Millfield L.E.A.D. Academy

A L.E.A.D. Academy

Teaching & Learning Policy

And Toolkit

2024 - 2025

Contents:

Rationale:

This policy is designed to be a working document which supports teaching staff in the construction and delivery of highly effective learning experiences for all children. It is important to understand the difference between learning and performance. Learning is explicitly linked to the long-term memory whilst performance is linked to short term goals and memory.

Vision

To improve the lives and life-chances of **every pupil.**

Our Core Values:

These core values permeate through our curriculum which is built on four strands.

Curriculum Drivers

These strands have been chosen to increase the cultural capital and therefore knowledge about future opportunities. We anticipate that our children will be international citizens and therefore needs a love of languages, knowledge and understanding of different cultures combined with a set of skills that will enable them to compete with the best in the world of work.

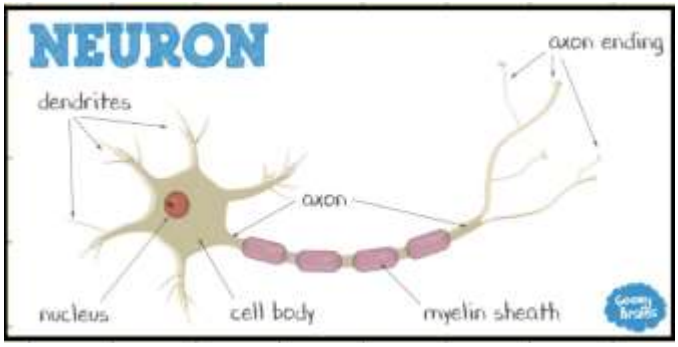
Section A: The Theory of Learning

Ongoing research and focus have been undertaken by Millfield LEAD Academy to understand how children learn best. This has resulted in a deeper awareness and application of the conditions needed for highly effective learning. The strategies adopted or developed by Millfield LEAD Academy are based on evidence-based research. This forms the basis for our Teaching and Learning approach. Part of this approach is to ensure children have a developing understanding of how they learn. This is based on our developing knowledge of the brain, its operations and how learning is stored and retrieved from long term memory.

What is learning?

Learning happens when there has been a change in long-term memory. If the neural pathways have not been sufficiently developed, then the knowledge will not 'stick' and be forgotten. Children will not be able to recall it when needed and progress will be slower. By making these neural pathways strong, connections can be made and the application of knowledge from one area to another is greatly increased.

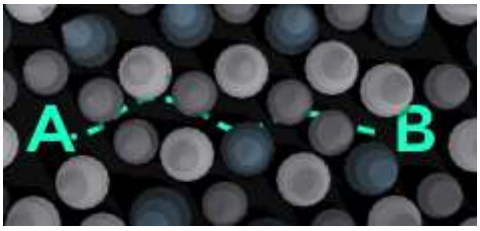
How does our brain work/make neural pathways?



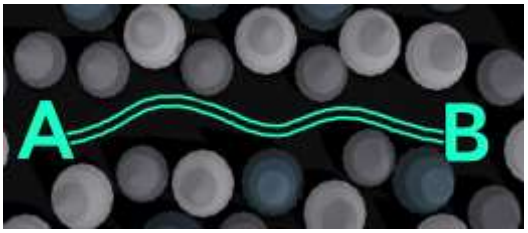
The information travels through the myelin sheath. The more it does this the thicker the myelin sheath becomes and the more efficient the transfer of information. This is the neural pathway.

Strong neural pathways enable us to automatically use and apply information, knowledge and concepts which are stored in our long-term memory. However, to move new learning into long-term memory requires practice and application. At first, the pathway is winding and may even take wrong turns as it tries to make sense of the information.

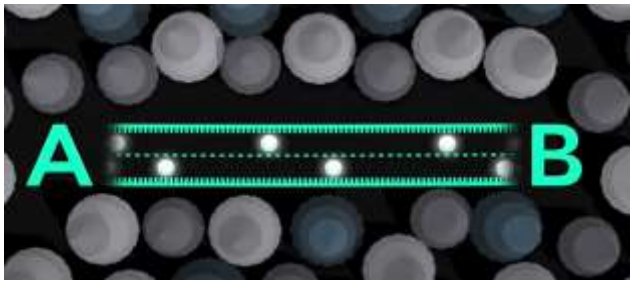
Imagine walking through a dense forest to find a particular tree. At first, you will take many wrong turns and your path will not be straight and efficient.



The more you walk through the forest, the straighter the path will become. You will notice signs and things from previous walks and begin to build a more efficient route. This linked knowledge enables us to walk to the designated tree quicker and with less errors and wrong turns.



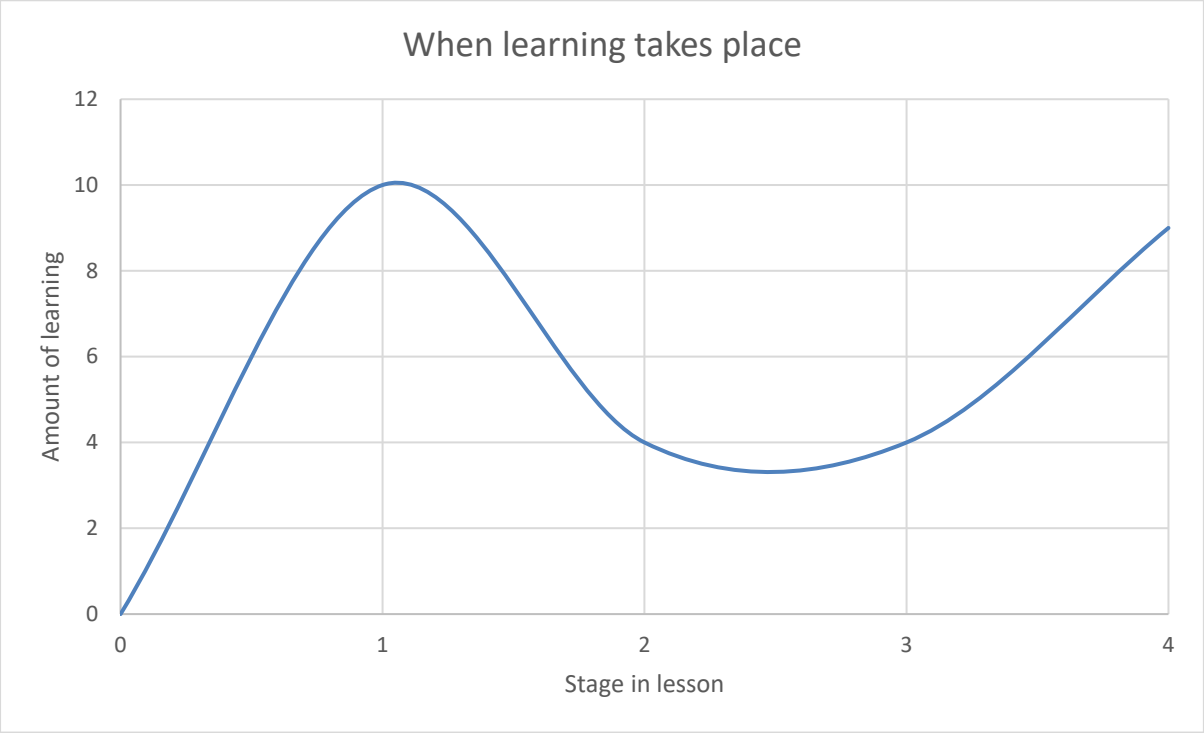
Each time we walk through the forest it gets quicker, easier and more links are made. Eventually, through the recall and practice, the walk is automatic and with no wrong turns. The trees seem to move out of the way and the winding route is now a direct straight route.



If children do not have the opportunities to recall and practise, then their neural pathway will remain winding and inefficient. It is our job as teachers to ensure that the pathways are created and become strong and reliable.

Images from The Neuroscience of Learning by Halo Neuroscience https://www.youtube.com/watch?v=_nWMP68DqHE

Research on the brain indicates that children learn the most at the beginning of a lesson and the second most at the end of the lesson. It is crucial that the teaching pedagogy reflects this research and knowledge.



Knowledge:

There are different types of knowledge and some of these are explicitly linked to subjects.

Substantive knowledge, also known as declarative knowledge, is knowledge about the subject. Facts and information are substantive knowledge. This type of knowledge is generally fixed.

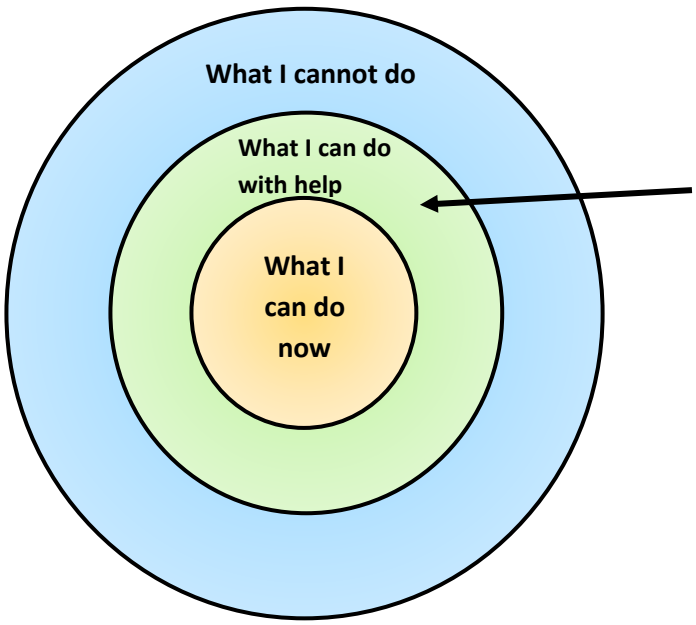
Disciplinary knowledge, also known as procedural knowledge, is knowledge about how something is done, was established or the steps taken to validate something. This type of knowledge continues to be developed by academics, researchers or specialists in the field as our understanding of it deepens.

Children need to develop both the substantive and disciplinary knowledge. By understanding and being able to apply the disciplinary knowledge children can show their depth of knowledge/learning in new areas/concepts or related learning tasks.

Desirable difficulties and the zone of growth

Teachers should understand the concept of desirable difficulties and the zone of growth (the optimal conditions for learning). An understanding that learning always begins with the learner experiencing some form of cognitive conflict/stress. Learning should challenge children and rigorous learning experiences that go beyond input thinking should be planned and taught. Pupils should be encouraged to recognise and enjoy a level of difficulty and see errors and failures as an opportunity to learn more and develop. Experiencing controlled difficulties will aid memory and the development of neural pathways. Too much cognitive overload or stress leads to learning being impeded because the amygdala does not send the information to the prefrontal cortex (the reflective part of the brain). By being exposed to the right amount of stress or difficulties leads to myelination of the neural pathway which makes learning stronger and aids long term memory and recall. Research shows 'that moderate levels of stress in short, defined periods and in a supportive environment help rewire the brain to deal more effectively with stress in the future. 'The right amount of stress in the right conditions does indeed make you stronger' Whitman & Kelleher 2016

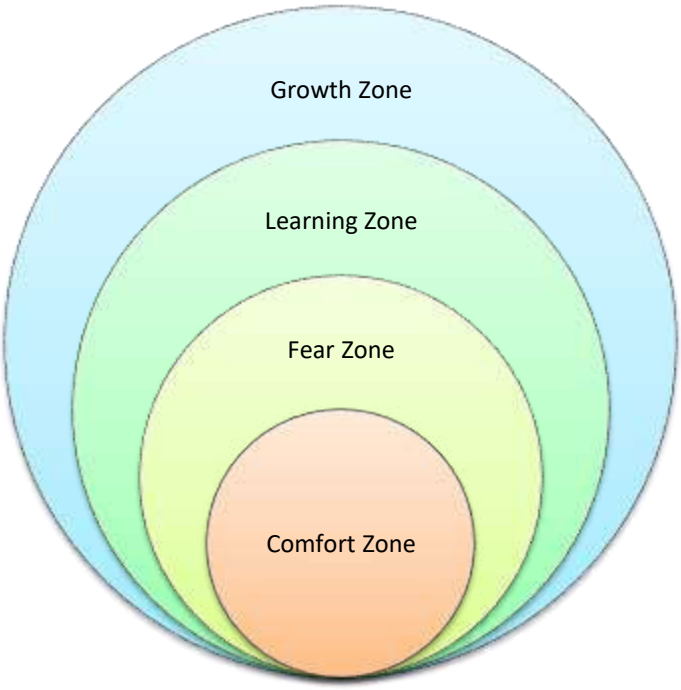
Lev Vygotsky first introduced the zone of proximal development (ZPD), and this has been further developed over the years. The research indicates that children can attain more if they are supported to attempt harder learning tasks. This guidance or support is gradually removed so they can demonstrate they can do the task/apply the knowledge independently.



Zone of Proximal Development (ZPD).

With appropriate scaffolding the learner can make progress to a deeper level.

The ZPD diagram above matches the commonly available Zone of Growth diagrams shown below. Here children are supported through the fear/anxiety zone into a learning zone. The learning zone is where children are supported through scaffolding and enhanced modelling. They then progress into the growth zone where they apply this new knowledge independently.



The difficulty for teachers is designing activities and tasks which move the children through the zones and into the growth zone. If the work planned is too easy then children will coast and make limited, if any progress. Work at this level does not take into account the children's prior learning. Teachers must plan activities that build on prior learning and there is a need to assess the children throughout the lesson. When this is done effectively children will make at least good progress and be engaged in their learning.

Children also need to develop an understanding and a voice to identify and request when they need support, or when they are too comfortable and need to move on. This self-awareness will lead to improved learners who strive for challenge and as a result will lead to improved learning. The use of self-checking areas allows children opportunities to check their learning and make informed decisions around requiring help or further challenge. Scaffolding, which is gradually removed, will also aid the children in managing the cognitive difficulties and stresses of learning something new. Linking the new learning to previous learning will also aid the recall and retrieval of knowledge, which ultimately strengthens learning further. Ultimately, the decision on support or challenge lies with the teacher.

Cognitive load

Teachers should be aware that there is a limit to how much information pupils can process at any one time – this is known as cognitive load. New information is processed in the working memory. When new information has been used and links have been established the knowledge will transfer to long-term memory. However, transfer will only occur if information is retrieved (recalled and remembered) sufficiently, only then will it become embedded in long-term memory as permanent learning. When pupils have more information that is automatic in a subject concept or area, this frees up their working memory to be able to apply what they know strategically and to problem solving.

Teachers need to be mindful of the cognitive load of worksheets and ensure that the information on them is kept to a minimum and aids not hinders cognition.

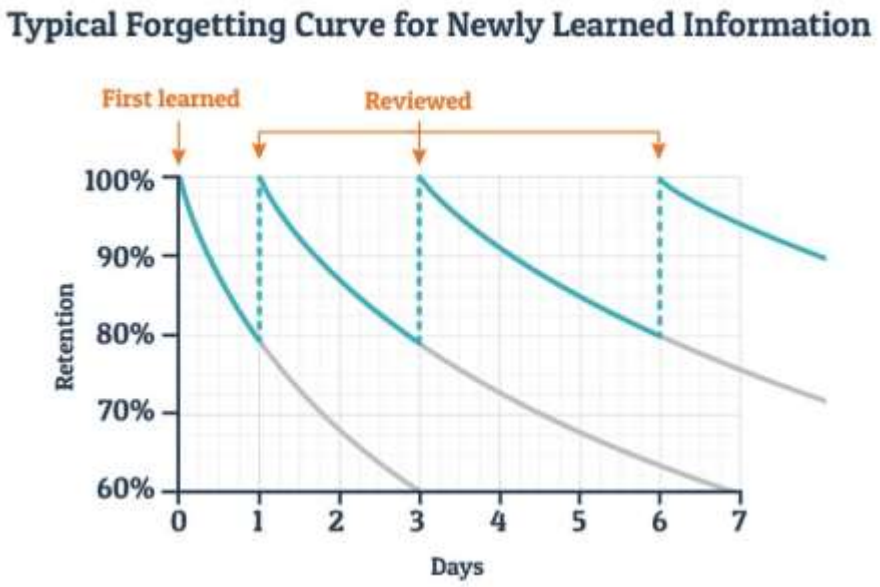
Presentations or slides also need to be reviewed to ensure there is not too much cognitive load for children. Teachers should review these to ensure only the essential elements are included and a 'less is more' approach adopted.

Metacognition

Metacognition evidence suggests that pupils learning improves when they develop their levels of self-regulation and metacognition (EEF Toolkit 2019). This refers to the ability to think about one's own thinking and cognitive strategies. Metacognition and self-regulation approaches aim to help pupils think about their own behaviour and learning more explicitly, often by teaching them specific strategies for planning, monitoring and evaluating their learning. Self-checking areas are utilised for the ongoing evaluation of their learning. Children assess their learning at the end of each lesson and can request an IMPact session. IMPact sessions will ensure that the child has securely grasped their learning prior to the next lesson.

Retrieval

Retrieval is a crucial element of how we learn and how information is transferred into long term memory. Being able to recall information frees up working memory, especially when the recall is automatic. Building in retrieval activities enables the myelin sheath to strengthen and this in turns makes the retrieval more automatic. Initially children will forget and the act of trying to retrieve information also helps with recall. Ebbinghaus' forgetting curve demonstrates how retrieving information and planned revisiting of learning aids recall and the automaticity of retrieval.



https://www.researchgate.net/figure/Ebbinghaus-forgetting-curve-and-review-cycle_fig1_324816198

Retrieval activities should be built into a learning sequence or lessons. The act of retrieving something from the previous week/month/term and making links to current learning further strengthens the memory and help transfer the knowledge into long term memory. This aids application at a later date. Low stakes quizzes help aid recall and retrieval. This in turn helps strengthen neural pathways and the transfer into long term memory. Teachers should build in regular opportunities for these low stake quizzes. Retrieval practice is a crucial aspect of the learning sequence and process.

Displays

Teaching staff should ensure the learning environments are non-discriminatory and represent the full range of role models and actively promote the protected characteristics. Displays should reflect and celebrate the diversity of our school community. Teachers should be watchful for unconscious bias throughout their practice. To reduce cognitive load and enable children to focus on the key learning elements the areas around the main teaching zones (interactive whiteboard, whiteboard, demonstration areas and where the teacher positions themselves to give the instructions) should be kept free from distractions, namely displays, behaviour ladders, notices or job lists. This will ensure that children's attention is on the instructional/learning aspect and not additional material that does not link to the learning.

The classroom is the learning environment and should reflect the children's learning. This may include celebratory displays alongside learning journeys and working walls. This will ensure that the displays do not become 'wallpaper' and fail to aid children's learning. Working walls should reflect the current themes and topics and the aim is to help guide the children and give them prompts to aid recall and make links to previous learning. Subject learning journeys should be updated termly

to reflect the current topics being learnt. All displays should have correct spellings and grammar unless it is necessary to display incorrect examples as part of the learning sequence and upskilling of writing. Key vocabulary should also be displayed, ideally with some reference to context to aid the acquisition of the technical vocabulary and aid its correct use.

Section B: The Practice of Teaching

Excellent Teaching

Utilising Rosenshine's Principles of Instruction we have established a core set of attributes that we expect all teachers to adopt and demonstrate to enhance learning. Excellent teachers' attributes:

How do these attributes fit into the art of teaching?

To be highly effective in the implementation of teaching the following must be included in daily practice:

- Plan, deliver and evaluate a series of connected learning experiences
- Revisits previous learning in a systematic way which develops long term memory
- Teach lessons which **are not** the transmission of knowledge or input thinking
- Have excellent subject knowledge
- Build on pupils' current knowledge and ensure pupils know what is being learnt and why
- Increase variance in lessons to reduce the variance in outcomes
- Utilises pedagogical approaches that develops independence and collaboration
- Encourage pupils to be resilient and embrace failure as a vehicle to get better and develop
- Creates opportunities to apply knowledge and skills
- Involve pupil participation frequently and purposefully
- Pupils can develop through hard work, practise and determination.
- Establish an orderly, stimulating and safe environment that enhances and supports learning
- Use resources of the highest quality

Pupil Premium Pupils:

Teachers are aware of who their PP pupils are and their flightpath. PP pupils who are absent will be a priority for additional input and guidance by the teacher/teaching assistant to ensure they 'stay up' with their peers. This will be through additional instruction, scaffolding and guidance or pre-teaching the lessons missed to ensure they are able to seamlessly join in with the class lessons.

PP pupils are a priority for in school tuition and ALL PP pupils have a series of small group tuition during the academic year. PP pupils are discussed at all pupil progress meetings to ensure they are on track as well as being challenged to make accelerated progress to reach higher levels than their flight path.

Rosenshine's Principles of Instruction:

Combining the Brain research with specific pedagogical approaches we have utilised the research from Barak Rosenshine and his Principles of Instruction.

The 10 approaches outlined in the research lend themselves to highly effective teaching. The strands are:

1. Daily review.
2. Present new material using small steps.
3. Ask questions.

4. Provide models.
5. Guide Student practice.
6. Check for student understanding.
7. Obtain a high success rate.
8. Provide scaffolds for difficult tasks.
9. Independent practice.
10. Weekly and monthly review.

Strand	What this means in practice
Daily review	Reviewing previous learning helps strengthen the connections and helps with recall of key information and knowledge. Reviewing ultimately leads to the learner effortlessly and automatically recalling and making connections with new learning.
Present new material using small steps	Working memory is small and can only cope with a few bits of information at a time. Introduce small amounts of information, guide and support children to practise it and once mastered introduce new information.
Ask questions	Questioning helps teachers to assess if the new material has been learned or if there is a need for further guidance or instruction. The most effective teachers get children to elaborate and explain their answers focussing on the process.
Provide models	Modelling is crucial in allowing children to see what needs to happen to be successful in the learning task. Explaining as working through the model allows children to understand the steps. Worked examples reinforce these steps and this reduces the cognitive load.
Guide student practice	To help children store information in long term memory there is a need to provide opportunities for children to rephrase, elaborate and summarise the information. Too little guided practice means the information not being stored resulting in it being difficult to recall or apply. Effective guided practice results in children being able to be independent in the learning task.
Check for understanding	Checking regularly throughout the lesson allows teachers to spot misconceptions and it also aids processing which helps move new learning into long term memory. This constant ongoing assessment influences teachers' decisions on when to introduce new information or when to consolidate the current learning focus.

Obtain a high success rate	We aim for a success rate of approximately 80%. This shows that the guided practice has been effective but there is also enough challenge for the children. Introducing knowledge, concepts or information in small chunks and checking their responses in guided practice before moving onto independent work will ensure the high success rate.
Provide scaffolds for difficult tasks	Using models, prompts or additional support through a variety of means help children to learn new or difficult tasks. These scaffolds are short term or temporary until they have helped the child move the learning into their memory and they become confident and competent in recalling and applying the knowledge.
Independent practice	In order for learning to be recalled automatically and fluently the children need opportunities to practise the new material independently. This leads to overlearning which in turn frees up working memory which can be used for more new learning or the application of the knowledge.
Weekly and monthly review	To ensure children develop their long-term memory and build relationships and networks between knowledge and concepts they need to practice them over and over again. Helping children form these connections allows new, linked, information to be learned easier and previous learning to be recalled automatically.

<u>When in a lesson should these take place?</u>

As previously stated, research has informed us when in lesson children learn the most. It is during these 2 identified areas that the most connections and links can be made with previous learning and knowledge.

While there is no set requirement linked to timings the daily review and presenting information in small chunks should happen at the start of the lesson. The recall of previous learning, linked to the new material, will aid the transfer and subsequent automatic recall. Utilising the strands above during the introduction of new material should result in a significant period of time when the new material can be practised independently. This will be in the middle section of the lesson (where learning is lower – it's the application that is being mastered). The end part of a lesson should support the children in linking the new knowledge to previous knowledge and concepts. There is likely to be a significant number of questions asked at this point to check for understanding and to ensure a high success rate.

<u>Base, Secure and Deep</u>

Each lesson should have a base, secure and deep activity planned. This variance is designed to reduce the variance in outcomes. The base activity are introductory activities to secure links between previous knowledge and the current objectives being taught. Additional scaffolding may be required to make these links. Secure activities are designed to cover the learning objectives for the relevant curriculum and year group. Children should be able to make the links to previous knowledge independently. Deep activities should really challenge the children and aim to move children into the zone of growth. This should provide opportunities for children to apply their new

knowledge in a different context or way. Each level of activity should provide clear assessment opportunities to see if learning has resulted in a change in long-term memory.

SEN children on parallel curriculums

For some children an adapted curriculum (a curriculum from a previous year group) is required to ensure that they fill any gaps and to ensure key knowledge is secure. This will ensure they are able to make links and don't experience constant failure due to not having previous knowledge they can call on to make links. A parallel curriculum should cover the same strands and concepts as those being taught to the rest of the class. Children should be in the class for the main teacher input but may have adapted activities of additional scaffolding to ensure they can access the learning. By being exposed to the main class input the children are aware of where their learning will take them. Additional scaffolding, which is gradually removed, and adapted learning tasks ensure that the children secure the knowledge needed to progress. The aim is for the children to be independent in their learning at the appropriate level and not reliant on adult support/guidance.

SEN and building Independence

We base our strategies for promoting independence in learning *(after the initial modelling) on the following. The aim is to start with the least amount of scaffolding first and progress from there.*

Self-scaffolding (independent learning)

- *Allow children to self scaffold without intervening*
- *Listen from a distance*
- *Get ready to intervene if required but remember that struggle/stress is essential*
- *Prompt sheets for them to refer to themselves*
- *Use of talking partners*
- *Resources available on the table or easily accessible*
- *An annotated example available to refer to*

Prompting (encouraging to think for themselves)

- *Say nothing-wait and give time*
- *Use gestures, point to the example, prompts etc.*
- *Where should we start?*
- *What did I do first?*
- *What do you need to do first?*
- *What will you do next?*
- *Which way do we....?*
- *How could you find out?*
- *What could you do?*
- *What could you use?*
- *How could you check/improve it?*
- *What is your plan?*
- *Can you think back to what...said?*

Clueing (a more specific hint)

- *Where could you find that sound/word in the classroom?*
- *Remember when you did…refer to previous learning*
- *Is there somewhere where you could look?*
- *Could you use….?*
- *Look at the working wall/give us a clue/slides to find the information you need*
- *Look at your book/whiteboard…what could help you?*
- *Re read the skill/SC*
- *What is missing from…?*
- *Think back to yesterday's learning when we….*

The EEF Special Needs in Primary School Guidance Report
https://educationendowmentfoundation.org.uk/public/files/Publications/Send/EEF_Special_Educational_Needs_in_Mainstream_Schools_Guidance_Report.pdf

Has detailed guidance to support teachers approach to the teaching of SEN children.

EEF for SEN.docx

Further detailed guidance can be found by clicking on the embedded document.

Neurodiversity:

Neurodiversity refers to the different ways the brain can work and interpret information. Most people are neurotypical, meaning that the brain functions and processes information in the way society expects, however neurodivergent people naturally think about things differently and learn and process things in a different way.

Neurodiversity is an umbrella term covering a number of neurodevelopmental conditions such as:

- ADHD
- Autism
- Dyslexia
- Dyspraxia
- Dyscalculia
- Dysgraphia

All of these conditions are neurodevelopmental, which means individuals are born with them and they do not go away – although neurodiverse people may well get better at coping with their condition(s).

If a child in your class has a diagnosis, the SENCo will liaise with the class teacher to support with appropriate strategies.

CPD and Coaching:

All teachers are expected to reflect on their lessons and identify effective practices and practices that they want to refine and develop. The aim is to be 1% better next week than this week. By adopting this constant cycle of self-reflection, it enables discrete areas of improvement to be identified and a coaching programme to be implemented.

General pedagogical approaches, latest research or common themes identified through the self-reflection feed into the weekly CPD sessions alongside the objectives identified on the Academy Improvement Plan (AIP). Teachers are expected to keep a CPD journal for each CPD meeting. This will identify 3 key takeaways for developing knowledge or pedagogy. These are revisited so an impact analysis can be completed.

Teachers are expected to keep a reflection journal and to share these reflections on a regular basis.

Teachers also actively participate in Professional Learning Conversations (PLC's) where they identify and work with colleagues to strengthen practice in a specific area and with a specific identified group of children.

The role of Journaling:

As part of being reflective we encourage and expect teachers to keep a reflective journal. This is where they write about their teaching and reflect on both positives and areas they identify as needing adaptions. Time is given for this in CPD meetings throughout the academic year.

These journals have a set of prompts to aid teacher's reflection.

- What was going on in my class before taking this action or intervention?
- What was the action I chose to take?
- What impact have I noticed already?
- What have I learnt about T & L as a result of taking this action?

Subsequent prompts are given throughout the year, based on a particular focus or theme.

Assessment:

Assessment for Learning is a crucial aspect of ensuring children progress and are challenged. Where this is underdeveloped children appear to make progress, but this is limited and accelerated progress is rare.

Assessment for Learning is done continuously throughout lessons. Teachers will utilise a range of approaches, from questioning, responses on whiteboards and modelling to a certain understanding and if knowledge is being transferred into long-term memory. Where children have not secured a neural pathway then the teacher will intervene to help guide and strengthen the path and the transfer of knowledge to long-term memory.

Quizzes and tests are important opportunities to assess and plan future learning not a tool to assess what has been learnt.

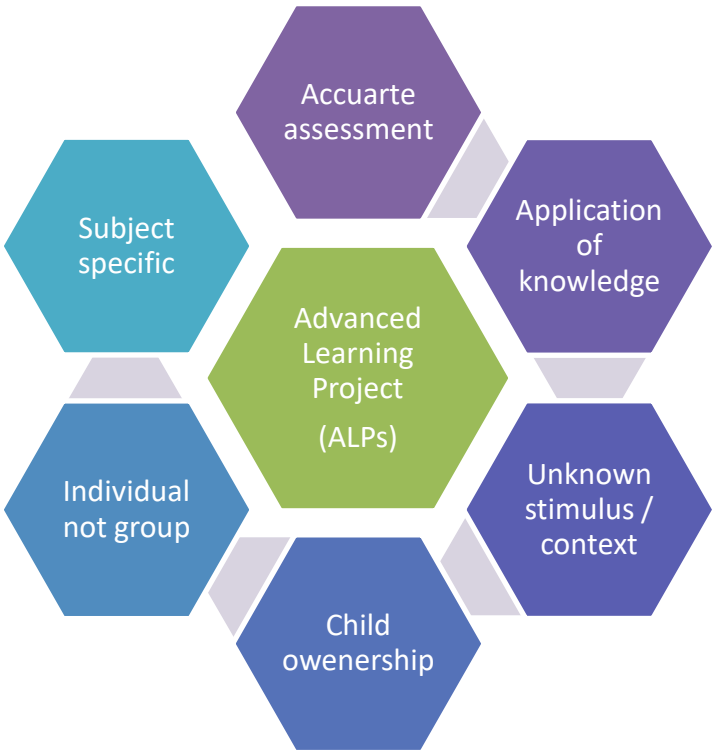
Termly NTS assessments (or previous SATs paper) in Reading, Maths and Grammar allow for a detailed Question Level Analysis (QLA) to be undertaken by the teachers to identify areas which have not been retained and recalled from long term memory or gaps in the curriculum which need to be taught. The standardised scores generated are linked to stanines and movement between stanines identify children doing well or needing additional intervention. This is assessment of learning.

Teachers make assessments in all subjects taught on a termly basis and these are triangulated with work in books/evidence portfolios alongside pupil interviews/planning analysis.

Teachers build assessment opportunities to check that children can recall both substantive and disciplinary knowledge and can this be utilised and applied in different contexts. A deeper level of learning is demonstrated by the extent learning can be recalled and transferred between contexts.

Assessment of Foundation Subjects

Our Advanced Learning Projects (ALP's) were created to ensure a robustness to our foundation stage assessments. Children were demonstrating their knowledge throughout the unit being taught but we wanted to ascertain if this knowledge had been moved to long-term memory and subsequently could be recalled and used in a different context. The ALP's units are based on a set of principles.



Accurate assessment	We need to ensure that we are assessing accurately so that future learning builds on current levels and any gaps addressed.
Application of knowledge	Learning is a change in long-term memory. Children will have securely learnt knowledge or skills if they can recall and apply this at a different time. Can children demonstrate this independently after the lesson?
Unknown stimuls/context	The application of the knowledge in an unknown context or through an unknown stimulus will enable teachers to assess if children can recall knowledge and apply it. The stimulus or context should not link to any learning the child has done that term or academic year.
Child Ownership	The tasks needs to be open-ended so that children can have ownership of how they present their outcomes. Restricting outcomes can seriously hinder the successful application of the knowledge being assessed. Teachers may need to guide children back to the focus of the ALP to ensure they do not go off task and accurate assessment cannot be completed.
Individual not group	For accurate individualised assessments to take place the task should be completed individually. If group work is used then some

	children will, naturally lead the group whilst others will take a back seat. The 7 survival skills such as collaboration are not being assessed during these tasks, specific subject knowledge and skills are the focus.
Subject specific	The tasks need to be subject specific otherwise the assessments will not be accurate and be diluted. Specificity is key to robust assessment.

Some foundation subjects will be assessed using the ALPs approach outlined above. For other subjects we have an assessment approach already embedded as outlined below.

- Science: TAPS assessments throughout the year. These assess the working scientifically sand the disciplinary knowledge elements of the subject.
- Music: The Leicestershire scheme of work has an inbuilt assessment system and this is used to assess children.
- PE: A series of core tasks are used at both the start and end of units of learning. There is scope within these for children to apply previously learnt skills or knowledge.
- Computing: Within the Purple Mash platform are assessments which are used to assess the children.

Art, Design, History and Geography will be assessed using the ALP's approach. For History this will focus on the disciplinary knowledge of the subject and the retrieval of previous learning.

Individual subjects' pedagogical approach

Each subject has its own pedagogical approach that is suited to the unique nature of the subject.

Art:

Creativity and exploration are encouraged and channelled through the 7 concepts, as outlined in the progression document. Children should be provided with opportunities to experiment and investigate using a wide range of tools and mediums to facilitate their own unique designs. Discrete skills and techniques are taught, and children are then given the freedom to apply these to a final piece based on a stimulus and concept. This will result in a class of individual art pieces not a class set of replicas of a famous piece of art. Sketch books are used for children to experiment and practise their techniques.

Computing:

Successful computing teachers combine their knowledge of the subject with evidence-based teaching practices. As computing is ever-evolving, evidence of effective teaching approaches continues to emerge and change.

There are several key principles that the typical computing lesson must have:

- Ensuring that the concept of computing is clear (Computer Science, Information Technology, Digital Literacy);

- Key vocabulary is shared and a glossary is created and displayed on the computing display board;
- Clear modelling of new skills;
- Ensuring variance by providing activities with different levels of direction, scaffolding, and support. Adapting your instruction to suit different objectives will help keep all pupils engaged and encourage greater independence;
- Challenging misconceptions (e.g. using questioning, discussions or quizzing);
- Use the Purple Mash framework and computing progression documents to ensure that content is covered and differentiation can be built in.

Design & Technology:

Each DT unit will follow the same pedagogical approach. Each unit of learning will be based on the following approach:

Design, make and evaluate a _____ (product) for _____ (user) for _____ (purpose).

Within this approach children will undertake investigation and evaluation activities followed by specific focused tasks which will teach the skills required. The children will then design, make and evaluate a product that meets the purpose. This will lead children to be creative and independent in their designs and solutions for the problem presented, within the identified concept. We do not expect to see a class of identical artefacts and outcomes produced.

Geography:
Our Geography curriculum allows children to become geographical detectives, it is designed to develop children's curiosity and fascination about the world and its people. Children develop a range of investigative skills, which allows them to deepen their knowledge and understanding of the Earth's physical and human processes. An enquiry-based approach enables children to develop a sense of who they are, their heritage and what makes our local area unique and our place in the world. Fieldwork within our curriculum allows children to have practical first-hand experiences that enable them to find, see and feel the world around them and apply this knowledge across many areas of the curriculum.

History:
Our high-quality History education helps pupils to develop a clear narrative of history non-chronologically whilst making clear links to the past which can be enabled through our school timeline. Through this approach, pupils will learn and study the complexities surrounding the intricacies of different time periods, the diversity of societies, the impact these societies have made both globally and nationally. Through our teaching, children becoming increasing inquisitive. Children are taught how these link to their own history with a focus of local history in every year group for pupils to develop a clear understanding of their heritage and links. Our curriculum is built around 5 key strands:

- Significant individual
- Family and Household
- Technology and Inventions

- Childhood and Education
- Crime and Punishment

Within a lesson, children should be enquiring about the past through inquisitive questioning, analysis of primary and secondary sources as well as a links to our theme approach to deepen and build neurological pathways. As children progress through the school, they are able to pose questions about different time periods, analyse sources and as children enter UKS2, understand bias and how knowledge has been used to form opinions and understandings that exist of different time periods.

A balance of substantive and disciplinary knowledge will be taught within a lesson with children building on key concepts across the curriculum. History is enhanced through a range of History trips and immersive opportunities which allows children to build on their class-based learning and make links which will be embedded into their semantic memory.

English (Reading):

At Millfield, developing a culture of reading is a priority and is a key driver within our reading offer. We ensure that our approach to reading from early years, through to the end of KS2, is pedagogically driven by educational research – of which we are an active participant.

We position metacognition and self-regulation at the heart of the teaching of reading fluency and have built mechanisms that allow children to be the driver behind their progress. This approach relates to both the fluency of word reading and the understanding, and use, of Tier 2 vocabulary. Using the principles of retrieval theory, we focus on the identification and use of Tier 2 in the knowledge that this has a direct impact on their life and life chances.

We recognise the importance of high-quality reading texts and each year we invest in and refresh our offer in order to ensure it is both diverse and representative of books that children want to read and are inspired by.

English (Writing):

All Writing units begin with immersion into the class novel in order to give children the required background knowledge and excitement needed for writing. The learning journey then begins with a WAGOLL and children identify the audience, purpose, writing skills and vocabulary they will need to produce their own written outcome of the genre; this is recorded in a Quad Box. From this, children are then taught the relevant concepts. Using these concepts, the WAGOLL and background knowledge, children then plan their own version of the genre for the specific audience and purpose. Then they observe a modelled write where the teacher explicitly explains the processes they are going through as they draft an example in front of the children. Children then write their own texts, which may require more than 1 session. Once completed, children then assess their own learning against the skill sheets relevant to their learning level before editing and re-drafting their work.

Maths:

Mathematics introduces children to concepts and thinking strategies that are essential for everyday life. It gives children the opportunity to develop communication, resilience and critical thinking. At Millfield, we aspire for our children to develop secure number sense, be fluent and efficient in calculation and be able to articulate how to problem solve and apply reasoning skills. We want children to leave our school being numerate and able to function in the wider world of education and careers, with future success giving them the best life choices and opportunities in life.

MFL:

MFL is predominantly a spoken subject where children learn, rehearse and apply the knowledge. Writing words, key phrases and sentences are gradually introduced and creative opportunities for their application are taught. Alongside the spoken and written language is learning around the culture of Spain and Spanish speaking countries.

Music:

Music is a practical subject and the focus during the lessons is on children participating and practising techniques. Children should have the opportunity in lessons to respond to the given stimulus and rehearse their response.

PE:

The learning intention of the lesson is made clear to children at the start of the lesson. A series of lessons which develop and expand the children's knowledge and skills are taught. These are applied during the lessons and at the end of the sequence of lessons. Each unit starts with a core task which assesses the children's baseline ability. This is repeated at the end of the unit to assess how the children can apply the new skills and techniques taught. Peer modelling and evaluation is built into the lessons.

PSHCE:

The majority of PSHCE lessons will be discussion based and class/group discussions will form the basis of the learning tasks. Rules for safe discussions should be discussed at the beginning of each year to ensure that lessons provide a safe space for children to discuss issues around their body, personal safety and their safety in school and other places. Children will be taught strategies to help keep themselves safe and ways to deal with friendships and family relationships in good times and more difficult times. Our PSHCE curriculum will create well rounded individuals and will be reflected in their behaviour both in school and out of school.

RE:

Within RE lessons, the structure should include a safe space for children to explore ideas, discuss and debate knowledge and create a reflective dialogue as children learn key beliefs of the world's religions. The curriculum will be built around the three strands:

1) Make sense of belief

2) Understand the impact
3) Making connections

Majority of RE lessons will be discussion based which will form the basis of the learning tasks. RE will be enhanced with visits to local worship places and other religious opportunities to further their understanding. Through this approach it will give children the knowledge and skills to flourish both within their own community and as members of a diverse and global society.

Science:

High quality science lessons are delivered through the specific disciplines of biology, physics and chemistry and the concepts within. Lessons are sequenced to aid children's understanding.

Lessons should be planned to give children opportunities to explain what is happening, make predictions and analyse causes.

Disciplinary knowledge about working scientifically drive a pedagogical approach across all concepts, allowing for children to lead their learning within the constraints of the lesson focus.

Pupils are encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena.

Learning For Life:

As part of our curriculum, we have developed a bespoke aspect which complements our 4 core principles (Aspirations, Global Citizen, Safe & Well and Future Living) and Wagner's 7 survival skills. This is called our Learning for Life curriculum.

The 7 Survival Skills are:

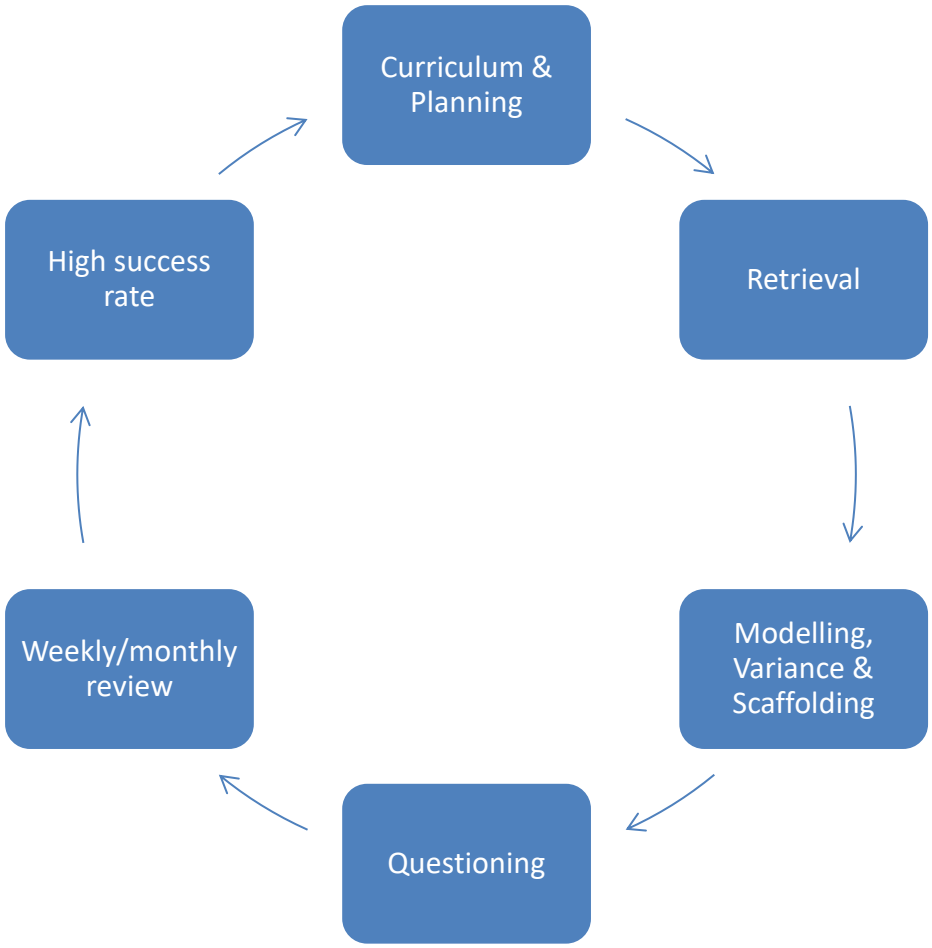
- Critical Thinking and Problem Solving
- Collaboration across networks and leading by influence
- Agility & Adaptability
- Initiative and Entrepreneurship
- Effective oral and written communication
- Accessing and analysing information
- Curiosity and imagination

CHARACTERISTICS

The school has adopted a series of learning characteristics as part of the Routes to Resilience project. These attributes link to the core values and the 7 survival skills above.

Monitoring:

The following model shows the ongoing cycle of monitoring that takes places to ensure highly effective teaching and a consistency of application of this policy.



Strand	Example of monitoring activity.
Curriculum & Planning	Curriculum coverage. Planning scrutiny to review objectives, links to previous learning, representative of the curriculum aims (GAFS) and curriculum intent.
Retrieval	Daily reviews how are tasks linked to prior learning.
Modelling, Variance & Scaffolding	How much variance is taking place to reduce variance in outcomes? Does the modelling reflect the schools approach? Is scaffolding used appropriately and gradually reduced? Has scaffolding been thought through and resources used appropriate? Are sentence stems used to ensure full answers?
Questioning	Are questions deep and push children to explain, infer and analyse? Do teaching staff push children to answer deeper and more fully? Is questioning at a superficial level?
Weekly/monthly review	How effective are the reviews to ensuring neural pathways are developed? Do they link to previous learning? Do they help children make links?

High success rate	What are the assessments telling you? Are there any pockets of poor progress/attainment? What is being done to address them? How are the teacher's taking responsibility/ownership of the progress? Do books reflect the assessment data? How many children are reaching the deeper learning tasks in class?

Section C: Glossary

Word	Definition
Assessment for Learning	Formative. Informs future teacher instruction.
Assessment of Learning	Summative. What children can do
Cognitive load	The amount of information that our working memory capacity can hold at one time.
Dendrites	Appendages that are designed to receive communications from other cells.
Disciplinary knowledge	Procedures, how something is done
Learning	A change in long-term memory
Metacognition	Awareness and understanding of one's own thought processes
Myelin sheath	The protective layer that wraps around the axons of neurons.
Neural pathway	A series of connected neurons that send signals from one part of the brain to another.
Neuron	A type of cell that receives and sends messages from the body to the brain and back to the body.
Retrieval	Ability to recall information
Scaffolding	Equipment or guides to aid/support learning
Self-regulation	The ability to understand and manage your own behaviour and reactions.
Substantive knowledge	Facts and information
Zone of Proximal Development (ZPD)	The space between what a learner can do without assistance and what a learner can do with guidance.

Sources:

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