

Embedding speech and language therapy in Scottish education:

Improving children's communication for learning, wellbeing and future life chances

Executive summary

Strong speech, language and communication skills are essential for children's learning, relationships, wellbeing and long-term life chances. Speech and language therapists (SLTs) play a vital role in identifying and supporting communication needs, reducing behavioural challenges, improving inclusion, and building staff confidence.

This report makes the case for embedding SLTs in every school and early years setting across Scotland. It presents an experimental workforce model based on existing models of good practice and research, identifying the level of SLT resource needed to deliver improved outcomes through an integrated, education-based approach.

Key findings:

- Approximately 745 full-time equivalent (FTE) SLTs are needed to embed speech and language therapy across all 5,011 early learning and school settings in Scotland, reaching nearly 800,000 children.
- Currently, 530 FTE SLTs work with children and young people in Scotland. Around 156 FTE of whom are required to support children in a health context and pre-placement settings, leaving approximately 375 FTE that could deliver services in education settings.
- This means we would need approximately an additional 370 FTE SLTs to fully implement regular SLT support across schools and early years settings, an increase of 70%.
- A phased roll-out is achievable, beginning with an initial uplift of approximately 185 FTE SLTs which would be an initial 35% increase.

Key recommendations:

- Increase the children's speech and language therapy workforce by at least 35% to deliver integrated education-based services.
- Expand speech and language therapy training opportunities and new entry routes to meet projected demand.
- Ensure long-term funding for sustainable, co-located speech and language therapy services in education.
- Promote the development of quality universal, targeted and individualised approaches for children with communication needs in Scotland.

Embedding SLTs is a practical, evidence-based way to improve outcomes, reduce inequalities and support whole school wellbeing which directly aligns with the Scottish Government's ambitions on prevention and early intervention.

Introduction

It is widely recognised by academic research, education and health professionals that speech, language and communication skills are fundamental to children's academic success, social development, wellbeing and future life chances.

Speech and language therapists (SLTs) are experts in identifying and supporting children and young people with communication needs. But their impact goes much further. SLTs work alongside educators to improve children's communication, support inclusion, reduce behavioural challenges and facilitate improved educational outcomes.

These skills are critical if the Scottish Government is to deliver their aspirations on prevention, early intervention, reducing inequalities and ensuring that every child has the best start in life and the opportunity to fulfil their potential.

That is why we are calling for every school and early years setting in Scotland to have access to dedicated time with a speech and language therapist. This is essential to ensuring that all children and young people, regardless of background, are given strong communication foundations on which they can continue to build throughout their educational journey.

This report sets out to answer a key question: how many speech and language therapists are required to deliver this vision? Through experimental workforce analysis, it seeks to highlight how many SLTs are needed to give every school and early years setting access to a dedicated speech and language therapist and compares this with the existing level of resource available.

Why should SLTs work in education?

When children with speech, language and communication needs (SLCN) do not have the right support, they are significantly more likely to experience underachievement, mental health challenges and behavioural issues.^{i,ii,iii,iv} Embedding speech and language therapists in education-based teams allows us to support children earlier, prevent harm and build relationships that help us address complex challenges as a team.

Evidence shows that integrated, school-based speech and language therapy models enhance pupil outcomes in educational attainment, mental health and behaviour.^{v,vi,vii,viii,ix}

SLTs working within schools can deliver universal, targeted and individualised approaches, including coaching and training educators, and cultivating communication-supportive environments. Strategies are more effective when tailored to the classroom context and sustained through collaboration.^x

Moreover, positioning SLTs in schools promotes equity of access to speech and language therapy, particularly benefiting children from disadvantaged backgrounds who might otherwise face difficulties accessing clinic-based services. These integrated models also support teacher wellbeing and capability, reducing their stress^{xi} by providing guidance on managing communication needs in early years settings or in class.

Embedding SLTs within education systems is not only effective for improving individual outcomes, but also a preventative, inclusive strategy that supports whole-school teaching, learning and wellbeing which lays the groundwork for academic success and life outcomes.

Model of service delivery

By aligning with Ready to Act^{xii} and Equity for All^{xiii}, most speech and language therapy services in Scotland have good frameworks in place to assess local needs and improve outcomes for children. However, service delivery remains highly variable.

For the purposes of this report, we are focusing on an integrated service delivery model, where health and education funding is pooled and utilised to meet the level of need in the community. A key part of what makes this delivery model work is that every school and early years setting has a dedicated SLT who devotes time to settings based on level of need. This model has been successfully implemented by the speech and language therapy service in NHS Forth Valley and other services and provides a template of how embedding an SLT in every school and early years setting could be achieved Scotland-wide.

Current workforce challenges

Scotland currently has 1,332 registered SLTs (headcount), working across both adult and children's services. However, growth in the speech and language therapy workforce has been slow. Over the past five years, Scotland's speech and language therapy workforce increased by just 2%, compared to 15% across the rest of the UK.^{xiv}

This limited growth has not kept pace with rising demand. Freedom of Information (FOI) data shows that the number of children waiting for speech and language therapy increased from 6,503 in May 2023^{xv} to 6,727 in May 2024^{xvi} — with over 53% waiting longer than 18 weeks in both years. In some health boards, children are waiting for as long as two to three years for an initial contact.

This shortfall is driven by:

- Workforce vacancies and limited supply of newly trained SLTs
- Lack of funded posts to match need
- Growing population-level demand, particularly in areas of high deprivation.

Using the most recent population estimates (mid-2022), there is currently one SLT per 4,090 people in Scotland, compared to one per 3,656 in the rest of the UK.

Without significant investment in training and recruiting SLTs, workforce capacity will remain insufficient to meet children's needs or implement the integrated model described in this report.

Case study: NHS Forth Valley

Over the last five years, several speech and language therapy services, such as NHS Forth Valley have adopted the Balanced System^{xvii} to support a whole system integrated service delivery model. Evidence shows a positive impact for children accessing speech and language therapy in a timely, responsive way (98% of children accessed the service within 12 weeks in 2024/25). Despite the increase in demand, the number of children on the speech and language therapy caseload in Forth Valley is below the pre-pandemic level as more children are supported within education in the least intrusive way. There is a focus on upskilling and developing the children's workforce with over 250 training and coaching sessions delivered to 2,250 people in 2023/24. The service delivery model also helps address health inequalities by providing the service closer to families and communities.

As this model is rolled out and embedded, there is an increasing understanding of the level of speech and language therapy resource required to embed the full range of changes needed to achieve better outcomes for children. The national children's speech and language therapy leads group used this information and their understanding of their own area demands to come to a consensus about the estimated SLT resource required to fully deliver this service model.

Analytical approach

Purpose of analysis

The purpose of this experimental analysis was to answer two key questions to understand the speech and language therapy resources needed for an integrated education delivery model across Scotland, aimed at improving outcomes for children and young people.

Question 1 – How many SLTs are needed to embed a speech and language therapist in every school and early years setting and deliver improved outcomes for children and young people in Scotland?

Question 2 – Are there enough SLTs in post to embed a speech and language therapist in every school and early years setting?

Data sources

- Publicly available school and pupil statistics^{xviii,xix}.
- Publicly available area deprivation data^{xx}.
- Primary data from speech and language therapy service leads across Scotland on current workforce levels and the resource needed to support children in a health or social work context (e.g., dysphagia, AAC, neurodevelopmental disorders).
- Information from NHS Forth Valley about the delivery of its integrated service^{xxi}.

Methodology

The required speech and language therapy resource for each area in Scotland was estimated using best practice models across education and early years settings.

Weighting for school size (pupil numbers) and area deprivation (using Scottish Indices of Multiple Deprivation (SIMD) data) was applied. This weighting was applied to ensure allocation of speech and language therapy resource is informed by both the size of the education setting and population-level data, addressing health inequalities. Area deprivation is linked to greater communication needs, as environmental factors are known to impact language development.^{xxii}

Comparative analysis modelled the difference between the estimated required resource and the resource currently available to deliver speech and language therapy at universal, targeted and individualised levels within schools and early learning and childcare settings (ELCs)^{xxiii}, mapping information from health boards to corresponding Local Authorities. This identifies the additional resource required for a comprehensive roll-out of integrated speech and language therapy education service delivery across Scotland.

Limitations

While this analysis is informed by the best practice and expertise, some limitations should be acknowledged.

- Some assumptions, such as the estimated speech and language therapy resource allocation of 0.5 days per week for ELCs and one day per week for schools, are based on practical experience of speech and language services in Scotland. While these figures are reasonable and informed by services, they could benefit from more granular data.
- Weighting has been applied to reflect variations in setting size and area deprivation, using school SIMD^{xxiv} population data. However, SIMD is applied at an area level of the setting and does not account for the individual circumstances or lived experiences of the children attending.
- Health boards and local authorities with smaller populations and smaller speech and language therapy teams are particularly vulnerable to workforce fluctuations. In these areas, the absence of one SLT can significantly reduce service capacity.
- Some information of interest that was unavailable for this analysis:
 - Speech and language therapy Healthcare Clinical support worker resource.
 - Independent education placements and early years settings that are not partnership placements or local authority run.

Findings

Question 1:

How many SLTs are needed to embed a speech and language therapist in every school and early years setting and deliver improved outcomes for children and young people in Scotland?

Based on service delivery models from NHS Forth Valley and consensus building with the Scottish Children's Speech and Language Therapy Leads Network, the estimated resource required to embed SLTs in education settings is 0.5 days per week for an average-sized early learning and childcare setting (ELC) and one day per week for an average-sized primary, special, or secondary school.

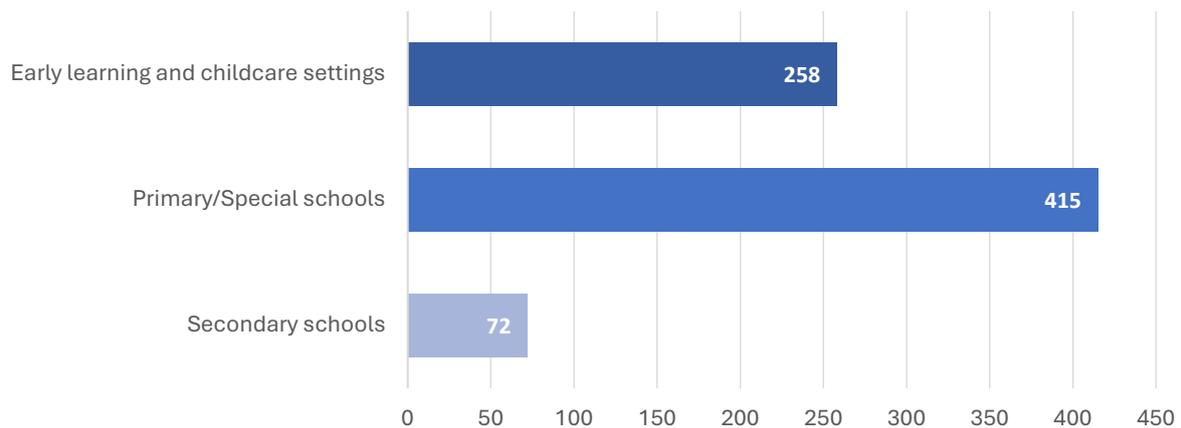
Using the Scottish Government education data for 2024 (published March 2025), there are 2,575 ELCs (local authority and partnership) with an average of 35 children; 2,077 primary and special schools, with an average of 186 pupils; and 359 secondary schools, with an average of 876 pupils.

Applying the recommended average resource across settings in Scotland suggests a total of:

- 258 full-time equivalent (FTE) SLTs are required to allocate 0.5 days for every average ELC,

- 415 FTE SLTs are required to allocate one day for every average primary and special school, and
- 72 FTE SLTs are required to allocate one day for every average secondary school.

The recommended number of FTE SLTs required to deliver integrated speech and language therapy in education across Scotland, by setting type (average settings)



Combined, this suggests an overall total of 745 FTE SLTs to support all 5,011 education placements across Scotland, attended by almost 800,000 children and young people. This is in addition to the speech and language therapy workforce required for health or social work provision, or for pre-placement children (aged 0-3) which is 156 FTE.

The ratio of speech and language therapy to children is higher in early years. As children get older, each SLT supports more young people. Findings suggest there is one therapist for around 350 children in ELCs, compared to over 900 in primary schools and more than 4,000 in secondary schools. This enables a focus on early intervention in the early years, while maintaining supports for across all age groups.

Question 2:

Are there enough SLTs in post to embed a speech and language therapist in every school and early years setting?

As of March 2025, speech and language therapy service leads across Scotland reported:

- The workforce consists of **709 therapists** (permanent and temporary), providing the resource of **530 full time equivalent (FTE) qualified SLTs**, which averages 0.75 FTE per therapist. For example, to provide the full time equivalent of 75 therapists, 100 therapists would be required.
- Of these, 156 FTE speech and language therapy staff are required to support children within a health context and pre-placement children aged 0–3.

After deducting the 156 staff supporting children in a health context and pre-placement children from the overall total, the current resource available for embedding speech and language therapy in education placements is **374 FTE SLTs, delivered by 499 therapists**.

When this is compared to the required 745 FTE SLTs (993 therapists) outlined in question one, this suggests the additional resource required to fully deliver outcomes for children and young people through an integrated approach in education settings is an additional 371 FTE SLTs (495 therapists). This **represents a 70% increase in the overall speech and language therapy children and young people (CYP) workforce** (additional to the existing resource of 530 FTE SLTs) to fully implement the integrated education model across Scotland.

The current available and additional recommended resource for embedding speech and language therapy in education



Minimum resource to begin implementation

Based on a minimum threshold, the resource Scotland would need to start delivering an integrated model across the country is:

- An additional 185 FTE SLTs (equivalent to 246 therapists).

- This translates to a 35% increase in the overall CYP speech and language therapy workforce.

Recommendations

In order to deliver good communication outcomes for Scotland's children and young people within an educational context, we need to:

1. Begin phased implementation of an integrated education-based speech and language therapy model with an initial uplift of 185 FTE SLTs, rising to 371 FTE to achieve full coverage across all education settings in Scotland.
2. Expand SLT training capacity and introduce alternative entry routes such as apprenticeships to support the sustainable growth of the children's speech and language therapy workforce.
3. Secure long-term, cross-sector funding to deliver effective and sustainable speech and language therapy services embedded in education.
4. Position speech and language therapy services closer to education and co-located within educational establishments, where resource allows.
5. Promote the development of quality universal, targeted and individualised approaches for children with communication needs in Scotland.

References

- ⁱ Botting, N., Toseeb, U., Pickles, A., Durkin, K. and Conti-Ramsden, G. (2016) 'Depression and anxiety change from adolescence to adulthood in individuals with and without language impairment', *PLOS ONE*, 11(7), p. e0156678.
- ⁱⁱ St Clair, M.C., Pickles, A., Durkin, K. and Conti-Ramsden, G. (2011) 'A longitudinal study of behavioral, emotional and social difficulties in individuals with a history of specific language impairment (SLI)', *Journal of Communication Disorders*, 44(2), pp. 186–199.
- ⁱⁱⁱ Snowling, M.J., Duff, F.J., Nash, H.M. and Hulme, C. (2016) 'Language profiles and literacy outcomes of children with resolving, emerging, or persisting language impairments', *Journal of Child Psychology and Psychiatry*, 57(12), pp. 1360–1369.
- ^{iv} Conti-Ramsden, G., Mok, P.L.H., Pickles, A. and Durkin, K. (2019) 'Do emotional difficulties and peer problems occur together from childhood to adolescence? The case of children with a history of developmental language disorder (DLD)', *European Child & Adolescent Psychiatry*, 28(7), pp. 993–1004. doi: 10.1007/s00787-018-1261-6.
- ^v Royal College of Speech and Language Therapists (RCSLT) (2018) *Improving mental health outcomes for school age children: Evidence of links with speech, language and communication needs*. London: RCSLT. Available at: <https://www.rcslt.org/wp-content/uploads/2021/09/Mental-health-briefing-paper.pdf> (Accessed: 16 June 2025).
- ^{vi} Alharbi, N.H. (2024). *The Effects of Interventions on Behavior Outcomes for Children with Speech and Language Delays: A Scoping Review*. *Creative Education*, 15(7), 1297–1310
- ^{vii} Education Endowment Foundation (2021). *Oral language interventions – Teaching & Learning Toolkit*. (Evidence summary of +6 months impact on reading and wider benefits)
- ^{viii} West, G., et al. (2022). *Early language intervention improves behavioral adjustment in school: Evidence from a cluster randomized trial*. *Journal of School Psychology*, 92, 334–345
- ^{ix} Law, J., Lee, W., Roulstone, S., Wren, Y., Zeng, B. & Lindsay, G. (2012). *What Works: Interventions for children and young people with speech, language and communication needs*. London: Department for Education. Available at: [https://www.researchgate.net/publication/267409192_What_Works_Interventions_for_children_and_young_people_with_speech_language_and_communication_needs] (Accessed: 16 June 2025).

-
- ^x White, S.L.J. and Spencer, S. (2018) 'A school-commissioned model of speech and language therapy: Perspectives of education staff', *Child Language Teaching and Therapy*, 34(2), pp. 141–153. Available at: <https://eric.ed.gov/?id=EJ1185152> (Accessed: 16 June 2025).
- ^{xi} Hulme, M., Beauchamp, G., Wood, J. and Bignell, C. (2024) *Teacher Workload Research Report*. Commissioned by the Educational Institute of Scotland. Available at: <https://www.eis.org.uk/Content/images/Campaigns/QualityEducation/WorkloadResearch.pdf> (Accessed: 16 June 2025).
- ^{xii} Scottish Government (2016) *Ready to Act: A transformational plan for children and young people, their parents, carers and families*. Edinburgh: Scottish Government. Available at: <https://www.gov.scot/publications/ready-act-transformational-plan-children-young-people-parents-carers-families/> (Accessed: 16 June 2025).
- ^{xiii} Gascoigne, M.T. (2021) *Equity for All: Children's Speech and Language Therapy Services in Scotland. A report for Scottish Government*. Available at: <https://www.bettercommunication.org.uk/downloads/2022%20Equity%20for%20All%20Final%20for%20Publication.pdf> (Accessed: 9 May 2025).
- ^{xiv} Health and Care Professions Council (HCPC) (2024) *Registration data 2019–2024* [Data obtained via Freedom of Information request].
- ^{xv} Royal College of Speech and Language Therapists (RCSLT) (2023) *FOI data from Scottish Health Boards on children's speech and language therapy services*. May 2023.
- ^{xvi} Royal College of Speech and Language Therapists (RCSLT) (2024) *FOI data from Scottish Health Boards on children's speech and language therapy services*. May 2024.
- ^{xvii} Gascoigne, M.T. (2008 - 2025) *The Balanced System*. Available at: <https://www.thebalancedsystem.org/> [Accessed 9 May 2025].
- ^{xviii} Pupil census supplementary statistics (2024). Scottish Government.
- ^{xix} Early Learning and Childcare Statistics (2024). Scottish Government.
- ^{xx} Scottish Index of Multiple Deprivation (SIMD) (2020). Scottish Government.
- ^{xxi} NHS Forth Valley Data via SLT Impact Reports for Falkirk, Stirling and Clackmannanshire councils (2023-24).
- ^{xxii} Lindsay, G. and Strand, S. (2016) 'Children with Language Impairment: Prevalence, Associated Difficulties, and Ethnic Disproportionality in an English Population', *Frontiers in Education*, 1, 2. doi: 10.3389/feduc.2016.00002.

^{xxiii} Early years placements included are local authority nurseries and partnership nurseries which account for 92% of early years funded places.

^{xxiv} The Scottish Index of Multiple Deprivation is a relative measure of deprivation across 6,976 small areas (called data zones). If an area is identified as 'deprived', this can relate to people having a low income but it can also mean fewer resources or opportunities. SIMD looks at the extent to which an area is deprived across seven domains: income, employment, education, health, access to services, crime and housing.