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 a model that could achieve an integrated, education-based approach.

Key findings:

- 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.

- For the current analysis, the required speech and language therapy resource across Scotland was estimated using a model of embedding SLTs in education, used in NHS Forth Valley. Initially this was 0.5 days per week of SLT input for an average sized early years placement and 1 day per week for an average sized school. These are illustrative averages only; in practice, local allocation would need to be adjusted according to population need, setting size and deprivation.

- Modelling showed that a substantial increase (70%) in SLTs is needed to embed speech and language therapy across 5,011 early learning and school settings in Scotland, reaching nearly 800,000 children.

- 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:

- Position SLT services in education settings, where possible

- 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

- Enhance leadership competencies to ensure local leaders have the skills, knowledge and support to facilitate a cross-boundary, whole system change

- 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 its 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 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], many 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, as set out in the Balanced System[xiv]. 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 to support the development of quality universal, targeted and individualised support based on level of need.

This model has been successfully implemented by the speech and language therapy service in NHS Forth Valley and provides a template of how embedding an SLT in every school and early years setting could be achieved Scotland-wide.

Facilitating transformational change in children's services requires leaders with the competencies to work across boundaries, create the conditions for change, and take collective action to improve outcomes[xv]. Strong leadership is essential for building a shared vision, fostering inclusive collaboration[xvi], and challenging the systems and structures that perpetuate inequality[xvii]. Competencies such as relational leadership, strategic thinking, and the ability to influence beyond organisational silos are critical for addressing the complex and interconnected challenges facing children and families[xviii]. Embedding these leadership approaches across sectors is fundamental to delivering meaningful, sustainable change, particularly for families living in poverty[xix]. Recommendations from Equity for All[xx] and Public Health Scotland[xxi] emphasise the importance of developing leadership capabilities that support whole-system change, integrated working, and action within complex environments[xxii].

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, for both adults and children, has been slow. Over the past six years, Scotland's speech and language therapy workforce increased by just 4%, compared to 22% across the rest of the UK.[xxiii]

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[xxiv] to 6,727 in May 2024[xxv] — 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. It is important to note that waiting times should not be seen as the only measure of demand, as they are not always an accurate reflection of need. This is particularly true for families living in poverty, who often face greater barriers to accessing support through the traditional refer–assess–treat model.

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 4,031 people in Scotland, compared to one per 3,485 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

In 2019 NHS Forth Valley Speech and Language Therapy in partnership with Stirling, Falkirk and Clackmannanshire local authorities embarked on a transformational journey to understand how to support the wellbeing of all children and young people with communication needs. The team moved resource upstream and prioritised early intervention and prevention.

Process of Transformation

- The process was framed using quality improvement methodology and the solutions were coproduced in partnership with Families, Health and Education to ensure that the transformational change ideas were driven by the needs and views of the local population.
- Targeted approaches were developed and tested using Pupil Equity and Scottish Attainment Funds.

- The service worked in partnership with Better Communication CIC and now implements the Balanced System Framework[xxvi] to underpin their offer.
- In addition, Forth Valley's transformation was supported by training and development work, including approaches pioneered by Kate Malcomess[xxvii] around 'Request for Assistance'. This training underpinned the cultural and practical shift needed to embed SLT expertise at the point of need.

How did the service change?

- Speech and language therapy funding streams from health and education were pooled to better meet the needs of all children and young people with communication needs.
- SLTs shifted most of their resource to be present and visible within educational establishments.
- They took a whole systems approach across Universal, Targeted and Individualised levels and across the five strands of Family Support, Environment, Workforce, Identification and Intervention.[xxviii]
- They engaged differently with referrals, shifting to 'requests for assistance' and introducing outcomes focused conversations at the point when people were asking for help by changing the focus from 'what's wrong' to 'what matters to you?'
- For those children whose needs cannot be met at a Universal or Targeted level, Individualised
- support continues, with a focus on upskilling those closest to the child.
- In 2022/23 improvement work with Allied Health Professional (AHP) and Health Visiting (HV) colleagues improved access to AHPs for HVs to have early intervention conversations and the development and delivery of an AHP training package and a resource pack for HVs.

What was the impact?

- Families living in poverty now have access to quality speech and language therapy provision.
- Communication friendly environments in educational placements support all children and provide adaptations for children with identified communication needs.
- The children's workforce has access to quality training and behaviour change has occurred due to coaching and modelling in context. By building expertise and resilience in those closest to the child, CYPs wellbeing outcomes are met in a sustainable way.
- Concerns raised by parents, carers or the wider workforce are addressed as soon as possible to prevent harm and provide advice and reassurance to enable self-management of on-going support needs without the child having to be stepped into individualised care.
- Across Forth Valley, 97% of children and young people receive support within 12 weeks of the request being received.

- 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.
- Therapy outcome measure data shows strong improvements in children's outcomes across the domains of impairment, activity, participation, child wellbeing and parental wellbeing.
- The individualised caseload and the number of referrals have reduced despite increased demand which is a strong indicator that Universal and Targeted activity is supporting more children.

Analytical approach

Purpose of analysis

The purpose of this 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[xxix,xxx]

- Publicly available area deprivation data[xxxi]

- 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[xxxii]

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 at local authority level. This ensured allocation of speech and language therapy resource was 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.[xxxiii]

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)[xxxiv], 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.

For illustrative purposes, base assumptions of 0.5 days per week of SLT input for an average sized ELC and 1 day per week for an average sized school were used to derive national totals. These assumptions were then adjusted at local authority level using school sizes, pupil numbers and SIMD weighting. This means that councils with larger rolls and higher levels of deprivation would require proportionally more resource, while those with smaller rolls or lower deprivation received less. For example, in our modelling Council X received an increase of over 20% once deprivation was applied, whereas Council Y's allocation was reduced slightly.

Note on methodology and frameworks

This analysis was informed by the principles of the *Balanced System* methodology[xxxv] but does not represent a full application of that framework. It provides an illustrative national projection to support policy discussion, recognising that local service design will need to refine allocations further using more detailed needs analysis.

Limitations

While this analysis is informed by 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 and best practice, they could benefit from more granular data.

- SIMD weighting is area-based and does not capture variation within individual educational placements. Local refinement for geographic factors such as rurality and travel time, as well as demographic factors, will be required during the implementation phase.

- Weighting has been applied to local estimates to reflect variations in setting size and area deprivation, using school SIMD[xxxvi] 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. Local planning will therefore need to consider individual level need and variation within settings.

- The headline estimate of 745 FTE is based on national modelling using average per-setting allocations. These were then adjusted at council level by school size and deprivation (SIMD) to reflect differences in population and need. Weighting ensures resources are distributed more equitably between areas, rather than increasing the national total. What changes is the balance of allocation between councils, with proportionally more resource directed to larger or more deprived areas. The figures should therefore be read as illustrative national estimates, with local service design and tools such as the Balanced System required to refine allocations further.

- 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.

- This analysis estimates strategic system capacity and does not account for non-contact time such as annual leave, sickness absence or administrative activity, which should be addressed through local implementation planning.

- This report did not replicate the detailed Health Board analyses undertaken in Equity for All or use The Balanced System. The current analysis provides a simplified national projection, complementing previous work by estimating a total number of additional SLTs required nationally to embed speech and language therapy in every ELC and school across Scotland.

- 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. Once the speech and language therapy resource is established in an area, more nuanced analysis would be required. Some schools and nurseries, based on need, may require more time, while others may require less. Therefore, the use of a tool such as the Balanced System School Allocation Tool would be beneficial[xxxvii].

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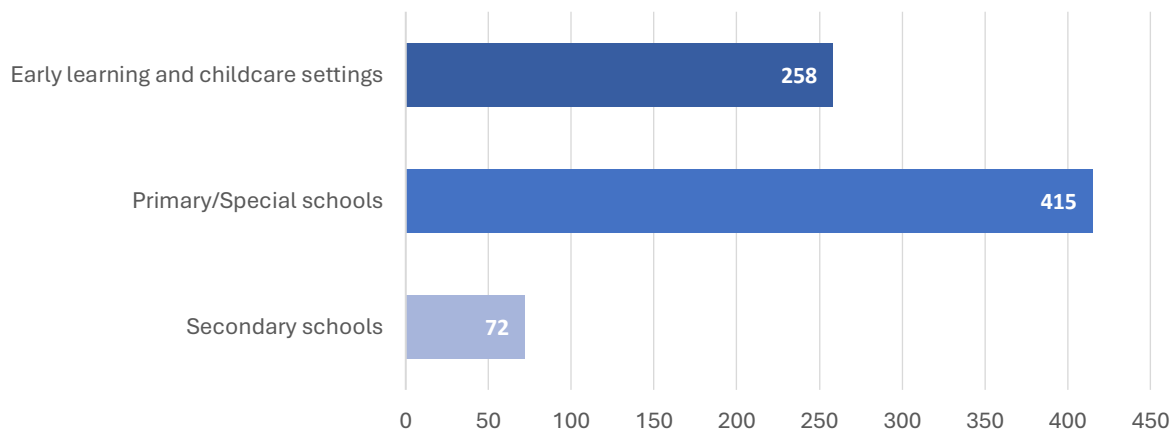
Combined, this suggests an overall total of 745 FTE SLTs to support all 5,011 education placements across Scotland, attended by almost 800,000 children and young people. This is in addition to the speech and language therapy workforce required for health or social work provision, or for pre-placement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

The ratio of speech and language therapists 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.
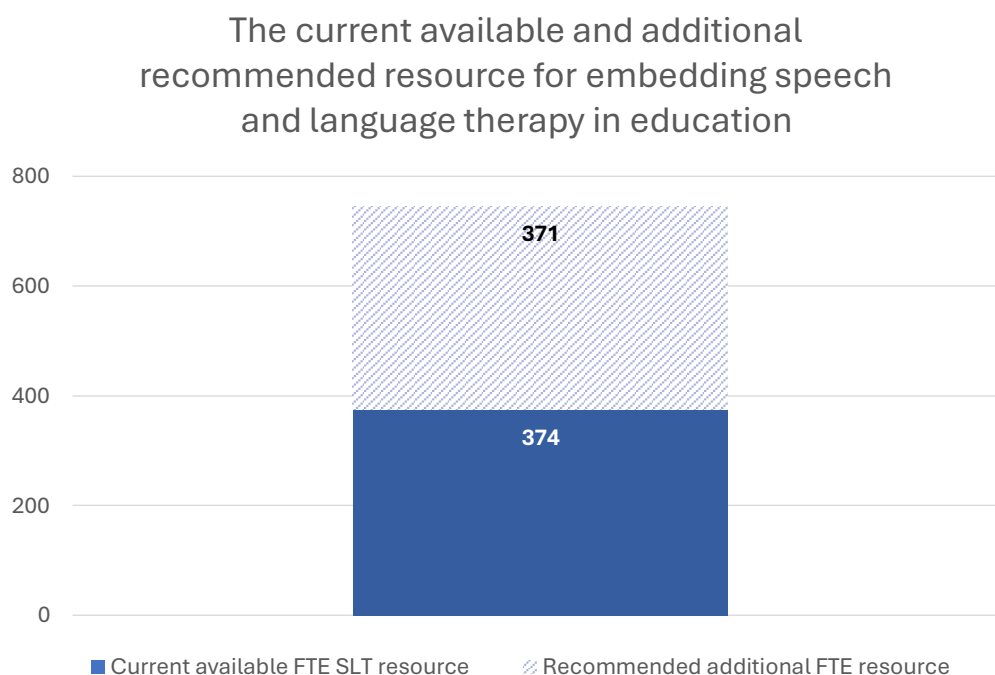
Question 2:

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

371

374

■ Current available FTE SLT resource ▨ Recommended additional FTE resource

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. **Enhance leadership competencies to ensure local leaders have the skills, knowledge and support to facilitate a cross-boundary, whole system change**

6. 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. (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 Gascoigne, M.T. (2008 – 2025) *The Balanced System* [online]. Available at: https://www.thebalancedsystem.org/ [Accessed 9 May 2025].

xv McTier, S., Connelly, G., & Kelly, E. (2023). Case Studies of Transformational Reform Programmes. CELCIS

xvi Labonté, R., Racine, L., Haughton, M., & Spiegel, W. (2023). Competencies for Transformational Leadership in Public Health: An International Delphi Consensus Study.

xvii O'Brien, M.L. and Ovando, T.M. (2023) 'The leadership dynamics of systems change', The Leadership Quarterly, 34(1), 101678. https://doi.org/10.1177/17427150241230350

xviii Helm-Murtagh, S.C. and Erwin, P.C. (2024) 'Building a new generation of public health leaders forged in a public health crisis', American Journal of Public Health, 114(6), pp.626–632. https://ajph.aphapublications.org/doi/10.2105/AJPH.2024.307633

xix Institute of Health Equity & Public Health Scotland. (2025). CHES: Summary of Learning from the Site-Selection Process.

xx Gascoigne, M. (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).

xxi Public Health Scotland (2022) Speech and communication development among children in Scotland during the COVID-19 pandemic. Available at: https://www.publichealthscotland.scot/publications/speech-languageand-communication development-among-children-in-scotland-during-the-covid-19-pandemic/ (Accessed: 9 May 2025).

xxii Public Health Scotland (2024) Background on the Whole System Approach. Available at: https://publichealthscotland.scot/about-us/what-we-do-and-how-we-work/supporting-whole-system-approaches/background-on-the-whole-system-approach/ (Accessed: 8 July 2025).

xxiii Health and Care Professions Council (HCPC) (2025) *Registration data 2019–2025* [Data obtained via Freedom of Information request].

xxiv 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.

xxv 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.

xxvi Gascoigne, M.T. (2008 – 2025) *The Balanced System* [online]. Available at: https://www.thebalancedsystem.org/ [Accessed 9 May 2025].

xxvii Malcomess, K. (2025). *The Care Aims Framework*. Care Aims. Available at: https://careaims.com [Accessed 15 September 2025].

xxviii Gascoigne, M.T. (2008 – 2025) *The Balanced System* [online]. Available at: https://www.thebalancedsystem.org/ [Accessed 9 May 2025].

xxix Pupil census supplementary statistics (2024). Scottish Government.

xxx Early Learning and Childcare Statistics (2024). Scottish Government.

xxxi Scottish Index of Multiple Deprivation (SIMD) (2020). Scottish Government.

xxxii NHS Forth Valley Data via SLT Impact Reports for Falkirk, Stirling and Clackmannanshire councils (2023-24).

xxxiii 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.

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

xxxv The Balanced System® School Allocation Tool works by ranking schools according to their relative level of need and then allocating the existing speech and language therapy resource across them. This provides an evidence-based method for distributing current capacity as fairly and transparently as possible, helping services and schools understand how resources are matched to local demand. While our analysis explored what would be required to reach every school and nursery across Scotland, the allocation tool focuses on making the best use of the workforce already in place.

xxxvi 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.

xxxvii Gascoigne, M. (2022). *The Balanced System® School Allocation Tool.* Developed by Better Communication CIC. Available at: https://www.thebalancedsystem.org/