Adapting teaching as required (responsive)
- Stimulating and ambitious learning environment.



Pupils' attainment is strongly affected by the quantity and pacing of instruction.



The importance of memory and learning

- Learning is at least in part defined as a change in long term memory.
- Where knowledge is rehearsed for short periods over a longer period of time, learning is more effective than more intensive study over a shorter period of time.
- Retrieval practice is also important in strengthening memory and making it easier to retrieve information later.
- Describing or explaining something learned to others helps to make connections between ideas and concepts and aids learning.
- Representing information both visually verbally aids learning and retrieval from memory.

What do we call this theory of cognition?



The importance of memory and cognitive load theory

- Is about memory and the brain, and the capacity of short-term memory to process information.
- Long term memory consists of a range of schemata, complex structures which link knowledge and create meaning and are built up over time.
- Learning is about changing those schemata through acquiring knowledge and making connections with different schemata.
- Before entering long-term memory information has to be processed by short-term memory which has a limited capacity and cannot be overloaded.
- So this suggests teaching in small chunks.

Effective use of Assessment



If effectively employed, assessment can have a positive impact on learning and teaching

Formative assessment informs teachers about pupils learning and helps plan future learning

It also **feeds back** to pupils to help them to learn more effectively and raise achievement.

Pupils learn best if they understand the aim of learning, where they are in relation to this aim and how they can achieve the aim.

Use of low-stakes testing can contribute to learning – the retrieval practice of recalling knowledge.

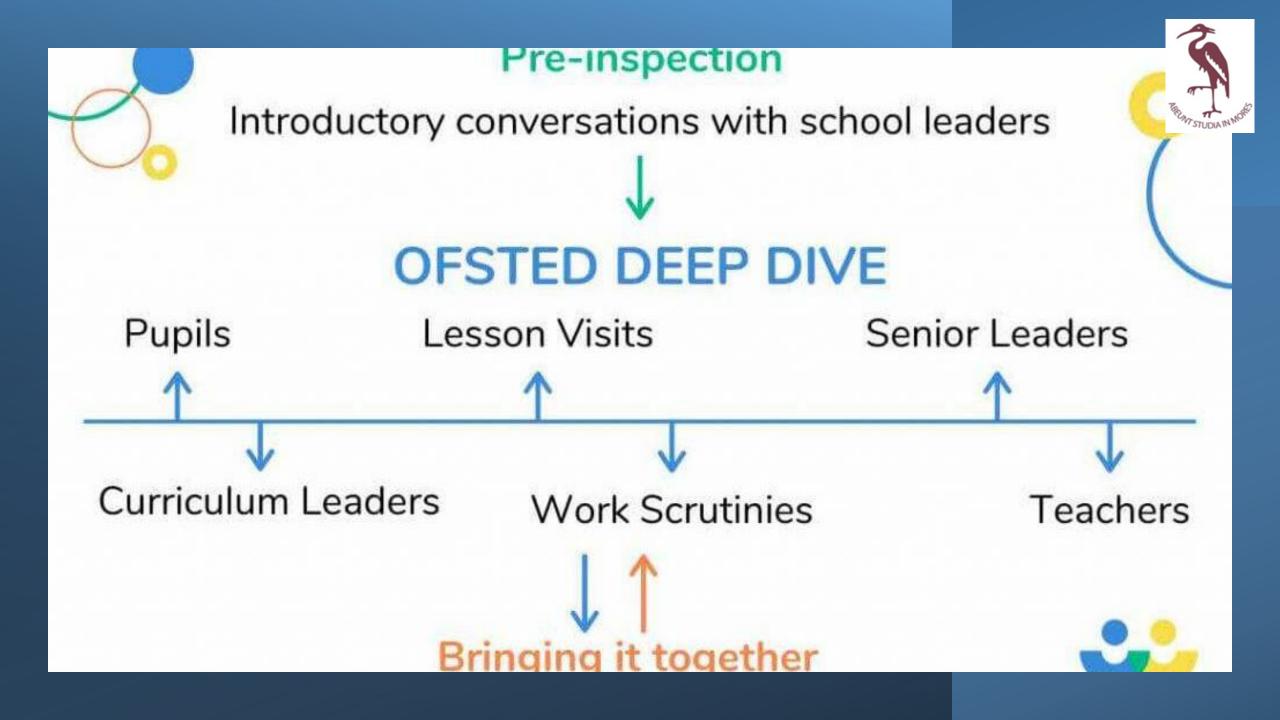
What can you share from your lessons? What strategies do you deploy to help students to remember, to reduce the cognitive load and to assessment effectively?

Aiding Memory

Reducing cognitive load

Assessment





How does a subject deep dive work in practice?



Discussions with senior leaders

Discussions with curriculum leaders

Lesson visits to a connected sample of lessons

Discussions with same teachers

Discussions with same pupils

Scrutiny of same pupils' work

Lesson visits



- A sequence of lessons across 2 key stages
- E.g. deep dive in history four to six history lessons visited
- Curriculum and/or senior leaders goes with inspector to lessons
- Where does this lesson fit into the planned history sequence that you've told me about?
- How does this lesson build on subject learning to support the next stage?
- Inspector talks to pupils, looks at work and identifies pupils for the panel and work sample
- Is current learning sequenced to build on prior learning and are pupils aware of these connections?

Lesson visits – a focus on learning



Is prior learning revisited?

Do pupils understand key concepts and engage in appropriate discussion?

As a result of the learning seen do pupils know more and remember more?

Do teachers use assessment to identify useful feedback to plan/adjust subsequent teaching?

How well does the environment focus on pupils and their learning?

Do teachers have expert knowledge of the subjects they are teaching?

Lesson resources, too, are coming under increased scrutiny from Ofsted. Resources should be matched to the curriculum sequence. Good resources should identify and introduce children to knowledge as outlined in the curriculum, and sequence it correctly. Likewise, if the resources require a child to perform a skill, such as analysis, it must be clear that children have learnt the knowledge they need to be able to do it.



Lesson visits — a focus on learning

Lesson visits – SEND and CLA



Are CLA and SEND (EHCP) plans being used effectively?

Lesson visits – Behaviour

- What is the extent of low-level disruption to learning and how well is it managed by the teacher?
- Are school policies being followed and are they effective?



Discussion with subject teachers

- Inspectors do not judge individual teachers.
- They are primarily focused on how teachers plan and deliver a sequence of lessons over time to help children learn the curriculum content in class.
- Inspectors will expect teachers to understand what key knowledge and skills they are teaching that will be essential for their study in later years at school; in other words, how their Year 7 history curriculum builds towards what the children will learn in Year 9 and beyond.
- Inspectors may also talk to individual teachers about the lesson they've observed, although individual teachers and lessons are not graded in the new framework.
- They could also discuss how the lessons inspectors have visited fit within the larger sequence of lessons they are teaching on that subject.
- What key concepts they wanted pupils to take from the lesson, and how that builds on what they have learned before and gets them ready for what they will learn in the future.

Imagine you have an inspector visit you today. **Practice answering the** questions in yellow within your group/pair.

Examples of questions

Curriculum – why are you teaching this now? What came before? What will you teach next?

Will you change anything because of how the pupils responded today?

How do you assess that pupils are knowing more and remembering more?

What support do you provide for pupils who fall behind?

How was the curriculum delivered remotely during the pandemic, and pupils' work reviewed?

How are you helped to improve your subject knowledge alongside your pedagogical knowledge?

How are specialists and nonspecialists supported?

Also additional questions on safeguarding, behaviour and workload.

Square that circle!

Talks with SLT

Talks with ML



Talks with teachers

Talks with pupils Work scrutiny

Summary – key points

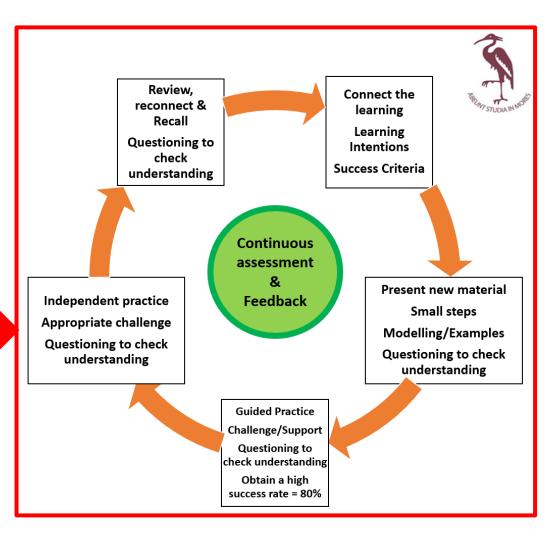
- A deep dive is to gain a deeper understanding of a **school's curriculum**.
- The curriculum is at the heart of education.
- Know the what, why and how's of your curriculum.
- Maintain and develop solid subject knowledge and pedagogy.
- Teaching effectiveness is the single most important factor in school effectiveness.
- Develop your understanding of the science of learning (cognitive science)
- Discussions, lesson visits, student samples
- Be ready for questions/discussions

Action points – To do list...

- Know the curriculum and the thinking behind it. Discuss with your CTL/department.
- 2. Invest in Subject CPD as appropriate e.g. exam boards, department meetings.
- Return to Rosenshine and Assessment for Learning and research in cognitive science.
- 4. Familiarise yourself with the possible curriculum/T&L questions.
- 5. Date for your diary 21st April next Twilight department follow-up

Next Twilight: Thursday 21st April







Resources



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Aiding Memory

Reducing cognitive load

Assessment



A summary of what to expect from Ofsted's subject 'deep dives'

Discussions with senior leaders

This stage happens before the deep dives. Ofsted inspectors first need to get a 'top level' view of a school's curriculum by talking to the headteacher and senior leaders. During the conversation, usually a 90 minute phone call, inspectors will want to find out about the school's overall curriculum aims, approach and rationale. When at the school, inspectors may ask for additional meetings about the curriculum if they need more information. The aim of these conversations is to grasp the bigger picture of what the school intends for the children to learn, as well as when they will learn it.

Inspectors may want to hear or see your long-term curriculum plans in more detail, although Ofsted are keen to stress that they don't expect to be handed planning folders. These conversations will focus on the wider curriculum coverage, sequencing and progression and on the deep dive subjects that the headteacher and the inspectors will choose together.

Some questions inspectors may ask at this 'top level' include:

How have you designed your curriculum? Why?

How is your curriculum ambitious for all children?

What are you trying to achieve with your curriculum?

How does your curriculum support your school's aims?

How have you decided to sequence your curriculum? Why?

How do you know that children are learning the curriculum content?

What is the school's action plan for curriculum development?

What are the strengths and weaknesses of the curriculum?

Further example of Top-level Questions: Curriculum Intent and Implementation

- Inspectors will ask what the school wants pupils to learn, and why?
- How is this put into practice in the school's curriculum planning?
- Will also ask about the specific impact of the pandemic on the school community and how leaders responded to the situation. How did the school implement the curriculum remotely and what, if any, elements of remote learning remain in place now.
- How has the school adapted and prioritised the curriculum from September 2020?
- How have subject leaders and teachers identified pupils' learning gaps and new starting points, and how have curriculum plans changed as a result?
- Are leaders following the national curriculum or confident their curriculum is of similar breadth/ambition in each subject?
- Does the curriculum build towards end points of what pupils will be able to know and do, including how the intended curriculum will address social disadvantage by addressing gaps in pupils' knowledge and skills.
- Does the curriculum remain as broad as possible for as long as possible?
- (Teaching to tests)
- Have leaders ensured that the curriculum contains content that has been identified as most useful, and taught in a logical progression (sequenced)?
- How do leaders ensure pupils can remember the curriculum content long term?
- How do leaders know if pupils "learn the curriculum"?
- To what extent do leaders understand that "the curriculum is a progression model"?
- What are the reasons for differences in subject effectiveness across the school?
- How do leaders quality assure the curriculum and in what ways, and what difference is it making?
- Can leaders explain the focus, rationale and impact of staff training on the curriculum?

Discussions with curriculum leaders

- Does this subject curriculum match or exceed the requirements of the National Curriculum? Evidence of checks made?
- How does prior content taught in previous lessons, topics and years prepare children for subsequent learning? Content choices, sequencing and attention to memory.
- What are the key concepts that pupils need to understand in this subject?
- Does assessment check that necessary components are learned to perform composite tasks?
- How do you adapt the curriculum for SEND/DA pupils?
- Curriculum leaders may be asked to illustrate specific curriculum choices by
- reference to curriculum plans and pupils' work across a number of lessons
- Are there systems to support inexperienced, non-specialist/struggling teachers?
- How do whole school priorities affect the quality of education at subject level?
- Inspectors may discuss remote education with curriculum leaders (and teachers) and may review completed work and teaching materials, even if remote education is no longer in place.

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Discussions with students

- Pupils seen with their books so that they can be referred to
- Will be asked what they learned in the lesson visited and how their prior learning helped them. Also what they learned in the previous lesson which helped them today.
- Will be asked about how they learnt remotely during the pandemic.
- May be asked what they learned last year and how teacher helps them to remember important content for later use. Can they give examples?
- May be asked to what extent a love of reading is promoted across the school
- Will be asked about other aspects of life in school including behaviour, bullying, extra-curricular activities...