



Teaching and Learning POLICY

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<i>Type of Policy</i>	<i>Tick ✓</i>
DCAT Statutory Policy	
DCAT Non-statutory Policy	
DCAT Model Optional Policy	
Academy Policy	✓
Local Authority Policy	

AIMS OF THE POLICY

At The March CE Primary School we are committed to high quality teaching and learning to raise standards of achievement for all children. This policy reflects what has been agreed in terms of approach and consistency and makes explicit the best practice to which the school aspires. It also reflects the aims and objectives of the school and supports its vision.

As a school, we are committed to our mission statement:

With God's help

we will live kindly,

love each other,

learn and laugh together!

The purpose of this policy is to provide an agreed set of standards, consistency of practice and equal opportunities for all learners. The principle of inclusive learning and equality of opportunity are embraced and learning is promoted for each individual learner regardless of their prior experience, ability, gender, age, ethnicity, or any other circumstance.

This policy should be read in conjunction with our subject policies.

PRINCIPLES OF LEARNING

*Learning has been defined in cognitive psychology as **an alteration in long-term memory**:*

"If nothing has altered in long-term memory nothing has been learned." Progress, therefore, means knowing more (including knowing how to do more) and remembering more.

OFSTED 29 Jul 2019

Learning is the purpose of the whole school and is a shared commitment. At March CE Primary School we recognise that education involves children, parents, staff, governors, the community and the DCAT Trust, and that for optimum benefit all should work closely together to support the process of learning.

We aim to:

- provide a supportive, positive, healthy, caring and safe environment, which has high expectations and values all members of the school community;
- recognise the needs and aspirations of all individuals and provide opportunities for all pupils to make the best possible progress and attain the highest personal achievements;
- ensure children can develop as literate, numerate and technologically competent individuals, within a broad, balanced, exciting and challenging curriculum;

- provide rich and varied contexts and experiences for pupils to acquire, develop and apply a broad range of knowledge, skills and understanding;
- provide a curriculum which promotes the spiritual, moral, social, cultural, physical, mental and emotional development of the pupils;
- develop individuals with lively, enquiring minds, good thinking skills, self-respect, self-discipline and positive attitudes;
- encourage all children to be enthusiastic and committed learners, promoting their self-esteem, self-worth and emotional well-being;
- develop children's confidence and capacity to learn and work independently and collaboratively;
- develop enduring values of Love, Faith, Forgiveness, Peace and Compassion;
- encourage children to respond positively to the opportunities, challenges and responsibilities of a rapidly changing world;
- encourage children to value the diversity in our society and the environment in which they live;
- encourage children to become active and responsible citizens, contributing positively to the community and society.
- Develop children's cultural capital

ETHOS

The ethos and atmosphere underpin the agreed aims of the school. In the course of their daily work the staff will contribute to the development of this ethos through:

- providing a calm and effective working environment, in which each child can produce his or her best work;
- providing a welcoming environment, in which courtesy, kindness and respect are fostered;
- providing positive role models;
- providing a fair and disciplined environment, in line with the school's behaviour policy;
- effective management of their professional time;
- developing links with all stakeholders and the wider community;
- valuing and celebrating pupils' success and achievements;
- Acknowledge that *everyone* is a learner;
- Reviewing personal and professional development in order to ensure a high level of professional expertise.

ROLES AND RESPONSIBILITIES

Learning and teaching is a shared responsibility and all members of the school community have an important part to play.

All members of the school community should work towards the school's aims by:

- esteeming children as individuals and respecting their rights, values and beliefs;
- fostering and promoting good relationships and a sense of belonging to the school community;
- providing a well ordered environment in which all are fully aware of behavioural expectations;

- offering equal opportunities in all aspects of school life and recognising the importance of different cultures;
- encouraging, praising and positively reinforcing good relationships, behaviours and work;
- working as a team, supporting and encouraging one another.

Teachers will endeavour to:

- provide a challenging and stimulating curriculum designed to encourage all children to reach the highest standard of achievement;
- recognise and be aware of the needs of each individual child according to ability and aptitude;
- ensure that learning is progressive, continuous and builds on prior learning;
- be good role models, punctual, well prepared and organised;
- demonstrate, at all times, our core values of hard work, respect and responsibility;
- keep up-to-date with educational issues;
- provide clear information on school procedures and pupil progress;
- have a positive attitude to change and the development of their own expertise;
- establish links with the local community to prepare pupils for the opportunities, responsibilities and experiences of life;
- work collaboratively with all involved in education to develop a shared philosophy and commonality of practice.

Parents are encouraged to support their child's learning by:

- ensuring that their child attends school regularly, punctually, well-rested and in good health;
- ensuring that their child arrives at school wearing the correct uniform and bringing necessary equipment;
- demonstrate, at all times, our core values of hard work, respect and responsibility;
- providing support for the discipline within the school and for the teacher's role;
- supporting the work of educational targets and becoming actively involved in the implementation of any support programme;
- participating in discussions concerning their child's progress and attainment;
- ensuring early contact with school to discuss matters which affect a child's happiness, progress and behaviour;
- allowing their child to become increasingly independent as they progress throughout the school;
- informing the school of reasons for their child's absence;

Pupils are encouraged to support the school's aims by:

- attending school in good health, maintained by adequate diet, exercise and sleep;
- attending school regularly and punctually;
- being organised, bringing necessary equipment;

- conducting themselves in an orderly manner in line with the expected behaviour policy;
- taking increased responsibility for their own learning;
- demonstrate, at all times, our core values of hard work, respect and responsibility.

The community is invited to support the school by:

- contributing to activities, such as worships and assemblies, specialist outings, clubs, etc;
- presenting themselves as positive role models to be emulated;
- organising activities and events throughout the year to extend and deepen pupils' knowledge and skills;
- supporting school events;
- Voluntarily helping in the classroom.

Early Years Foundation Stage

Pupils in EYFS follow the play-based Early Years Foundation Stage curriculum. As such, pupils can access a broad range of areas of provision- both in and out of the classroom environment. Teaching is tailored to the interests of pupils and is often topic-based. All practitioners in the Foundation stage take on the role of teacher, facilitator and assessor, engaging with pupils in their play in order to move learning on. This is achieved through a combination of targeted teacher input and free-flow sessions that enable pupils to self-initiate learning, engaging in a variety of well planned, rich learning opportunities.

Pupils learn early reading and writing through a daily phonics session which builds on prior learning. It is differentiated according to need and highly structured. Phonic skills are reinforced through children's play and provision.

Pupil's early number, calculation and measuring skills are developed through a daily focused mathematics session, and with provision that reflects the pupil's current learning needs.

Key Stage 1 and 2

The curriculum includes core subjects and foundation subjects that ensure statutory coverage of the National Curriculum for England. For all subjects, there are clear whole-school and year group overviews as well as knowledge and progression documents for each year group that build and develop an appropriate sequence of knowledge and key skills for each subject as pupils move through the school. Short term plans are flexible and responsive. They are adapted according to pupil's prior understanding and are designed to build on previous learning. They are matched to the needs of individual pupils which enables all pupils to make progress in every lesson

Although pupils move through the curriculum at broadly the same pace, some will require support and others greater challenge. The aim of the teacher is to design and

adapt learning experiences to enable as many pupils as possible to master the knowledge, concepts and skills being taught and apply them confidently.

When pupils encounter barriers to their learning and fall behind, the teacher will first intervene and if further support is needed will discuss the pupil's needs with the Senco. A short term intervention may be put in place for the pupil to access, in addition to the usual core teaching. This may take place within the classroom, as part of Quality First Teaching (QFT) provision or may involve short targeted intervention in a small group setting. Targeted interventions where pupils are withdrawn for short sessions during the school day will only take place where there is strong evidence of impact. Teachers will also use the Ordinarily Available Practise guide (OAIP) to facilitate planning to create more inclusive learning environments and experiences for the children who need additional support.

The progress and attainment of pupils receiving **Pupil Premium** will be tracked and monitored closely and they will be offered access to additional learning (SDI) or pastoral interventions in order to accelerate their rate of progress regardless of their academic starting point.

LONG TERM PLANNING

At March CE Primary School we are committed to following the programmes of study as required by the National Curriculum 2014. A cycle of National Curriculum Programmes of Study is drawn up by staff and is carefully balanced to ensure full coverage of the National Curriculum, PSHE, SRE and RE.

At March CE Primary School, we have some subjects such as History which can have a cross curriculum theme (for example World War II in Year 6 linked with writing and geography) However, foundation subjects can be taught in a more discrete approach to ensure the skills and knowledge required meet National Curriculum expectations. Staff meetings and professional development days are used to allow staff to have the time to complete the development and where possible staff have opportunities to work with external advisors from the DCAT Trust and other professionals.

Subject overviews are reviewed with all staff yearly to ensure knowledge is built on over time and these plans are shared with parents at the start of each term through learning journeys.

Medium term plans are based upon previous assessment data, pupil need and subject expectation.

Curriculum time can be planned as continuous study throughout the term, or as blocks of study. At March CE Primary School, we are committed to raising standards of basic skills. By basic skills, we mean the ability to read, write and speak in English and to use Mathematics at a proficient level to facilitate learning across the curriculum in order for our children to be successful in later life.

QUALITY FIRST TEACHING & ROSENSHINE'S PRINCIPALS OF INSTRUCTION

At March CE Primary School, we believe deploying Quality first teaching (QFT) and utilising the key principals of Rosenshine we will engage and support the learning of all children. The ultimate goal with Quality First Teaching strategies is to ensure that all whole-class teaching is as inclusive as possible. This means that all instruction should come from the teacher and not from additional support, such as teaching assistants and other specialists.

Quality First Teaching demands 100% participation from the pupils, and sets high and realistic challenges. It does not 'spoon feed', it is challenging and demanding; it expects pupils to be able to articulate their ideas, understanding and thinking by actively promoting pupil talk.

As a school we provided (provide) adaptive teaching strategies and scaffold learning in the lessons. Scaffolding refers to **modifications** you make while designing and teaching lessons that allow all students to be successful in learning the same content which means children are 'keeping up' rather than catching up. Scaffolding involves breaking up the learning into parts so that students can gradually tackle more complex materials independently, whilst still accessing the learning objectives.

The key characteristics of QFT are:

- Highly focused lesson design with sharp objectives
- High demands of pupil involvement and engagement with their learning
- High levels of interaction for all pupils
- Appropriate use of questioning, modelling and explaining on the part of the teacher (linked to Rosenshine)
- An emphasis on learning through dialogue, with regular opportunities for pupils to talk both individually and in groups
- An expectation that pupils will accept responsibility for their own learning and work independently
- No cap on learning
- Fluidity of grouping
- Marking / assessment within or at the end of the session will inform planning
- Regular use of encouragement and authentic praise to engage and motivate pupils

Rosenshine (2010, 2012) summarised at least 40 years of research on effective classroom instruction and devised a set of key principles that maximise impact of teaching in the classroom. From these we have developed agreed features of what effective lessons at March CE Primary School should include over a sequence of lessons:

1. Begin a lesson with a short review of previous learning

Reviewing previously learned material strengthen the connections between pieces of knowledge. That is, it enhances understanding. Rosenshine suggests a five to eight-minute review of the previously covered material (sticky knowledge) including peer

marking, asking questions, checking for misconceptions, correcting homework, and others.

2. Present new material in small steps followed by student practice

There is only so much novel information we can process at one time. If you ask pupils to do too much at the same time, they will probably fail.

3. Ask questions and check answers

To learn something, pupils need to practice it. Every time pupils answer a question or solve a problem, they retrieve that information, memory for that information becomes stronger and more last-longing. The more variety of question types, the better.

4. Use models

Concrete examples and models are a good strategy to introduce a new concept. Explicit and detailed explanations and instructions are also recommended.

5. Guide practice

Rosenshine recommends that teachers stimulate pupils to rephrase, elaborate and summarise new material. According to him, successful teachers spend more time asking questions, checking for understanding, correcting errors and guiding students when working out problems.

6. Check for understanding

Constant checking is important to catch misconceptions before they harm learning. It also helps teachers notice if parts of the content need reteaching. Rosenshine suggests that teachers ask direct questions, instead of asking pupils if they have questions and assuming that silence means a full understanding of the topic.

7. Obtain a high success rate

This principle relates to making sure all pupils have mastered the current set of lessons before moving on to the next one. It involves checking for misconceptions and asking questions.

8. Provide scaffolds in difficult tasks

When pupils are completing a hard task, it is important that teachers provide temporary instructional support. These scaffolds can be gradually removed as pupils advance in their understanding and fluency on a particular topic. Rosenshine suggests using cue cards, checklists, worked examples and models as scaffolding. Teachers can also anticipate pupils' errors and warn them about them beforehand.

9. Stimulate and monitor independent practice

Independent practice should be used after guided practice. That is, when pupils are already very competent in a topic, they can practice independently in order to become fluent and retrieve information automatically. Rosenshine calls this process

“overlearning”. Independent practice should cover the same topic covered in guided practice as pupils need to be fully prepared for it.

10. Conduct weekly and monthly reviews

Similar to Principle 1, Rosenshine advocates for a frequent review of previously learned material in order to help students reconsolidate information and create stronger connections. This will be undertaken by assessments of sticky knowledge from the medium term plans

Sticky Knowledge Assessment Question:

Name 3 geographical features that might be seen in aerial photographs?



Teachers ensure breadth and balance to the curriculum and endeavour to make use of curricular opportunities to enhance learning and to ensure children have an opportunity to a progressive curriculum

Activities should show a balance in terms of individual, group and whole class work. Specialist teaching is available from subject leaders when they can be released from class and also in the form of visitors.

Planning will incorporate as many styles of working as possible. These styles include:

- individual learning;
- collaborative learning in small groups, or pairs;
- one to one learning with an adult, or more able pupil;
- whole class;
- independent learning.

Group work may include friendship, matched ability, mixed ability, etc, appropriate to the activity. Collaborative learning is encouraged, although some periods of the day may be set aside for silent work.

Teachers at March CE Primary School feel that pupils learn best when:

- they are happy, healthy and alert – receptive and positive
- they are interested and involved – learning is relevant and stimulating
- the purpose of a task is understood – they understand why they are doing it
- they feel secure – in terms of environment, relationships and learning

- they feel valued – teachers and other adults care about their development as learners
- they have opportunities to explore and take risks
- they are actively involved, making choices and taking responsibility in their learning
- they have an element of control and can work with independence
- they receive positive feedback and praise for achievements
- the learning environment is well-organised and resources are easily accessed
- tasks are differentiated, matched to the child
- learning is built on existing knowledge and experience – clearly defined small steps
- they have opportunities to talk about their work, reflecting, discussing and sharing ideas
- the teacher is knowledgeable, enthusiastic and motivated

Effective learning is ensured through the process of monitoring successful teaching (see monitoring policy) and pupil's learning outcome i.e. Baseline Assessment, reading ages and SAT results.

The Learning Environment

Pupils learn best when they feel secure and confident in their surroundings. We expect every area of the school to exemplify our whole school values. Treating each other and our environment with respect is the starting point for developing positive relationships. This creates a culture in which every pupil has the confidence to perform at their very best. Pupils are encouraged to reach their potential, become independent in their learning and develop a positive attitude to lifelong learning.

Teachers have a responsibility to ensure that their classrooms are safe, caring, supportive and stimulating environments in which to learn. The learning environment will undergo regular monitoring to ensure consistency and high standards are being met. Classroom displays should reflect high quality pupil's work and provide excellent stimuli for further learning. Displays should include the sticky knowledge and icon to support retrieval of key knowledge that has been taught. For example:

Sticky Knowledge for display:

Tone means to add black paint to a coloured paint.



Pupil Grouping

All classes are mixed ability. Teachers use a flexible approach to grouping pupils dependent on the intended learning objective. Tasks are matched to the individual and different groups will access guided work alongside the teacher throughout the week.

These teacher-led groups will be flexible and the purpose and reason for working with the teacher will always be shared with the pupils.

Same Day Intervention (SDI)

Takes place for pupils to 'keep up' with their learning in Maths and English. Misconceptions are identified by the teacher through live marking to identify pupils who require additional teaching to embed mathematical knowledge and practice in applying the taught skill.

Developing learners with high expectations and a love of learning.

We believe that a knowledge and skills-based curriculum provides the structure to enable pupils to learn most effectively, make connections and develop cognition.

Teachers are determined that pupils achieve well. They encourage pupils to try hard, recognise their efforts and ensure that they take pride in all aspects of their work. Teachers have consistently high expectations of all pupils' attitudes to learning.

Pupils love the challenge of learning and are resilient to failure. They are curious, interested learners who seek out and use new information to develop, consolidate and deepen their knowledge, understanding and skills. They are encouraged to make connections in their learning and draw on prior knowledge and experiences to develop, context, enrich and broaden their learning.

They thrive in lessons and also regularly take up opportunities to learn through extra-curricular activities.

Pupils have the right to receive outstanding teaching to enable them to access outstanding learning. Our child centred approach, linked with a determination that every pupil should be given the best possible opportunities to succeed, guides all our teaching and learning. Effort is praised and the link between effort and success is made clear to pupils. Good quality work is expected and celebrated through display and the reward system. Positive reinforcement and developing self-belief and self-esteem are key features of the vocabulary we use with pupils. The learning opportunities we give promote curiosity and a love of learning and the challenge element helps pupils develop resilience.

ASSESSMENT, RECORDING AND REPORTING

ASSESSMENT FOR LEARNING (AfL)

When AfL is used appropriately children receive personalised learning at its best, and for this reason we see assessment as being fundamental in every lesson.

A range of strategies must be used to ensure effective AfL including, open-ended and differentiated questioning, talk partners, use of mini-whiteboards, guided group work, time for reflection and review using strategies such as thumbs up or down or traffic lights to ascertain understanding (with appropriate action taken quickly to secure learning), self and peer assessment.

If, by the end of the lesson, it is clear the child has not met the learning intention then additional teaching/ intervention to address misconception can be put in before the end of the day or before the next lesson and planning should be adapted for the next lesson.

Regular assessments are made of pupils' work in order to establish the level of attainment and to inform current and future planning. Formative assessment is used to guide the progress of individual pupils. It involves identifying each child's progress in each area of the curriculum, determining what each child has learned and what therefore should be the next stage in his/her learning.

Formal summative assessment is carried out at the end of each National Curriculum Key Stage (i.e. in Years 2 and 6) through the use of SATs and teacher assessment. Phonics are tested in Year 1 and retested where necessary in Year 2. PIRA PUMA AND GAPS tests are also taken in Years 3, 4 and 5. Initial Baseline assessment is used in Early Years within six weeks of starting school and Foundation Stage Profiles are maintained throughout the year.

Suitable tasks for assessment include:

- group discussions;
- short tests in which pupils write answers;
- specific assignments for individual pupils;
- discussions in which children are encouraged to appraise their own work and progress;
- pupil observations; • SATs.
- PIRA, (standardised reading assessment) PUMA (standardised maths assessment)

In writing, independent written work is completed regularly to support accurate assessment judgements, after the children have been taught all requirements needed for a specific genre over a period of two –three weeks. In reading, levels are assessed through their ability to work on VIPERS (Vocabulary, inference, prediction, explanation, recall and sequencing) this may be in reading sessions, one to one work, guided reading activities, test outcomes. In maths, children have daily practice in Years 3-6 where they should be sharpening their arithmetic skills at age related expectations (WhiteRose planning to support this), through opportunities to problem solve (reasoning) and number tasks completed in lessons. From Foundation Stage to Year 6, children are using NCETM maths resources (National Centre for Excellence in the Teaching of Mathematics) to promote the development of early number.

High expectations should be the norm in all lessons and children should not be in static groups. In order to achieve accurate and fair judgements of a pupil's level of attainment, moderation activities are regularly planned into the staff meeting timetable. Cross year group and cross phase moderation also takes place as part of this process of achieving accurate assessment. All year groups take part in moderation within the Trust and other local schools

MARKING:

Marking is a formal or informal recognition of work in progress or completed. This includes open-ended questioning, dialogue focusing on learning intentions and writing observations and learning targets onto work.

Specific formative comments on pupils' work act as a record as well as being a reminder of the focus for future progress. Marking should be comprehensible to pupils and parents and to this end be consistent and should use words, numbers or pictures.

- helps children understand how to improve and comments aim to be positive and constructive;
- at best this is completed while a task is being carried out through discussion between child and teacher;
- of written work is used sensitively and with discretion so that a child can assimilate a limited number of corrections at one time. This will vary according to the age, ability and task.

Feedback to pupils about their own progress is achieved through discussion and the marking of work and is most effective during the lessons. At March CE Primary School, we believe that 'live' marking within the sessions **is** more effective, as teachers and support staff can quickly identify if a child has a misconception which can be addressed within a session.

All results from assessments are analysed and used to inform future planning. Directed time is allocated to staff to ensure the assessments support planning. Use of the analysis tool with PIRA and PUMA allow staff to ascertain gaps in learning and these are discussed in pupil progress meetings with the Headteacher and Senco after assessments have been completed in Dec, March and June.

MONITORING AND EVALUATING

Pupils' work will be monitored and moderated regularly in each of the core curriculum areas by the subject leaders and the Deputy or Headteacher. A termly review of monitoring procedures is held with all members of the teaching staff in the form of Pupil Progress Meetings which includes discussions around our whole school Provision Map and the impact of the interventions that are used. Subject leaders will regularly monitor children's books. The Performance Management informs learning and teaching. (See Performance Management Policy).

Subject leaders have a variety of roles. These include:

- taking the lead in curriculum development to ensure progression and continuity in their subject throughout the school;
- supporting colleagues in their development and implementation of the scheme of work, and in assessment and record-keeping activities;
- monitoring progress in their subjects and advising the Headteacher on action needed; taking responsibility for the purchase and organisation of central resources for their subjects;

- using release time to support colleagues;
- keeping up-to-date through reading and attending relevant courses.
- Ensuring the governing body have up to date information on subjects
- Talking with confidence about their subject and attainment in their subject

Resources

Classroom and central resources are the responsibility of classroom teachers and subject leaders who ensure that:

- there is a range of appropriate, accessible, high quality resources available for which pupils can select materials suitable to the task in hand;
- all children know where classroom resources are kept and the rules about their access and use;
- children are encouraged to act independently in choosing, collecting and returning resources where appropriate;
- the library is a valued resource and used appropriately;
- children work together to establish an attractive, welcoming and well organised environment engendering respect, care and value for all resources.

Each classroom will be equipped with a basic set of resources and books appropriate to the age range. Specialist resources will be stored in the appropriate curriculum resource cupboard/area, and will be regularly audited by the subject leaders. Consumables will be replenished as necessary. Staff may contact subject leaders with suggestions for specialist materials which may need ordering.

Pupils will be taught how to use all resources correctly and safely, with care and respect and with regard for Health and Safety and waste. Care will be taken to ensure that resources reflect the cultural and linguistic diversity of our society, and that all pupils have equality of access.

At March CE Primary School the use of visits and visitors to enrich the curriculum is valued and these are used throughout the school to widen children's experiences and support learning across a range of subject areas.

Time is a resource that we value. To maximise its use:

- as children progress throughout the school they are encouraged to take greater control of their own learning, including their use of time;
- opportunities for learning are maximised by ensuring that tasks are made specific by focused objectives;
- teachers will encourage pupils to work within given time scales, and will facilitate the effective use of time through the provision of appropriate resources and planning extension activities;
- all children engage in useful activities upon entering the classroom and know what to do between the end of an activity and the end of a session.

EQUAL OPPORTUNITIES

- All children should have equal access to subjects in order to develop their personal capabilities.
- When children are working in groups, we endeavour to ensure that their hands on experience is equitable.
- Resources are checked to ensure that gender and ethnicity are reflected in a balanced way without stereotyping.
- The subject leads, in conjunction with the SENCO, will advise teachers on the support that can be provided to children with particular individual needs.

INCLUSION

- Teachers ensure that the work undertaken by children with a disability:
- takes account of their pace of learning and the equipment they use; takes account of the effort and concentration needed in oral work, or when using, for example, vision aids; is adapted or offers alternative activities in those subjects where children are unable to manipulate tools or equipment, or use certain types of materials; allows opportunities for them to take part in educational visits and other activities linked to their studies; uses assessment techniques that reflect their individual needs and abilities.

Please see our Inclusion SEND and Marking and feedback policy in conjunction with this policy.

Appendix 1:

THE PRINCIPLES OF INSTRUCTION

TAKEN FROM THE INTERNATIONAL ACADEMY OF EDUCATION

This poster is from the work of Barak Rosenshine who based these ten principles of instruction and suggested classroom practices on:

- research on how the brain acquires and uses new information
- research on the classroom practices of those teachers whose students show the highest gains
- findings from studies that taught learning strategies to students.

HOW3
www.how3.com

01 DAILY REVIEW



Daily review is an important component of instruction. It helps strengthen the connections of the material learned. Automatic recall frees working memory for problem solving and creativity.

02 NEW MATERIAL IN SMALL STEPS



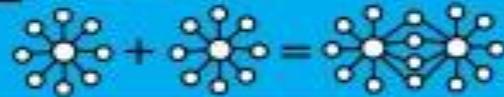
Our working memory is small, only handling a few bits of information at once. Avoid its overload — present new material in small steps and proceed only when first steps are mastered.

03 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.

04 PROVIDE MODELS



Students need cognitive support to help them learn how to solve problems. Modeling, worked examples and teacher thinking out loud help clarify the specific steps involved.

05 GUIDE STUDENT PRACTICE



Students need additional time to rephrase, elaborate and summarise new material in order to store it in their long-term memory. More successful teachers built in more time for this.

06 CHECK STUDENT UNDERSTANDING



Less successful teachers merely ask "Are there any questions?" No questions are are taken to mean no problems. False. By contrast, more successful teachers check on all students.

07 OBTAIN HIGH SUCCESS RATE



A success rate of around 90% has been found to be optimal, allowing students are learning and also being challenged. Better teachers taught in small steps followed by practice.

08 SCAFFOLDS FOR DIFFICULT TASKS



Scaffolds are temporary supports to assist learning. They can include modeling, teacher thinking aloud, cue cards and checklists. Scaffolds are part of cognitive apprenticeship.

09 INDEPENDENT PRACTICE



Independent practice produces "overlearning" — a necessary process for new material to be recalled automatically. This ensures no overloading of students' working memory.

10 WEEKLY & MONTHLY REVIEW



The effort involved in recalling recently-learned material embeds it in long-term memory. And the more this happens, the easier it is to connect new material to such prior knowledge.