

## Script

Chair (Gemma Burton)- Good evening, my name is Gemma Burton and I would like to welcome you all to this webinar. This session will include four presentations on the topic of supporting children with special educational needs. Each presentation will focus on a specific need, with the aim of enhancing understanding and developing knowledge in this area.

The Additional Learning Needs and Education Tribunal (Wales) Act (2018) defines additional learning needs (ALN) when an individual has a learning difficulty or disability that requires extra support in their education. A person is considered to have ALN if their learning difficulty or disability means they need additional learning provision to help them learn effectively (Welsh Government, 2018). This highlights the importance of inclusive education and removing barriers so that all children experience equal access to learning opportunities and their education (Devarakonda, 2025). This is supported by the United Nations Convention on the Rights of the child (Article 28), which states how every child has the right to equal access to education and equal opportunities to learn (UNICEF, n.d).

To begin I would like to invite you all to briefly introduce yourselves and the focus of your presentation.

Josie -My name is Josie Thornton and I will be presenting information on Autism.

Cara -Good evening, my name is Cara Rowcliffe, and I am going to discuss my poster about down syndrome.

Zoe - Good evening, my name is Zoe and I will be presenting on Attention Deficit Hyperactivity Disorder (ADHD).

I will begin the webinar this evening with a presentation focused on Dyslexia.

Gemma's poster presentation -

Introduction – This poster will critically evaluate how dyslexia is identified and diagnosed, considering potential barriers and an in-depth exploration into an appropriate strategy to support children with dyslexia in education. Dyslexia is a

neurodevelopmental learning disorder that affects language processing, including reading, spelling and writing skills (Orton Dyslexia Society, 1994, cited in Chisom, 2016). The International Dyslexia Association, (2026) states how dyslexia is a lifelong condition that varies in severity and is often associated with difficulties in memory, attention and planning.

To begin, it is important to understand how dyslexia is identified and diagnosed.

Dyslexia is identified within educational settings when persistent difficulties in reading, spelling, decoding and phonological processing are observed, (Daniel *et al.*, 2024). This is supported by the NHS, (2026) explaining how signs of dyslexia may include delayed speech, limited interest in language activities and reading below age expectations. Children may also struggle with number, sequencing and organisation and often read aloud slowly and hesitantly. Parents' understanding of dyslexia and its effects on their children is also considered essential for supporting children's ongoing development and progress, as it enables earlier recognition of difficulties (Abdel-Azem *et al.*, 2024). However, Dobaria and Shah (2024) highlight that schools may face challenges in early identification due to resource and training limitations. Moreover, according to Bonifacci (2024) parents may also face challenges in early identification, particularly if they have their own literacy difficulties, which can affect their awareness of identifying early signs of dyslexia. In addition to this, Colenbrander *et al.*, (2018) suggests how there is strong evidence that reading difficulties, including dyslexia, are hereditary, highlighting the importance of considering family history in early identification.

A dyslexia diagnosis is made on low reading achievement, limited response to targeted intervention over time and the exclusion of other possible causes to learning difficulties (Daniel *et al.*, 2024). Educational psychologists and additional needs teachers contribute to the assessment and support planning for children with suspected dyslexia, but cannot give a formal diagnosis (Welsh Government, 2026). This is supported by the NHS (2026), which states that assessments are carried out by educational psychologists or specialist teachers. However, a formal diagnosis is made through a specialist diagnostic assessment, which is not available through the

NHS and therefore depends on a family's ability to pay for private assessment.

Bearing this in mind, Knight (2025) suggests that diagnosis may not always be fair with factors such as socioeconomic background, gender and ethnicity influencing the likelihood of receiving a dyslexia diagnosis.

There are also several barriers which can affect the identification and support for dyslexia.

Teachers can become barriers to the identification and support of dyslexia due to missed symptoms and delayed referrals (Wilmot *et al.*, 2022). A delay in the identification process may be because teachers are not always fully aware of what specific signs to look for, as dyslexia may present in varied and subtle ways, leading to slower assessments and support for pupils (Harding *et al.*, 2023).

Furthermore, this may be linked to insufficient teacher training where teacher's may not be adequately prepared to recognise symptoms associated with dyslexia (Coughlan, 2017). This is supported by Lewis (2024), who highlights that current schools' budgets mean a reduction in staffing and resources, which could also potentially limit training opportunities for all staff members due to cost, which could also limit the ability to meet children's needs effectively.

Moreover, in addition to this, the multistage referral process can become another barrier to the identification and diagnosis process (Sanfilippo *et al.*, 2020). Following a teacher referral to an educational psychologist, pupils are assessed and recommendations are made to support the child. Formal diagnosis can only be made through a specialist diagnostic assessment which is self-funded (Welsh Government, 2026). However, families who can afford private assessments are more likely to access a quicker diagnosis, with costs ranging from £500-£700 (Daniel *et al.*, 2024). This contributes to inequalities in access to support (Harding *et al.*, 2023) which does not align with the United Nations Convention on the Rights of the Child (Article 28), which emphasises how children should have equal access to education without discrimination, (UNICEF, n.d).

These barriers can negatively affect children's wellbeing and development.

Dyslexia has been linked to emotional difficulties such as low self-esteem and anxiety which can negatively impact children's confidence, motivation and overall wellbeing. Wilmot *et al.*, (2023) supports this stating the importance of early identification and diagnosis to avoid ongoing struggles that cause stress, repeated setbacks and reduced self-esteem. This aligns with the UNCRC which states that education should help every child to reach their full potential with wellbeing being central to their development (UNICEF, n.d). This is supported by the Welsh Government (2020) who also emphasise the importance of wellbeing being central to a child's learning and development as it enables children to engage fully in their education and develop the resilience needed to overcome barriers.

To support children with dyslexia appropriate approaches and strategies are essential.

The Orton-Gillingham approach is a structured, multi-sensory, phonics based approach that supports reading development through using visual, auditory and kinaesthetic learning together (Teresa Garretson, n.d.). Valde (2024) describes it as a literacy based approach that teaches reading through stage-based phonics and word decoding, breaking language into smaller sound, symbol components and gradually building to text reading. This approach can also be similar to other phonics based interventions, including programmes such as 'Tric a Chlic' and 'Read Write Inc', which similarly aid early reading development through step by step, stage based guided instructions, which are supported by the curriculum for Wales (Welsh Government, 2025).

According to Nurjanah *et al.*, (2024) the Orton- Gillingham approach supports different learning styles, improves understanding, retention and promotes inclusion. This is supported by Gardner's theory of multiple intelligences which highlights how different approaches to learning such as linguistic, visual and bodily kinaesthetic methods can benefit different individuals, which could be helpful for those with dyslexia (Maslo, 2023).

A barrier to this approach is the significant training and resources required for effective implementation. Practitioners must complete intensive training followed by ongoing professional development which can create additional workload pressures

for staff (Maslo, 2023). Moreover, according to Lewis (2024), school budget pressures are leading to reductions in staffing which could also potentially limit schools' ability to train staff and deliver additional approaches effectively. Therefore, access to this approach may be inconsistent meaning not all learners with dyslexia are able to benefit equally from this targeted, specialist support.

However, schools have a duty to address children's needs to ensure equal access to learning which is highlighted by the Equality Act (2010). This emphasises the importance of this approach being consistently available across all educational settings for children, to promote inclusive practice and positive outcomes for learners (Department for Education, 2014).

In conclusion dyslexia identification and diagnosis are influenced by awareness and training. However, barriers can delay support and create inequality in access to specialist targeted approaches. These delays can negatively impact children's academic progress, confidence and emotional wellbeing. Therefore, early and consistent identification along with the appropriate approach and strategies are essential to ensure learners can reach their full potential.

Thank you for listening.

Are there any questions?

Zoe – To what extent should schools rely on formal diagnosis before providing support for dyslexia?

The Curriculum for Wales states that ongoing assessment is essential in identifying barriers to learning and the importance of tailoring targeted support for all learners. This suggests how ongoing assessments supports children's needs, as opposed to waiting for a formal diagnosis (Welsh Government, 2020). This is supported by the Children and Families Act (2014), which states how schools need to work with parents to identify children's needs early so that appropriate support is put in place to enable progress (Department for Education, 2014). Moreover, Knight (2025) highlights how the United Nations Convention on the Rights of Persons with Disabilities, suggests that dyslexia may not need a formal label because children's needs are individual and should be supported regardless of diagnosis to ensure

inclusive education. Therefore, schools should not rely on formal diagnosis before providing support for children with learning needs such as dyslexia.

However, a formal diagnosis of dyslexia can be important because it may help support children's self-esteem by giving them a clearer understanding of their difficulties (Wilmot *et al.*, 2022). Furthermore, even with early identification and diagnosis, ongoing monitoring and assessment are essential to track a pupil's progress, as reading difficulties may continue, highlighting schools' continual role in supporting learners (Colenbrander *et al.*, 2018).

### Cara – Are there limitations to the Orton-Gillingham approach?

The Orton-Gillingham approach is an effective approach, targeting children with difficulties in reading and understanding phonics in a multisensory way (Teresa Garretson, n.d.). However, as mentioned children with dyslexia may struggle with working memory, processing speed, numeracy, sequencing and organisational skills (NHS, 2026). This is supported by Sinha and Rajesh (2024) who explain how children with dyslexia often experience cognitive difficulties such as reduced working memory, slower processing speed and weaknesses in sequencing and organisation, which can make it harder for them to manage and complete school tasks.

Therefore, this highlights the need for various strategies and resources also being readily available in the classroom to support all children who require additional help, beyond just reading and phonological awareness. This suggests how beneficial it could be to use other strategies and interventions alongside the Orton-Gillingham approach. However, as mentioned this requires teachers to be knowledgeable within all aspects of dyslexia to identify children who require additional support, and this is not always possible as limited school budgets can restrict adequate training for all staff members which can produce inequalities in the consistency of support for learners in the classroom (Lewis, 2024). On the other hand, using in service training days to share good practice of classroom strategies and successful interventions can reduce the cost of training while sharing valuable information and expertise with all staff members. This could help to minimise inconsistencies within practice and ensure all pupils have equal access to support without relying on expensive external training (Serrat, 2017).

Josie – You mentioned various other strategies, could you explain more about this, please?

As mentioned, children with dyslexia often experience cognitive challenges, such as working memory, slower processing speed and difficulties with sequencing and organisation. This can make it more difficult for them to manage, engage and complete classroom tasks (Sinha and Rajesh, 2024). Task planners are widely used as a classroom strategy for children with dyslexia and considered helpful in completing classroom tasks. Task planners can help children break tasks into smaller steps and provide visual reminders to aid organisational skills and working memory (Atkinson, 2020). Research conducted by Anthony *et al.*, (2023) suggests that visual imagery supports memory by helping individuals recall information as mental pictures which can strengthen retention and understanding. Therefore, using images incorporated into the task planner could improve how quickly and accurately information is remembered, as visual cues enhance memory retrieval. However, this also emphasises the need for teachers to have a strong understanding of dyslexia in order to identify needs early and provide tailored appropriate support for children requiring different strategies and approaches to suit their needs (Harding *et al.*, 2023).

Thank you for your questions.

Next, I would like to hand over to Cara for her presentation on Down's Syndrome.

Cara - Down syndrome is when a baby is born with an extra chromosome, they usually get an extra chromosome by chance, this can be because of a change in the sperm or egg before the baby is born (NHS, 2023). Down syndrome is a genetic condition where babies are born with an extra chromosome. Most people are born with 23 chromosomes within each cell within their body; therefore, this is a total of 46 but individuals who are diagnosed with down syndrome have an extra copy of chromosome 21, therefore this results in their cells containing 47 chromosomes instead of 46 (Cleveland Clinic, 2023). Around 23-35 children with down syndrome are born each year, this is out of around 60,000 births, a wide range of these cases were not detected during the testing at the early stages of pregnancy (Lou *et al.*, 2020).

Chromosomes can be explained as small “packages” of genes within the body’s cell, and this can determine how the body forms and functions. The extra chromosome can impact how children’s brains and bodies develop. As babies with down syndrome grow, they often have developmental challenges, this can include being slower at learning to speak, crawl and walk (Bull,2020). Some physical signs of down syndrome are present at birth, these also become more apparent as the baby grows (Fidler 2005). Some physical signs can include flattened face, including the bridge of the nose, almond shaped eyes that slant up, short neck, poor muscles tone or loose joints, can be shorter than average height (Centers for Disease Control and Prevention (CDC), 2024).

Cleveland Clinic (2023) states that the studies are suggesting that the risk of giving birth to a child with down syndrome is more likely to increase as the mother gets older, therefore women who are over the age of 35 when conceiving are more likely to have a child who is diagnosed with down syndrome, but individuals under the age of 35 are also likely to have children with down syndrome.

When a female is pregnant, they will be given the opportunity to have a test to see if their baby has down syndrome, this will involve an ultrasound and a blood test. This will be offered between weeks 10 and 14 of pregnancy (NHS, 2023).

The prenatal screening for down syndrome has become a routine check in many countries, this gives parents early information about the fetus that they are growing, it gives parents the opportunity to make decisions about the pregnancy (Nuffield Council on Bioethics, 2025).

In some cases, fetuses that have identified to have the extra chromosome are more likely to be terminated. Within Denmark, around 95% of parents will choose to terminate their pregnancy after a prenatal down syndrome diagnosis. Many parents terminate the pregnancy due to the worry of the health, future and the impact that the diagnosis can have on the family life (Lou et al., 2020).

During traditional prenatal testing you can find out about 90% of down syndrome pregnancies, while around 5% of pregnant women will be sent for further testing for other results. The new cfDNA (NIPT) test is much more accurate way of testing for

down syndrome, this has been proven that only 0.5% gets sent for additional invasive testing (Davis, Cuckle and Yaron, 2014).

There is a diagnostic procedure available for the prenatal diagnosis of down syndrome, this is known as chronic villus sampling (cvs). This test is usually carried out during the second trimester during 15 and 22 weeks of pregnancy. This procedure carries a risk of 1% of miscarriage, but it is at nearly 100% accuracy in diagnosing down syndrome (National Down Syndrome Society, 2024)

There is a wide range of different barriers that are in place that will affect children with downs syndrome. Individuals who have down syndrome may suffer from speech delays, language difficulties that will lead to impaired communication skills. Speech delays are a common barrier that affects children with down syndrome due to this being delayed (Baxter, 2025). The development of speech for children will be affected by hearing, muscle tone, facial shape differences and challenges with memory and learning. It takes children with down syndrome longer to be able to coordinate their speech muscles and develop the accuracy that is needed for their speech (Kumin, 2006) Some other speech differences that have been noticed in children with down syndrome is that their speech is harder to understand therefore their caregivers, teachers and other children can't understand what they are trying to say, therefore this will lead to the child being frustrated (Down Syndrome Resource Foundation, 2022).

Speech and language are commonly known to be delayed within children with down syndrome, there is a wide range of barriers that can impact this. Children could suffer with their hearing skills (Kumin, 1994).The main hearing problems that children with down syndrome are likely to be affected by is otitis media, this is when they have infection in the middle of the ear. This is a common effect in children with down syndrome due their ear canals being narrower (Zalzal and Lawlor, 2023). By suffering with hearing skills, it will impact children's vocabulary and grammar, as they will be unable to hear parents/caregivers, practitioners and other children talking they will be unable to pick up what others are saying around them. Therefore, they will not develop their vocabulary and grammar (Martin et al., 2009). Some children have

bilateral or mixed hearing loss are more likely to suffer from severe hearing loss. It is important that children with down syndrome attend regular hearing test, this is done to monitor the children as their hearing is more likely to decline rather than improve (Kreicher et al., 2018).

One type of strategy that is in place to support children with down syndrome is speech and language therapy (Buckley and Bird, 2001). This is in place to help children with their language skills and it also improves their communication (**Laws and Bishop, 2003**). A speech and language specialist is a healthcare profession that assesses, diagnoses and treats speech, language and communication within babies and children. The main goal of a speech and language therapist is to ensure children can communicate to the highest of their abilities ([www.asdclinic.co.uk](http://www.asdclinic.co.uk), n.d.).

Children with down syndrome will need a speech and language programming that is specifically designed for them and ensures that it targets the areas that they need to develop. Speech and language can also be promoted within settings as most children with down syndrome will be allocated a member of staff to support the child while at school, this will allow the staff member to follow the plan from the speech and language therapist to help the child with their development (Speech and Language Therapy, n.d.).

Therefore, to conclude down syndrome is a genetic condition that affects individuals from before birth, early identification is extremely important to support the child and the family. Prenatal screenings have become more accurate and giving parents more information about the situation. When children with down syndrome are born, speech and language delays are one of the common developmental barriers that they face. This challenge can often occur from physical differences, for example reduced muscle tone, narrower ear canals and a higher likelihood of hearing loss, therefore all of these are likely to affect their effective communication skills.

Even with these barriers in place interventions can make a difference to children's development. speech and language therapy will provide structured and personalised support that will help children with their individual needs and help improve their communication skills that they need to develop and allow them to interact confidently. When in settings working together to provide the best and consistent

support for individuals to ensure they meet their needs. By understanding the condition and being able to identify barriers that are around that effects individuals is important therefore they can adapt and ensure they are implementing the appropriate interventions to ensure the child gets the best opportunities for their development.

Thank you for listening.

Gemma - Thank you Cara, are there any questions for Cara?

Zoe- Is there a form of communication that can be used for non-verbal children with down syndrome?

Children who are non-verbal with down syndrome can use sign language as a form of communication. This allows individuals to be able to communicate with others before they are talking. Research shows that by combining sign language and speech it boosts their early vocabulary and development (Clibbens, 2001). Sign language is a good way to jump start areas of the brain that is linked to speech and language development. the decision of using sign language is the parent's own decision. It is not necessary and not everyone will want to while some parents like to use it with their children. Sign language has many benefits it gives children a way of communicating with others, this can reduce the child from feeling frustrated due to not being able to communicate and express themselves (First, 2021).

Gemma - How can children with down syndrome be supported within the classroom?

Children with down syndrome will be given 1:1 support therefore they will be allocated a member of staff to support them within the classroom. Visual timetables, picture cues and structural visual routines can be used within the classroom to show the child what is happening and when it is happening. This will help the child to understand what is going on and follow a routine (Leicestershire Partnership NHS Trust, 2019).

Using sign language as well as speech to help further the communication within the classroom. This will allow the child to become less frustrated when they are trying to speak and explain something. Allowing the child to have the extra time to do things if

they need it. For example, when they are trying to talk or explain something it is important that they are not rushed. By ensuring they are given enough time this ensures the child doesn't become frustrated (Kumin 2006).

### Josie – Do women need to have the prenatal down syndrome test?

Within Nih.gov (2024) it states that they surveyed 76 women who accepted the testing process while 65 women declined the testing process. This is due to individual's preferences. Some women want the testing to ease their worries and ensure the baby is healthy, the study shows that women accepted the testing process for reassurance and to gain further knowledge about their pregnancy. The women who didn't accept the testing process stated that termination of the pregnancy was not an option and they were worried that the testing process could lead to miscarriage. Within the study it also states that the women who declined the testing knew someone who has down syndrome and felt like it wouldn't make a difference to them and they would adapt.

Moving on to Zoe for her presentation on ADHD.

Zoe - Attention Deficit Hyperactivity Disorder is a neurodevelopmental condition characterised by persistent patterns of inattention, hyperactivity, and impulsivity that interfere with functioning or development (National Institute of Mental Health, 2024a). According to Siva Prasad M.S and Rahul Kumminimana (2025), ADHD affects approximately 7–10% of school-aged children globally and can significantly impact both educational achievement and social development.

This prevalence rate, however, is not consistent across all studies. This immediately highlights a key issue in ADHD research. Prevalence is influenced by diagnostic criteria, cultural expectations, and educational systems (National Institute of Mental Health, 2024).

From an educational perspective, ADHD is significant because it affects three core areas of learning:

- Cognitive functioning (attention, memory, organisation)
- Behavioural regulation (impulsivity, hyperactivity)

- Social interaction (peer relationships and communication)

(Storebø *et al.*, 2019).

Importantly, ADHD does not indicate low intelligence. Many learners with ADHD demonstrate average or above-average cognitive ability. However, self-regulation difficulties mean they may struggle to demonstrate their knowledge in traditional classroom environment (Kofler *et al.*, 2024).

A key concept is inclusive practice. Inclusive practice refers to the removal of barriers that prevent learners from fully participating in education. It is grounded in equality, diversity, and social justice principles. Inclusion is not simply about placement in mainstream classrooms, but about meaningful participation, belonging, and achievement (Dalal Aldhilan, Rafiq and Afzal, 2025).

It is also important to introduce the concept of marginalisation. Marginalisation happens when learners are excluded because their needs are not met or they are viewed negatively (UK aid, 2018). In ADHD, this can occur through behavioural labelling, exclusionary discipline, or lack of appropriate support.

I will critically explore ADHD through:

- Identification and diagnosis
- Symptoms
- Barriers and impact on learners
- Support strategies

ADHD is diagnosed through behavioural observation, developmental history, and multi-informant reporting rather than a biological test.

The primary diagnostic framework is the Diagnostic and Statistical Manual of Mental Disorders. The DSM-5 states that symptoms must:

- Persist for at least six months
- Be present before age 12
- Occur in two or more settings (e.g., home and school)

- Cause significant impairment in functioning

(Cabral, Liu and Soares, 2020).

One key strength of the diagnostic process is its multi-agency approach. Teachers, parents, and clinicians contribute to assessment, which increases reliability by capturing behaviour across different environments. Chadwick, Buell and Goldbart (2019) highlight that this triangulation of data reduces reliance on a single observer and improves diagnostic accuracy.

Another strength is early identification. Early diagnosis allows for earlier intervention, which is strongly associated with improved educational outcomes and reduced behavioural difficulties (Perrin, Heller and Loe, 2019).

Standardised tools such as behavioural rating scales also provide structure to the diagnostic process, making it easier to compare behaviours across individuals.

Despite these strengths, ADHD diagnosis remains highly controversial in academic literature.

A major issue is subjectivity. Behaviour is interpreted differently depending on teacher expectations, classroom culture, and professional judgement. Hamed, Kauer and Stevens (2015) argue that this subjectivity can lead to inconsistency in diagnosis and referral.

There is strong evidence of gender bias in ADHD diagnosis. Skogli et al. (2013) found that boys are significantly more likely to be diagnosed than girls. This is partly because boys tend to display more externalising behaviours, while girls often present with inattentive symptoms that are less disruptive and therefore less likely to be identified in classroom settings.

Quinn and Madhoo (2014) further emphasise that ADHD in females is often underdiagnosed or misdiagnosed, leading to delayed support and increased emotional difficulties.

Another key issue is reliance on the medical model, which focuses on deficits within the child rather than environmental factors. This model can overlook how classroom

structure, teaching style, and curriculum design contribute to behavioural difficulties (Fabio *et al.*, 2023).

Al-Beltagi et al. (2025) argue that deficit-focused approaches can reinforce stigma and negative identity formation in learners.

Overall, while DSM-5 criteria provide structure and consistency, ADHD diagnosis is influenced by social, cultural, and educational bias. This raises important questions about fairness, equity, and the validity of diagnostic categories in education systems.

### Symptoms of ADHD

ADHD symptoms are grouped into two categories: inattention, hyperactivity/impulsivity.

Inattention includes difficulties sustaining attention, disorganisation, forgetfulness, and poor task completion. Hyperactivity/ impulsivity includes excessive movement and restlessness and interrupting others and acting without thinking (National Institute of Mental Health, 2024b).

However, symptom do not presentation in a uniform way.

Research highlights significant variability in how ADHD presents across individuals. For example, females are more likely to display inattentive symptoms rather than hyperactivity, contributing to under-identification in schools (Quinn and Madhoo, 2014).

Symptoms may also vary depending on environment. Structured environments may reduce symptom visibility, while unstructured settings may increase behavioural challenges.

Importantly, ADHD symptoms overlap with other conditions such as anxiety and autism, making diagnosis more complex (Froehlich *et al.*, 2011).

### Barriers and Impact on Children

Learners with ADHD experience multiple interconnected barriers that impact educational outcomes.

ADHD significantly affects executive functioning, including working memory, attention regulation, and organisational skills (Kofler et al., 2017).

This leads to difficulties following instructions, completing multi-step tasks, and managing time effectively. Dominguez and Carugno (2023) highlight that learners with ADHD may underachieve academically despite having average or above-average intelligence.

Traditional classroom environments often worsen ADHD symptoms.

Staff et al. (2023) argue that long periods of seated learning, limited movement, and high levels of sensory stimulation can reduce attention and increase behavioural difficulties.

This suggests that classroom design itself can act as a barrier to learning.

Learners with ADHD may experience difficulties in peer relationships due to impulsivity, inattentiveness, or difficulty interpreting social cues.

Ramnivas et al. (2024) found that these challenges can lead to peer rejection, isolation, and conflict. Over time, repeated negative interactions can contribute to low self-esteem and emotional difficulties such as anxiety.

School systems often rely on standardised expectations of behaviour and achievement.

Learners with ADHD may be disproportionately disciplined for behaviours linked to their condition, such as restlessness or interrupting. Cheesman et al. (2022) argue that this reflects systemic inequality within educational institutions.

Misconceptions about ADHD can result in learners being labelled as “lazy,” “disruptive,” or “unmotivated.”

Richardson et al. (2015) highlight that such labelling contributes to stigma, which can negatively affect identity, motivation, and engagement with learning.

These barriers interact and reinforce one another.

For example:

- Cognitive difficulties may lead to behavioural issues
- Behavioural issues may result in punishment
- Punishment may reduce self-esteem
- Reduced self-esteem may further impact engagement

This creates a cycle of educational disadvantage (Almeida *et al.*, 2021).

While some research emphasises neurological causes, other research highlights environmental contributions. This comparison supports a more balanced view: ADHD difficulties are shaped by both internal neurodevelopmental factors and external educational environments (Siva Prasad M.S and Rahul Kumminimana, 2025).

Inclusive education is supported by global and national frameworks.

A key international milestone is the Salamanca Statement. This statement, developed by 92 governments and 25 international organisations, declared that all children should be educated in mainstream schools wherever possible.

It established inclusion as a fundamental right, not a privilege (UNESCO, 1994). UNESCO promotes inclusive education as a human rights issue, emphasising participation, equity, and access.

In Wales the Equality Act 2010 requires schools to make reasonable adjustments for learners with disabilities, including ADHD.

This may include:

- Adjusted teaching methods
- Modified assessments
- Classroom support strategies

(Welsh Government, 2025).

Despite legal protections, discrimination still occurs.

Discrimination may include:

- Exclusion from activities
- Punitive disciplinary measures
- Lack of appropriate support

This can lead to marginalisation, where learners are excluded from meaningful participation in education (Duarte *et al.*, 2022).

Although policies support inclusion, implementation is inconsistent.

Schools may have legal obligations but lack resources, training, or time to implement effective inclusive practice.

This creates a gap between policy and practice (Dalal Aldhilan, Rafiq and Afzal, 2025).

### Support Strategy: Structured Routine Systems

One effective strategy for supporting learners with ADHD is structured classroom routines.

This includes:

- Predictable daily schedules
- Clear and simple instructions
- Task breakdown into smaller steps
- Visual timetables
- Positive reinforcement systems

(Welsh Government, 2025).

This approach is grounded in behaviourist theory, particularly the work of B. F. Skinner.

Skinner's operant conditioning theory suggests that behaviour is shaped by reinforcement. Positive reinforcement increases the likelihood of desired behaviours being repeated.

Benefits of structured routines

Frolli et al. (2023) and Thomas and Karuppali (2022) found that structured environments improve:

- Attention regulation
- Behaviour management
- Task completion
- Academic performance

### Challenges

However, structured interventions also have limitations.

Ryan et al. (2022) highlight that inconsistent implementation reduces effectiveness. Teacher training is therefore essential.

Li, Pei and Zhao (2025) argue that over-structured environments may reduce creativity and autonomy.

### Critical evaluation

Structured routines are most effective when balanced with flexibility, allowing for:

- Student choice
- Differentiation
- Emotional support

This aligns with modern inclusive education models that emphasise adaptability rather than rigid behavioural control (Selman and Dilworth-Bart, 2023).

In conclusion, ADHD is a complex neurodevelopmental condition that significantly impacts education.

Diagnosis is structured through DSM-5 criteria but influenced by subjectivity, cultural expectations, and gender bias. Symptoms vary widely across individuals, reinforcing the need for flexible interpretation.

Learners with ADHD face multiple barriers, including cognitive, environmental, social, institutional, and attitudinal challenges. These barriers often interact, leading to cycles of disadvantage and potential marginalisation.

However, inclusive education frameworks such as the Salamanca Statement and Equality Act 2010 provide a foundation for addressing these inequalities.

Structured classroom routines offer an effective support strategy, but they must be implemented flexibly and inclusively to avoid over-reliance on behaviour control.

Ultimately, ADHD should not be understood solely as a deficit within the learner. Instead, it should be viewed as a difference that requires adaptation within educational systems.

A truly inclusive approach recognises diversity, reduces stigma, and ensures that all learners are supported to reach their potential.

Thank you for listening.

Gemma - Thank you Zoe, are there any questions for Zoe?

**Josie- Why is ADHD sometimes difficult to diagnose in children?**

ADHD can be difficult to diagnose in children because there is no single biological or medical test that confirms the condition. Instead, diagnosis is based on behavioural observations, developmental history, and information gathered from multiple individuals, including parents, teachers, and healthcare professionals (NHS, 2025). This means that the process can be subjective, as behaviours may be interpreted differently depending on the observer and the environment. For example, behaviour that one teacher considers disruptive or hyperactive may be viewed by another as normal childhood behaviour.

Another challenge is that ADHD symptoms often overlap with other conditions, such as anxiety disorders, autism spectrum disorder, learning difficulties, or emotional and behavioural disorders. This can make it difficult for professionals to determine whether behaviours are caused by ADHD itself or another underlying issue (Craig *et al.*, 2015). In some cases, children may receive a delayed diagnosis or be misdiagnosed.

Gemma - What barriers do children with ADHD face in school?

Children with ADHD face a range of interconnected barriers within educational settings, which can significantly affect both their academic achievement and social development. One major barrier is related to executive functioning difficulties, including problems with attention regulation, working memory, organisation, and time management. These difficulties can make it challenging for learners to follow instructions, complete tasks, and maintain concentration during lessons. As a result, many children with ADHD may underachieve academically despite having average or above-average intelligence.

Environmental barriers within schools can also contribute to difficulties. Traditional classroom environments are often highly structured around expectations of sitting still, sustained concentration, and quiet teacher-led learning. These expectations may conflict with the needs of learners with ADHD, who often benefit from movement, stimulation, and more interactive approaches to learning. Noisy or visually distracting classrooms may further reduce concentration and increase frustration.

#### Cara - Why are structured routines helpful for learners with ADHD?

Structured routines are considered an effective support strategy for learners with ADHD because they provide consistency, predictability, and clarity within the learning environment. Many children with ADHD experience difficulties with executive functioning, including organisation, attention control, and task management. Structured routines help reduce these difficulties by creating clear expectations and reducing uncertainty throughout the school day.

Examples of structured classroom strategies include visual timetables, step-by-step instructions, predictable schedules, task breakdown, and positive reinforcement systems. These approaches can reduce cognitive overload and help learners focus more effectively on tasks. For example, breaking larger tasks into smaller, manageable steps can make work feel less overwhelming and increase the likelihood of task completion.

Gemma - Thank you Zoe

Gemma - And finally, Josie's presentation on Autism.

## WHAT IS AUTISM

### INTRODUCTION

Autism spectrum disorder is a lifelong disability that affects children with communicating, how they behave and learn. According to (Spitzer, 2006) autism spectrum disorder (ASD) is a condition that affects a child's language and communication skills, their social interactions and how they display repetitive behaviours and have less interest in learning. Research has shown in recent studies that it affects 1-150 children and, in more boys, than girls. It is a neurodevelopmental condition it affects their social communication with others, and they have little interest with objects (Hymen et al, 2020) cited in (Wang and Wang, 2024).

### SIGNS AND SYMPTOMS

Children as young as two years old can show signs and symptoms of autism. Early intervention for children, is that to aim to help them with their social communication and basic skills. Research findings suggest that earlier interventions and intensive treatment can result in better outcomes for the child (Paediatrics and child health, 2026). Signs of autism can include repetitive movements such as lining up toys, having an interest in a certain toy or activity. They can get upset in minor changes and can repeat some words. They can also experience delays in their speech and language, their movement skills, they can be hyperactive and have impulsive behaviour, unusual sleeping, they can experience different in moods and anxiety (autism spectrum disorder, 2024). Furthermore, (NHS.UK,2022) says a sign of not responding to their name, avoid eye contact with others, no facial expression towards others such as no smiling, no speech and repetitive movements such as flapping of hands. They do not role play with others or on own. According to (Cavalcante et al, 2024, p.69) it is very important to have the knowledge and skills to recognise early signs and symptoms of autism, to assess and intervene early, and to refer children to the right professionals by working together with practitioners.

### IDENTIFICATION AND DIAGNOSIS

According to (Hashmi, 2025) to get a diagnosis of autism in the early years is to be assessed by the professional team, such as health visitors, speech and language and other health professionals. The assessment would be to observe the child for a period, ask if there is a family history of autism, to have a physical examination. Practitioners to write up reports how they behave at nursery and to see if they display the same at home and to test for any other medical conditions. Research has shown that children with autism can inherit a gene from family members, and another sibling is more likely to have autism. Some research has suggested that a child exposed to environmental trigger, which can be caused by being born premature, exposed to alcohol or medication while in the womb (NHS Oxford Health, 2020, p.3). Furthermore, (NHS Oxford Health, 2020, p.13) to support the child is to set a routine each day, same time and place for meals, giving them snacks frequently and having to keep same time for bed routine every night. However, (Calvacante et al, 2024, p.68) identifying autism early in childhood, is to get the right help and support from the right professionals. This is important in the early years, that they can get referred and receive the best support and lead them to develop their potential and their quality of life for their future. Furthermore, (Calvacante et al, 2024, p.70) says that studies have shown that all professionals from different fields, can provide a holistic view of the child needs and to care for the overall symptoms of autism. To support and continue to assess and to allow the child to progress and make changes were needed.

## BARRIERS

Children with autism experience barriers, which are sensory issues, education, healthcare obstacles and communication and social interactions. (National Autistic Society, 2026) evidence shows there are some difficult impacts on communication, for a child to make and maintain friends, feeling anxious about being around others. Can feel frustrated and embarrassed, they can feel isolated and feeling lonely. Children struggle both verbal and non-verbal which can have an impact in their development and their daily life. Early interventions by professionals can help and support children, such as speech and language, play based social learning programmes and talking therapies which all understand the individual style

of communication. However, (Early Years Alliance, 2025) says 'removing barriers and having a reflection approach, identifying and addressing physical, emotional and social obstacles that may prevent participation'. (Westmarland and Furness, no date) the early years foundation stage curriculum, for the inclusive practice is to focus on changing the environment, to adapt and support children with their development needs in order, to learn and can take part in activities with others. Structured support, resources and funding are needed to support settings and schools. However, knowledge and understanding are the key factors by practitioners and teachers for a successful inclusive education (Roberts and Simpson, 2016) cited in (Serratore et al, 2024). Furthermore, (Mathieson, 2015, p.10) to overcome barriers is to highlight and recognise the child's strengths. Practitioners and families need to communicate about their child's progress, and work together with an inclusive attitude, in enabling environment that allows access and opportunities for each child to learn and to benefit them. UNCRC (2016) Article 28, states that every child has the right to education with achieving this right and to equal opportunity to make educational and vocational information and guidance available to all children.

### STRATEGY

In an inclusive environment every child who has additional learning needs, should have the same rights to learn and grow and to reach their potential goal in life. In the early years setting, the environment should be adapted for every individual child and to suit their needs (Manikiza, 2020, p.24). Furthermore, (Gibson et al, 2021) suggest that evidence has shown that play-based interventions such as role play can help practitioners to identify and support children with autism. Offering all children opportunities for them to explore and discover and to take risks in the early years setting can help to learn and thrive (Birth to 5 matters, 2026). Strategies to help children with their communication skills by using flash cards to identify pictures and colours. Using symbols and gestures by using simple words. Encourage children to engage with others in smaller groups or just one to one, interaction with the practitioner to play games that involve taking in turns (manikiza, 2024, p.27). There is no cure for autism but there are options, and ways to help children and their

families to live and cope with the diagnosis. There is medication to help with extreme cases, such as self-harm, aggression and repetitive behaviours. There are other treatments that can help, speech therapy, occupational therapy and educational. Family training is to help and support family members to live with and support their child with autism spectrum disorder (The Who, 2019). A strategy is to train autistic children to act like non-autistic is often referred as 'masking' in learning communication styles, but masking has been found to be exhausting, and it can cause them stress and anxiety, which could lead to having mental health problems later in life (National autistic society, 2026).

### CONCLUSION

Overall, autism is a condition that affects children in their development, communication, behaviour and social skills. However, every child is unique, and their behaviour and communication can be displayed differently. With early interventions and support from the right professionals, children can learn and achieve their goals in life. Communities and professionals should continue to encourage and support awareness for children and families.

Thank you for listening.

Gemma -Thank you Josie, are there any questions for Josie?

Zoe– What strategies work best for supporting children with autism?

The strategies are to designate a quiet area and a safe space in the setting; the strategy should include self-regulation and provide a safe and calming environment for children. When displaying work or wall features, aim to use neutral colours to stimulate them and keep it simple and meaningful. To ensure that learning environments are calm and supportive, and to make them feel they belong, and that children with autism are given opportunities to speak and to be heard (NEN, UK, 2022, p.19-20). Research suggests that parents can effectively use strategies to help their child. Involving parents and supporting them is to hold messages, in keeping them informed of every day of their learning outcomes. Support parents to

understand their strengths and their needs and to reach their goals (the educational hub, 2023).

**Cara– How can practitioners work closely with parents after concerns are noticed?**

By building and forming a trusting friendship with parents, so that they will find it easier to speak openly, they will feel more comfortable and knowing that they would feel more supported by the practitioners (Freud, no date). A pre assessment information and support would be given to parents, then the Information after assessment would be shared with parents and given support after being diagnosed with autism. They would be offered a service to make referrals to help families understand and get the right care for their child and to support them (Green et al, 2022). Furthermore, (Help for early years providers, 2021) says research shows, parents and practitioners working together is very important to support their child and offer a range of opportunities to help with their child's learning journey.

**Gemma - how can practitioners create an inclusive environment for children with autism?**

An inclusive environment is important that all children, even with autism and other disabilities, and backgrounds, that they feel valued and supported. The environment feels welcoming, they feel safe and belonged to help them develop their skills. Create a safe space in the environment, to build relationships and trust with children and to work alongside parents to help and support their child through their learning journey (GOV.UK, 2025). An inclusive environment gives children with autism equal opportunities for learning and development. For every child it works for all inclusion, making adaptations so that children with autism can take part fully and feel part of the group (Care Learning, 2026).

Thank you for your questions.

Gemma - To summarise, this webinar has included presentations which have critically evaluated how Dyslexia, Down's Syndrome, ADHD and Autism are identified and diagnosed. Potential barriers have been considered and explored along with the appropriate strategies available to support children with these additional learning needs in education. I would like to invite questions for the final time this evening?

ECEY6006

2414374 -Gemma Burton

2405978 -Josie Thornton

2405002 -Cara Rowcliffe

2405003 -Zoe Burke-Coles

Cara – no questions from me

Zoe – no more questions from me

Josie – thank you, no questions from me.

Gemma – and thank you, no more questions from me

Gemma - Thank you Cara, Zoe and Josie for presenting this evening and the audience for listening.

### Reference List

A Down's Syndrome Association publication (n.d.) *Strategies and interventions: ABC strategies, learning profile, do's and don'ts, behaviour series*. Available at: <https://www.downs-syndrome.org.uk/wp-content/uploads/2020/09/3.-Strategies-and-interventions.pdf> (Accessed: 3 May 2026).

Abdel-Azem, D.I, Ahmed, LA, Mansy, A.M.A and Ali, M.J.E. (2024) 'Parents' Knowledge and Attitude Regarding Dyslexia: Cross-sectional survey', *International Egyptian Journal of Nursing Sciences and Research*, 4(2), pp.484-503.  
<https://doi.org/10.21608/ejnsr.2024.263578.1356>

Almeida, I.L. de L. *et al.* (2021) 'Social Isolation and Its Impact on Child and Adolescent Development: a Systematic Review', *Revista Paulista De Pediatria*, 40(40). Available at: <https://doi.org/10.1590/1984-0462/2022/40/2020385>

Anthony, K., Hoo Keat Wong, Lim, A., Sow, F. and Janssen, S.M.J. (2023) 'Examining the roles of visual imagery and working memory in the retrieval of autobiographical memories using a dual-task paradigm', *The quarterly journal of experimental psychology/Quarterly journal of experimental psychology*, 77(3), pp.447–460. doi:<https://doi.org/10.1177/17470218231200724>

ASD Clinic (n.d.) *Speech and Language Therapy | Services | ASDclinic.co.uk*. Available at: <https://www.asdclinic.co.uk/services/speech-and-language-therapy.php> (Accessed: 8 May 2026).

Atkinson, D. (2020) *Strategies to support students' working memory and retention*. Available at: <https://schools.oxfordshire.gov.uk/sites/default/files/2025-07/strategiestosupportstudentsworkingmemoryandretention.pdf> (Accessed: 2 May 2026).

Autism Spectrum Disorder (ASD) (2024) *Signs of Autism Spectrum Disorder*. Available at: <https://www.cdc.gov/autism/signs-symptoms/index.html> (Assessed: 09 May 2026).

Baxter, D.R. (2025) *Speech, language & communication in Down syndrome: overview for SLTs*. Down Syndrome UK. Available at: [https://downsyndromeuk.co.uk/blog/speech-language-communication-profile-down-syndrome/?utm\\_source=copilot.com](https://downsyndromeuk.co.uk/blog/speech-language-communication-profile-down-syndrome/?utm_source=copilot.com) (Accessed: 10 May 2026).

Birth to 5 matters (2026) *Inclusive practice and Equalities*. Available at: <https://birthto5matters.org.uk/inclusive-practice-and-equalities> (Assessed: 09 May 2026).

Bonifacci, P., Montuschi, M., & Lami, L. and Snowling, M. (2014) 'Parents of children with dyslexia: Cognitive, emotional and behavioural profile.', *Dyslexia*, 20(2), pp. 175-190. <http://doi.org/10.1002/dys.1469>

Buckley, S. and Bird, G. (2001) *Speech and language development for children with Down syndrome (5–11 years)*. Portsmouth: Down Syndrome Education International (Accessed: 3 May 2026).

Bull, M. (2020) 'Down syndrome', *Pediatrics*, 147(5), pp. 1–24 (Accessed: 5 May 2026).

Cabral, M.D.I., Liu, S. and Soares, N. (2020) 'Attention-deficit/hyperactivity disorder: diagnostic criteria, epidemiology, risk factors and evaluation in youth', *Translational Pediatrics*, 9(S1), pp. S104–S113. Available at: <https://doi.org/10.21037/tp.2019.09.08>

Care Learning (2026) *How to create an inclusive environment in the early years setting*. Available at: <https://carelearning.org.uk/early-years/equality-and-diversity-and-inclusion-in-early-years/how-to-create-an-inclusive-environment-in-the-early-years-setting/#goggle-vignette> (Assessed: 09 May 2026).

Centers for Disease Control and Prevention (CDC) (2024) *Down Syndrome. Birth Defects*. Available at: <https://www.cdc.gov/birth-defects/about/down-syndrome.html> (Accessed: 6 May 2026).

Chadwick, D., Buell, S. and Goldbart, J. (2019) 'Approaches to communication assessment with children and adults with profound intellectual and multiple disabilities', *Journal of Applied Research in Intellectual Disabilities*, 32(2), pp. 336–358. Available at: <https://doi.org/10.1111/jar.12530>

Chan, W.W.Y., Shum, K.K. and Sonuga-Barke, E.J.S. (2022) 'Attention-deficit/hyperactivity disorder (ADHD) in cultural context: Do parents in Hong Kong and the United Kingdom adopt different thresholds when rating symptoms, and if so why?', *International Journal of Methods in Psychiatric Research*, 31(3). Available at: <https://doi.org/10.1002/mpr.1923>

Cheesman, R. *et al.* (2022) 'How interactions between ADHD and schools affect educational achievement: a family-based genetically sensitive study', *Journal of Child Psychology and Psychiatry*, 63(10), pp. 1174–1185. Available at: <https://doi.org/10.1111/jcpp.13656>

Chisom, E. (2016) *Understanding Dyslexia*. Available at: <https://doi.org/10.13140/RG.2.1.3292.4566> (Accessed: 22 April 2026).

Cleveland Clinic (2023) *Down Syndrome*. Available at: <https://my.clevelandclinic.org/health/diseases/17818-down-syndrome> (Accessed: 6 May 2026).

Clibbens, J. (2001) 'Signing and lexical development in children with Down syndrome', *Down Syndrome Research and Practice*, 7(3), pp. 101–105. doi: <https://doi.org/10.3104/reviews.119> (Accessed: 11 May 2026).

Colenbrander, D., Ricketts, J. and Breadmore, H. (2018) 'Early identification of dyslexia: Understanding the issues', *Language, Speech and Hearing Services in Schools*, 49. Pp.817-828. Available at: [https://doi.org/10.1044/2018\\_Ishss-dyslc-18-0007](https://doi.org/10.1044/2018_Ishss-dyslc-18-0007)

Coughlan, S. (2017) 'Schools have no funds to train teachers, says study', *BBC News*. Available at: <https://www.bbc.co.uk/news/education-38827188> (Accessed: 26 April 2026).

Craig, F. *et al.* (2015) 'Overlap Between Autism Spectrum Disorders and Attention Deficit Hyperactivity Disorder: Searching for Distinctive/Common Clinical Features', *Autism Research*, 8(3), pp. 328–337. Available at:  
<https://doi.org/10.1002/aur.1449>

Crespín, J. *et al.* (2026) 'Does Attention-Deficit/Hyperactivity Disorder Predominant Presentation Matter? Examining Functional and Symptom Changes After Cognitive Behavioural Therapy', *Clinical Psychology & Psychotherapy*, 33(2). Available at:  
<https://doi.org/10.1002/cpp.70271>

Dalal Aldhilan, Rafiq, S. and Afzal, A. (2025) 'Navigating Barriers and Building Pathways: Inclusive Education for Children with Special Needs', *F1000Research*, 14, p. 1203. Available at: <https://doi.org/10.12688/f1000research.172211.2>

Daniel, J., Clucas, L and Wang, H., H (2024) 'Identifying students with dyslexia: exploration of current assessment methods', *Annals of Dyslexia*. Available at:  
<https://doi.org/10.1007/s11881-024-00313-y>

Davis, C., Cuckle, H. and Yaron, Y. (2014) 'Screening for Down syndrome – incidental diagnosis of other aneuploidies', *Prenatal Diagnosis*, 34(11), pp. 1044–1048. doi: 10.1002/pd.4420 (Accessed: 5 May 2026).

Department For Education (2014) *The Equality Act 2010 and Schools*. p.9. Available at:  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/315587/Equality\\_Act\\_Advice\\_Final.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/315587/Equality_Act_Advice_Final.pdf) (Accessed: 26 April 2026).

Department of Education (2014) *The young person's guide to the Children and Families Act 2014*. Available at:

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/359681/Young Person s Guide to the Children and Families Act.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/359681/Young_Person_s_Guide_to_the_Children_and_Families_Act.pdf)

Devarakonda, C. (2025) *Diversity and Inclusion in Early Childhood: An Introduction*. 2nd ed. London: Sage Publications Ltd.

Dobaria, H. and Shah, M. (2024) 'Assessing primary school teachers' knowledge and awareness of Dyslexia: A comprehensive evaluation of identification skills, intervention strategies, and classroom support practices', *Educational Administration Theory and Practice journal*, 30(1). doi:<https://doi.org/10.53555/kuey.v30i1.10254>

Down Syndrome Resource Foundation (2022) *Speech*. Available at: <https://dsrf.org/resources/information/communication/speech/> (Accessed: 6 May 2026).

Duarte, C. dP. *et al.* (2022) 'Punitive school discipline as a mechanism of structural marginalization with implications for health inequity: A systematic review of quantitative studies in the health and social sciences literature', *Annals of the New York Academy of Sciences*, 1519(1), pp. 129–152. Available at: <https://doi.org/10.1111/nyas.14922>

Early Years Alliance (2025) *Equality and Inclusive Practice early years alliance*. Available at: <https://www.eyalliance.org.uk/advice-and-information/early-years-practice/equality-and-inclusive-practice/> (Assessed: 9 May 2026).

Fabio, R.A. *et al.* (2023) 'ADHD symptoms increase perception of classroom entropy and impact teacher stress levels', *Children (Basel)*, 10(6), pp. 1082–1082. Available at: <https://doi.org/10.3390/children10061082>

Family First Homecare (2021) *My child has special needs – what are the benefits of using sign language?* Available at: <https://myfamilyfirsthc.com/blog/my-child-has-special-needs-what-are-the-benefits-of-using-sign-language/> (Accessed: 11 May 2026).

Fidler, D.J. (2005) 'The emerging Down syndrome behavioural phenotype in early childhood', *Infants & Young Children*, 18(2), pp. 86–103 (Accessed: 5 May 2026).

Freud, A. (n.d) *Sharing Concerns about a child with parents and carers*. Available at: <https://www.annafreud.org/resources/under-fives-wellbeing/sharing-concerns-about-a-child/> (Assessed: 9 May 2026).

Froehlich, T.E. *et al.* (2011) 'Update on Environmental Risk Factors for Attention-Deficit/Hyperactivity Disorder', *Current Psychiatry Reports*, 13(5), pp. 333–344. Available at: <https://doi.org/10.1007/s11920-011-0221-3>

Gibson, J. L., Pritchard, E., & de Lemos, C. (2021) 'Play-based interventions to support social and communication development in autistic children aged 2–8 years: A scoping review', *Autism & Developmental Language Impairments*, 6. Available at: <https://journals.sagepub.com/doi/full/10.1177/23996415211015840> (Assessed: 9 May 2026).

Green, J., Leadbitter, K., Ainsworth, J. and Bucci, S. (2022) *An integrated early care pathway for autism*. Available at: [https://doi.org/10.1016/S1352-4642\(22\)00037-2](https://doi.org/10.1016/S1352-4642(22)00037-2) (Assessed: 9 May 2026).

Harding, S., Chauhan-Sims, M., Oxley, E. and Nash, H.M. (2023) 'A Delphi study exploring the barriers to dyslexia diagnosis and support: A parent's perspective', *Dyslexia* 29(3). doi:<https://doi.org/10.1002/dys.1743>

Hashmi, S. (2025) *Autism Spectrum Disorder Bupa UK*. Available at: <https://www.bupa.co.uk/health-information/neurodiversity/autism#diagnosis> (Assessed: 9 May 2026).

Help for Early Years providers (2021) *Working in partnership with parents and carers*. Available at: <https://help-for-early-years-providers.education.gov.uk/support-for-practitioners/working-in-partnership-with-parents-and-carers> (Assessed: 9 May 2026).

India TV News (2024) *World Down Syndrome Day 2024: What is Down syndrome? Know its causes, prevention, early diagnosis and more*. Available at: <https://www.indiatvnews.com/health/world-down-syndrome-day-2024-what-is-down-syndrome-know-its-causes-prevention-early-diagnosis-and-more-2024-03-21-922548> (Accessed: 10 May 2026).

International Dyslexia Association. (2026) *Explanation: 2025 dyslexia definition explanation*. Available at: <https://dyslexiaida.org/explanation-2025-dyslexia-definition-explanation/> (Accessed: 22 April 2026).

*Journal of Humanities and Social Science*. (10SR-JHSS) Volume 29 issue5/ series 5/ (2024) p.66-77. Available at: [www.10srjournals.org/10sr-jhss/papers/vol29.issue5/ser5/m2905056670.pdf](http://www.10srjournals.org/10sr-jhss/papers/vol29.issue5/ser5/m2905056670.pdf) (Assessed: 9 May 2026).

Knight, C. (2025) 'Dyslexia: Identity, labelling and its place in inclusive education', *British Journal of Special Education*. doi:<https://doi.org/10.1111/1467-8578.70028>

Kofler, M.J. *et al.* (2024) 'Executive function deficits in attention-deficit/hyperactivity disorder and autism spectrum disorder', *Nature Reviews Psychology*, 3(10), pp. 1–19. Available at: <https://doi.org/10.1038/s44159-024-00350-9>

Kreicher, K.L., Weir, F.W., Nguyen, S.A. and Meyer, T.A. (2018) 'Characteristics and progression of hearing loss in children with Down syndrome', *The Journal of Pediatrics*, 193, pp. 27–33.e2. doi: 10.1016/j.jpeds.2017.09.053 (Accessed: 5 May 2026).

Kumin, L. (1994) *Communication skills in children with Down syndrome: A guide for parents*. Bethesda, MD: Woodbine House (Accessed: 5 May 2026).

Kumin, L. (2006) 'Speech intelligibility and childhood verbal apraxia in children with Down syndrome', *Down Syndrome Research and Practice*, 10(1), pp. 10–22. doi: 10.3104/reports.301 (Accessed: 4 May 2026).

Laws, G. and Bishop, D.V.M. (2003) 'A comparison of language abilities in adolescents with Down syndrome and children with specific language impairment', *Journal of Speech, Language, and Hearing Research*, 46(6), pp. 1324–1339 (Accessed: 4 May 2026).

Leicestershire Partnership NHS Trust (2019) *Children's Speech and Language Therapy Service: Visual Timetables*. Available at: <https://www.leicspart.nhs.uk/wp-content/uploads/2019/02/Visual-Timetable-ammended.pdf> (Accessed: 11 May 2026).

Lewis, B. (2024) '*Wales school cuts: Head teachers face budget deficits warning*', BBC News. Available at: <https://www.bbc.co.uk/news/articles/cr546v39qldo> (Accessed: 26 April 2026).

Lou, S., Lanther, M.R., Hagenstjerne, N., Bjørn Petersen, O. and Vogel, I. (2020) "This is the child we were given": A qualitative study of Danish parents' experiences of a prenatal Down syndrome diagnosis and their decision to continue the pregnancy', *Sexual & Reproductive Healthcare*, 23, p. 100480. doi: 10.1016/j.srhc.2019.100480 (Accessed: 8 May 2026).

Manikiza, J. (2020) *Autism- A Guide for early years settings*. Available at: <https://neurodivergencewales.org/wp-content/uploads/2020/08/A-Guide-for-early-years-settings-Eng.pdf> (Assessed: 9 May 2026).

Martin, G.E., Klusek, J., Estigarribia, B. and Roberts, J.E. (2009) 'Language characteristics of individuals with Down syndrome', *Topics in Language Disorders*, 29(2), pp. 112–132. doi: 10.1097/tld.0b013e3181a71fe1 (Accessed: 8 May 2026).

Maslo, I. (2023) 'Gardner's theory of multiple intelligences in the learning process', *Sworld-US conference proceedings*, (usc21-01), pp.85–88.

doi:<https://doi.org/10.30888/2709-2267.2023-21-01-02>

Mathieson, K. (2015) *Inclusion in the early years*. McGraw-Hill Education.

Mowlem, F. *et al.* (2019) 'Do different factors influence whether girls versus boys meet ADHD diagnostic criteria? Sex differences among children with high ADHD symptoms', *Psychiatry Research*, 272, pp. 765–773. Available at:

<https://doi.org/10.1016/j.psychres.2018.12.128>

National Autistic Society (n.d) *Autism and Communication*. Available

at: <https://www.autism.org.uk/advice-and-guidance/about-autism/autism-and-communication> (Assessed: 9 May 2026).

National Down Syndrome Society (2024) *Understanding a diagnosis of Down syndrome*. Available at: <https://ndss.org/lifespan/understanding-a-diagnosis-of-down-syndrome> (Accessed: 2 May 2026).

National Institute of Mental Health (2024) *Attention-Deficit/Hyperactivity disorder: What you need to know*, National Institute of Mental Health. U.S. Department of Health and Human Services. Available at:

<https://www.nimh.nih.gov/health/publications/attention-deficit-hyperactivity-disorder-what-you-need-to-know> (Accessed: 5 May 2026).

NEN.UK (2022) *Strategies for supporting very young children in the autism spectrum in the early years*. Available at: <https://www.nen.org.uk/sites/default/files/2022-04/SASS-strategies-for-supporting-children-on-the-autism-spectrum-in-the-early-years.pdf> (Assessed: 9 May 2026).

NHS (2023) *Down's Syndrome*. Available at: <https://www.nhs.uk/conditions/downs-syndrome/> (Accessed: 4 May 2026).

NHS (2025) *ADHD in children and young people*, *nhs.uk*. Available at: <https://www.nhs.uk/conditions/adhd-children-teenagers/> (Accessed: 5 May 2026).

NHS Oxford Health (2020) *Autism Spectrum Disorder pack for parents and carers*. Available at: <https://www.oxfordhealth.nhs.uk/wp-content/uploads/2020/03/OH-071.19.ASD-pack-for-parents-and-carers.pdf> (Assessed: 09 May 2026).

NHS website (2026) *Dyslexia in children*. Available at: <https://www.nhs.uk/conditions/dyslexia-in-children/> (Accessed: 26 April 2026).

Nuffield Council on Bioethics (2025) *Non-invasive prenatal testing: ethical issues*. Available at: <https://www.nuffieldbioethics.org/publication/non-invasive-prenatal-testing-ethical-issues/> (Accessed: 2 May 2026).

Nurjanah, Kansil, I.C., Masturoh, I. and Hanwar, D. (2024) 'Multisensory learning: improving conceptual understanding through an intuitive sensory approach', *Journal of Pedagogi*, 1(6), pp.56–64. doi:<https://doi.org/10.62872/7ygyx095>

Olsson, Å. and Hansson, S. (2025) 'Designing for diversity: teachers' strategies for creating inclusive learning environments', *Learning Environments Research*, 29(1). Available at: <https://doi.org/10.1007/s10984-025-09561-0>

Pediatrics and Child Health (2026) *The value of early intervention of children with autism*. Available

at: [https://www.paediatricandhealthjournal.co.uk/article/S1751-7222\(18\)30114-8/abstract](https://www.paediatricandhealthjournal.co.uk/article/S1751-7222(18)30114-8/abstract) (Assessed: 9 May 2026).

RCSLT (n.d.) *Ask the Experts: Down's syndrome*. Available at:

<https://www.rcslt.org/wp-content/uploads/2022/04/Ask-the-Experts-Downs-syndrome-bulletin-august-2020.pdf> (Accessed: 6 May 2026).

Sanfilippo, J., Ness, M., Petscher, Y., Rappaport, L., Zuckerman, B. and Gaab, N. (2020) 'Reintroducing dyslexia: Early identification and implications for pediatric practice', *Pediatrics*, 146(1), p.e20193046. doi:<https://doi.org/10.1542/peds.2019-3046>

Selman, S. and Dilworth-Bart, J. (2023) 'Routines and Child development: a Systematic Review', *Journal of Family Theory and Review*, 1(1). Available at: <https://doi.org/10.1111/jftr.12549>

Serrat, O. (2017) 'Identifying and Sharing Good Practices', in Knowledge Solutions, Singapore: Springer, pp.843–846. doi:[https://doi.org/10.1007/978-981-10-0983-9\\_92](https://doi.org/10.1007/978-981-10-0983-9_92)

Serratore, T., Berdelmann, K., & Schmiedek, F. (2025) Which barriers do autistic and non-autistic children experience in inclusive classrooms? An experience sampling approach', *European Journal of Special Needs Education*, 40(6), 1060–1075. <https://doi.org/10.1080/08856257.2025.2474842> (Assessed: 9 May 2026).

Sinha, P. and Rajesh, R. (2024) 'Developmental dyslexia; An analysis of interventions through cognitive techniques and technology (1990-2023)', *Shodhkash: Journal of Visual and Performing Arts*, 5. Available at: <https://doi.org/10.29121/shodhkosh.v5.i6.2024.3169> (Accessed: 2 May 2026).

Siva Prasad M.S and Rahul Kumminimana (2025) 'Attention-deficit/hyperactivity disorder: insights, advances and challenges in research and practice', *Postępy Psychiatrii i Neurologii*, 34(3), pp. 196–206. Available at: <https://doi.org/10.5114/ppn.2025.153717>

Speech and Language Therapy (n.d.) *Role of SLT for primary school children*. Available at: <https://www.downs-syndrome.org.uk/wp-content/uploads/2021/07/Role-SLT-for-primary-school-children-15.7.21.pdf> (Accessed: 9 May 2026).

Spitzer, J. (2026) *Autism spectrum disorders (ASD) in children; Early signs, diagnosis, and treatment options*. Available at: <https://www.bransonhealth.com/health-news/autism-spectrum-disorders-asd-in-children-early-signs-diagnosis-/> (Assessed: 9 May 2026).

Storebø, O.J. *et al.* (2019) 'Social skills training for attention deficit hyperactivity disorder (ADHD) in children aged 5 to 18 years', *Cochrane Database of Systematic Reviews*, 6(6). Available at: <https://doi.org/10.1002/14651858.cd008223.pub3>

Teresa Garretson Site. (n.d.) *Orton-Gillingham | What is Orton-Gillingham?* Available at: <https://www.orton-gillingham.com/what-is-orton-gillingham/> (Accessed: 26 April 2026).

Ternby, E., et al. (2016) *Why do pregnant women accept or decline prenatal diagnosis for Down syndrome?* Available at:  
<https://pmc.ncbi.nlm.nih.gov/articles/PMC4960031/> (Accessed: 11 May 2026).

The Education Hub (2023) *Strategies for supporting autistic children in early childhood settings*. Available at: <https://cdn.theeducationhub.org.nz/wp-content/uploads/2023/07/2.pdf> (Assessed: 9 May 2026).

UK aid (2018) *GEC Thematic Review Understanding and Addressing Educational Marginalisation*. Available at:  
<https://assets.publishing.service.gov.uk/media/5b606060e5274a5f4314d6e5/TR-Add-Educational-Marginalisation-1.pdf> (Accessed: 5 May 2026).

Uk Government (2025) *Ten ways to create an inclusive environment*. Available at: <https://earlyyears.wandsworth.gov.uk/article/170385> (Assessed: 9 May 2026).

UNESCO (1994) *THE SALAMANCA STATEMENT AND FRAMEWORK FOR ACTION ON SPECIAL NEEDS EDUCATION*. UNESCO. Available at:  
<https://www.european-agency.org/sites/default/files/salamanca-statement-and-framework.pdf> (Accessed: 5 May 2026).

UNICEF (n.d.) *UN convention on the rights of the child (UNCRC)*. Available at:  
<https://www.unicef.org.uk/what-we-do/un-convention-child-rights/> (Accessed: 26 April 2026).

UNICEF UK (2016) *The United Nations Convention on the Rights of the Child*. Available at: <https://www.unicef.org.uk/wp-content/uploads/2016/08/unicef-convention-rights-child-uncrc.pdf> (Assessed: 9 May 2026).

Valde, R. (2024) 'Orton-Gillingham approach: Its effects on the reading ability of grade two pupils', *Social Science Research Network*, 9(6).

doi:<https://doi.org/10.2139/ssrn.4864179>

Wang, C., & Wang, H. (2024) The growing challenge of autism spectrum disorder: a comprehensive review of etiology, diagnosis, and therapy in children. *All Life*, 17(1). <https://doi.org/10.1080/26895293.2024.2415057> (Assessed: 9 May 2026).

Welsh Government (2018) *Additional Learning Needs and Education Tribunal (Wales) Act 2018 - Explanatory Notes*. Available at: <https://www.legislation.gov.uk/anaw/2018/2/notes/division/3> (Accessed: 2 May 2026).

Welsh Government (2020) *Health and well-being: Introduction - Hwb*. Available at: <https://hwb.gov.wales/curriculum-for-wales/health-and-well-being/> (Accessed: 2 May 2026).

Welsh Government (2020) *Supporting learner progression assessment guidance - Hwb*. Available at: <https://hwb.gov.wales/curriculum-for-wales/assessment-arrangements/supporting-learner-progression-assessment-guidance/> (Accessed: 2 May 2026).

Welsh Government (2025) *Reasonable Adjustments of General Qualifications [HTML]* | GOV.WALES, GOV.WALES. Available at: <https://www.gov.wales/reasonable-adjustments-general-qualifications-html> (Accessed: 5 May 2026).

Welsh Government (2025) *Supporting learners with Attention Deficit Hyperactivity Disorder (ADHD) [HTML]* | GOV.WALES, GOV.WALES. Available at: <https://www.gov.wales/supporting-learners-attention-deficit-hyperactivity-disorder-adhd-html> (Accessed: 5 May 2026).

Welsh Government (2025) Repository - Hwb. Available at: <https://hwb.gov.wales/repository/resource/a847d3a3-ae3b-4f38-aa48-ddc11a801f37/overview> (Accessed: 26 April 2026).

Welsh Government (2026) *Educational and child psychology - Carmarthenshire County Council*. Available at: <https://www.carmarthenshire.gov.wales/home/council-services/education-schools/additional-learning-needs/educational-child-psychology/> (Accessed: 26 April 2026).

Westmorland and Furness (n.d) *Autism in the early year's foundation stage information for early years settings*. Available at: [www.westmorlandandfurness.gov.uk](http://www.westmorlandandfurness.gov.uk) (Assessed: 9 May 2026).

What is autism NHS (2022) *Signs of autism in children*. Available at: <https://www.nhs.uk/conditions/autism/signs/children/> (Assessed: 9 May 2026).

Wilmot, A., Pizzey, H., Leitão, S., Hasking, P. and Boyes, M. (2022) 'Growing up with dyslexia: Child and parent perspectives on school struggles, self-esteem, and mental health', *Dyslexia* 29(1). doi:<https://doi.org/10.1002/dys.1729>

World Health Organisation (2019) *Autism Spectrum Disorder*. Available at: <https://www.who.int/publications/m/item/autism-spectrum-disorder-2019> (Assessed: 9 May 2026).

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Zalzal, H.G. and Lawlor, C.M. (2023) 'Down syndrome for the otolaryngologist: A review', *JAMA Otolaryngology–Head & Neck Surgery*, 149(4), pp. 360–367. doi: 10.1001/jamaoto.2023.0001 (Accessed: 4 May 2026).

I have not used AI.