

Multisensory / Multimodal Learning

Multisensory learning uses several of the five senses at once during teaching to help learners:

- Enrich their understanding of topics,
- Retain and recall information more easily, and
- Maintain attention and concentration in the classroom.

It is different from learning styles, which assume learners can be classified into auditory, visual, or kinaesthetic learners (as in the VARK methodology). Instead, it is learning which uses any combination of the senses of **sight (visual), hearing (auditory), smell, touch (tactile), movement (kinaesthetic), and taste**.

Enriching understanding

Imagine trying to explain the beach to someone who has never seen it before, just using words. Would they be able to fully understand what the beach is like? If you showed them a picture, then they would understand a little more. If you played an audio track of the sound of the waves, that would increase their understanding further. Finally, if you brought some sand and some salt water for them to look at, touch, taste, and smell, the picture would start to be more complete. This is multisensory learning: engaging multiple senses to help gain fuller understanding of a concept or topic.

Retaining and recalling information

Research on the brain and learning tells us that information received by the brain from each of these senses is stored differently, so multisensory learning means more parts of the brain are involved in storing the information. This helps the brain to access the information more easily when trying to remember it.

Maintaining attention

If a learner is participating in a listening activity in a lesson, their other senses are not turned off. Rather, when trying to focus on listening, a learner will have to filter out information received by the other senses at the same time. Reports suggest the human brain has evolved to process multisensory signals, making it more natural than unisensory processing. By providing multiple senses with relevant input, this creates a reciprocal relationship between sensory input and thinking, offering an opportunity for more focused learning.

Multisensory learning is a great way to motivate all learners and help them achieve their full potential, and is part of the Department for Education's core criteria for teaching synthetic phonics. It has particularly strong support for helping to engage SEND learners, who may have sensory processing issues associated with one or more of the senses.

Who should we plan multisensory lessons for?

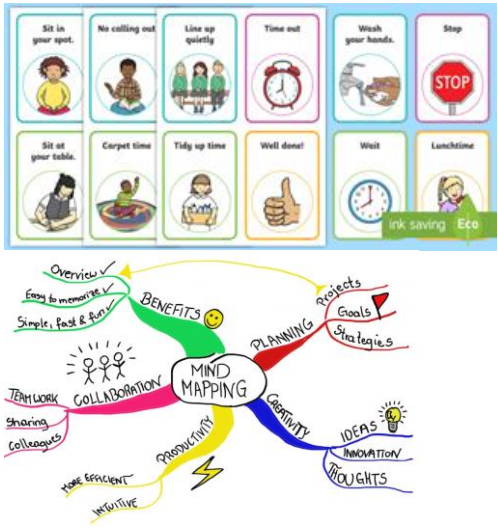

Learners who need additional support in enriching understanding, e.g. EAL, hydrocephalus, specific learning disability including dyslexia

Conditions which affect retention and recall, e.g. cerebral palsy, epilepsy, acquired brain injury


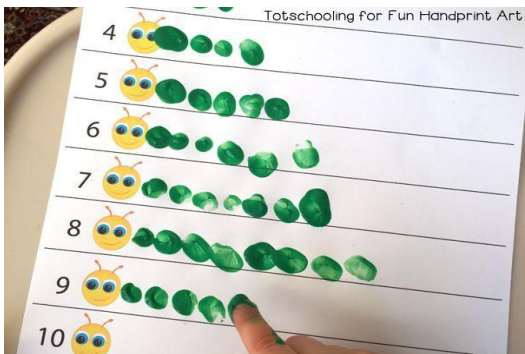


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Conditions which affect attention and concentration, e.g. ADD, ADHD, cerebral palsy, epilepsy, hydrocephalus, acquired brain injury, sensory processing disorders



Examples of sensory learning strategies

	Examples	
Visual	<ul style="list-style-type: none"> • Posters • Flashcards • Images on a projection or computer screen • Graphic organisers in texts e.g. different layouts, graphs, diagrams, colours and shapes • Student-created artwork • Word mosaics and colouring • Videos • Manipulatives for maths skills, e.g. Numicon, Unifix 	 <p>The image shows two visual examples. The top one is a 2x6 grid of flashcards with icons and text: 'Sit in your spot', 'No calling out', 'Line up quietly', 'Time out', 'Wash your hands', 'Stop', 'Sit at your table', 'Carpet time', 'Tidy up time', 'Well done!', 'Wait', 'Lunchtime', and 'ink saving Eco'. The bottom one is a hand-drawn mind map with 'MIND MAPPING' in the center. Branches include: 'Overview' (Easy to remember, Simple, fast & fun), 'BENEFITS' (Projects, Goals, Strategies), 'PLANNING', 'CREATIVITY' (IDEAS, INNOVATION, THOUGHTS), 'PRODUCTIVITY' (MORE EFFICIENT, INITIATIVE), and 'TEAMWORK' (Sharing, Collaboration, colleagues).</p>
Auditory	<ul style="list-style-type: none"> • Reading aloud • Talking and discussion • Music and songs • Audiobooks • Rhymes, chants, and language games • Using voice recorders • Videos • Sounding out phonemes, blends, and words 	 <p>The image shows a group of four children in a classroom setting. A boy in a yellow shirt is playing a red drum. A girl in a pink shirt is playing a tambourine. Another girl in a purple shirt is also playing a drum. They are all smiling and appear to be enjoying the activity.</p>

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<p>Tactile</p>	<ul style="list-style-type: none"> • Sand trays • Raised line paper • Textured objects • Finger paints • Puzzles • Modelling materials such as Play-Doh, clay and sculpting materials • Manipulatives for maths skills • Magnetic letters and word building kits • Using toys such as building blocks etc. • Using objects of reference which can be held and examined 	 
<p>Kinaesthetic</p>	<ul style="list-style-type: none"> • Movement, either whole body (as in dance, PE, drama) or hands, especially paired with other sensory activities such as counting or singing songs related to concepts • Observing and imitating actions e.g. assigning a gesture or action to a specific learning point such as a phoneme • Touching or handing out objects • Practical lessons • Role-play and hot seating • Rhythmic recall • Flash card races and other learning games • Using toys such as cars, building blocks etc. • Allocating time to move around the classroom to e.g. find a partner, switch seats etc. • Manipulatives for maths skills e.g. Unifix, Numicon Shapes 	 

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<p>Taste and smell</p>	<ul style="list-style-type: none"> • Using objects such as food items, scented lotions, flowers and plants etc. (check for allergies) in storytelling, literacy, or science • Cookery, for example for literacy (following recipes) and maths (measuring) • Using international food items for geography 	 
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Combining different sensory learning styles into a multisensory lesson

	English	Maths	Other
<p>EYFS/KS1</p>	<ul style="list-style-type: none"> • Watch a video together of a writer reading a poem about food (visual/auditory). • Repeat the poem back together and individually, looking for specific phonics, and add actions or signing (auditory/kinaesthetic) • Touch, smell, and taste the food (tactile/taste/smell) 	<ul style="list-style-type: none"> • Use Numicon to show number bonds alongside the numerals (tactile/visual) • Build the number bond operations using building blocks or Unifix and counting out loud (kinaesthetic/visual/auditory) • Chant or sing the answers to the calculations together (auditory) 	<ul style="list-style-type: none"> • Explore objects such as plants (tactile/smell), draw and label them (visual) in science • Use puppets/toys, scented lotions, gestures, and moving to different locations (areas of the classroom) for sensory storytelling (visual/tactile/smell/kinaesthetic)

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<p>KS2</p>	<ul style="list-style-type: none"> • Use an alphabet chart to point to or touch letters to spell words (kinaesthetic/ visual) • Use singing or chanting to reinforce spellings (auditory) • Put new words into sentences with learner-created illustrations/ 'Pictorizing' software on a word processor such as Clicker 8 (visual) 	<ul style="list-style-type: none"> • Use manipulatives to represent place value (tactile/visual/ kinaesthetic) • Use movement games with chanting or rhythmic repetition to have children move to different positions of place value as in columnar addition and subtraction (kinaesthetic/ auditory) 	<ul style="list-style-type: none"> • Science experiments are often multisensory – start with a WOW moment (visual/smell/tactile/ kinaesthetic/ auditory) • Reference objects or music as well as illustrations and posters for humanities, e.g. a Roman helmet, a Saxon shield, a Greek vase (visual/auditory/ tactile)
<p>Secondary</p>	<ul style="list-style-type: none"> • Roleplays, hotseating and other drama activities (kinaesthetic/ auditory) • Videos of film versions of texts or authors reading their works (visual/auditory) • Use mind maps, bullet point lists, voice recorders etc. to encourage multisensory note-taking (visual/auditory) • Reference objects or photographs for important themes (tactile/visual) 	<ul style="list-style-type: none"> • Manipulatives (visual/tactile/ kinaesthetic) • Visual representations e.g. graphs, diagrams, shapes 2D and 3D etc. (visual) • Problem solving through discussion, including moving around the room to find new partners for discussion (auditory/ kinaesthetic) 	<ul style="list-style-type: none"> • Visuals such as maps, photographs and reference objects for humanities subjects (visual/tactile) • Roleplay with props, or songs for MFL (kinaesthetic/visual /tactile/auditory)

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Useful links and resources

Jolly Phonics: <https://www.jollylearning.co.uk/jolly-phonics-catalogue/parent-teacher-guides/>

Numicon: <https://global.oup.com/education/content/primary/series/numicon/?region=uk>

Clicker: <https://www.cricksoft.com/uk/clicker>

Advice for teaching for different learning styles in secondary school, including multisensory learning: http://www.lancsngfl.ac.uk/projects/behaveattend-new/download/76/19_Learning_Styles.pdf?s=!B121cf29d70ec8a3d54a33343010cc2

Ideas for multisensory teaching of letter formation and sight words in a primary setting: <https://blog.maketaketeach.com/multi-sensory-ideas-for-teaching-sight-words/>