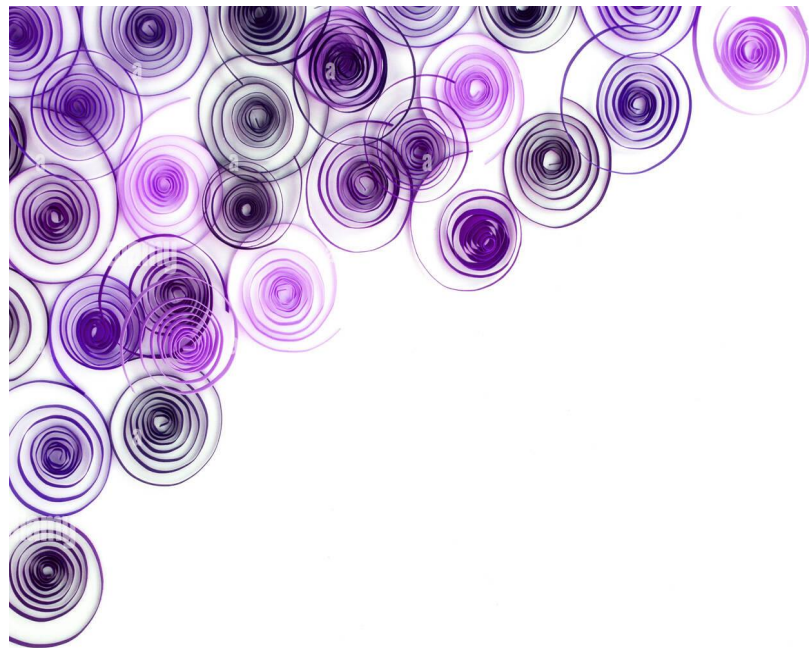




# Teaching and Learning at The Mill Academy.

## Using an Evidence Based Approach.

Miss K Glyde – Assistant Headteacher; Teaching and Learning Lead



# Intent



The Mill Academy provides motivational and exciting learning opportunities where our children can gain skills and develop their talents across the curriculum and wider curriculum. We provide a child centred approach where the curriculum recognises and develops individual talents and interests. We see each child as unique and aim to harness and celebrate their talents throughout their time in the school and equip them with a thirst for lifelong learning.

Our curriculum is underpinned by three key drivers.

We aim to develop the resilience of all our learners, both academically and socially and emotionally. Our curriculum gives the children the opportunity to challenge themselves to new experiences, understand how to tackle new learning with a positive mind-set and build their stamina to be able to succeed as lifelong learners.

We aim to develop our children's creativity, through the skills that they are taught and also the ways in which they acquire the skills. Through a bespoke curriculum tailored for the needs of our children we aim to motivate and inspire them, developing their talents across all subjects.

We aim to provide all our pupils with the skills, attitudes and attributes to enable them to be world wise. Through the Children's Leadership Team, Junior Wardens program, wider curriculum, life skills lessons, RSHE, Collective Worship, P4C and Thrive we aim to develop our pupils' awareness of their own power and identity, the impact they can have on others and the strength they have to make changes.



## **Why these Key Drivers?**

The vast majority of pupils come from within the locality are White British origin. Through our curriculum we teach about cultural and historical diversity, stereotypes and racism making them world wise learners. This is an important element as some children will never visit anywhere but Barnsley.

The proportion of disadvantaged pupils supported by the pupil premium is well above average. We tackle this by providing opportunities for children whether that be sports groups (totally runnable, Barnsley community, All Stars Cricket), visitors coming into schools (artists, historians, musicians, authors) and going on trips.

The proportion of pupils who have special educational needs and/or disabilities is above average.

Families mental health needs continues to be a growing issue and our PSA regularly delivers workshops to tackle this. Our key driver resilience aims to tackle children's mental health and attitudes towards life and learning. The support we have in place for our families gives them a sense of belonging to the community.

Our Key drivers Link with Worsborough's Ward Profile Census 2019 of being "strong and resilient communities. We still feel that these areas warrant greater attention, emphasis, and possibly resources, to influence other areas of activity and make the greatest impact overall"

Key drivers are underpinned in every topic throughout school to ensure children are being exposed to, and making it explicit, that they are learning to be resilient, creative or world wise. Our Key drivers are displayed in all classrooms and our curriculum maps. In addition, these key drivers are celebrated weekly during assembly.



Taking the key points of the EIF 2019 into consideration, we strived to ensure that the curriculum is rooted in consensus about the knowledge and skills pupils need to take advantage of later in life, that there is clarity about end points, to ensure that the curriculum is planned and sequenced so knowledge grows sequentially, that the curriculum reflects local context by addressing typical gaps, ensure the curriculum is broad and deep, and that it provides high academic ambition.

The way we have redesigned our ambitious curriculum is to ensure that we are digging deeper and delving longer in the areas which will have most impact on our pupils, help children to know more and remember more. The culture of our curriculum is a never ending story – we will adapt it year on year to ensure we are engaging, inspiring and meeting the needs of our pupils taking context into consideration.

We use curiosity as a driver for learning. At the beginning of each topic, children will complete a KWL grid, referring to prior learning/retrieval and questions that they would like to find out about the theme. By provoking this curiosity, the children have invested an interest – learning becomes extrinsic to intrinsic.



At The Mill Academy we are committed to excellence in all that we do and recognise that this is achieved through a constant drive to improve and develop the quality of teaching and learning across the school.

We strive to be the best we can be and have high expectations: We have high expectations of all children both for behaviour and academic success. We also hold high expectations of our staff to deliver outstanding lessons to ensure rigorous learning and progress.

Great teaching is key: We know that without great teachers, nothing else matters. Teachers must have the time, professional tools and resources to do their jobs effectively.

We do whatever it takes: It is our task to close achievement gaps. The faster we close these gaps, the greater the chance of academic success for our children. We do what it takes to ensure that each child makes rapid progress.

We plan to ensure academic success: We plan with every child in mind; we plan every part of each lesson. Planning is the teacher's tool to help them meet the needs of every child. Through assessment we identify the highest leverage activity for improvement.

Marking and assessment is the teacher's personal communication with each of their children. Questioning drives progress: It deepens learning and uncovers misconceptions. Teachers tell less and question more. High levels of literacy and numeracy provide the foundations for academic success: We prioritise depth before breadth, so that all children secure firm foundations in English and Maths as early as possible.

## **Great teaching is key!**

*'Raising the quality of teaching is the single most effective thing we could do to promote overall attainment and equity' (Coe et al. 2020)*



Of all the factors inside the school that affects children's learning and achievement, the golden thread is the teacher (OFA 2022) . Good quality teaching is technically sophisticated and difficult, requires high levels of education and periods of training, perfected through continuous improvement, involves wise judgements informed by evidence and experience and share a collective sense of accomplishment and responsibility for children's outcomes.

Everything we do must support and enable great teaching and learning.

We will ensure teaching is great through:

- Continuous professional development which is personalised to the individual – both teachers and teaching assistants
- Shared expectations about what great teaching looks like
- A common language of learning about effective teaching
- Creating time, space and opportunities for all staff to be reflective practitioners

Improving the quality of teaching and learning is a continuous process which is jointly owned by all staff who take collective responsibility for each other's professional development. Some of these systems are directed by the teaching and learning lead or self-directed by teachers who are encouraged to reflect and adapt own practice. Others are planned through structured learning conversations, staff meetings, newsletters, coaching and organised through lesson observations which are developmental and focused on improving specific aspects of teaching.



## **We believe that happy learners make greater progress.**

An outstanding learning environment will have teachers and other adults generating high levels of enthusiasm for participation and commitment to learning. In a great learning environment we believe that:

- The excitement is palpable and contagious.
- Praise is precise, plentiful and generous.
- Praise informs others what 'great' looks like.
- Good work is celebrated regularly.
- No one is left out of the spotlight of praise.
- Learners are caught doing things well.

At The Mill Academy we will:

- Display learners work
- Celebrate outcomes through 'beautiful exhibitions' of work open to our community and beyond
- Give regular feedback using precise and accurate praise.
- Make contact with parents to tell good news.
- Publish learners' work
- Reward outstanding work in assemblies.
- Photocopy brilliant work which is sent home to be further celebrated

As outlined in this guidance, we use the most effective research to ensure that this is constantly driven forward, including (but not limited to) Rosenshine's Principles in Action, Benjamin Bloom and Doug Lemov.





# Implementation



As a teacher and leader at our school, the following systems will enable ownership of improving teaching:

- incremental coaching
- allocated CPD time to attend webinars, read research, meet with external specialists
- subject leader networks in place across the trust to draw on a wide pool of expertise. Staff encouraged to network with other schools.
- joint/shared planning of lessons
- peer lesson observations within school
- trust/external audits (T&L, behaviour and safety)
- lesson study visits to other schools with a specific focus on improving an aspect of teaching
- lesson study style observations and jointly planned with named colleagues
- triangulated lesson observations and learning walks with a specific focus
- engagement in school led research and development projects, disseminated and shared with teams
- planned professional development learning conversations with mentor or named appraiser
- progress review meetings
- performance management systems
- opportunities to undertake NPQs.
- staff leadership library

At the heart of a trustworthy observation system are clear transparent and measurable criteria for success. This defines a common language for instructional practice that enables teachers, mentors and staff to 'grow' common beliefs about what good teaching looks like. This has a profound effect on teachers' practice and shapes what teachers do in the classroom.

The following guidelines are designed to outline our vision and ethos in relation to teaching and learning at The Mill Academy. They are aligned to our core expectations and provide a roadmap to success for all levels of teaching.

We continuously review our support for teachers and teaching assistants and revise leadership practice linked to our shared expectations.

## **Behaviour for Learning.**

At The Mill Academy, we celebrate good behaviour and a positive approach to learning. As a Thrive accredited school we believe that every member of the school community has an individual responsibility to ensure that our school environment is a safe, happy and carefree one.

### Aims and values

Our school aims to provide a happy and secure environment for all those who work in or visit it based on three main rights:

- The right to learn
- The right to be safe
- The right to be treated with respect

### Our aims are:

- For all children to feel happy, safe, needed and valued so that they can reach their full potential, developing skills, practical abilities, knowledge and the will to use them.
- To encourage a calm, purposeful and happy atmosphere within school.
- To create a positive environment within which the individual can learn, the group can learn and within which the teacher can be most effective.
- To foster a positive caring attitude towards everyone, where achievements at all levels are acknowledged and valued.
- To encourage increasing independence and self discipline so that each child learns to accept responsibility for their own behaviour.
- To have a consistent approach to behaviour throughout the school, with parental cooperation and involvement.
- To make the boundaries of acceptable behaviour clear to ensure safety.
- To raise awareness about appropriate behaviour.



## **Creating beautiful environments which encapsulate the highest standards**

Classroom environments both support and enrich the learning of all children.

As well as being vibrant and welcoming, the classroom environment is a learning resource, the second teacher, a way of engaging children and building the class community. It can create a sense of ownership and be used to support and promote learning as well as celebrating children's work. With careful thought and planning, an effective classroom environment is used as an interactive resource supporting teaching, learning and assessment.

At The Mill Academy we believe that a well organised and stimulating environment has a direct impact on the quality of teaching and learning, and therefore supports raising standards. It enables pupils to develop independence as learners, building on good EYFS practice.

- Objectives and key questions are displayed and referred to in lessons. (These are not only important for children but also enable adults learning with children to be clear about teacher expectations).
- Prompts, ideas and good examples that are generated during lessons are displayed and referred to, to support future learning.
- Key questions are displayed and used to trigger prior knowledge. Curriculum displays include statements and questions to highlight key learning points.
- Key words and technical vocabulary are displayed and discussed for a variety of curriculum areas. Please note that any collections of words or phrases are displayed and updated regularly to ensure vocabulary links to an appropriate learning context.

## An Effective Working Wall

Indicate on a display board the starting point and learning outcome for the lesson being taught with the journey between the two points.

Pupils should be involved in the entire process of the working wall, from its conception through to the details of how it is managed.

Work should be put up or removed in consultation with the children who should be helping to determine which examples best exemplify the current learning objectives

Children will be explicitly taught vocabulary to be applied in their work.

It should be:

- Added to over a series of lessons - shows the process and journey - use arrows to show this or learning line to support
- A place where anyone can make a contribution - e.g. speech bubbles/misconceptions
- Confidence building - Constantly used and referred to - key information clear
- A place for planning/structure of children's work
- A storehouse of information and ideas - vocabulary, guidance, images, diagrams/  
A place for planning / structure of children's work / a teaching aid reinforcing teaching points
- Frequently changed to be current - remove once children do not need to refer to them/have learnt this concept

Cognitive psychology has shown that the mind best understands facts when they are woven into a *conceptual* fabric, such as a narrative, mental map, or intuitive theory. Disconnected facts in the mind are like unlinked pages on the Web:  
They might as well not exist.

Stephen Pinker

## Teaching and Learning Sequence

At The Mill, our Teaching and Learning practice is informed by the most effective research.

Our planning and lesson sequence are underpinned by Rosenshine's 'Principles of Instruction', Lemov's 'Teach like a Champion' and the formative assessment research of John Hattie, Carol Dweck and Kate Jones.

Rosenshine's Principles are 10 research based principles of instructions linked to the classroom. These principles come from 3 sources:

- (a) research and cognitive science
- (b) research and master teachers
- (c) research on cognitive supports.

Here they have been set against a selection of techniques from Lemov's Teach like a champion, which the author Doug Lemov describes as "a set of field notes from the observations of the work of masters"

1

### Daily review

Daily review is an important component of instruction. It helps cement the connection between learning material, automatic recall of words, concepts and procedures, freeze working memory for problem solving and creativity.

#### Technique 20 - Do now

Use a short warm up activity that pupils can complete without instruction or direction from you to start the class every day. This lets the learning start even before you start teaching.

#### Technique 5 - Show me

Flip the classroom dynamic in which the teacher gleans data from a passive group of pupils. Have pupils actively show evidence of understanding.

#### Technique 46 - Strong start

Design and establish an effective routine for pupils to enter the class and begin class. Once routine becomes habit, load on working memory is reduced.

#### Technique 26 - Exit ticket

End each class with an explicit assessment of your objective that you can use to evaluate your (and your pupils) success.

**2****New material and small steps**

Our working memory is small, only handling a few pieces of information at once. Avoid overload. Take time to present new material in small steps and proceed only when the first steps are mastered.

**Technique 21 - Name the steps**

Break down complex tasks into simple steps that form a path for pupil mastery. Give pupils the benefit of your intuition into the material to build knowledge systematically.

**Technique 57 - What to do (EX)**

Use specific concrete sequential and observable explanations to tell the students what to do as opposed to not what to do. Apply these rules when scripting how to unravel ideas.

**Technique 16 - Begin with the end**

Progress from unit planning to lesson planning. Define the objective, decide how you assess it and then choose appropriate lesson activities.

**Technique 25 - At Bats**

Because succeeding once or twice at a skill won't bring mastery, give your students lots of practice at mastering knowledge and skills.

**3****Ask questions**

The most successful teachers spend more than half the class time lecturing, demonstrating and asking questions. Questions allow the teacher to determine how well the material is learned and how then to proceed with next steps.

**Technique 33 - Cold call**

Create a positive culture where you can call on pupils regardless of whether they have raised their hands and pupils are ready to offer what they know.

**Technique 11- No opt out**

Turn "I don't know" into a success by helping pupils who won't try or can't succeed. Practice getting it right (and being accountable for trying).

**Technique 32 - Wait time**

Allow students time to think before answering, if they aren't productive with that time then narrate them towards being more productive.

**Technique 36 - Pepper**

Use pepper as a fast pace vocal review to build energy and actively engage your class.

**4****Provide models**

Pupils need cognitive support to help them to learn how to solve problems. Modelling, worked examples and teacher thinking out loud help clarify the specific steps involved and reduce the load on working memory.

**Technique 39 - Show call**

Create a strong incentive to complete writing with quality and thoughtfulness by publicly showcasing and revising pupil writing regardless of who volunteers to share.

**Technique 38 - The art of the sentence**

Ask pupils to synthesize a complex idea in a single well-crafted sentence. The discipline of having to make one sentence do all the work pushes students to use new syntactical forms.

**Technique 22 - Board = Paper**

Model and shape how pupils should take notes in order to capture the information your present.

**Technique 15 - Without apology**

Embrace- rather than apologise for- rigorous content, academic challenge, and the hard work necessary to scholarship.

**5****Guide pupil practice**

Pupils need more time to rephrase elaborate and summarise new material. Successful teachers build in time for this as it supports greater understanding as well as more successful retention in long term memory.

**Technique 37- Everybody writes**

Prepare your pupils to engage rigorously by giving them a chance to reflect in writing before you ask them to discuss.

**Technique 43 - Turn and talk**

Encourage pupils to better formulate their thoughts by including short contained pair discussions but make sure to design them for maximum efficiency and accountability.

**Technique 42 - Habits of discussion**

Make your discussions more productive and enjoyable by normalizing a set of ground rules or habits that allow discussion to be more efficiently cohesive and connected.

**Technique 8 - Culture of error**

Create an environment where your pupils feel safe, making and discussing mistakes so you can spend less time hunting for errors and more time fixing them.

**6****Check student understanding**

More CFU, means more processing, greater long term retention and better teacher understanding in terms of gaps. Very effective teachers avoid seeking nods from pupils and use targeted questioning to find misconception.

**Technique 1- Reject self report**

Replace functionally rhetorical questions with more objective forms of impromptu assessment in order to raise pupil accountability and teacher understanding of learning.

**Technique 2 - Targeted questioning**

Ask a quick series of carefully chosen, open-ended question directed at a strategic sample of the class and executed in a short time period.

**Technique 7 - Plan for error**

Increase the likelihood that you will recognize and respond to errors by planning for common mistakes in advance.

**Technique 4 - Tracking. Not watching.**

Be intentional about how you scan your classroom. Decide specifically what you are looking for and remain disciplined about it in the face of distractions.

**7****Obtain high success rate**

Obtaining a high success rate at each stage of delivery will build solid foundations and avoid entrenching misconceptions. Moving on too quickly will reduce effectiveness and affect those pupils reaching clarity more recently.

**Technique 10 - Own and track**

Have students correct or revise their own work, fostering an environment of accountability for the correct answer.

**Technique 12 - Right is right**

When you respond to answers in class, hold out for answers that are all the way right or all the way to your standards of rigor.

**Technique 6 - Affirmative checking**

Insert specific points into your lesson when students must get confirmation that their work is correct. Productive or sufficiently rigorous before moving onto the next stage.

**Technique 15 - Without apology**

Embrace rather than apologise for rigorous content, academic challenge and the hard work necessary to scholarship. Aim high with expectations and challenge and build support.



**8****Scaffolds for difficult tasks**

Scaffolds are temporary supports to assist learning. They can include modelling, teacher thinking aloud, cue cards and check lists. Scaffolds are part of a cognitive apprenticeship leading to competence and independence.

**Technique 35- Break it down**

When a student makes an error provide just enough help to allow them to solve as much of the original problem as they can.

**Technique 57- What to do (AC)**

Use specific concrete sequential and observable supports to show students what to do, identifying how to model and explain effectively in order to scaffold hard academic tasks.

**Technique 21- Name the steps**

Break down complex tasks into simple steps that form a path for student mastery.

**Technique 9 – Excavate error**

Dig into errors, studying them efficiently and effectively to better understand where students struggle and how you can best address those points.

**9****Independent practice**

Rigourously monitored practice or over learning secures success and competence which will automise recall and reduce load on working memory. Facts, concepts and discriminations will be clear for subsequent learning.

**Technique 37- Everybody writes**

Prepare your pupils to engage rigorously by giving them a chance to reflect in writing before you ask them to discuss.

**Technique 43 - Turn and talk**

Encourage pupils to better formulate their thoughts by including short contained paired discussions but make sure to design them for maximum efficiency and accountability.

**Technique 41- Front the writing**

Arrange lessons so that writing comes earlier in the process to ensure that pupils think rigorously in writing and have the opportunity to work independently prior to feedback.

**Technique 40 - Build stamina**

Gradually increase writing time to develop in your pupils the habit of writing productively and the ability to do it for sustained periods of time.

**10****Daily, weekly and monthly review**

The effort involved in recalled recently learned material embeds it in long term memory to develop extensive and available background knowledge. The more this happens the easier it is to connect new material.

**Technique 20 – Do now**

Use a short term warm up activity that pupils can complete without instruction or direction from you to start class everyday, this lets the learning start even before you start teaching.

**Technique 13 - Stretch it**

When reviewing pupil understanding, improve academic rigor by rewarding right answers with harder questions.

**Technique 6 - Affirmative checking**

Insert specific points into your lesson when pupils must get confirmation that their work is correct, productive or sufficiently rigorous before moving onto the next stage.

**Technique 16 - Begin with the end**

Progress from unit planning to lesson planning, define the objective, decide how you'll assess it and then choose appropriate lesson activities.



# The Teaching Sequence

## Our intent

- Overarching Topic
- Subject curriculum objectives e.g. History/Geography
- Outcome – application of knowledge/ application of skills.

## Context and hook to learning Implementation

- Hook
- Immersion
- Precision teaching using substantive knowledge from prescriptive curriculum

## Ensuring retention of information/facts

- Remembering prior knowledge from previous year groups at the beginning of every topic
- Remembering prior knowledge at the beginning of every lesson
- Mini retrievals
- Retrieval test/quiz at the end of every unit
- Application of knowledge/skills as the outcome



## **Planning**

We plan to ensure academic success. We believe that when teachers develop highly-structured lessons with clear and specific aims, which are delivered through specifically designed activities, they are able to drive the best performance. Planning is essential for this to be executed at the highest level. We believe that planning enables us to meet the needs of every learner. Great planning also supports behaviour for learning. This planning will predict areas in which it is most likely that learners will have misconceptions.

At The Mill, we have long term planning for each year group. These are used in addition to the curriculum maps for each topic. For each subject, it specifies what they should already know from the previous year group and what they will learn about to ensure learning is sequential and builds upon prior knowledge. Medium term plans, prescriptive curriculums, continue over a half termly or termly basis to enable teachers to look ahead to see all substantive knowledge which needs to be covered and possible outcomes. These are adaptable so that teachers are able to be proactive and reactive.

Medium term plans give specific outcomes throughout the unit of work; giving learning a purpose.

Short term planning is done weekly and daily as teachers react to their children's needs and understanding.

Analysis groups are planned for each day (these are adaptable, where needed) along with extra interventions in the afternoon.

Lessons will be differentiated where necessary to enable all learners to meet learning objectives.

Vocabulary will be taught explicitly and referred to in each lesson to embed the language and definition.

High quality resources to be used to support and engage learning.



## Learning Objectives

Each lesson has a clear learning objective and this relates to the previous and next day ensuring that each lesson builds on learning and supports the learner to progress:

- Learning objectives are precise and ambitious
- Learning objectives to be used from the National Curriculum to ensure pitch and challenge is age appropriate.
- Focus on what is to be learned and not what is to be covered
- Have the end in sight 'so that' will be used in every objective

**2**

### **New material and small steps**

**Our working memory is small, only handling a few pieces of information at once. Avoid overload. Take time to present new material in small steps and proceed only when the first steps are mastered.**



## **Modelling**

At The Mill, we use WAGOLs (what a good one looks like) to explicitly break new learning down into small steps and to demonstrate what children are working towards. Teachers should pre-plan these as part of the planning process, but children should be involved in the process during the lesson.

Teachers and children may create their own success criteria verbally or written on the board, where this is appropriate. This may be to help them understand the steps to success or may be used as part of retrieval.

Our working walls display examples of these so that:

- children can access WAGOLs and know what they are learning towards
- high expectations are clear- to show what success looks like including ambitious vocabulary
- there is a shared understanding of judgement criteria
- children know what it looks like – successful model
- identifies key features, aims and reminders of current learning, so children can see where they are and next steps
- it provides a reference to success for pupils
- when pupils encounter problems – they can self check and improve



**4**

### **Provide models**

**Pupils need cognitive support to help them to learn how to solve problems. Modelling, worked examples and teacher thinking out loud help clarify the specific steps involved and reduce the load on working memory.**



## **Modelling**

We ensure that WAGOLs/success criteria are understood by children by:

- Introducing them at start of unit
- Discussing, referring to in lessons and expanding with children
- Consistently referring back to, referencing throughout the learning process
- Placing them in child friendly speak and modelling
- Using pictures, symbols, photographs
- Developing a consistent format
- Model learning using them
- Using as in-lesson assessment tool
- Ensure vocabulary is accurate, understood and applied
- Collaborative checklist



**4**

### **Provide models**

**Pupils need cognitive support to help them to learn how to solve problems. Modelling, worked examples and teacher thinking out loud help clarify the specific steps involved and reduce the load on working memory.**



## Guiding Student Practice

Guided practice is a teaching practice pioneered by Barbara Rogoff. It involves three steps for practicing new skills in the classroom. First, the teacher models how to do a task to the student. Second, the student does the task with guidance from the teacher. Third, the student practices the task independently.

The teacher will:

Break the task down into small, clear, understandable steps.

Use visual aids such as process charts to help students understand the steps.

Use mnemonic patterns and acronyms as retrieval cues to help students' memory recall.

Ask students for their shared input on a plan for completing the task.

Ask students to recall and predict the next steps in the step-by-step process of completing a task.

Encourage students to speak out loud to the teacher about what they're doing and why they're doing it.

Encourage to ask questions when they are stuck. Teachers should provide prompts, open-ended questions and nudges to help students recall the next step

5

### Guide pupil practice

**Pupils need more time to rephrase elaborate and summarise new material. Successful teachers build in time for this as it supports greater understanding as well as more successful retention in long term memory.**



## Scaffold for challenging tasks

Rosenshine tells us that children must undergo a form of ‘cognitive apprenticeship’ whereby they learn cognitive strategies from a master teacher who MODELS, COACHES & SUPPORTS the children. Teachers will ensure that modelling and scaffolding are precise and effective at showing what good looks like whilst allowing children sufficient space to adapt and learn from this. This might look like:

- Teachers (and teaching assistants) will work with an identified focus group (or group of children).
- Teachers may choose to identify groups of children who may start work independently before others.
- Some children may need pre-teaching or additional guiding within the lesson.
- Exemplars – examples produced by previous children
- Strategic thinking, e.g. modelling of labels to show children that they can do this
- Writing frames

Anticipate errors & misconceptions – model these within a session explicitly with the children. Children to use purple pens to edit work or ‘tick or fix’

8

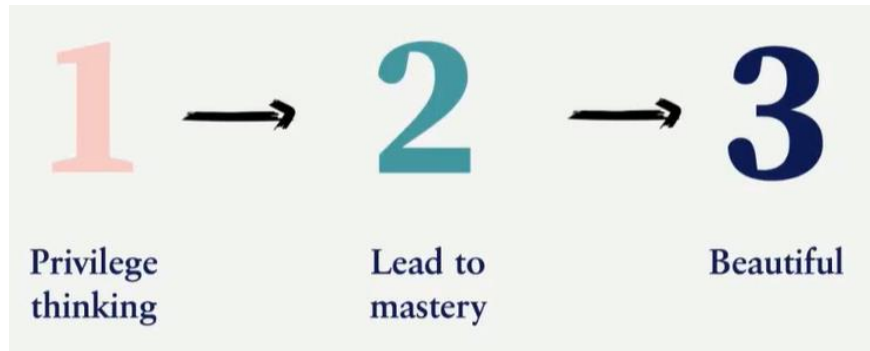
### Scaffolds for difficult tasks

Scaffolds are temporary supports to assist learning. They can include modelling, teacher thinking aloud, cue cards and check lists. Scaffolds are part of a cognitive apprenticeship leading to competence and independence.



**Using high quality, authentic resources.**

When we are planning and thinking about the choice of resources we provide for the children, we take into consideration three criteria in terms of what we offer our children.



## Using high quality, authentic resources.

1

Privilege  
thinking

What ever we give our pupils in our classrooms really ought to privilege thinking over task completion.

Eg – homophones – work had been completed in the previous lessons, downloaded worksheet, work ticked, assumed the child understood homophones – questioned, she had no idea

Completion of the task was more important than if she had actually learned it.

Immediately shift this by having a discussion “tell me what you’ve learned.” Relay the information back to see if they had learned it or not.

2

Lead to  
mastery

What we offer our children should have the potential over time to lead to mastery.

It won’t happen in every lesson, but we need to ask ourselves “Is a child, from what I’m offering in this lesson, are they likely to do something in a new context, on their own terms, as a result of what I’ve taught them?”

Idea of getting better and delving deeper into something

3

Beautiful

Are the materials we are choosing for children beautifully designed?

Do they have high quality, authentic images on them rather than a line drawing?

Do they have ‘real life’ images on them as opposed to cartoon designed versions?

Do they provoke curiosity?

Does it have depth and richness to it?





## Questioning

Every lesson at The Mill Academy is characterised by skillful questioning at every stage of the lesson. Teachers use questioning as a formative assessment tool to find out what children know and what gaps they might have. Questions will be carefully pre – planned.

Every lesson should involve a number of strategies to engage children in dialogue, collaboration and thinking. Questioning should optimize whole class participation.

At The Mill, we do this through the use of:

- cold-calling
- talking partners/group discussion
- mini – whiteboards
- open and closed questioning (see next page for example of question types)

We aim to create a culture of ‘No opt out’ (Lemov, Teach like a champion).

We create a climate that means we take risks. Teach our children that we cannot simply say ‘I don’t know’. When children make errors ensure you go back to them to say the right answer.

### Say it again, better

It is normal for first answers to be half hearted. A second opportunity to respond allows them to finesse their answer & add depth. E.G. ‘Thanks, that’s great. Now let’s say it again better. Try again but make sure you add in x and link y. Children then immediately give an improved response.

3

### Ask questions

The most successful teachers spend more than half the class time lecturing, demonstrating and asking questions. Questions allow the teacher to determine how well the material is learned and how then to proceed with next steps.

Strategy/approach	Process	Gains and benefits
<b>Thinking Time:</b> Consciously waiting for a pupil or class to think through an answer (before you break the silence) e.g. 15-30secs	Relationships are positive or are improving. There is recognition that school improvement is dependent on building professional relationships with all members of the school community	Prompts depth of thought and increases levels of challenge. Ensures all pupils have a view or opinion to share before an answer is sought.
<b>Basketball questioning:</b> Move questions and discussions between pupils	Teacher establishes movement of ideas and responses around the class. Builds on other pupils' ideas and comments. Accepts 'half-formed' ideas. NB not 'ping-pong'	Engages more pupils. Stops teacher being focus for all questioning. Develops connected thinking and development of ideas.
<b>Conscripts and Volunteers:</b> Using a planned mix of 'conscripts' and 'volunteers'	Teacher selects answers from those who volunteer an answer and an equal amount of those who do not.	Enhances engagement and challenge for all.
<b>Phone a friend:</b> Removes stress to enable those who cannot answer to participate	Those who cannot answer are allowed to nominate a fellow pupil to suggest an answer on their behalf, but they still have to provide their own answer, perhaps building on this.	Encourages whole-class listening and participation. Removes stress and builds self-esteem.
<b>Hot-seating:</b>	A pupil is placed in the 'hot-seat' to take several questions from the class and teacher.	Encourages listening for detail and provides challenge
<b>Mantle of the expert:</b>	A wears the cloak of the expert to answer questions from the class.	Builds self-esteem through opportunity to share detailed knowledge.
<b>Preview:</b> Previewing questions in advance	Questions are shared/displayed before being asked, or the start of the lesson.	Signals the big concepts and learning of the lesson
<b>Pair rehearsal:</b> of an answer or a question	Pairs of pupils are able to discuss and agree responses to questions together.	Encourages interaction, engagement and depth
<b>Eavesdropping:</b> Deploying specific targeted questions	Listen in to group discussions and target specific questions to groups and individuals.	Facilitates informed differentiation.
<b>5Ws:</b> Modeling simple exploratory questions to gather information	Teacher models the use of Who, What, Where, When and Why to set out a simple information gathering response based on the information provided.	Encourages students to rehearse enquiry and comprehension, can extend into reasoning and hypothesis. Creates an inquisitive disposition and a thinking/self-reflective approach to learning.

Strategy/approach	Process	Gains and benefits
<b>High Challenge:</b> Phrasing questions carefully to concentrate on Bloom's Taxonomy higher challenge areas	Questions must be pre-planned, as very difficult to invent during a lesson. Focus questions to address analysis, synthesis, evaluation and creativity, based on Bloom's Taxonomy.	Provides high challenge thinking, requiring more careful thought, perhaps collaborative thinking and certainly longer more detailed answers. For Able, Gifted and Talented.
<b>Staging or sequencing:</b> questions with increasing levels of challenge	Increasing the level of challenge with each question, moving from low to higher-order questioning	Helps pupils to recognise the range of possible responses and to select appropriately.
<b>Big questions:</b> The setting of a substantial and thought provoking question	Big questions cannot be easily answered by students when the question is posed. They are often set at the beginning of the lesson and can only be answered by the end of the lesson, using all of the thinking based on all of the contributions to the lesson.	These questions develop deeper and more profound thinking. Big Questions are often moral issues or speculative questions such as, Where are we from? How big is the universe? What is the meaning of life?  They require extended answers and usually rely on collaborative thinking and a personal interpretation of the information provided.
<b>Focus questioning:</b> This will help students to answer bigger questions	When students struggle to answer bigger or more complex questioning, the teacher can model or lead the thinking by asking Focus questions to lead the student through the steps of the thinking.	Develops confidence and the sequencing of small steps in thinking and response. Allows students to reveal the stages in their thinking.
<b>Fat questions:</b> Seeking a minimum answer	Pupils are not allowed to answer a question using less than e.g. 15 words or using a particular word or phrase. They must give an extended answer or make a complete sentence/phrase.	Develops speaking and reasoning skills, the correct use of critical and technical language .
<b>Skinny questions</b> A traditional approach to Q&A asking everyday questions with a fixed or specific answer	In its simplest form, students can answer yes or no to a skinny question, or give a number or knowledge based response.	Challenge level is low in skinny questions that do not seek and extended answer or reasons for the answer. Mostly knowledge and comprehension based. Does not develop thinking or reasoning.
<b>Signal questions:</b>	Providing signals to pupils about the kind of answer that would best fit the question being asked. Teacher responds to pupils attempt to answer, by signaling and guiding the answers.	The essence of purposeful questioning, moving pupils from existing knowledge or experience (often unsorted or unordered knowledge) to organized understanding, where patterns and meaning have been established.
<b>Seek a partial answer:</b>	In the context of asking difficult whole class questions, deliberately ask a pupil who will provide only a partly formed answer, to promote collective engagement.	Excellent for building understanding from pupil-based language. Can be used to lead into 'Basketball questioning'. Develops self-esteem.

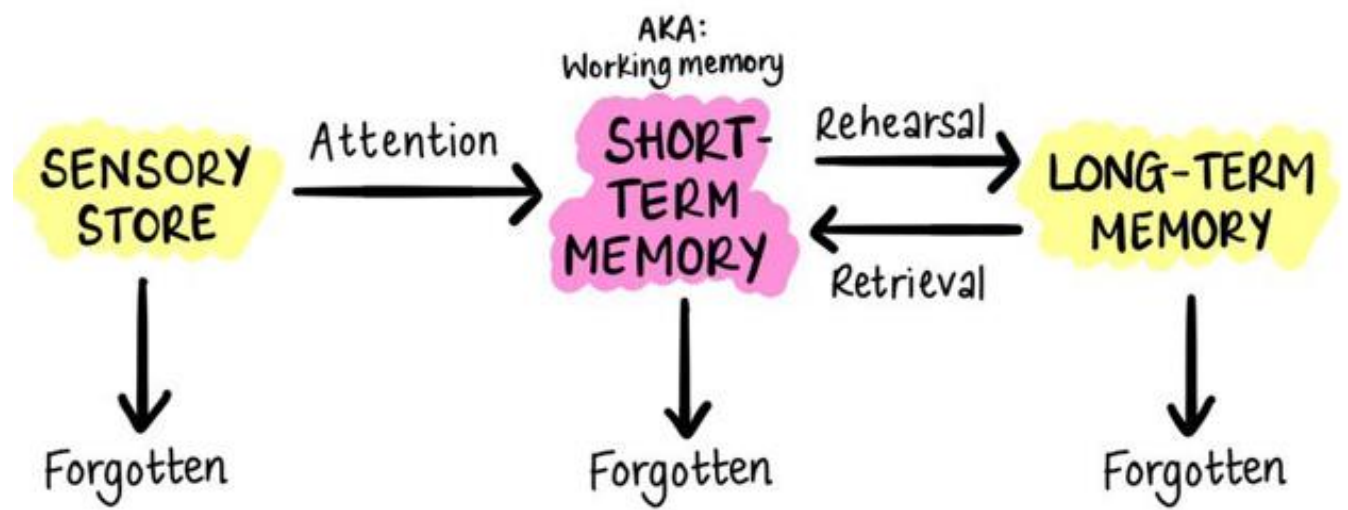


## Retrieval and Understanding



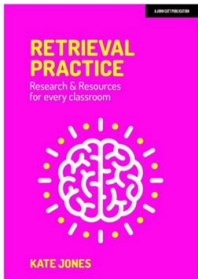
The act of recalling learned information from memory (with little or no support) and every time that information is retrieved, or an answer is generated, it changes the original memory to make it **STRONGER!**

*Peterson & Peterson (1959)*  
→ Almost all information stored in short-term memory that is not rehearsed is lost within 18 to 30 seconds!



THE MULTI-STORE MODEL OF MEMORY BY ATKINSON & SHIFFRIN (1968)

Learning = a change in long-term memory  
‘if nothing has changed nothing has been learned’





## Retrieval and Understanding



Teachers should include daily review of previous learning in lessons. This could be from the previous lesson, previous week or year (teacher discretion). Research tells us that when regular retrieval is used before continuing the subject, this helps remind students of what they learned and develops a concrete base for their learning. Thus in turn, supporting students to know more and remember more.

Teachers will use a variety of retrieval techniques for daily review and to check understanding.

### Methods include

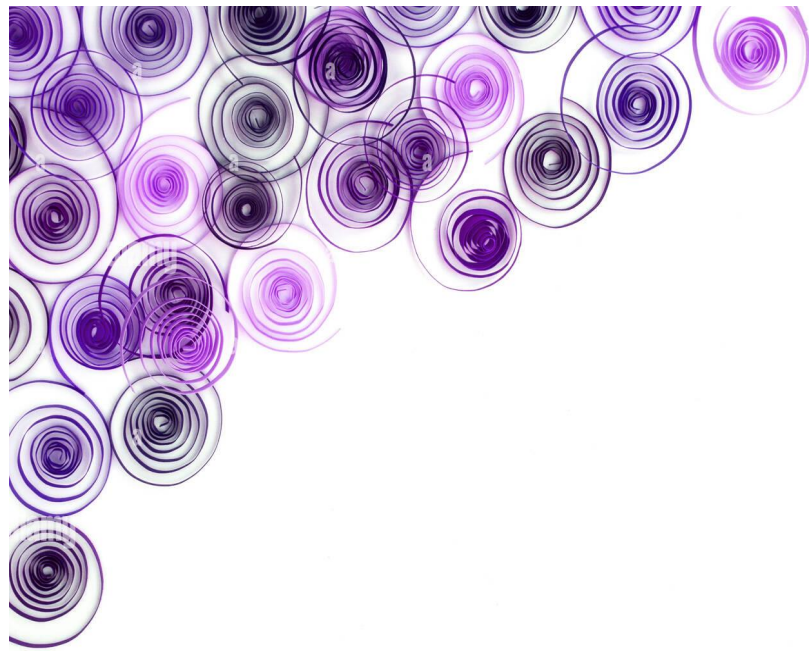
Mini retrieval  
Thought showers  
Vocabulary  
Flash cards  
Mini quiz  
Kahoot quiz  
List it  
Spacing  
Odd one out  
Freya models  
End of unit key questions

As outlined in the guidance, teachers should anticipate any mistakes and model these as part of whole class teaching. Where misconceptions have arisen, teachers will address these with the class (or group of children that have this). These mistakes /misconceptions will also inform future planning and teaching.

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### Check student understanding

More CFU, means more processing, greater long term retention and better teacher understanding in terms of gaps. Very effective teachers avoid seeking nods from pupils and use targeted questioning to find misconception.



# Impact





The impact of the highest quality Teaching and Learning will ensure that children have solid foundations for learning and all students are able to reach their highest potential. Teachers will ensure that children develop a deeper understanding of concepts at all levels to enable the highest success.



## How We Evaluate the Quality of Teaching and Learning

Self-evaluation of learning take place regularly to support teachers and staff in delivering high quality learning experiences for children. We meet regularly to discuss teaching and learning and undertake the following activities to enable the best learning is provided.

This includes:

- learning walks
- teaching and learning / planning team meetings
- book looks – range of practical, discussion, written application, presentations
- rigorous moderation of books through the school leadership and the trust
- subject audits
- school tracking data audits of all groups of pupils
- lesson observations/ drop ins
- informal opportunities for staff to peer observe or team teach
- pupil voice

When making judgements about the quality of provision in a class, it is important to remember that good quality teaching every day for every lesson leads to outstanding progress and outstanding outcomes for pupils. Therefore, good teaching over time means outstanding practice.

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### Obtain high success rate

**Obtaining a high success rate at each stage of delivery will build solid foundations and avoid entrenching misconceptions. Moving on too quickly will reduce effectiveness and affect those pupils reaching clarity more recently.**