

Definition:

The chromosomal disorder **Down syndrome** (Down's syndrome, trisomy 21, trisomy G) is caused by the presence of part or all of a 21 st chromosome. Named after the British physician John Langdon Down who discovered the syndrome in 1866, the disorder has been identified by Jerome Lejeune in 1959 as a chromosome 21 tisomy. Characterised by a combination of minor and major changes in structure Down syndrome is concerned with impairment of cognitive ability and physical growth, as well as a particular set of facial characteristics.

Down Syndrome.org.uk

Characteristics seen in the classroom:

- Strong visual learning skills
- Ability to learn to read and write and use written word
- Speech and language impairment and weak comprehension skills
- Hearing difficulties, hearing can fluctuate, may have difficulty with phonics
- Weak short term auditory/working memory – difficulty memorising sequences, retaining instructions
- Fine and gross motor difficulties – low muscle tone – affects ability to record work, self help skills delayed
- Short concentration span – difficulty staying on task, distractible, tire easily
- Visual difficulties – reading small fonts, texts too busy or too little contrast

Where to go for help:

- Educational Psychology Service
- LAB 21 – LSAT Service
- Woodlands Outreach Service
- Severndale Outreach Service
- Down Syndrome Association - Primary and Secondary downloadable information packs

Cognition and Learning Difficulties**Down Syndrome****Assessment and Diagnosis:**

Down syndrome is a genetic condition caused by the presence of an extra chromosome 21. A baby born with Down syndrome thus has three copies of chromosome 21 instead of the usual two. Children with Down syndrome are not just developmentally delayed but have a specific learning profile with characteristic strengths and weakness. It is vital that this is recognised in order that the most appropriate strategies are used so that children with Down syndrome are able to develop their knowledge, learn new skills and be included into school as effectively as possible.

Frequently used Interventions:

- Seat near front of class to support hearing
- Gain pupil attention by using their name
- Use visual cues – pictures, signs, facial expressions to support speech
- Early reading – match pictures, match words, play reading games
- To support writing – enable stability, use hand exercises, activities to develop perceptual skills and hand-eye co-ordination
- Developing maths skills – use structured, concrete materials for classifying, rote counting, 1:1 correspondence
- ICT – develop keyboards skills, use talking books, software eg Clicker, Nessy