

The DSi <u>International Guidelines for the Education of Learners with Down Syndrome</u> aim to improve the education of learners with Down syndrome internationally and to contribute to the realisation of their right to inclusive and equitable quality education and the promotion of lifelong learning opportunities.

The following text is an extract from Page 22-23 of the Guidelines (reproduced with permission):



## 4.2.1 Planning for inclusive practice

Inclusive education as a philosophy and practice avoids a focus on some students who are different to others in the class and in need of remediation. Rather, there is attention to provision of learning adjustments and curriculum differentiation that support the learning of everyone in the class. As Florian explains,

[Effective inclusive education teachers] have changed the way they think about the concept of inclusive education. Rather than only accommodating learner differences, they focus on extending what is available to everybody. This focus on learning as a shared activity is a subtle but important shift in thinking about individual differences between learners that avoids the potentially negative effects of treating some students as different. (Florian, 2012, p. 277)

Classroom planning techniques such as the Universal Design for Learning (UDL) framework (Rose, Gravel, & Gordon, 2014) underpin inclusive practice. By designing into the lesson learning adjustments available to any student who finds them helpful, teachers develop curricula that accommodate the diverse strengths and challenges of all learners, minimising the need for additional adjustments.

An important concept in inclusive practice is the teaching of year level curriculum with adjustments (Spooner & Browder, 2006), also known as 'age-appropriate' curriculum. In this approach, a classroom teacher begins planning with the curriculum materials established for the year level of the class. Appropriate adjustments are then planned, taking account of the anticipated needs of the diverse learners in the class, and paying careful attention to adjustments specified in Individual Education Plans. Enabling prompts are designed to assist a learner to be able to engage with the task but are only offered after the learner indicates the need for this support. Extending prompts are designed to provide challenge and greater depth for learners to go beyond the set task. This is preferable to assigning work from later year levels which would lead to boredom in subsequent classes. Examples of this approach in the context of mathematics have been developed by Sullivan and colleagues (Sullivan, Mousley, & Zevenbergen, 2006).

Mitchell and colleagues in a review of research identified the following approaches for curriculum adjustment and modification:

To make the curriculum accessible, consideration should be given to the following alternatives in relation to content, teaching materials, and the responses expected from the learners:

- (a) modifications (e.g. computer responses instead of oral responses, enlarging the print),
- (b) substitutions (e.g., Braille for written materials);
- (c) omissions (e.g., omitting very complex work); and
- (d) compensations (e.g., self care skills).

Other modifications can include

- (a) expecting the same, but only less,
- (b) streamlining the curriculum by reducing its size or breadth,
- (c) employing the same activity but infusing IEP objectives, and
- (d) curriculum overlapping to help students grasp the connections between different subjects, for example. (Mitchell, Morton, & Hornby, 2010, p. 51)

Following the approach of adjusting the curriculum for the year level has led to remarkable results in the area of mathematics. Examples of learners with Down syndrome who had not demonstrated accomplishment of simple arithmetic achieving learning goals in areas such as algebra and trigonometry have been reported (Faragher, 2014; Monari Martinez, 1998; Monari Martinez & Pellegrini, 2010). It is important to note that these students were supported by the use of calculators as needed.



## 4.2.2 Strategies for learning support needs

The learning of students with Down syndrome in the general class will be enhanced with good teaching and the right support. Fundamentally, the most significant factor in inclusive education is the implementation of established effective education pedagogy, as noted by Jordan and colleagues, "effective teaching is effective intervention for all students" (Jordan et al., 2009, p. 536), and it underpins the clear research findings that high quality inclusive education benefits all learners (Hehir et al., 2016).

Students with Down syndrome will benefit from effective support targeted to their individual requirements. In keeping with inclusive practice, additional supports and adjustments should be made available to all students in the class, should they wish to make use of them (Florian, 2012). The following supports have been found from extensive practice evidence to be effective for many students with Down syndrome. It is important to reiterate that learners with Down syndrome are individuals, and teachers should determine whether or not these or other supports are required.

## Effective strategies include the use of:

- visual supports to focus attention;
- · visual scaffolds such as photos and pictures to support language teaching;
- common classroom aids such as number lines, calculators, letter charts, grids and diagrams (ready availability of these supports reduces the load on a student's working memory and visual supports, such as letter and number charts, can be affixed to a child's desk or kept in the back of an older student's workbook);
- commonly available tools, such as using the calendar on smart phones for the classroom schedule (this supports attention as well as providing opportunities to become adept with devices in common usage);
- models, where relevant, of completed work as a guide.

This is just a short extract of the Guidelines. <u>Click here to read them in full and downloaded for</u> future reference.