

Good afternoon and thank you everyone for joining. I am Chloe Duffy and I am chair of this webinar, I am pleased that you have joined to share information on your chosen additional learning needs topic. Before we begin could everyone just confirm their name and chosen topic. As I have mentioned my name is Chloe Duffy and my chosen topic is Down syndrome. Claudia if you would like to go next –

Perfect, now I am sure we are all eager to begin therefore Claudia we are ready when you are;

Claudia's Question: What causes ADHD?

Becci's Question: What could practitioners within early years settings do to help an autistic child having a breakdown?

Down's syndrome occurs when a child is born with an extra chromosome. A mutation in the sperm or egg before birth usually results in an additional chromosome that occurs by accident. Nothing that the parents did either before or during pregnancy caused this alteration as stated NHS, (2023).

Down Syndrome can be detected from when a foetus is 12 weeks old. The NHS (2021) states how expectant parents are offered a screening test for Down syndrome usually at their 12-week ultrasound appointment. If the expecting parents agree to the test, a blood sample will be taken from the mother. The "nuchal translucency" of the baby's neck is measured during the scan. The mother's age and the results of these two tests are used to calculate the likelihood of the baby having Down syndrome. This antenatal screening process is called non-invasive prenatal test (NIPT) and was introduced in Wales in 2018 as explained by NHS Wales (no date). Furthermore NIPT tests are not compulsory and some parents do decide to not test for down syndrome during pregnancy due to their own personal reasons.

Dr Jarvis (2021) clarifies how it is possible to diagnose Down syndrome either prenatally or postnatally. A baby with Down's syndrome may exhibit characteristic traits that lead to suspicion of the condition soon after delivery. Genetic testing then examines the baby's chromosomal count and appearance which is then used to confirm the diagnosis. This is basically the composition of their genes. The infant will get a blood test as part of it. Then, chromosomes in their blood can be analysed to detect the presence of an additional chromosome 21.

There are usually some developmental delays in the various domains in children with Down syndrome. Delays in activities such as sitting, crawling, and walking are known as gross motor delays. Fine motor delays are delays in the deliberate coordination of hand and finger motions. Delays in the onset and quality of speech development are known as speech delays. Every child develops at a different rate, and some might not experience as many delays in these developmental domains as others. The majority of children with Down syndrome typically achieve their developmental milestones one and a half to two times later than typical children as stated by National Down Syndrome Congress (2020).

DSE (2024) explains how it is typically known as a developmental profile as each individual has their own strengths and weaknesses therefore each individual child develops at their own rate. However according to Down's Syndrome Association (2021) the majority of children with Down syndrome attend mainstream schools alongside their typically developing peers. This allows children with Down syndrome to form relationships with others and master new skills in an inclusive setting.

Oxfordshire County Council (no date) agrees when provided additional help and differentiated activities, most children with Down syndrome do well in mainstream schools. However children with more severe learning disabilities may benefit from attending a special school.

A barrier to children with Down syndrome attending mainstream education may occur due to a difference in opinions and priorities which could hinder the parent-school relationship. This could possibly be due to the importance of children with Down syndrome having the correct support in place. This is important as due to the developmental delays that children with Down syndrome experience if they are not supported correctly that could fall even further behind with their development compared to their peers.

Parents expect the correct support to be in place to support their child whether the child attends mainstream or special schools as article 28 states all children have the right to an education and article 29 states how the education of the child shall be focused towards the development of the child's personality, talents, and mental and physical abilities to their utmost potential as provided by UNICEF (no date). Holland, Pell and KIDS (2018) identifies the discrepancy between expectations from home and school as a roadblock to attaining successful results. The parent-school relationship is obviously harmed when experts, especially educators, describe a child only in terms of their additional learning needs, characterising the child and his or her challenges as the issue.

These discrepancies may occur due to a lack of training and understanding of additional learning needs in mainstream education. Devarakonda (2013) explains how teaching assistants and other support staff provide help to ALN students in both special and mainstream schools. At worldwide, national, regional, and local levels, the titles assigned to those who offer assistance vary, and the nature of the support is contingent upon the position and obligations of the individual. Activities conducted inside or outside of the classroom to assist the learning of single students or small groups of students with the goal of enhancing their engagement and accomplishment will be included in this support.

According to research in most schools teaching assistants are heavily required to support children with additional learning needs. Students who have Down syndrome are more likely to require additional learning support than others. However, Groom and Rose (2005) have some reservations about how teaching assistants are used in the supervision of such students. They believe that teachers who have had professional training in classroom management are better equipped to support children with Down syndrome than teaching assistants who frequently receive little training.

Furthermore, Dreyer (2014) states how the concept of a collaborative and systemic approach to aiding students with Down syndrome in the school is adversely impacted by the reality that mainstream teachers typically view support as the sole responsibility of learning support teacher otherwise known as teaching assistants. This demonstrates that teachers in mainstream classrooms still have beliefs and ideals that are outdated about how to provide support to children with additional learning needs.

However, Greenway and Rees Edwards (2021) state how it was evident from their research that although teaching assistant may not have adequate training, the study made it clear that teaching assistants were enthusiastic about their work and the need of providing ongoing one-on-one support for children with ALN. They felt that knowing and advocating for the needs of each unique child was at the core of their job as a teaching assistant. The strong and trustworthy relationships the teaching assistants had with the child demonstrated these qualities. This shows that it is possible to successfully support children with ALN without training and qualifications.

Children with Down syndrome generally experience speech and language challenges, while the degree of these difficulties varies greatly between individuals as discussed by Bird (2021). Strategies

that could promote language development and support children with Down syndrome could include teachers situating children with Down syndrome near the front of the classroom, speaking directly and clearly to the student, and utilising simplified language with visual reinforcement wherever possible as stated by SCoTENS (2008).

Rutherford, M., et al. (2020) also encourages visual support to enhance children with Down syndromes language development. They believe that visual supports improve results for children with ALN by providing clarity and minimising memory demands. Research suggests that they can reduce anxiety, irritation, and distraction, improve task completion, increase peer interaction, ease transitions, and promote independence. Although effective use of these tools relies on staff training and knowledge.

However, Down syndrome Ireland (no date) believe in other strategies to encourage language development. These include teachers making compensatory language adjustments. Short, straightforward language can help to support children with Down syndrome. In addition teacher can help by providing time for processing, for instance, count to ten before speaking again. Lastly, make use of affirmative language. Understanding "we walk in the corridor" is far simpler than understanding "don't run in the corridor." The verb WALK is key in the first phrase. While the key word in the second phrase is RUN.

Another strategy that encourages speech development is the use of technology according to Action for children (2017). They believe that if children use televisions and touch screen devices and converse with other children and adults while doing so, it can help them develop their language skills. Instead than substituting play and conversation with technology, it's critical to use it in conjunction while encouraging in-person encounters with actual people. This can be supported by Billington (2016) who states that technology offers new opportunities, such interactive and user-friendly story telling e-books and applications, as well as other services, like online video calling, which can play a significant role in supporting language, literacy, and communication.

Does anybody have any questions?

Claudia's Question: How can a parent and teacher relationship support a child with Down syndrome in Education?

Answer; Well Claudia, Down's syndrome Scotland (no date) believe that parents are the first and most important teachers. They are in the greatest position to assess their child's abilities, passions, and preferred method of learning. Collaboration between both parents and educators is crucial in early childhood settings. An effective collaboration promotes the mutual sharing of knowledge and skills, allowing for the production of outcomes that will enhance learning and growth.

Becci's Question: How do other theorists or approaches support children with Down Syndrome in education?

Answer; The Te Whariki approach explain how research shows that certain teaching methods consistently enhance learning outcomes for children with Down syndrome. They believe that Students should be able to represent their knowledge through various languages, symbols, and writings. They assist students with Down syndrome in properly communicating their thoughts.

Using communication techniques like sign language, visual aids, and assistive technology that can enhance participation and conversation with classmates. Furthermore, Students with Down syndrome may require special support to develop critical thinking skills and problem-solving abilities, including actively seeking and developing knowledge. Mind mapping techniques can be effective for visually representing complex thoughts. Te Whariki enables children to reflect on their own learning, use personal knowledge and intuition, to ask questions, and challenge assumptions as stated by Kehe (2015).

Brilliant, if that is the last of the questions then we have come to the end of the webinar. I would just like to thank everyone who has joined today and shared information on their chosen topic. I think we can all agree that we have all learnt something that will improve our practice when working with children with ALN. I can only hope that by sharing information, strategizing and working together we can break down these barriers for all these incredible children.

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