Teaching Students with Down syndrome

Resources

Research has found that through participation in inclusive education, teachers experience professional growth and increased personal satisfaction.

Inclusion results in a more positive sense of self and self-worth for children who do and do not experience disability.
Universal Design for Learning Guidelines

I. Provide Multiple Means of REPRESENTATION

1: Provide options for perception
1.1 Offer ways of customizing the display of information
1.2 Offer alternatives for auditory information
1.3 Offer alternatives for visual information

2: Provide options for language, mathematical expressions, and symbols
2.1 Clarify vocabulary and symbols
2.2 Clarify syntax and structure
2.3 Support decoding of text, mathematical notation, and symbols
2.4 Promote understanding across languages
2.5 Illustrate through multiple media

3: Provide options for comprehension
3.1 Activate or supply background knowledge
3.2 Highlight patterns, critical features, big ideas, and relationships
3.3 Guide information processing, visualization, and manipulation
3.4 Maximize transfer and generalization

II. Provide Multiple Means of ACTION & EXPRESSION

4: Provide options for physical action
4.1 Vary the methods for response and navigation
4.2 Optimize access to tools and assistive technologies

5: Provide options for expression and communication
5.1 Use multiple media for communication
5.2 Use multiple tools for construction and composition
5.3 Build fluencies with graduated levels of support for practice and performance

6: Provide options for executive functions
6.1 Guide appropriate goal-setting
6.2 Support planning and strategy development
6.3 Facilitate managing information and resources
6.4 Enhance capacity for monitoring progress

III. Provide Multiple Means of ENGAGEMENT

7: Provide options for recruiting interest
7.1 Optimize individual choice and autonomy
7.2 Optimize relevance, value, and authenticity
7.3 Minimize threats and distractions

8: Provide options for sustaining effort and persistence
8.1 Heighten salience of goals and objectives
8.2 Vary demands and resources to optimize challenge
8.3 Foster collaboration and community
8.4 Increase mastery-oriented feedback

9: Provide options for self-regulation
9.1 Promote expectations and beliefs that optimize motivation
9.2 Facilitate personal coping skills and strategies
9.3 Develop self-assessment and reflection

Resourceful, knowledgeable learners
Strategic, goal-directed learners
Purposeful, motivated learners

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WHEN CONSIDERING THE outcomes of inclusive education, there are a number of challenges. As noted above, many research studies, purporting to examine inclusive education, in reality consider practices of micro (and sometimes even macro) exclusion. Discriminatory attitudes and practices pose serious barriers to inclusive education, and yet, despite these challenges, research evidencewhelmingly supports inclusive education. In addition to the outcomes for social justice and sense of community and belonging (as discussed above) research provides evidence of positive outcomes of inclusive education for social, academic, cognitive and physical development in children who do and do not experience disability. The research studies discussed here involve a diverse range of children, including children labelled with ‘mild’ through to ‘severe’ intellectual, sensory and physical impairments or multiple impairments.

Many of the studies discussed in this section explore situations where a child has been ‘included into’ an existing setting, rather than inclusive education whereby the setting has been transformed to provide the best possible education for all of its children. Nonetheless, these examples demonstrate the positive outcomes that are possible when considerable steps towards inclusive education are taken. If the barriers currently inhibiting the realisation of genuine inclusion were to be addressed it seems likely that the outcomes would be even more positive. As educational transformation occurs, ongoing research is required to develop a clear understanding of the outcomes of genuinely inclusive education.
THE SOCIAL SIDE OF INCLUSION

Whether the result of micro or macro exclusion, “[w]ith segregation comes devaluation, a loss in cultural capital for individuals. This form of disempowerment actively disadvantages students who have been labelled as disabled”. Exclusion impacts negatively on children who experience disability, their peers and the adults who engage with them, resulting in marginalisation, stigmatisation and often bullying and abuse. While a common assumption is that abuse and bullying occurs only in mainstream settings, this is actually incorrect. By contrast, research provides evidence that despite higher teacher-student ratios and greater supervision the full range of bullying occurs in ‘special’ settings. While there is some variation in individual studies, particularly based on teacher or parent ratings, contrary to common perception, growing research evidence suggests that children who attend ‘special’ schools are more likely to experience bullying than children who attend mainstream settings, and that inclusive education is a key factor in reducing or eliminating bullying.

Inclusive education facilitates social development in children who do and do not experience disability. Research evidence suggests that genuinely inclusive education allows children to build and develop friendships that they might not have considered or encountered otherwise. Inclusive settings encourage higher levels of interaction than segregated settings, which results in more opportunities for children to establish and maintain friendships. The more time a child spends within an inclusive setting, the greater the social interaction. In turn, this leads to better outcomes for social and communication development.

The growing body of research into the outcomes of inclusive education for social development has also found that inclusion results in a more positive sense of self and self-worth for children who do and do not experience disability. Inclusive education leads to a sense of belonging and to a self-concept not only as a receiver of help, but also as a giver of help. For children who do and do not experience disability, inclusive education has been shown to result in more advanced social skills.

Teachers frequently cite ‘challenging behaviour’ as their biggest concern regarding fulfilling their role as educators. Research provides evidence that inclusive education leads to improved behaviour development in children who do and do not experience disability with less ‘challenging’ or ‘disruptive’ behaviour in inclusive settings. Children who participate in inclusive education have been found to be more independent. Additionally, children who participate in inclusive education have been found to develop qualities such as patience and trust, and to become more aware of and responsive to the needs of others than children in non-inclusive settings. Inclusive education supports children in developing increased awareness and acceptance of diversity and understanding of individuality.
INCLUSION AND ACADEMIC DEVELOPMENT

In regards to academic development, again, research findings contrast with the common assumption that the higher teacher-child ratios, as well as teachers trained in special education, would result in better academic outcomes in segregated ‘special’ schools or classes. By contrast, research shows that children who experience disability who are included into mainstream educational settings demonstrate better academic and vocational outcomes when compared to children who are educated in segregated settings. Children who experience disability who are included into mainstream settings have been found to score higher on achievement tests and perform closer to grade average than children who are in non-inclusive settings. Research provides evidence for better outcomes in reading, writing and mathematics. Additionally, it has been argued that inclusive education stimulates learning in that more time is spent on academic learning in mainstream schools than in segregated settings. Children who are included in mainstream schools are given opportunities to engage at higher academic levels and to achieve outcomes that may not otherwise be possible.

Children who do not experience disability have also been found to benefit academically from inclusive education with equal or better academic outcomes compared to children participating in non-inclusive settings. Furthermore, inclusive teachers engage all children in more higher-order thinking, questioning and dialogical interactions than non-inclusive teachers. All children in inclusive settings receive higher quality instruction that is better suited to individual needs, particularly through small group work.

In regards to children who do not experience disability, research finds no decrease in academic performance. Instead inclusive education results in:

- Increased learning opportunities and experiences;
- Overall education is more sensitive to differing student needs;
- Growth in interpersonal skills;
- Greater acceptance and understanding of human diversity;
- Greater flexibility and adaptability.

LANGUAGE DEVELOPMENT

Communication and language development in children who do and do not experience disability is enhanced through inclusive education. This is particularly evident when children who experience disability are supported to communicate with their peers. Children who are being included have been shown to increase independent communication, mastery of augmentative and alternative communication (AAC) strategies and increased speech and language development when provided with appropriate support for inclusive education. Furthermore, children assessed as having limited vocabulary and language skills have been found to be able to engage in extended conversation and use complex vocabulary after six months of participation in an inclusive preschool setting.

Enhanced communication and language leads to greater independence and initiation of interactions and increased active participation. Consequently it appears that inclusive education supports communication and language development, which in turn supports greater inclusion. Appropriate support to develop and implement AAC strategies is essential to inclusive education for many children.
PHYSICAL DEVELOPMENT

Limited research has considered outcomes of inclusive education for physical development. However, research to date provides evidence to suggest that inclusive education contributes positively towards the physical development of children who experience disability. Children who experience disability who are included into mainstream educational settings show gains in motor development and have a higher degree of independence. Inclusion in mainstream educational settings encourages participation and provides more opportunities to observe and learn through the ‘power of the peer’, as well as to learn through trial-and-error, this may enhance opportunities for physical development. Inclusive education provides access to a broader range of play and learning activities, which can stimulate physical development and enhance children’s experiences.

In research considering children’s perspectives on inclusion in physical activities, children reported that when they were actually included in physical activities this provided an entry point for play and friendship and created a sense of legitimate participation. Research has explored the negative outcomes for children when they are excluded from physical education. However, three international reviews have found that when children who experience disability are included in physical education and provided with appropriate support the outcomes are positive for all children involved.

OUTCOMES FOR TEACHERS

Overall, research provides evidence that inclusive education results in higher quality education and care for children who do and do not experience disability. However, the benefits of inclusive education are not only for children. While it has been found that teachers are sometimes initially reluctant to participate in inclusive education and may feel that they are not equipped for the challenges involved, research has also found that teachers develop confidence in their ability to be inclusive educators, and increase their positive attitudes towards inclusion, through experience and support.

Teachers often feel that inclusion will be a bigger challenge or struggle than it actually is in practice.

“Two concerns are commonly voiced among professionals who express resistance to inclusion. This first is that the needs of children will not be met amid the complex dynamics of a general education setting. The second is that the needs of children with disabilities will require an excessive amount of directed resources that take away from the educational experiences of children without disabilities...neither concern is valid in a thoughtfully structured, well-resourced classroom.”

Research has found that through participation in inclusive education, teachers experience professional growth and increased personal satisfaction. Additionally, developing skills to enable the inclusion of children who experience disability results in higher quality teaching for all children and more confident teachers.
OUTCOMES FOR FAMILIES

There is considerable research exploring the negative impact of exclusion on families. While it is outside of the scope of this issues paper, research provides evidence demonstrating that families frequently experience stigmatisation and a host of barriers when they seek to have their children included. Similarly, the experience of stigmatisation and exclusion is common for parents who experience disability. While genuine collaboration and partnership have been found to facilitate inclusion, families frequently face a lack of responsiveness to their needs and wishes. However, there is very little research investigating the outcomes of inclusive education for families when it does occur. Some research suggests that when children are included, this may support parents in feeling more confident to return to work. Additionally, the experience of genuine inclusive education contributes to parents’ psychological and economic well-being. Inclusive education, when it occurs, is often the result of considerable parent advocacy and many families strongly desire inclusive education for their children. Sadly for families, the path to achieving this is often not an easy one. It is frustrating for parents to have to continually advocate for the inclusion of their child in the school and community, particularly in light of the weight of evidence demonstrating the positive outcomes of inclusive education.

It’s So Much Work To Be Your Friend

by Richard Lavoie

As any parent, teacher, coach, or caregiver of a learning disabled child knows, every learning disability has a social component. The ADD child constantly interrupts and doesn’t follow directions. The child with visual-spatial issues loses his belongings. The child with a nonverbal communication disorder fails to gesture when she talks. These children are socially out of step with their peers, and often they are ridiculed or ostracized for their differences. A successful social life is immeasurably important to a child’s happiness, health, and development, but until now, no book has provided practical, expert advice on helping learning disabled children achieve social success.

For more than thirty years, Richard Lavoie has lived with and taught learning disabled children. His bestselling videos and sell out lectures and workshops have made him one of the most respected experts in the field. Rick’s pioneering techniques and practical strategies can help children ages six to seventeen.

It's So Much Work To Be Your Friend

(book & video)

Foreword by Mel Levine, M.D.

Helping the Child with Learning Disabilities Find Social Success

It's So Much Work To Be Your Friend

It’s So Much Work to Be Your Friend

PBS VIDEO
This resource complements the seven e-learning courses relating to the *Disability Standards for Education 2005* developed by the University of Canberra in partnership with education authorities in all States and Territories.

The suite of e-learning courses provides a consistent national approach to assisting schools and early childhood education providers to understand their obligations under the *Disability Discrimination Act 1992*.

**The other courses include:**

- Educational Leaders Course
- Early Childhood School Course
- Early Childhood Prior to Fulltime School Course
- Primary Schools Course
- Junior Secondary Schools Course
- Senior Secondary Schools Course
- Resources for Educational Assistants

**Browser compatibility:** Internet Explorer 9 and above, Google Chrome, Mozilla Firefox, Apple Safari.