A Unique Learning Profile: Students with Down Syndrome

Hearing impairment
Some 80% of preschool children experience fluctuating conductive hearing loss with some 15% having sensori-neural hearing loss. For many, hearing loss persists in school years. Will have difficulty listening to whole class input, listening in noisy environments, processing spoken language, discriminating speech sounds, learning phonics.

Verbal memory weakness
Difficulty learning from listening - maintaining attention, retaining instructions, memorizing sequences, learning new vocabulary and information. Challenges in retaining and consolidating learning into long term memory.

Delayed motor skills
Linked to low muscle tone, loose ligaments and developing motor plans. Affects all physical activities, delays self-help skills and handwriting progress but will improve with practice. May have difficulty staying on task & multi-tasking. Easily distracted by other factors. Tires easily.

Speech & language delay
Limits ability to communicate. Understand more than can express – knowledge may be underestimated. Will influence learning from listening, processing long sentences, understanding new or subject specific vocabulary, word finding, forming sentences, understanding instructions, reading comprehension skills, thinking and reasoning.

Visual learning strengths
Ability to learn and use sign and gesture, to learn to read and use written word. Strengths in learning through imitation, from modeling and demonstration. Learns well from visual resources (pictures, photos, diagrams, symbols, concrete materials, digital technologies and apps).

Visual impairment
Occurs for all students, to some degree. All children have poor visual acuity (soft focus) and 80% poor focus at close range (up to 10 inches). Bifocals are routinely recommended. Difficulties with: writing using a pencil on blue-lined paper, reading< 18 point font, coping with text/diagrams/pictures that are too cluttered, detailed, or have little contrast.

This graphic, adapted from Down Syndrome: Good Practice Guidelines for Education, outlines strengths and challenges associated with the main aspects of the specific learning profile for young people with Down syndrome, as well as the unique range of sensory, physical and cognitive needs of this group of learners.