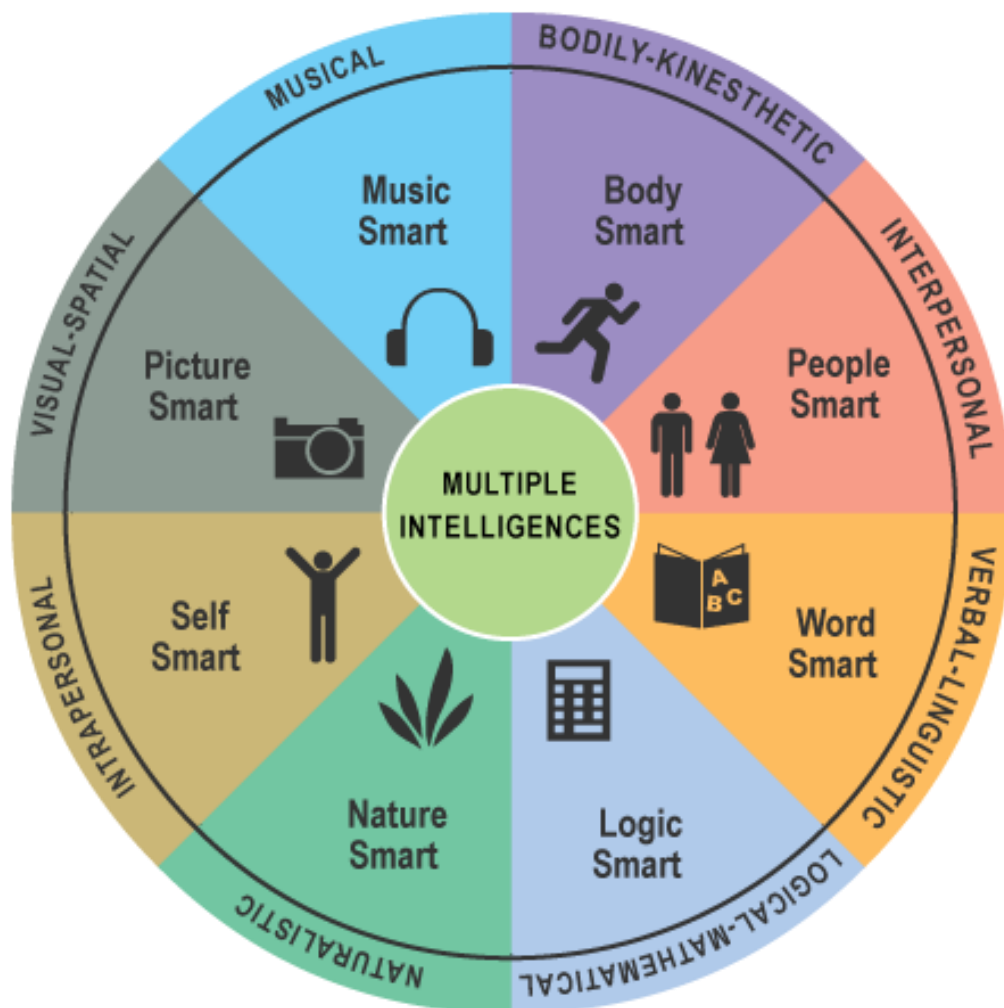


Learning Styles

According to Armstrong (2012, p. 14) 'the most important tool upon which to build a positive niche for the neuro-diverse brain is our understanding of each student's individual strengths'. Gardner's theory of multiple intelligences (2006, p. 5) presents a holistic view of the mind involving different areas of intelligence, cognitive strengths, and learning styles. He identifies the following eight intelligences:



Different learning styles can be combined in a classroom context for a multimodal learning experience, allowing students to incorporate two or three different approaches in one activity. The published literature outlines strong correlations between personality type, temperament and learning style such as the Myers Briggs Personality Assessment or the Keirsey Temperament Sorter.

E Extrovert – 40% The outer world of actions, objects and persons	I Introvert – 60% The inner world of concepts and ideas
S Sensate – 75% The immediate, real, practical facts of experience and life	N (Introvert)– 25% The possibilities, relationships and meanings of experiences
T Thinking – 50% Objectively, impersonally, considering causes of events and where decisions may lead	F Feeling – 50% Subjectively and personally, weighing values and choices and how they matter to others
J Judgment – 50% In a decisive, planned and orderly way, aiming to regulate and control	P Perceiving – 50% In a spontaneous flexible way, aiming to understand life and events

Aligned to personality type-based learning styles is the idea of considering learning preferences according to temperament where we think of active, practical, focussed and personal learners. By considering the preferred ways of working of the different types of learners, teachers can differentiate

their teaching so that students have opportunity to learn in their preferred way but also are exposed to learning options to develop alternative ways of working. Similarly, as we consider our own and others' innate preferences, we better support each other and promote effective teams.

<https://www.bing.com/videos/riverview/relatedvideo?&q=David+Keirse&mid=7947D7C322A3760399C57947D7C322A3760399C5&&FORM=VRDGAR>

Active Learners (SP)

Teachers can best support active learners with strategies such as:

- Being immediate and spontaneous
- Using hands-on activities
- Uses contraction, manipulation and tools as learning experiences
- Minimising paper and pencil tasks
- Avoiding lots of teacher talk, rigid routines, workbooks, sheet work, close supervision
- Increasing the density of visual and verbal tasks
- Including competitions with teamwork
- Change things around but minimise warnings about change
- Facilitate students reporting on their own progress
- Minimise the need to interpret symbols and codes and teach these explicitly when needed for learning
- Increase the amount of activity, risk, performance and media involvement
- Teaching from a 'How does this work?' approach
- Provide structure as these learners are not keen on democratic processes for learning.

Practical Learners

Teachers can best support practical learners with strategies such as:

- Providing structure
- Including direct involvement with concrete experiences
- Demonstrating what has to be done to learn
- Having pencil and paper activities
- Using highly sequential strategies with clear instructions
- Teaching in a teacher-directed way, avoiding unstructured discussions, long-term independent projects and fantasy exercises
- Having practical activities
- Remembering that these students like to work steadily and want to complete the work before moving on
- Maximising stability with clear systems and strategies in place for relief or non-contact teachers
- Using teacher talk, question and answer sessions, practical experiences
- Teaching from a 'Why is it so?' approach

Focussed Learners

Teachers can best support focussed learners with strategies such as:

- Ensuring lessons enable independent learning with high levels of intellectual demand and ways that foster curiosity
- Being sure that teacher-directed lessons are challenging
- Fostering opportunities for students to demonstrate competence
- Teaching to enhance understanding and logic
- Accepting demonstrations of learning through multi-modal options
- Using experiments to develop learning
- Giving quiet, earned compliments
- Linking learning to maths and science across the curriculum
- Teaching from a 'How? and Why?' approach

Personal Leaders (NF)

Teachers can best support personal learners with strategies such as:

- Using dialogue as feedback
- Being warm and friendly combined with teacher directed strategies
- Using small group learning and teaching
- Promoting cooperation not competition
- Facilitating an open atmosphere
- Recognising and modelling good communication skills
- Incorporating reading in lessons
- Remembering that personal learners thrive on recognition
- Using debates, contracts, continuous assessments, peer tutoring, learning centres, rewards, feedback, role plays, and simulations
- Teaching from a 'Who? and Why?' approach.

As teachers think about strategies to incorporate in their work, they notice that their own preferred learning style influences their natural ways of working. The details provided here in our Pedagogical Framework alert teachers to the importance of incorporating a wide range of strategies across the day so that all students experience not only their preferred way of working but also are enabled to expand their ways of learning and working.

Sensory modalities

- Auditory
- Visual
- Tactile
- Kinaesthetic.

Differentiation strategies linked to visual learners

While in the classroom, students who are visual learners benefit from teachers who use the whiteboard to list the important points of a lesson, who provide an outline to follow along with during the lesson, and who provide class and individual student visual schedules as well as the class timetable. These learners also benefit from information gathered from pictures, photographs, videos, diagrams, objects, and text and prefer to learn alone or in a very small group in a quiet room. Visual learners often view information through the "mind's eye" (one's ability to see things with the mind) when trying to remember something. If there is a strong preference for learning by visual methods (seeing), the teacher makes sure that they use some or all of the following strategies with those students:

- Sit near the front of the classroom to eliminate visual obstructions
- Always have a class and individual visual schedule with text and photos or symbols at the students at their independent reading level
- Use gestures and visuals as well as speech
- Pictures, videos, posters, screens
- Use of diagrams and pictures
- Images on tablets, phone, flow charts, graphs
- Colour code pictures, diagrams, symbols, text with highlighters/markers/pens
- Review new information within 24 hours of teaching and multiple times thereafter
- Write sentences and phrases that summarize new information
- Make flashcards of vocabulary words and concepts that need to be memorized; use highlighters to note key points on the cards. Limit the amount of information per card so the mind can take a mental "picture" of the information.
- Show mathematical calculations with visuals; write the steps for the students to watch; use colour
- Ensure quiet settings where recall will be productive

Differentiation strategies linked to auditory learners

When a student processes information by reading (aloud) and hearing, then the preferred method of learning is said to be auditory. Teachers consider the following suggestions if there is a strong preference for learning by auditory methods:

- Always get the student's attention and then speak in language that the student can comprehend not just relying on visuals
- Make sure students are in a position to hear well in the classroom
- Use recitation strategies
- Foster active listening amongst students and staff
- Make sure one person speaks at a time so that auditory learners are not trying to listen to competing demands
- Engage students in a learning conversation e.g. What are you learning? How well are you doing? What are you doing now? What will you learn next? How can we help you learn more?
- Use rhyme, stories, jokes
- Describe visuals, pictures and other images
- Use recorded story books
- Engage students in opportunities for one to tell others what they learnt, know, did, etc.
- Set up situations where a student can listen to their own voice e.g. reading, talking
- Give students quiet time to recall and absorb what they have learnt

Differentiation strategies linked to tactile or kinesthetic learners

Tactile learners like to experience the world and act out events. To remember a phone number, tactile learners may remember the pattern of their fingers as they press the numbers on a phone or keypad. Tactile learners can remember complicated directions once they've acted them out.

When a student processes information through touch, then their preferred method of learning is said to be tactile. Teachers use these strategies to differentiate to benefit tactile learners:

- Provide "hands on" activities
- Ensuring there are opportunities to manipulate materials to learn new information
- Opportunities to be physically active in the learning environment
- Doing in-class demonstrations with "hands on" student learning experiences, and fieldwork outside the classroom
- Assistance with handwriting tasks and encouragement to hold pencils and pens gently when writing
- Activities which use tools
- Learning experiences where there are repeated opportunities to act them out
- Enable students to fiddle and fidget with things
- Permit drinks and nibbles during lessons
- Teach spelling by "finger spelling" the words
- Use puzzles and mazes for learning
- Demonstrate directions and encourage students to act them out
- Show how to do something and then make sure the students have the opportunity to do it
- Are flexible about seating options including chairs, wobble stools, floor, cushions, swings
- Given freedom to move around
- Uses hands and rhythm and beat to teach spelling, number facts, etc.
- Gives frequent breaks
- Assesses learning of knowledge and skills through a range of modalities and not just writing or telling
- Frequent change of activity to redress boredom; short lessons and frequent changes of types of task
- High frequency and density of outdoor and community based learning
- Flashcards to help memorizing information e.g. sight words
- Acting out stories, topics, mathematics equations etc.