

Introduction

To begin, if an individual requires additional learning resources due to a learning difficulty or disability, regardless of whether it is caused by a medical condition or not, they are considered to have Additional Learning Needs (ALN) (Newport City Council, 2024). Similarly, Swansea Council (2023) state that a child is considered to have an ALN if they have a disability or greater difficulty with learning than most other children their age. Although it is a positive that both councils have taken the same information on board, it is considered important to think of implications of having the same definition. For example, the importance of the unique child in the early years – care could be inconsistent throughout the councils as every child has individual needs (Early Years Matters, 2023). The Welsh Government (2021a) explain that it is considered essential to value and acknowledge every child's uniqueness in order to promote their holistic development and well-being.

The Additional Learning Needs and Education Tribunal (Wales) Act 2018, part 2 chapter 1 states that 'ALN' is used to replace the terms 'special educational needs (SEN)'. The Welsh Government (2018) explain that this will indicate an apparent change from the current systems, which are no longer functional and assist to mitigate some of the stigma attached to the terminologies currently in use.

Autism is described as a developmental disorder that has an impact on an individual's social interactions, both verbal and non-verbal (NV), and perception of their environment (Centres for Disease Control and Prevention, 2022). Typical signs of autism in children include not responding to their name, avoiding eye contact, and repetitive movements (NHS, 2022). Moreover, approximately a fifth of learners in Wales are estimated to have an ALN (Snap Cymru, no date). Additionally, Underwood, *et al.*, (2021) indicate that a reliable estimate of the male to female ratio was approximately 3:1. Additionally, the National Autistic Society (NAS) (2024) state that they believe one in 100 people in the UK are autistic. Brignell, *et al.* (2018) further explain that language issues are considered common in children with ASD, and between 25% and 30% of children with ASD either never acquire functional language or are minimally verbal (MV).

Identification/Diagnosis

According to the World Health Organisation (WHO) (2022), Autism is difficult to diagnose before the age of about 12 months, although by the time a child is two years old, a diagnosis can usually be made. The Scottish Intercollegiate Guidelines Network (2016) explain that in children under three years old, regression of language or social abilities without loss of motor skills should prompt a referral for an autism assessment due to the high probability of autism. Vivanti, *et al.* (2017) state that the evidence base supporting early intervention for young children with ASD remains relatively sparse. The National Institute of Child Health and Human Development (2021) state early autism diagnosis and treatment are more likely to have significant, long-term benefits on symptoms and future skills. Additionally, NSPCC Learning (2023) suggest that early detection and fulfilling a child or family's needs can reduce the factors of risk that could adversely be affecting the child with ALN life and raise protective factors that have a positive impact on the welfare of the child.

NAS (2024a) state that understanding the early signs and symptoms is the first step in diagnosing children with ASD. The goal of early intervention and prevention is to offer targeted, tailored support to lessen the need for services or prevent the need for later, more extensive interventions (Welsh Government, 2021). However, according to Koegel, *et al.* (2021), it is considered important to acknowledge that almost all children under the age of 18 months are either NV or MV. Due to this, it is considered important that a specialist recognizes this, where an official diagnosis can only be provided by a specialist, such as a Paediatrician (NAS, 2020c). Cardiff and Vale University Health Board (no date) further state that children must be assessed by health care professionals who have specialist training in diagnosing autism, in order to receive a diagnosis. A thorough history, observations, and information gathered from one or more people who know the child getting assessed (e.g. parent, teacher) are typically included in assessments (Autism Wales, 2020). The additional learning needs co-ordinator (ALNCo) in Wales is the individual who at a strategic level, ensures that the needs of all learners with an ALN within the educational setting are addressed, in both mainstream education and a specialist provision setting (Welsh Government, 2019). The Welsh Government (2022a) also explain that due to the position of an ALNCo being essential in the educational

setting, it should either be a senior member of staff or have a clear line of communication available to all staff. This will assist the educational environment in organizing, overseeing, and carrying out its duties in order to recognise and address the needs of children with ALN. Children with an ALN such as NV Autism will be issued an Individual Development Plan (IDP) (Welsh Government, 2022). Holtom and Lloyd-Jones (2016) explain that an IDP is a document that aids in the planning, education, and evaluation of a child for teachers. Additionally, an IDP includes a description of the child and their ALN, and provides a clear outline of what is necessary to address their requirements, from social services, healthcare, and other agencies involved in their care and support (NAS, 2020a)

Barriers

The National Institute on Deafness and other Communication Disorders (2020) state that children with ASD frequently struggle to interpret words with gestures, including pointing to an item. The National Autistic Society (2024a) suggests that NV Autistic children are frequently thought to have a disability or medical issue that prevents them from speaking. The medical model of disability is a framework that conceptualises disability as an internal issue and focusses on medical interventions and rehabilitation to treat the condition (Chawner and Owen, 2022). Therefore, because many children diagnosed with ASD find it difficult to communicate their needs, feelings, and thoughts, then acts as a barrier (McKinney, *et al.*, 2021). Carmarthenshire County Council (2022) state that these difficulties can affect children in different ways. For example, Nottinghamshire Children's Trust (2013) and Black, *et al.* (2022) explain that due to their difficulties interpreting social signs, many children with NV autism find it challenging to form friendships and to participate in reciprocal social activities.

According to Sturrock, *et al.*, (2022) for children with autism, the experience of being NV in a very verbal society can have psychological effects. Additionally, Rodogno, Kraue-Jensen and Ashcroft (2016) and Kwan, *et al.*, (2020) explain that anxiety and sadness can be worsened by feelings of inadequacy, low self-esteem, and the feeling of being misunderstood or ignored. A child's sense of identity and self-worth might be negatively impacted by their inability to verbally communicate with others, which can also leave them feeling frustrated and powerless (LaGasse, 2017; Cage,

Monaco and Newell, 2018; UK Government, no date). Moreover, Sanctuary (2017) states that some autistic children may self-harm, for a number of reasons, including social communication and interaction difficulties. Approximately 50% of children with ASD engage in some form of self-harm (Minshawi, 2014). Steinfeldt-Kristensen, Jones and Richards (2020) explain that common forms of self-harm in children include head banging or biting. Whereas more severe forms of self-harm include, eating non-food items (also known as PICA), and hair pulling (Sanctuary, 2017).

Furthermore, other barriers that a NV child with autism could face can be explained using the social model of disability. Aube, *et al.* (2021) state that some children with NV ASD experience stigma over their disability. This relates to the social model of disability where the barriers exist in society and the environment, not through an individual's disability, as opposed to the medical model (Haegele and Hodge, 2016). Public and professional perceptions of autism, along with how apparent autistic symptoms are interpreted, are the main factors contributing to the stigma surrounding autism (Turnock, Langley, and Jones; 2022). Kasuhlik, Kostaki, and Kyriakopoulos (2016) explain children with autism may benefit from inclusive educational techniques, particularly when their academic and socioemotional needs are better served in a mainstream education classroom than in a special education setting (Mazumder and Thompson-Hodgetts, 2019). However, Hurley-Hanson, Giannantonio, and Griffiths, (2019) state that NV children with ASD may not benefit in mainstream education settings, if they are being perceived adversely or experience stigma with their peers. Davidson and Morales (2023) suggest that the underlying issue of stigma around Autism is the lack of knowledge and understanding others have on the condition. Children with NV autism have the tendency of avoiding eye contact, which can give the impression that they are impolite, indifferent, or unfocused (Nystrom, Falck-Ytter and Bolte, 2017; Trevisan, *et al.*, 2017). Liao, Lei and Li (2019) suggest if staff had appropriate training on NV ASD, it could reduce the stigma children face in their environment.

Strategy

According to NAS (2024) Autism is a spectrum condition that affects individuals differently, where some autistic with autism display delayed language development, while others with autism do not use speech at all. Simmons (2017) explains that in

this situation, alternative methods of communication must be developed. A popular support strategy that can support NV autistic children communicate is Augmentative and Alternative Communication (AAC) (NAS, 2020c). These tools, which come in a variety of devices and systems are designed to support children with NV ASD that struggle with language (Aftab, *et al.* 2023). Morin, *et al.*, (2018) state that AAC devices can include basic picture communication, or as highly complex speech generating devices (Bell and Gifford, 2023). NAS (2023) further explain that AAC describes the use of communication tools that contribute to a message and can replace speech.

Stone-Macdonald, *et al.* (2023) state that children who use AAC benefit greatly from the encouragement of independence and self-advocacy. AAC devices and/or apps give children the confidence to express their needs, make decisions and state their preferences (O'Donoghue *et al.*, 2021). Van Grunsven and Roeser (2022) explain that this helps them become more independent and have an improved quality of life. As a result, a greater sense of self and self-determination are developed, both of which Nam, Kim, and Sparks (2018) consider critical for processing everyday activities and social interactions. Additionally, AAC improves children who have NV Autism's mental health, as their frustrations and anxieties related to communication issues are lowered (Iacono, Trembath, and Erickson, 2016; Sievers, Trembath, and Westerveld, 2018). Moreover, AAC is considered essential in supporting NV autistic children's language development, where NV Autistic children can acquire new vocabulary, grammar, and perhaps sentence structures (Syriopoulou-Delli, and Eleni, 2022). Higgins-Walsh (2023) explains that this is due to the fact AAC provide children with NV ASD opportunities to practice and improve their language in different communication situations, such as at school, out in the community, or at home.

However, Donato, Spencer, and Arthur-Kelly, (2018) states that Autistic children who use an AAC device/app could face limitations. Families with children who have recently obtained a new AAC device need to incorporate this technology into their daily lives, frequently struggle to do so due to a lack of training on how to use it (Berenguer, *et al.*, 2022). According to Arserio, Biggs, and Holz (2023), families expressed dissatisfaction with the complicated requirements of using AAC, and

inadequate training at home, which ultimately resulted in the AAC device/app being abandoned. Moreover, Allen, Hartley, and Cain (2016) explain that AAC apps are often expensive, for example, Proloquo2Go has a price of £249.99 to download (Apple App Store, 2023). Froli, *et al.* (2022) further state that as a result, it is understandable that some parents would be drawn to less expensive options, although these may not meet the NV needs of some Autistic children or have not been shown to be effective in studies (Logan, Iacono, and Terembath, 2016; Dorney and Erickson, 2020).

Conclusion

In conclusion, children that have Non-Verbal ASD are faced with many challenges, from the identification and diagnosis of the condition, to barriers that can create mental health issues from frustration on not being able to communicate verbally, and self-harm, to facing stigma for their condition. By implementing strategies that suit the needs of NV children with ASD, these barriers can be reduced and avoided, which also involves the support from highly trained staff.

I would now like to take the opportunity for any questions.

Question

When discussing strategies, you chose using an AAC device. Are there any other strategies?

Thank you, and yes I have looked into Speech and Language Therapy (SALT). For children who struggle with communicating, speech and language therapists offer treatment, care, and support that can change lives (NHS Careers, no date).

According to Swansea Bay University Health Board (no date) Speech and Language Therapists (SLTs) work in a variety of settings with individuals, other professionals, and parents/caregivers to enable autistic people to communicate, be understood, and engage with others in everyday life (Royal College of Speech and Language Therapists, 2023).

Law, Dennis, and Charlton (2017) state that 6 hours on average, for over 6 months 70% of children's language skills were improved. However, the Children's

Commissioner for England (2019) states that the waiting list for SALT can take months. According to the Welsh Government's (2018a) aims for therapy services, no one should have to wait more than 14 weeks to receive speech and language treatment. Bearing this in mind, the number of people waiting longer than 14 weeks for speech and language therapy increased from 24 in February 2020 to 508 in October 2021 (Welsh Government 2023). Therefore, many caregivers make the decision for their child to have private SALT, although Blethers Speech and Language Therapy (no date) explains that an initial assessment costs £120 for an hour. This could be difficult for some families and the current cost of living.

References

Additional Learning Needs and Education Tribunal (Wales) Act 2018, c.1. Available at: <https://www.legislation.gov.uk/anaw/2018/2/section/2/enacted> (Accessed: 9 January 2024).

Aftab, A., Sehgal, C. A., Noohu, M., and Jaleel, G. (2023) 'Clinical Effectiveness of AAC Intervention in Minimally Verbal Children With ASD: A Systematic Review', *NeuroRegulation*, 10(4), pp. 239–252. Available at: <https://doi.org/10.15540/nr.10.4.239>.

Apple App Store (2023) *Proloquo2Go AAC*. Available at: <https://apps.apple.com/gb/app/proloquo2go-aac/id308368164> (Accessed: 14 January 2024).

Arserio, A. P., Biggs, E. E., & Holz, E. (2023) 'Experiences of Parents Supporting Their Young Children Who Use Speech-Generating Devices', *Journal of Early Intervention*. Available at: <https://doi.org/10.1177/10538151231199898>

Aube, B., Follenfant, A., Goudeau, S., and Derguy, C. (2021) 'Public Stigma of Autism Spectrum Disorder at School: Implicit Attitudes Matter', *Journal of Autism and Developmental Disorders*, 51(5), pp. 1584–1597. Available at: <https://doi.org/10.1007/s10803-020-04635-9>.

Autism Wales (2020) *Information for referrers*. Available at: <https://autismwales.org/en/community-services/i-work-with-children-in-health-social-care/clinicians-toolkit-children/information-for-referrers/> (Accessed: 6 January 2024).

Bell, J. and Gifford, T. (2023) 'Proloquo2Go (P2G) in the Classroom: Providing Speech, Communication, Behavioral Support, Academic, and Social Support for Students', in *Using Assistive Technology for Inclusive Learning in K-12 Classrooms*. IGI Global, pp. 140–155. Available at: <https://doi.org/10.4018/978-1-6684-6424-3.ch007>.

Berenguer, C., Martínez, E. R., De Stasio, S., and Baixauli, I. (2022) 'Parents' Perceptions and Experiences with Their Children's Use of Augmentative/Alternative Communication: A Systematic Review and Qualitative Meta-Synthesis', *International*

Journal of Environmental Research and Public Health, 19(13). Available at:
<https://doi.org/10.3390/ijerph19138091>.

Black, M. H., Kuzminski, R., Wang, J., Ang, J., Lee, C., Hafidzuddin, S., and McGarry, S. (2022) 'Experiences of Friendships for Individuals on the Autism Spectrum: A Scoping Review', *Review Journal of Autism and Developmental Disorders*. Available at: <https://doi.org/10.1007/s40489-022-00332-8>.

Blanchard, A., Chihuri, S., DiGuseppi, C. G., and Li, G. (2021) 'Risk of Self-harm in Children and Adults With Autism Spectrum Disorder: A Systematic Review and Meta-analysis', *JAMA Network Open*, 4(10). Available at:
<https://doi.org/10.1001/jamanetworkopen.2021.30272>.

Blethers Speech and Language Therapy (no date) *Contact and fees*. Available at:
<https://edinburgh-lothian-mobile-speech-therapy.co.uk/fees> (Accessed: 14 January 2024).

Bolourian, Y., Losh, A., Hamsho, N., Eisenhower, A., and Blacher, J. (2022) 'General Education Teachers' Perceptions of Autism, Inclusive Practices, and Relationship Building Strategies', *Journal of Autism and Developmental Disorders*, 52(9), pp. 3977–3990. Available at: <https://doi.org/10.1007/s10803-021-05266-4>.

Brignell, A., Chenausky, K. V., Song, H., Zhu, J., Suo, C., and Morgan, A. T. (2018) 'Communication interventions for autism spectrum disorder in minimally verbal children', *Cochrane Database of Systematic Reviews*, 11(11). Available at:
<https://doi.org/10.1002/14651858.CD012324.pub2>.

Cage, E., Di Monaco, J. and Newell, V. (2018) 'Experiences of Autism Acceptance and Mental Health in Autistic Adults', *Journal of autism and developmental disorders*, 48(2), pp. 473–484. Available at: <https://doi.org/10.1007/s10803-017-3342-7>.

Cardiff and Wale University Health Board (no date) Integrated Autism Services Available at: <https://cavuhb.nhs.wales/our-services/integrated-autism-services/diagnostic-assessments-for-autism/> (Accessed 6 January 2024).

Centres for Disease Control and Prevention (2022) *What is Autism Spectrum Disorder?*. Available at: <https://www.cdc.gov/ncbddd/autism/facts.html> (Accessed: 4 January 2024).

Chawner, S. J. R. A. and Owen, M. J. (2022) 'Autism: A model of neurodevelopmental diversity informed by genomics', *Frontiers in psychiatry*, 13. Available at: <https://doi.org/10.3389/fpsy.2022.981691>.

Children's commissioner for England (2019) *We need to talk: Access to speech and language therapy*. Available at: <https://assets.childrenscommissioner.gov.uk/wpuploads/2019/06/cco-we-need-to-talk-june-2019.pdf> (Accessed: 14 January 2024).

Davidson, D. and Morales, D. (2023) 'Reducing stigma toward autistic peers: a pilot investigation of a virtual autism acceptance program for children', *Frontiers in psychiatry*, 14. Available at: <https://doi.org/10.3389/fpsy.2023.1241487>.

Dillenburg, K., McKerr, L., Jordan, J.-A., and Keenan, M. (2016) 'Staff Training in Autism: The One-Eyed Wo/Man', *International Journal of Environmental Research and Public Health*, 13(7), 716-. Available at: <https://doi.org/10.3390/ijerph13070716>.

Donato, C., Spencer, E., and Arthur-Kelly, M. (2018) 'A critical synthesis of barriers and facilitators to the use of AAC by children with autism spectrum disorder and their communication partners', *Augmentative and Alternative Communication*, 34(3), pp. 242-253. Available at: <https://www.tandfonline.com/doi/full/10.1080/07434618.2018.1493141?scroll=top&needAccess=true> (Accessed: 14 January 2024).

Dorney, K. and Erickson, K. (2020) 'Transactions Within a Classroom-Based AAC Intervention Targeting Preschool Students with Autism Spectrum Disorders: A Mixed-Methods Investigation', *Exceptionality Education International*, 29(2), pp. 42–58. Available at: <https://doi.org/10.5206/eei.v29i2.9401>.

Early Years Matters (2023) *A unique child*. Available at: <https://www.earlyyearsmatters.co.uk/eyfs/a-unique-child/> (Accessed: 6 January 2024).

Frolli, A., Ciotola, S., Esposito, C., Fraschetti, S., Ricci, M. C., Cerciello, F., and Russo, M. G. (2022) 'AAC and Autism: Manual Signs and Pecs, a Comparison', *Behavioral Sciences*, 12(10). Available at: <https://doi.org/10.3390/bs12100359>.

Haegele, J.A. and Hodge, S. (2016) 'Disability Discourse: Overview and Critiques of the Medical and Social Models', *Quest (National Association for Kinesiology in Higher Education)*, 68(2), pp. 193–206. Available at: <https://doi.org/10.1080/00336297.2016.1143849>.

Higgins-Walsh, E. (2023) *What is Augmentative and Alternative Communication and how can it benefit autistic people?*. Available at: <https://www.autism.org.uk/advice-and-guidance/professional-practice/aug-alt-comm> (Accessed: 14 January 2024).

Holtom, D., and Lloyd-Jones, S. (2016) *Outcome Evaluation of the Autistic Spectrum Disorder Strategic Action Plan: Final Report*. Available at: <https://www.gov.wales/sites/default/files/statistics-and-research/2019-07/160218-evaluation-autistic-spectrum-disorder-strategic-action-plan-en.pdf> (Accessed: 11 January 2023).

Hurley-Hanson, A.E., Giannantonio, C.M., and Griffiths, A.J. (2019) 'The Stigma of Autism', *Autism in the Workplace*, pp. 21-45. Available at: https://link.springer.com/chapter/10.1007/978-3-030-29049-8_2 (Accessed: 12 January 2024).

Iacono, T., Trembath, D., and Erickson, S. (2016) 'The role of augmentative and alternative communication for children with autism: current status and future trends', *Neuropsychiatric disease and treatment*, 12, pp. 2349–2361. Available at: <https://doi.org/10.2147/NDT.S95967>.

Jack, A., and A. Pelphrey, K. (2017) 'Annual Research Review: Understudied populations within the autism spectrum – current trends and future directions in neuroimaging research', *Journal of Child Psychology and Psychiatry*, 58(4), pp. 411–435. Available at: <https://doi.org/10.1111/jcpp.12687>.

Kaushik, A., Kostaki, E., and Kyriakopoulos, M. (2016) 'The Stigma of Mental Illness in Children & Adolescents: A Systematic Review', *Psychiatry Research*, 243, pp. 469–494. Available at: <https://doi.org/10.1016/j.psychres.2016.04.042>.

Koegel, L. K., Bryan, K. M., Su, P. L., Vaidya, M., and Camarata, S. (2020) 'Definitions of Nonverbal and Minimally Verbal in Research for Autism: A Systematic Review of the Literature', *Journal of Autism and Developmental Disorders*, 50(8), pp. 2957–2972. Available at: <https://doi.org/10.1007/s10803-020-04402-w>.

LaGasse, A.B. (2017) 'Social outcomes in children with autism spectrum disorder: a review of music therapy outcomes', *Patient related outcome measures*, 8, pp. 23–32. Available at: <https://doi.org/10.2147/PROM.S106267>.

Letsosa, R. and Retief, M. (2018) 'Models of disability : a brief overview', *Hervormde teologiese studies*, 74(1), pp. 1–8. Available at: <https://doi.org/10.4102/hts.v74i1.4738>.

Liao, X., Lei, X. and Li, Y. (2019) 'Stigma among parents of children with autism: A literature review', *Asian journal of psychiatry*, 45, pp. 88–94. Available at: <https://doi.org/10.1016/j.aip.2019.09.007>.

Logon, K., Iacono, T., and Trembath, D. (2016) 'A systematic review of research into aided AAC to increase social-communication functions in children with autism spectrum disorder', *Augmentative and Alternative Communication*, 33(1), pp. 51-64. Available at: <https://www.tandfonline.com/doi/abs/10.1080/07434618.2016.1267795> (Accessed: 14 January 2024).

Mazumder, R. and Thompson-Hodgetts, S. (2019) 'Stigmatization of Children and Adolescents with Autism Spectrum Disorders and their Families: a Scoping Study', *Review journal of autism and developmental disorders*, 6(1), pp. 96–107. Available at: <https://doi.org/10.1007/s40489-018-00156-5>.

McKinney, A., Weisblatt, E. J., Hotson, K. L., Bilal Ahmed, Z., Dias, C., BenShalom, D., Foster, J., Murphy, S., Villar, S. S., and Belmonte, M. K. (2021) 'Overcoming hurdles to intervention studies with autistic children with profound communication difficulties and their families', *Autism: The International Journal of Research and*

Practice, 25(6), pp. 1627–1639. Available at:

<https://doi.org/10.1177/1362361321998916>.

Melissa L. Allen, Calum Hartley and Kate Cain (2016) 'iPads and the use of "apps" by children with Autism Spectrum Disorder: do they promote learning?', *Frontiers in psychology*, 7. Available at: <https://doi.org/10.3389/fpsyg.2016.01305>.

Minshaw, N. F., Hurwitz, S., Fodstad, J. C., Biebl, S., Morriss, D. H., and McDougall, C. J. (2014) 'The association between self-injurious behaviors and autism spectrum disorders', *Psychology Research and Behavior Management*, 7, pp. 125–136.

Available at: <https://doi.org/10.2147/PRBM.S44635>.

Morin, K.L., Ganz, J.B., Gregori, E.V., Foster, M.J., Gerow, S. L., Genc-Tosun, D., and Hong, E.R. (2018) 'A systematic quality review of high-tech AAC interventions as an evidence-based practice', *Augment Altern Commun*, 34(2), pp. 104-117. Available at: <https://pubmed.ncbi.nlm.nih.gov/29697288/> (Accessed: 12 January 2024).

Munroe, A. and Dunleavy, M. (2023) 'Recognising autism in girls within the education context: reflecting on the internal presentation and the diagnostic criteria', *Irish Educational Studies*, 42(4), pp. 561–581. Available at:

<https://doi.org/10.1080/03323315.2023.2260371>.

MyDay (2024) *The University of Wales Trinity Saint David [image]*. Available at:

<https://myday.collabco.com/resources/university-of-wales-trinity-saint-david/>

(Accessed: 10 January 2024).

Nam, S., Kim, J., and Sparks, S. (2018) 'An Overview of Review Studies on Effectiveness of Major AAC systems for Individuals with Developmental Disabilities Including Autism', *The Journal of Special Education Apprenticeship*, 7(2), pp. 1-14.

Available at: <https://files.eric.ed.gov/fulltext/EJ1185374.pdf> (Accessed: 13 January 2024).

National Autistic Society (NAS) (2020) *Extra help at school in Wales: Individual development plans*. Available at: [https://www.autism.org.uk/advice-and-](https://www.autism.org.uk/advice-and-guidance/topics/education/extra-help-at-school/wales/individual-education-plan)

[guidance/topics/education/extra-help-at-school/wales/individual-education-plan](https://www.autism.org.uk/advice-and-guidance/topics/education/extra-help-at-school/wales/individual-education-plan)

(Accessed: 10 January 2024).

National Autistic Society (NAS) (2020a) *Pre-diagnosis support – a guide for parents and carers*. Available at: <https://www.autism.org.uk/advice-and-guidance/topics/diagnosis/pre-diagnosis/parents-and-carers> (Accessed: 11 January 2024).

National Autistic Society (NAS) (2020b) *Professionals involved in a diagnosis*. Available at: <https://www.autism.org.uk/advice-and-guidance/topics/diagnosis/professionals-involved/parents-and-families> (Accessed: 6 January 2024).

National Autistic Society (NAS) (2020c) *Understanding and developing communication*. Available at: <https://www.autism.org.uk/advice-and-guidance/topics/communication/understanding-and-developing-communication> (Accessed: 7 January 2024).

National Autistic Society (NAS) (2024) *Autistic women and girls*. Available at: <https://www.autism.org.uk/advice-and-guidance/what-is-autism/autistic-women-and-girls> (Accessed: 4 January 2024).

National Autistic Society (NAS) (2024a) *What is autism?*. Available at: <https://www.autism.org.uk/advice-and-guidance/what-is-autism> (Accessed: 11 January 2024).

National Institute of Child Health and Human Development (2021) *Early Intervention for Autism*. Available at: <https://www.nichd.nih.gov/health/topics/autism/conditioninfo/treatments/early-intervention> (Accessed: 7 January 2024).

National Institution on Deafness and Other Communication Disorders (2020) *Autism Spectrum Disorder: Communication Problems in Children*. Available at: <https://www.nidcd.nih.gov/health/autism-spectrum-disorder-communication-problems-children> (Accessed: 6 January 2024).

Newport City Council (2024) *Definitions of ALN*. Available at: <https://www.newport.gov.uk/en/Schools-Education/Additional-Learning-Needs/Definitions-of-ALN.aspx> (Accessed: 4 January 2024).

NHS (2022) *Signs of autism in children*. Available at: <https://www.nhs.uk/conditions/autism/signs/children/> (Accessed: 5 January 2024).

NHS Careers (no date) *Speech and Language Therapist*. Available at: <https://www.healthcareers.nhs.uk/explore-roles/allied-health-professionals/roles-allied-health-professions/speech-and-language-therapist> (Accessed: 14 January 2024).

NHS Inform Scotland (2023) *Autism Spectrum Disorder (ASD)*. Available at: <https://www.nhsinform.scot/illnesses-and-conditions/brain-nerves-and-spinal-cord/autism-spectrum-disorder-asd/#characteristics-of-autism> (Accessed: 10 January 2024).

Nottinghamshire Children's Trust (2013) *Nottinghamshire County Multi-Agency ASD Pathway (0-19) NICE Guidance on ASD Signs and Symptoms (Version 1 March 2013)*. Available at: <https://www.nottinghamshire.gov.uk/media/2421/nice-guidelines-on-asd-signs-and-symptoms.pdf> (Accessed: 11 January 2024).

NSPCC Learning (2023) *Early help and early intervention*. Available at: <https://learning.nspcc.org.uk/safeguarding-child-protection/early-help-and-early-intervention> (Accessed: 9 January 2024).

Nyström, P., Falck-Ytter, T. and Bolte, S. (2017) 'Responding to Other People's Direct Gaze: Alterations in Gaze Behavior in Infants at Risk for Autism Occur on Very Short Timescales', *Journal of autism and developmental disorders*, 47(11), pp. 3498–3509. Available at: <https://doi.org/10.1007/s10803-017-3253-7>.

O'Donoghue, M., O'Dea, A., O'Leary, N., Kennedy, N., Forbes, J., and Murphy, C. A. (2021) 'Systematic Review of Peer-Mediated Intervention for Children with Autism Who Are Minimally Verbal', *Review Journal of Autism and Developmental Disorders*, 8(1), pp. 51–66. Available at: <https://doi.org/10.1007/s40489-020-00201-2>.

Rodogno, R., Krause-Jensen, K. and Ashcroft, R.E. (2016) 'Autism and the good life': a new approach to the study of well-being', *Journal of medical ethics*, 42(6), pp. 401–408. Available at: <https://doi.org/10.1136/medethics-2016-103595>.

Royal College of Speech and Language Therapists (2023) *Autism Overview: How can speech and language therapy help?* Available at: <https://www.rcslt.org/speech-and-language-therapy/clinical-information/autism/#section-4> (Accessed: 14 January 2024).

Sanctuary, L. (2017) *Autism and self-harm*. Available at: <https://www.autism.org.uk/advice-and-guidance/professional-practice/self-harm> (Accessed: 12 January 2024).

Sanctuary, L. (2017a) *Self-harm and autism: an interview with Lucy Sanctuary*. Available at: <https://www.autism.org.uk/advice-and-guidance/professional-practice/self-harm-interview> (Accessed: 12 January 2024).

Scottish Intercollegiate Guidelines Network (2016) *Assessment, diagnosis, and interventions for autism spectrum disorders*. Available at: <https://www.sign.ac.uk/assets/sign145.pdf> (Accessed: 11 January 2024).

Sievers, S.B., Trembath, D., and Westerveld, M. (2018) 'A systematic review of predictors, moderators, and mediators of augmentative and alternative communication (AAC) outcomes for children with autism spectrum disorder', *Augmentative and Alternative Communication*, 24(3), pp. 219-229. Available at: <https://www.tandfonline.com/doi/abs/10.1080/07434618.2018.1462849> (Accessed: 13 January 2024).

Simmons, S. (2017) *What We Can't Understand: The Non-Verbal Communication Among Autistic Children*. Available at: <https://scholar.dominican.edu/senior-theses/61/> (Accessed: 11 January 2024)

Snap Cymru (no date) *What is ALN?*. Available at: <https://www.snapcymru.org/get-support/what-is-aln/> (Accessed: 3 January 2024).

Steenfeldt-Kristensen, C., Jones, C.A. and Richards, C. (2020) 'The Prevalence of Self-injurious Behaviour in Autism: A Meta-analytic Study', *Journal of autism and developmental disorders*, 50(11), pp. 3857–3873. Available at: <https://doi.org/10.1007/s10803-020-04443-1>.

Stone-MacDonald, A., Cihak, D.F., and Zager, D. (2023) *Autism Spectrum Disorders: Advancing Positive Practices in Education*. 5th edn. Oxon: Routledge.

Sturrock, A., Chilton, H., Foy, K., Freed, J., and Adams, C. (2022) 'In their own words: The impact of subtle language and communication difficulties as described by autistic girls and boys without intellectual disability', *Autism: The International Journal of Research and Practice*, 26(2), pp. 332–345. Available at: <https://doi.org/10.1177/13623613211002047>.

Summers, J., Shahrami, A., Cali, S., D'Mello, C., Kako, M., Palikucin-Reljin, A., Savage, M., Shaw, O., and Lunsky, Y. (2017) 'Self-Injury in Autism Spectrum Disorder and Intellectual Disability: Exploring the Role of Reactivity to Pain and Sensory Input', *Brain Sciences*, 7(11), pp. 140-. Available at: <https://doi.org/10.3390/brainsci7110140>.

Swansea Bay University Health Board (no date) Speech and Language Therapy Services – children. Available at: <https://sbuhb.nhs.wales/hospitals/a-z-services/children-young-people/hospital-and-community-services/community-services-for-children/ndd-and-therapies/therapy-services/speech-and-language-therapy-services-children/> (Accessed: 14 January 2024).

Swansea Council (2023) ALN – Definition of ALN. Available at: <https://www.swansea.gov.uk/article/1965/ALN---Definition-of-ALN> (Accessed: 4 January 2024).

Syriopoulou-Delli, C.K. and Eleni, G. (2022) 'Effectiveness of Different Types of Augmentative and Alternative Communication (AAC) in Improving Communication Skills and in Enhancing the Vocabulary of Children with ASD: a Review', *Review journal of autism and developmental disorders*, 9(4), pp. 493–506. Available at: <https://doi.org/10.1007/s40489-021-00269-4>.

Tager-Flusberg, H., and Kasari, C (2013) 'Minimally Verbal School-Aged Children with Autism Spectrum Disorder: The Neglected End of the Spectrum: Minimally verbal children with ASD', *Autism Research*, 6, pp. 468–478. Available at: <https://doi.org/10.1002/aur.1329>.

The Guardian (2013) *Assistiveware talks autism apps, price challenges and iOS versus Android [image]*. Available at: <https://www.theguardian.com/society/appsblog/2013/apr/02/assistiveware-autism-apps> (Accessed: 8 January 2024).

Tollerfield, I., Wilkinson, E., Stewart, A. G., Nall-Evans, S., Michelet, F., Elliott, P., and Jaydeokar, S. (2023) 'Exploring self-harm risk vulnerabilities in autism using the 'thinking patterns profiling model'', *Discover Psychology*, 3(1), pp. 8–16. Available at: <https://doi.org/10.1007/s44202-023-00069-3>.

Trevisan, D.A., Roberts, N., Lin, C., and Birmingham, E. (2017) 'How do adults and teens with self-declared Autism Spectrum Disorder experience eye contact? A qualitative analysis of first-hand accounts', *PloS one*, 12(11), pp. 1-22. Available at: <https://doi.org/10.1371/journal.pone.0188446>.

Turnock, A., Langley, K. and Jones, C.R.G. (2022) 'Understanding Stigma in Autism: A Narrative Review and Theoretical Model', *Autism in adulthood*, 4(1), pp. 76–91. Available at: <https://doi.org/10.1089/aut.2021.0005>.

UK Government (no date) *Personal, social and emotional development: Sense of self*. Available at: <https://help-for-early-years-providers.education.gov.uk/personal-social-and-emotional-development/sense-of-self> (Accessed: 12 January 2024).

Underwood, J. F., DelPozo-Banos, M., Frizzati, A., John, A., and Hall, J. (2022) 'Evidence of increasing recorded diagnosis of autism spectrum disorders in Wales, UK: An e-cohort study', *Autism : The International Journal of Research and Practice*, 26(6), pp. 1499–1508. Available at: <https://doi.org/10.1177/13623613211059674>.

van Grunsven, J. and Roeser, S. (2022) 'AAC Technology, Autism, and the Empathic Turn', *Social epistemology*, 36(1), pp. 95–110. Available at: <https://doi.org/10.1080/02691728.2021.1897189>.

VeryWell Health (2024) *Understanding the Three Levels of Autism [image]*. Available at: <https://www.verywellhealth.com/what-are-the-three-levels-of-autism-260233> (Accessed: 11 January 2024).

Vivanti, G., Kasari, C., Green, J., Mandell, D., Maye, M., and Hudry, K. (2018) 'Implementing and evaluating early intervention for children with autism: Where are the gaps and what should we do?', *Autism Research*, 11(1), pp. 16–23. Available at: <https://doi.org/10.1002/aur.1900>.

Welsh Government (2018) *Additional Learning Needs and Education Tribunal (Wales) Act: Explanatory Memorandum*. Available at: <https://www.gov.wales/sites/default/files/publications/2018-04/additional-learning-needs-and-education-tribunal-wales-act-2018-explanatory-memorandum.pdf> (Accessed: 4 January 2024).

Welsh Government (2018a) *NHS Wales Diagnostic and Therapy Services Waiting Times*. Available at: <https://www.gov.wales/sites/default/files/statistics-and-research/2018-11/nhs-diagnostic-therapy-services-waiting-time-quality-report.pdf> (Accessed: 14 January 2024).

Welsh Government (2019) *Support for Children and Young People with Autism Spectrum Disorder (ASD) in educational settings*. Available at: <https://www.gov.wales/sites/default/files/publications/2019-01/ways-of-supporting-learners-with-autistic-spectrum-disorder-asd.pdf> (Accessed: 11 January 2024).

Welsh Government (2020) *The Additional Learning Needs transformation programme: frequently asked questions*. Available at: <https://www.gov.wales/additional-learning-needs-transformation-programme-frequently-asked-questions-html> (Accessed: 3 January 2024).

Welsh Government (2021) *Code of Practice on the Delivery of Autism Services: Supporting Guidance Document*. Available at: <https://www.gov.wales/sites/default/files/publications/2021-08/code-of-practice-on-the-delivery-of-autism-services-supporting-guidance.pdf> (Accessed: 10 January 2024)

Welsh Government (2021a) *Enabling Pathways*. Available at: https://www.gov.wales/sites/default/files/consultations/2021-05/enabling-pathways-consultation-document_0.pdf (Accessed: 6 January 2024).

Welsh Government (2022) *Implementing the additional learning needs system between September 2021 and August 2024: a guide for parents and families*. Available at: <https://www.gov.wales/sites/default/files/publications/2022-09/implementing-the-additional-learning-needs-system-between-september-2021-and-august-2024-a-guide-for-parents-and-families.pdf> (Accessed: 9 January 2024).

Welsh Government (2022a) *The additional learning needs transformation programme: frequently asked questions*. Available at: <https://www.gov.wales/additional-learning-needs-transformation-programme-frequently-asked-questions-html> (Accessed: 8 January 2024).

Welsh Government (2023) *Diagnostic and Therapy Services, Waiting Times by week, November onwards*. Available at: <https://statswales.gov.wales/Catalogue/Health-and-Social-Care/NHS-Hospital-Waiting-Times/Diagnostic-and-Therapy-Services/waitingtimes-by-weekswait-hospital> (Accessed: 14 January 2024).

World Health Organisation (WHO) (2022) *Autism*. Available at: [https://www.who.int/news-room/questions-and-answers/item/autism-spectrum-disorders-\(asd\)#:~:text=Autism%20is%20characterised%20by%20some,and%20unusual%20reactions%20to%20sensations](https://www.who.int/news-room/questions-and-answers/item/autism-spectrum-disorders-(asd)#:~:text=Autism%20is%20characterised%20by%20some,and%20unusual%20reactions%20to%20sensations). (Accessed: 3 January 2024).