

# A brief review of approaches to oral language development

To inform the Area Based Childhood Programme

December 2014

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## The Area Based Childhood Programme 2013-2016



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agus Gnóthaí Óige  
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## 1. Executive summary

### Introduction

This review was commissioned by the Centre for Effective Services (CES). It examines evidence in relation to early speech and language development to inform the development of oral language development services in areas of social disadvantage. These areas are part of the Area Based Childhood (ABC) programme, a government initiative targeting investment in evidence-informed interventions to improve outcomes for children and families. The researcher carried out consultation with key experts and service providers and reviewed the international and national evidence base. This review is been written for a non-specialist reader and is likely to be of interest to a wide audience.

Whilst parents, early years workers and teachers all play important roles in promoting oral language development on a daily basis, oral language development interventions and services in Ireland are primarily delivered by speech and language therapists. The pressure to reduce long waiting lists means that prevention and early intervention work is not generally prioritised.

### Evidence on development and assessment of speech, language and communication

Language development is crucial to all aspects of children's lives and one of the best predictors of educational achievement. Approximately 6% of 2-5 year olds experience difficulties with language development. Poor language development has a lifelong impact on children's lives and they are at high risk of difficulties with cognitive development, literacy, social interaction, attention and readiness for formal teaching and learning. Early identification and intervention is therefore crucial.

Children experiencing social disadvantage often have problems with learning language, yet rates of identification are often low. Children learning English as an Additional Language (EAL) are also considered at higher risk for impaired language development and are commonly referred for speech and language therapy assessment in Ireland. Children with EAL develop language differently and assessment of language development is therefore difficult.

The complexity of language makes it difficult to assess more generally. Few assessment tools are suitable for measuring the language and communication of pre-school children and many tools in use may not be effective in predicting those who will have language difficulties in the future. Composite assessment tools appear to reflect language skills more accurately than single assessment tools and regular assessments are preferable to single assessments due to children's different developmental trajectories. Assessment tools can only provide a partial picture of the complex ways in which language is used and further research is needed on approaches to language assessment, particularly for preschool children.

### Evidence on oral language development services and interventions

Research findings support the provision of high-quality supports to parents and families before children start to talk, rather than waiting until a delay or disorder emerges. These supports are best undertaken in naturally occurring environments and throughout the activities of the child's life at

home, preschool or school. Evidence supports the refocusing of services to respond to the needs of the whole population and the appropriate use of specialist resources. Most resources should be dedicated to the promotion of language development through universal service provision. Universal services are provided by lots of people in the child's life and are aimed at increasing exposure to language learning opportunities. Fewer resources should be dedicated to targeted provision to meet needs not adequately addressed through universal services. Targeted services are provided by adults with specific additional skills in relation to helping the child to learn language. This may be an early years educator or a parent, with the support of parent training programmes. Specialist services should be provided by speech and language therapists to meet the needs of a small proportion of the population with rare, unusual or complex needs. Where these needs exist, the evidence is that frequency and intensity of opportunity are important.

There is growing, albeit limited, evidence on effective approaches to promoting oral language development. Effective promotion of language development includes interventions to strengthen the capacity of parents and early years educators. Research identifies that approaches to improve language and communication outcomes for children should include support for good play and verbal exchanges in infancy, and early positive parental input (e.g. warmth, sensitivity, responsiveness, support for autonomy, and early participation in literacy and learning) in addition to limited household chaos and regular routines during toddlerhood in order to achieve good outcomes in terms of both language and cognitive development. Language programmes are ways of formalising and increasing attention to approaches that have good evidence and can be helpful at both universal and targeted levels. Programmes that strengthen parents' capacity to support and encourage language and communication are useful, but need to be carefully chosen and implemented to ensure that they are a good fit for parents, especially those living with disadvantage. Where children are already showing problems with language and communication, targeted interventions should be designed and supported by specialist speech and language resources but may be more effectively delivered by skilled early years personnel and teachers using evidence-informed frameworks, approaches and programmes.

## Conclusions and recommendations for the ABC Programme

There is compelling evidence for universal service provision for the promotion of speech and language development of children. Oral language development needs to be supported across the lifecycle and multiple services and systems are needed to achieve this. This requires the development of a common language, common practices and shared assessed and interventions across health, education, social care and disability services. The current service delivery model does not position the scarce resource of speech and language therapy to impact on the greatest needs. A strengths-based, prevention and early intervention model is required and a small number of children, with specific problems in speech and language, need access to specialist supports.

Whilst there are still gaps in the evidence base, evidence in relation to what works in promoting language development in children experiencing disadvantage is growing. Although there is no 'best' way to achieve this, developing the capacity and skills of parents and early years educators to support children's language development does make a difference. Programmes with evidence of effectiveness are useful in systematising support for language learning but are not sufficient – language is integral to all parts of the child's life.

The following recommendations are made for the development of oral language development services under the ABC Programme.

**Areas in the ABC Programme should:**

1. Focus on **universal and targeted services** for oral language development
2. Prioritise **strengthening capacities in parents** who are the **best resource** for developing language in children
3. Enhance the **transfer of skills** from speech and language therapists to early years educators and schools
4. Deploy **speech and language therapists as the specialist designers and resources** to the system, not as the only form of intervention
5. Provide a **platform for sharing and pooling knowledge, experience, resources and evidence** on oral language development.

## 2. Introduction

### Purpose

The Area Based Childhood (ABC) programme is a government initiative targeting investment in evidence-informed interventions to improve outcomes for children and families living in areas of disadvantage across Ireland. CES commissioned this review of evidence in relation to early speech and language to ensure that services developed and implemented under the ABC Programme are evidence-informed; fit well with current service provision; and have future sustainability.

### Approach

The commission required the researcher to carry out consultation with key experts and service providers, to review international and national literature and to prepare a short paper summarising the evidence and advice, emphasising dimensions with relevance to the delivery of oral language development services under the Area Based Childhood Programme.

Consultations were undertaken with HSE speech and language therapy managers; speech and language therapists; academic researchers; experts in early childhood development and education; service providers and practitioners delivering a range of programmes in the early years; specialists in disability and special education and evaluators of language and literacy interventions in early years. Consultations were undertaken with individuals, small groups and service teams and one open consultation meeting was held with a diverse range of participants. A full list of those who participated in the consultation can be found in Appendix 1.

The review of the literature had an emphasis on recent research (within the last ten years), was limited to publications in English and included reports and documentation in non-peer reviewed publications, especially where these were reports of practice. Evaluations of Irish and international intervention programmes were included. The review shows a bias towards reports and findings from U.K. studies and interventions: this reflects the substantial research and investment in early intervention and prevention programmes in the UK in national programmes including 'Sure Start'<sup>1</sup> and 'A Better Start'<sup>2</sup>. The review of the literature was not a systematic review.

The terms 'speech', 'language' and 'communication' have very precise, technical meanings for speech and language therapists and other specialists. In this report, these terms are sometimes used in these precise ways and sometimes used less precisely, in order to avoid undue elaboration for the general reader. Material of relevance to a specialist reader only has not been included.

Language includes literacy. Learning to use words to understand and communicate is an essential foundation for literacy, which, in turn, is an important requirement for educational achievement and social inclusion. The connections between these different forms of language are assumed in this report: the particular challenges in relation to literacy are not specifically addressed here.

This review is likely to be of interest to many audiences: those involved in making policy and planning services for oral language development; in programme design and delivery; in monitoring

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<sup>1</sup> <http://www.ness.bbk.ac.uk/>

<sup>2</sup> <http://betterstart.dartington.org.uk/>

and evaluation; specialists, including speech and language therapists; and a general audience of those interested in early years development.

## Overview of current service provision

Oral language development interventions and services in Ireland are primarily delivered by speech and language therapists managed and funded by the Health Services Executive (HSE). Speech & Language Therapists provide assessment, diagnosis and therapy for children with a wide range of communication difficulties. Referral and access to services is usually through open referral and referrals are accepted from parents, primary care team members, teachers, social workers, and private health professionals. Assessment and therapy is typically provided in clinics and sometimes in education settings.

Early years practitioners and teachers also promote oral language development in their everyday work. The *Aistear* framework, the Early Childhood Curriculum Framework for all children from birth to six years, provides a broad blueprint for how learning can be conceptualised and organised in early years settings (Shiel, Cregan, McGough, & Archer, 2012). There is also a strong emphasis on oral language development in the Primary School English Curriculum (PSEC). However, implementation of the curricula has been challenging and a system of assessment and appropriate supports for educators is needed (Shiel, et al., 2012).

Speech and language therapists working with young children gather information from a range of sources, including through formal and informal assessment, to develop an accurate picture of how the child's speech and language is developing. Based on an analysis of this information, the therapist distinguishes between children who are developing language normally and those who have a language delay or disorder. The speech and language therapist will also identify the impact of a speech or language impairment on the child's life and explore the opportunities and supports for successful intervention. The assessment process allows the therapist to identify what the child needs and how best those needs might be met. There is a range of ways in which supports for speech and language development can be provided to the young child, including:

- Advice and/or training for parents/carers and/or preschool or school personnel
- The design of specific programmes of work, focused on particular aspects of speech or language, with guidance on when and how to undertake this work and, often, materials or workbooks to support the work
- Assessment for and provision of communication aids and/or resources
- Involvement with other professionals to develop a multi-disciplinary programme of intervention, where the child has needs in several developmental areas
- Direct therapy, delivered by the speech and language therapist, individually or in a group, usually for a set frequency over a set period of time.

The speech and language therapist will review progress after a period of support and further recommendations and actions are proposed in line with the child's changing needs. According to a recent review, access to speech and Language Therapy services varies widely across the country and no health area in Ireland achieves the international recommended caseload for speech and language therapists of between 30 and 65 (Conroy, 2014). Complexity of caseload and workload management



impact on service delivery, as well as caseload size. Almost 3,000 children wait more than 12 months for speech and language therapy (Conroy, 2014).

Attendance at clinics varies and the clinic-based model may not be appropriate for some families. Speech and language therapists may need to undertake home visits to understand language and communication in context, especially with children with complex needs, but there are severe constraints on home visits because of resources. Key performance indicators measured by the HSE include speech and language therapy waiting lists and throughput, primarily in clinic-based services. The pressure to reduce waiting lists means that prevention and early intervention is not prioritised and there is limited time to plan and review programmes or interventions. There is also recognition that speech and language therapy resources can get drawn to the setting that is best at mobilising those resources (e.g. schools rather than pre-schools; autism rather than disadvantage). Despite organisational and resource constraints, there are significant efforts to change the model of service and to develop evidence-based clinical pathways and there are good examples of these in use.

### 3. What does the evidence tell us about the development and assessment of speech, language and communication?

In recent years we have learned a great deal about how children develop language and speech and how this development influences later development. It is recognised that language development is a complex interaction between the intrinsic capacities of the child and the environment in which s/he develops.

#### The importance of speech and language

It is impossible to exaggerate the importance of language development to all aspects of a child's life. There is compelling evidence of the central role of communication and language as a key life skill. Effective verbal and non-verbal communication, based on language skills, is a prerequisite for accessing opportunities for learning and development in the early years, in the first years of formal education and throughout school life. There is increasing evidence about the connection between language and the development of other important skills including readiness for learning, literacy and numeracy (Bercow, 2008; Chambers, Cheung, Slavin, Smith, & Laurenzano, 2010; Delhaxhe & Motiejūnaitė, 2009; Hartshorne, 2006; Law, Reilly, & Snow, 2013).

There is also now evidence of the lifelong impact of a difficulty in developing language and communication skills (Bercow, 2008; Department for Children, 2008; Field, 2010; Karoly, Greenwood, Everingham, Houbé, & Kilburn, 1998; Law, 2011; Young et al., 2002). Language skills are one of the best predictors of educational success: language development at two years of age predicts children's performance at the start of primary school. Conversely, difficulty in learning language is associated with educational underachievement: children who have problems with speech or language when they start school are at high risk of difficulties with literacy. Children with poor language development at five years have a high risk of low educational achievement at seven years (Snowling, Hulme, Bailey, Stothard, & Lindsay, 2011).

A difficulty in using language can influence other aspects of development and can impact on cognitive development, literacy, social interaction, attention and readiness for formal teaching and learning. If a child has a limited vocabulary – the number and range of words s/he understands and/or uses – this can limit how s/he makes sense of what a teacher is saying and can very quickly limit access to the full benefit of the curriculum. If a child can't understand, or make him/herself understood, this impairs interaction with others, may lead to frustration for the child and others and be associated with behavioural difficulties (Law, 2011; Lockivood, 1994; Marshall, 2012).

Communication and language are central to learning and development. This has always been true, but changes in the complexity of life and the increasing sophistication of skills have increased the requirement for effective language and communication. Law et al. (2013) point out that changes in society have amplified the disabling effects of poor communication skills. Because language is a complex and dynamic system, even small problems in language can have a significant impact on other aspects of learning, development and social interaction.

The development of literacy builds on a foundation of spoken language and spoken and written language share important processes of learning and development. When children lack the

prerequisites of receptive and expressive oral language, they will struggle to develop reading and writing.

Because language and communication underpins social, emotional and educational development, early identification of difficulties and effective interventions to support language learning is crucial.

## Typical language development

Because so many factors influence speech and language development, there is no right or wrong way for children to learn language. In broad terms, language does develop in predictable ways, although the times vary. The usual or typical ways in which children learn to communicate and use language are called norms and the development of a particular child is compared to these norms to help to identify potential problems. These norms are influenced by gender, birth order, single or multiple births and other factors affecting early childhood experience. Very general developmental milestones for language and speech are widely available.<sup>3</sup>

**Figure 1 Indicative language developmental milestones according to age**

By age one	<ul style="list-style-type: none"> <li>● Babbles and uses sounds to accompany play and get attention</li> <li>● Recognises own name</li> <li>● Says 2-3 words as well as 'mama' and 'dada'</li> <li>● Imitates familiar words</li> <li>● Understands the names of familiar objects</li> <li>● Imitates sounds</li> <li>● Can take turns in simple routines (peek-a-boo; clap hands)</li> </ul>
By age two	<ul style="list-style-type: none"> <li>● Understands 'no'</li> <li>● Uses 10 to 20 words, including names</li> <li>● Can put 2 words together (bye-bye daddy')</li> <li>● Makes the 'sounds' of familiar animals</li> <li>● Points to eyes, ears, nose, hair</li> <li>● Can find objects identified by name only</li> </ul>
By age three	<ul style="list-style-type: none"> <li>● Understands up to 500 words</li> <li>● Can identify a wide range of objects by name</li> <li>● Carries on a conversation</li> <li>● Combines nouns and verbs and can use short sentences</li> <li>● Understands past and future</li> <li>● Can listen to a short story</li> <li>● Knows the names of colours and sizes</li> <li>● Solves problems by talking rather than hitting or crying</li> </ul>

<sup>3</sup> <http://www.hse.ie/caringforyourbaby/>

	<ul style="list-style-type: none"> <li>• Speech is mostly understood by familiar adults</li> </ul>
By age four	<ul style="list-style-type: none"> <li>• Has a vocabulary of up to 1,000 words</li> <li>• Can understand complex instructions (“put the red car under the table”)</li> <li>• Knows several nursery rhymes and songs</li> <li>• Can tell a short story</li> <li>• Uses sentences with 4-5 words</li> <li>• Uses plural and tenses, but sometimes incorrectly</li> <li>• Speech is mostly understood by unfamiliar adults</li> </ul>
By age five	<ul style="list-style-type: none"> <li>• Asks ‘who’, ‘what’, ‘why’ questions</li> <li>• Can use conditional terms ‘if....then’</li> <li>• Can uses past and future tenses and other forms of verbs, mostly correctly</li> <li>• Can make up stories</li> <li>• Can make simple jokes based on words</li> </ul>

### Problems in learning language

A review of international evidence estimated that approximately 6% of 2-5 year olds experience speech or language difficulties (systematic review conducted by Law, Boyle, Harris, Harkness, & Nye, 2000). In the Growing Up in Ireland study, a national longitudinal study of children, nearly one-in-five parents or guardians of three year olds had concerns about their child’s speech and language development and just one in three of these children had received interventions or services for the problem (Williams, Murray, McCrory, & McNally, 2013). By age nine, a reported 3.7% of children had a speech and language disorder (Cosgrove et al., 2014).

It is not always clear why children have difficulties in developing language or speech, but there are a range of factors that are often associated with difficulties in acquiring language, including:

- Social disadvantage;
- Difficulties with cognitive or sensory development (not covered in this paper); and
- Limited exposure to language learning opportunities.

### Language and social disadvantage

Social disadvantage can be defined as diminished social positioning in society and describes a range of linked difficulties that limit life opportunities including low income, poor housing conditions, low levels of education, and restricted access to resources. Children living with social disadvantage often have problems with learning language and these problems are often more severe and longer-lasting than problems of children who don’t experience social disadvantage. Importantly, problems may not be identified early and children may not get access to specialist help.

There are many studies indicating links between social disadvantage and children’s language development:

- Long-standing acknowledgement that poor language skills are associated with social disadvantage (W. Dockrell, 1966)
- We now know more about the extent of this association and the patterns of language difficulties in children from disadvantaged backgrounds (Roy & Chiat, 2013)
- Prevalence rates of language delays in disadvantaged populations are high, but rates of identification are often low (Law, et al., 2013)
- The greater the social disadvantage, the greater the difficulties with language development (Waldfoegel & Washbrook, 2010)
- Higher rates of difficulties are not reflected in referrals to speech and language therapy services (Bercow, 2008; Roy & Chiat, 2013)
- We don't know if the problems that children from disadvantaged backgrounds have are qualitatively different from those in children with more specific language disorders (J. E. Dockrell & Marshall, 2014)

The evidence that children living with disadvantage often have problems with developing speech and language has implications for practice. Increased attention has been paid in recent years to the effects of both disadvantage and speech and language delay or disorder in research and practice in many countries. This has generated more information about the evidence for what makes a difference for children, which is examined in the following chapter.

Practitioners and academics consulted in preparation for this paper expressed concern about models of disadvantage in use and our understanding of the impact of disadvantage on language. In their view, we don't have enough information about the norms for the population and definitely don't have norms for the family in circumstances of disadvantage. They highlight the risk of problematising what is systematic and proper for the context, because our theoretical understandings and the tests based on these understandings do not reflect the population in full (J. E. Dockrell & Marshall, 2014; Law, et al., 2013; Lindsay, Dockrell, Desforjes, Law, & Peacey, 2010; National Economic and Social Forum, 2009).

### **Limited exposure to language learning opportunities**

Children who are learning more than one language develop language differently from those who are learning just one first language. Children for whom English is an additional language (EAL) are commonly referred for speech and language therapy assessment in Ireland, especially in urban areas. Speech and language therapists report that this is a challenge in terms of diagnosis. It is difficult to distinguish between a disorder, a delay and normal language development for a child acquiring more than one language because the language development norms for children with EAL are different. Some tests have adjusted norms and standard deviations for children with EAL<sup>4</sup>. Therapists emphasise that assessment of young children with EAL is particularly difficult as the lack of sensitivity of tests for young children is compounded.

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<sup>4</sup> The New Reynell Developmental Language Scales (NRDLS) (fourth edition) includes the Multilingual Toolkit, an additional handbook giving guidance on how to adapt and use NRDLS with children for whom English is an Additional Language; the British Picture Vocabulary Scale used to provide norms for bilingual children, but apparently does not in the latest version

There has long been a concern about the impact of EAL on children's language development: children with EAL have been considered at risk for impaired language development, impaired cognitive development, risk of academic delay/failure and social-cultural exclusion (Genesee & Nicoladis, 2009).

Children with EAL are very heterogeneous with respect to when they learn English and the quantity and quality of English input that they receive. There have been relatively few studies and only limited data on developmental trajectories of these learners (Bedore & Pena, 2008).

Exposure to spoken English is a significant predictor of expressive and especially receptive language. When children are only exposed to English at preschool/school or through television, it is difficult to propose effective interventions. This has implications for the importance of the crèche or preschool environment.

Children should not be viewed as having a speech or language disorder because they speak a variety of English other than the standard dialect.

### **Unexplained difficulties learning language**

Some children experience language delays for no obvious reason. The new DSM-5<sup>5</sup> uses the term 'language disorder' to describe difficulties with the acquisition and processing of oral language. For a diagnosis of language disorder to be made, a child's language skills have to be different from other aspects of their development, and developing in ways that are different from the norms for language development. Language development is described as disordered if it presents in ways not seen in typical development or the patterns and if the extent of language learning needs are very different from normal patterns.

### **Additional conditions often associated with Speech, Language or Communication Needs**

This paper focuses on the implications of social disadvantage for language learning. There are other characteristics that are associated with problems in speech, language and communication and these may co-exist with social disadvantage. The additional and specific needs of children presenting with any of these problems need to be taken into account in understanding how best to support their language learning. These characteristics include, but are not limited to:

- Intellectual disabilities/ Special Educational Needs
- Deafness or hearing impairment
- Other sensory disabilities
- Physical disabilities
- Autism (Autistic Spectrum Disorder)

This report is focused on the language learning needs of children experiencing social disadvantage. While many of these will also experience one or more of the additional characteristics which impact on language and communication, the particular needs of children with disabilities will not be considered here. Children with developmental or other disabilities which impact on the acquisition

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<sup>5</sup> *The Diagnostic and Statistical Manual of Mental Disorders (DSM), Fifth Edition*, is a standard classification of mental disorders used by health professionals.

of language require the same opportunities for learning language as all children. However, they may also need additional, more intensive support, over a longer period of time.

## Language and assessment

We assess children's speech and language when there is a concern about development, to identify what kinds of problems exist so that we can plan effective interventions. Speech and language therapists apply a rule of thumb that can be summarised as 'rule in, rule out, watch and wait or intervene'. These choices are informed by assessment. Assessments can also be used as pre-intervention and post-intervention measures to evaluate the impact of oral language interventions. Good tests can provide useful information and can ensure that the most appropriate help is offered to support language learning. However, tests of language of young children are lacking in sensitivity: it is not clear that they measure the aspect of language intended.

## Screening

Language problems in children under five may be identified through screening. Screening tests must balance adequate sensitivity (identifying children with language problems) with adequate specificity (not identifying children who do not have language problems). Many tests do not meet these basic criteria for screening purposes. Tests can be reasonably accurate about identifying children who do not have language difficulties. However, it is harder to identify a child who is experiencing a language difficulty, and even harder to predict the likelihood of a child experiencing language difficulties in the future. Even tests that are specifically described as screening tests may not be adequate e.g. the Clinical Evaluation of Language Fundamentals (CELF) screening test, which is used by many speech and language therapists in Ireland consulted in the course of this study (J. E. Dockrell & Marshall, 2014). These conclusions about the limitations of screening tools are further supported by systematic reviews (Law, et al., 2000; Nelson, Nygren, Walker, & Panoscha, 2006). Nonetheless, in recognition of the importance of identifying children who struggle with oral language, there are continued attempts to devise psychometrically sound<sup>6</sup> screening devices. Current research suggests that regular monitoring is preferable to one-off screening of language, because screening tools cannot account for the differences in children's developmental trajectories (Snowling, et al., 2011).

## Assessment

When a problem is identified, the purpose of the assessment process is to gather information about the nature and extent of difficulties with different aspects of language. Typically, speech and language therapists use a mixture of tools to undertake an assessment. The tools of assessment and the settings of assessment give rise to particular patterns: we measure what is possible to measure and this does not necessarily include all important aspects of language. An important purpose of communication is to be able to regulate and manage the self in the world, to internalise and represent experiences in the world and to externalise and communicate personal thoughts and experiences. This is a complex and dynamic process which is not fully understood. Single measures of language, like vocabulary, are inadequate for determining whether a child is developing typically or is experiencing a delay at any age and the younger the child, the less reliable they are (J. E.

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<sup>6</sup> A test is psychometrically sound if it measures what it claims to measure (i.e. has validity) and performs consistently over time (i.e. has reliability).

Dockrell & Marshall, 2014). While they may provide important information and help to identify ways to address language difficulties, they never provide the full picture of the complex ways communication is used. Composite language measures appear to reflect language more accurately than single measures.

In the consultation for this paper, many speech and language therapists expressed concern about the limitations of the tests available to them for diagnostic and identification processes. The accuracy and utility of tests are also influenced by the skill and experience of the therapist and adherence to the assessment procedure. The limitations are an important consideration in reviewing the evaluation findings of programmes aimed at developing language skills in preschool children.

### Key messages about the development and assessment of speech, language and communication

- Language is complex and difficult to assess.
- A difficulty in developing language and communication skills can have a lifelong impact and impact negatively on cognitive development, literacy, social interaction and school readiness. Early identification and intervention is therefore crucial.
- There is a strong association between social disadvantage and problems in developing speech and language skills, but rates of identification of these problems are often low.
- Children who are learning more than one language develop differently from those who are learning just one first language, which has implications for assessment and intervention
- There are a number of characteristics that are associated with problems in speech, language and communication (such as intellectual disabilities or hearing impairment) and these may co-exist with social disadvantage.
- Few assessment tools are suitable for measuring the language and communication of pre-school children. The younger the child, the less sensitive the test.
- Many tests in use may not be effective in predicting language development.
- Composite measures of language appear to reflect language skills more accurately than single measures.
- Regular monitoring procedures, where regular testing shapes language teaching, may be of particular value, especially in measuring change over time.
- There is a need for further research into robust approaches to assessment of language for preschool children and to develop appropriate assessment tools, for use by multi-disciplinary team members.



## 4. What does the evidence tell us about oral language development services and interventions

There is a strong emerging trend to focus on universal dimensions of prevention and early intervention for language development. Research findings support the provision of high-quality supports to parents and families before children start to talk, rather than waiting until a delay or disorder emerges. Alongside the recognition of the value of preventing difficulties from developing, most models of intervention recognise the value of:

- distinguishing between different levels of need;
- intervening earlier rather than later;
- strengthening the capacities of parents and other adults in the young child's environment; and
- providing appropriate, targeted interventions with the aim of avoiding difficulties in oral language leading to difficulties in formal education.

This chapter outlines the evidence on organising oral language development services, with an emphasis on the promotion of language development from birth, and on interventions to prevent language difficulties and intervene early when they are identified. There is a growing body of evidence on language interventions in Ireland, which is referenced throughout the chapter, and summarised in Appendix 3.

### Universal, targeted and specialist oral language development services

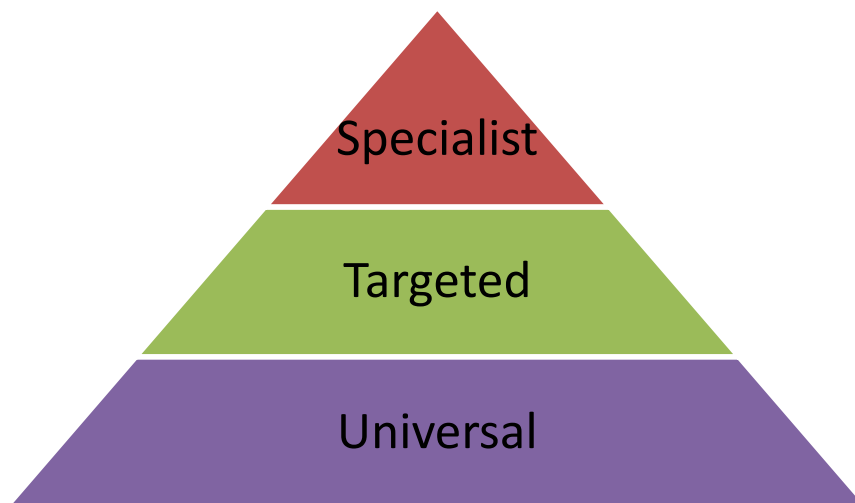
There is a requirement to provide services which fit with local need and influence. Most jurisdictions plan speech and language therapy services as a single service whilst others commission integrated services, working across traditional boundaries, with health services integrated with education or social services. In many areas, this has already happened for children's services. No single agency can deliver best outcomes for their service users by working in isolation.

There is substantial evidence that supports for language learning are best undertaken in naturally occurring environments and throughout the activities of the child's life, rather than, for instance, once weekly in the speech and language therapy clinic. There are many opportunities for modelling and reinforcing appropriate speech, language and interaction in ordinary settings at home, preschool and school (Childress, 2004; J. E. Dockrell & Marshall, 2014; Hanft & Pilkington, 2000; Law et al., 2012; Lindsay, et al., 2010). However, interventions for persistent problems with phonology (speech sounds) or complex or specific difficulties in learning language are best undertaken by a speech and language therapist.

There are many variations in describing ways of organising services that reflect the best use of resources. They all share the basic premise of devoting most resources to prevention and promotion (universal services), allocating fewer resources to meeting needs which are not adequately addressed through universal services (targeted services) and ensuring the availability of specialist resources to meet the needs of a very small proportion of the population with rare, unusual or complex needs (specialist services). This model of universal, targeted and specialist provision is presented in Figure 2

and aligns with specific models for delivering speech and language therapy services, such as the Broomfield model (Broomfield, 2013) and The Balanced System (Enderby et al., 2009).<sup>7</sup>

**Figure 2 Levels of oral language development services provision**



### **Universal services**

Universal services are for all children. They are provided by lots of people in the child's life and are aimed at increasing exposure to language learning opportunities which are a good 'fit' for the child. This includes:

- Regular, routine interactions;
- Focused on the interests and attention of the child (mind-mindedness);
- Responsive, built around the relationship with the child;
- Building on and expanding the communication efforts and strengths of the child; and
- Practice (prompted by everyday activities).

For a small number of children, these opportunities will not be sufficient for their language-learning needs. For this group, where there are gaps in language learning or particular difficulties, there is a need to amplify the level of support, through targeted services. Parents and early years educators, as well as others involved with the very young child, are well placed to identify potential problems and to ensure that targeted services respond to such problems.

<sup>7</sup> For more information on the Broomfield framework, see:

[http://www.youngballymun.org/fileadmin/user\\_upload/files/Report\\_of\\_Learning\\_from\\_Jan\\_Broomfield\\_session..pdf](http://www.youngballymun.org/fileadmin/user_upload/files/Report_of_Learning_from_Jan_Broomfield_session..pdf)

For more information on the Balanced System framework, see:

<http://www.bettercommunication.org.uk/the%20balanced%20system%20overview%20July%202013.pdf>

### Targeted services

Targeted services are provided by adults with specific additional awareness, experience and skills in relation to helping the child to learn language. This may be an early years educator or a parent, with the support of parent training programmes. Targeted services must:

- Understand the particular difficulty or missing skill;
- Increase intensity (practice) and exposure to language and provide modelling of language in its correct form;
- Monitor and record the response or change; and
- Provide support to other adults in the child's life.

Speech and language therapists should be involved in ensuring that early years educators, parents and others, as appropriate, have the relevant knowledge and skills to deliver targeted support.

### Specialist services

For a very small number of children, universal and targeted interventions are not enough. If the problem is hard to understand, does not change or improve with practice and exposure, or gets worse over time, it is important that children have ready access to specialist services in the form of speech and language therapy. This level of service is provided by a speech and language therapist and is likely to include:

- Assessment with relevant tests, if available;
- One-to-one or small group interventions;
- Monitoring changes over time; and
- Providing relevant information and support to skilled staff and/or parents.

### Towards a public health approach to oral language development

A recent discussion in an international journal questions the historical 'clinical' approach to intervention with children referred for speech and/or language disorders (Law, et al., 2013). With a specific focus on social disadvantage, Law and his colleagues question the assumptions that underpin this medical model: the rehabilitative framework; a focus on the individual; a particular view of the ownership of expertise. Addressing the uptake of services and whether those children who need services receive them, he notes that there are few population studies but those that do exist suggest that about one third of those identified with difficulties had asked for or been referred for help from a speech and language therapist. This means that two thirds of those who need services do not receive them.

Law proposes that speech and language therapy services should be reconceptualised to *respond to the needs of the whole population and according to socially determined needs, focusing on primary prevention* (p. 486). Advocating this public health framework, this paper specifically proposes the development of universal prevention services in relation to social disadvantage, in recognition of the established links between disadvantage and speech and language delays and disorders. Serious consideration should be given to a public health approach to oral language development to reflect the distribution of need and the appropriate use of specialist resources.

Law emphasises that all interventions are potentially preventative although what is to be prevented may change (Law, et al., 2013). Adapting guidance from the US Department of Health & Human Services, Law suggests a model that corresponds with the aims of universal, targeted and specialist models:

Primary prevention (universal) activities are directed at the general population and attempt to prevent early speech and language difficulties. All members of the community have access to and may benefit from these services. Primary prevention activities with a universal focus are aimed at raising the awareness of the general public, service providers, and decision-makers about the scope and problems associated with early speech and language difficulties

Secondary prevention (targeted) activities occur with populations identified as being at risk for speech and language difficulties because of marked social disadvantage, parental risk factors, family history, failing a screening procedure, etc. The aim here is to provide treatment for the difficulties, remove barriers and thereby facilitate the development of speech and language skills.

Tertiary prevention (specialist) activities focus on families where the child's difficulties are persistent and have not responded to intervention. Here the aim is to reduce the negative effects of the speech and language difficulty rather than remove it altogether (adapted from guidance from the US Department of Health & Human Services (USDHSS, 2004).

(Law, et al., 2013)

## Research about interventions and programmes

Language programmes and interventions are ways of formalising and increasing attention to approaches that work and can be helpful at both universal and targeted levels. All interventions in speech, language and communication seek to help the child to listen and attend to aspects of language, to recognise and reproduce the use of language and to internalise language use so that it is available to help thinking, self-regulation and managing interactions in the world. Children who have normal language development make use of the examples of language that occur in their everyday lives. Children with problems developing language need additional opportunities to hear and use language and these opportunities may be created in a one to one setting with a speech and language therapist, with a parent or early educator; in a group setting, with other children in a therapeutic or educational context or in a mixture of both. Children learn language from adults and from other children. Where there are difficulties, the evidence is that frequency and intensity of opportunity are important.

In examining specific frameworks and programmes of intervention, it is important to recognise that what is in use is influenced by different factors at a given point in time. Some programmes are well established, have been in use for many years and have a substantial body of evidence in relation to use and impact. Other programmes are unique, newly developed or locally adapted variations on existing programmes and there may be limited evidence about use and outcomes for children. Because they are more likely to have been evaluated and to have been more widely used, programmes that have been in use for longer have an advantage over those that have been in use

for a shorter time or in only one or a small number of settings. Fidelity<sup>8</sup> to the programme is important if the intended outcomes are to be achieved.

In the UK, the government responded to the findings of the Bercow Review of services for children with Speech Language and Communication needs (Bercow, 2008) by establishing the Better Communication Action Plan (The Children's Plan, 2008). This included the Better Communication Research Programme (BCRP) which identified the best evidence for oral language programmes, based on randomised controlled trials of interventions and a comprehensive survey of speech and language therapists in England and Wales. The research reports and thematic analyses offer important guidance for the development of services and the evaluation of interventions (Axford & Barlow, 2013a, 2013c; J. Dockrell, Lindsay, Roulstone, & Law, 2014).

In examining what interventions work for children and young people with speech, language and communication needs, as part of the Better Communication Research Programme, Law et al. (2012) reviewed the international intervention literature (excluding interventions explicitly targeting literacy) and surveyed speech and language therapists.

They reviewed 57 interventions either currently in use in England or published in the research literature. Five of the interventions were Universal interventions, 13 were clearly Targeted and 16 Specialist. The remainder were considered likely to be used across levels, adapted to meet the needs of individual children.

- 3 (5%) were found to have a strong level of evidence (at least one positive systematic review)
- 32 (56%) had moderate evidence (single randomised controlled trial)
- 22 (39%) had indicative evidence (good face validity but limited research evidence, e.g. case studies or 'before and after' studies)
- 2 other interventions were reviewed, but were under development with insufficient evidence to judge their value
- Most interventions focus on work with preschool and primary school children
- Seventeen (30%) of the interventions were specifically relevant for improving a child's speech
- Twenty two (39%) targeted language
- The remainder were aimed at a combination of speech, language, communication, and complex needs.

It is not proposed to outline Law et al.'s overview of intervention studies here, as the findings in full are available online.<sup>9</sup> The review evaluated all interventions against ten evaluative criteria and, in an Irish context, it is the criteria and their application that may be of most practical use (the criteria are provided in Appendix 2). Law et al. suggest that these criteria should be used by services and

<sup>8</sup> Fidelity is the degree to which the activities undertaken in a programme are true to the design of the original programme on which it is based

<sup>9</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/219623/DFE-RR247-BCRP10.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/219623/DFE-RR247-BCRP10.pdf)

professionals to select interventions or to develop their own interventions. The authors advocate the consideration of all ten criteria and acknowledge that different weight will be given to different criteria at different times and in different contexts. Readers are encouraged to read the full development in Law et al. (2012, pps 17-19). The review concluded that evidence in relation to interventions for children with speech, language and communication needs is limited and further evaluations are needed, particularly within the context of existing service provision.

### **Importance of 0-3 years**

Alongside the Better Communication Research Programme, the UK has also invested heavily in the research foundation for a 10-year programme of investment in prevention and early intervention called 'Fulfilling Lives: A Better Start', a follow-on to the national 'Sure Start' programme. As part of 'Better Evidence for a Better Start', Dartington Social Research unit has compiled evidence about what matters for child outcomes in the early years (Axford & Barlow, 2013b). This work, described as 'the science within', emphasises the importance of pregnancy, birth and infancy for language development, as well as the 1-3 year period. The impact of parenting and the home environment in the early years is emphasised. This work highlights the increasing research evidence pointing to the interconnection between the areas of social and emotional development and language and communication in the young child. "The 'science' within' reinforces the relationship between attachment security and language learning: secure attachment is associated with better learning outcomes. Speech and language develop on a foundation of play with babies, especially involving vocal and verbal exchanges. Regular engagement and verbal stimulation by parents contribute to language development in toddlers (1-3 years). Axford & Barlow also note the barriers to the development of speech and language: household chaos affects children's ability to express and understand language at 36 months and this can have a long term impact on language, interaction and cognitive development. This study acknowledges the impact of the economic situation of the family on children's well-being and the capacity of parents to interact positively with children.

Research identifies activities that can improve language and communication outcomes for children (Axford & Barlow, 2013b), including:

#### **Parent-infant interaction**

- Processes to identify parents or parents-to-be who are likely to have difficulties establishing secure attachment with their children, and programmes and practices to promote their parental sensitivity and 'mind-mindedness' – parents ability to represent their child's likely thoughts and feelings.

#### **Positive parenting practices**

- Processes to identify families where there is poor parenting, and programmes and practices that help to improve parenting practices.

#### **Language development**

- Programmes and practices that help to improve parents' verbal and non-verbal stimulation and early learning practices with their infants/toddlers.
- Programmes and practices that help to reduce household chaos.

This research identifies that children experiencing disadvantage need good play and verbal exchanges in infancy, and early positive parental input (e.g. warmth, sensitivity, responsiveness, support for autonomy, and early participation in literacy and learning) in addition to limited household chaos and regular routines during toddlerhood in order to achieve good outcomes in terms of both language and cognitive development.

### The central role of parents

There is increasing evidence of the value of evidence-informed home and centre or crèche based interventions that can be used immediately after birth and from 1-2 years. The design of these interventions should link with universal health services, specifically maternity services, to identify which families require more support than that delivered through universal prevention and promotion activities. The purpose of these interventions is to support parents in developing relationships with their babies, to encourage and support frequent and appropriate interactions and to develop mind-mindedness in parents. Mind-mindedness describes the capacity of parents to connect their child's behaviour with what the child might be thinking or feeling. Maternal mind-mindedness relates to important developmental outcomes, such as security of attachment and theory of mind (Meins, Fernyhough, Arnott, Turner, & Leekam, 2011). Examples of interventions with babies and their parents in Ireland include *Preparing for Life* and *Lifestart Growing Child Home Programme* and an example of an intervention with toddlers and parents is the *Parent-Child Home Programme* (see Appendix 3 for more details).

### Early years settings and schools

The evidence reviewed to inform A Better Start emphasises the value of early education and commits to the provision of 15 hours per week of early education in "good and outstanding settings", for 2 year old children from disadvantaged backgrounds. Supported by the findings of the evaluation of the National Early Years Access Initiative (NEYAI) in Ireland, the skills and capacities of early years educators are seen as critical (Axford & Barlow, 2013a; McKeown, Haase, & Pratschke, 2014). The research synthesis informing the design of A Better Start emphasises the skills of early years educators over the specific curriculum or programme used in early years settings. It suggests that a range of curricula can be used to improve language and learning outcomes for children via pre-schools (e.g. High Scope, Curiosity Corner, Incredible Years) (Chambers, et al., 2010; Girolametto, Weitzman, & Greenberg, 2006; International Society on Early Intervention, 2014; The National Evaluation of Sure Start Team, 2007). There is extensive experience of preschool programmes supporting language development in Ireland, such as *Happy Talk* in Cork City, *Chatter Matters* in Ballyfermot, and *Eager and Able to Learn* in Northern Ireland (see Appendix 3).

A number of studies identify the success of teacher-led interventions, with key differences related to the style of intervention rather than who delivered it. Several projects, including the Childhood Development Initiative in Tallaght West, deploy speech and language therapists in both preschool and school settings (see Appendix 3). Therapists work directly with children and parents in these settings and also provide training and support to preschool and school staff. *youngballymun* provides specialist speech and language therapy support across three of its initiatives (*Ready Steady Grow*; *3,4,5 Learning Years* and *Write Minded*) (see Appendix 3). Working with teachers in primary schools, this initiative demonstrates the value and impact of building capacity among

teachers, who can use the understanding and skills throughout the school day and with potential benefit to large numbers of students.

A number of literacy interventions have also been implemented in schools in Ireland and evaluations have demonstrated a range of outcomes including improvements in language outcomes for children, improved concentration and improvements in the quality of the literacy environment in schools. Examples include *Wizard of Words*, *Doodle Den*, *Write-minded*, and *Zoom Ahead with Books* (see Appendix 3).

## Evidence about what works in speech and language therapy

In a workshop with HSE speech and language therapists in 2013, Dr Jan Broomfield's summary of evidence about what works in speech and language therapy included:

- Early and more intensive interactions are more effective, particularly for expressive difficulties
- Children with speech and language disorder need regular review, with management integrated into education
- Intensive therapy leads to better outcomes for children with expressive language disorders
- Group therapy is beneficial for early comprehension as socialising helps
- Syntax (construction of sentences) before phonology (speech sounds) is best for mixed Speech Language Communication Needs
- Intervention by skilled trained others can be at least as effective as speech and language therapy intervention
- Phonology intervention is effective, when 8 or more weeks of therapy are provided by a speech and language therapist
- There is no evidence for Non-Speech Oral Motor Exercises

Speech and language therapy services in some areas use a blend of clinic-based and outreach in schools to enhance parental engagement, relationship building and greater attendance at speech and language therapy appointments. A number of initiatives have moved from clinic-based speech and language therapy provision to a model of school-based provision in order to increase accessibility to services, increase attendance and uptake rates, and facilitate enhanced integration of health and education services. Evaluations of these initiatives have demonstrated increased attendance, earlier access, and better coordination of services, such as the *Speech and Language Therapy Service In-School Provision* in Limerick City, the *NICHE Speech and Language Programme* in Cork, and the *Speech and Language Therapy Model* in Tallaght (see Appendix 3).

Examining the evidence for speech and language therapy interventions for language impairment, Enderby and her colleagues reviewed the findings of 20 key papers, including two systematic reviews (2009). A synthesis of all papers is given in the full report. Enderby notes the small numbers of children in most randomised controlled trials and a failure to disclose methods of randomisation, introducing bias. The studies examined a range of components of



speech and language therapy (SLT) interventions and their effect on outcomes. These included:

- intensity of intervention;
- timing of intervention and ‘watch and wait’ vs. intervention; and
- who delivered the interventions.

### Intensity of intervention

Studies indicate that more intensive interventions produce better outcomes. However, studies are limited and it is unclear what elements of intensity are important and how these relate to other aspects of intervention including timing, parental involvement and the involvement of other professionals.

### Timing of intervention and intervention Vs “watch and wait”

In the studies reviewed, children with a severe phonological disorder<sup>10</sup> who received speech and language therapy earlier made greater gains in conversational speech intelligibility and expressive language skills than the later treatment group. In one study, children who received therapy made significant gains compared to children who did not and children who received therapy earlier made greater progress. One study compared “watchful waiting” with immediate speech and language therapy for children under 3.5 years with speech and/or language delay. 70% of all children, in both arms of the study, still had substantial speech and language deficits at the end of the trial (12 months): therapy did not demonstrate an effect.

Enderby notes that the findings of these studies “raise questions about the appropriateness, timing, nature and intensity of speech and language therapy in the preschool population.” (p24), reinforcing concerns about the validity and sensitivity of measures of language and communication, especially in young children.

### Who delivers oral language development services and supports?

Enderby examined a number of studies which looked at who should deliver a speech and language intervention: speech and language therapists, speech and language Therapy Assistants (SLTAs), parents and teachers. One study compared efficacy and cost effectiveness of therapy delivered by speech and language therapists and speech and language therapy assistants in group and individual sessions. This study did not find any difference in effectiveness. Taking cost into account, group sessions delivered by SLTAs were least costly and individual treatment delivered by speech and language therapists was most costly. There is no nationally recognised role for SLTAs in Ireland, although SLTAs are employed in some settings, but these studies suggest that issues of skill-mix should be examined in order to maximise the impact of a scarce, specialist resource such as speech and language therapy and to ensure value for money.

### Parent-based programmes

Parent-based programmes delivered by speech and language therapists have been extensively studied. Studies of a range of parent-based interventions demonstrate that these approaches can

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<sup>10</sup> Children with a phonological disorder do not use some or all of the speech sounds expected for their age group.

be at least as effective as direct speech and language therapy. Some studies also claim greater cost effectiveness, although one study calculated a greater cost per outcome gained and increased costs to parents for parent-based programmes (Baxendale & Hesketh, 2003).

The Hanen Parent Programme is a widely used parent-based programme internationally, including in Ireland. Findings of studies using the Hanen Parent Programme vary. One study found no difference between the Hanen Parent Programme and traditional speech and language therapy clinic-based groups over a 12 month period (Baxendale & Hesketh, 2003). Hanen developed a programme for parents experiencing disadvantage called 'You Make the Difference', specifically targeting prevention of language delay/disorder. This programme is no longer offered by Hanen, following a population-level study in Australia, which found that it did not improve children's language skills (although the Hanen Centre has some criticisms of the study) and the Hanen Centre's recognition that the programme needed revision (Wake et al., 2011). The Wake study emphasises that studies with both positive and negative findings need to be published and considered in choosing effective prevention strategies. It offers a particular caution about assuming that effective interventions will remain effective when translated to the population level.

Hanen practitioners in Ireland are enthusiastic about its use. However, speech and language therapists working in disadvantaged communities caution that the Hanen programme, like other parent programmes, requires a level of organisation and self-efficacy in parents that should not be assumed. Overall, some therapists note that the parents who benefit most from Hanen programmes might well benefit from any structured programme.

Speech and language therapists consulted for this paper identified difficulties in communicating the role of parents or the value of groups. Parents may feel that they are being 'fobbed off' when they are offered programmes involving groups of parents. When parents perceive group therapy or parent programmes as a second-best substitute for direct therapy, they may not engage fully or may not recognise the benefits to their child (Harris & Goodall, 2007). The perception of a 'consultation' model, where the therapist focuses on building the capacity of parents, teachers and early years educators, as a less good and lower-value service is common (Hayes, Keegan, & Goulding, 2012). Research which identifies limitations in speech and language therapy services and shortages of speech and language therapists (Conroy, 2014) may reinforce the public perception that anything other than direct therapy from a speech and language therapist will fail to meet the needs of children.

Further research is required to identify which types of children and/or parents may benefit from different types and delivery of therapy, and how to effectively build the capacity of parents.

### **The quality, availability and use of evidence**

Analysis and synthesis of the evidence reviewed for this paper highlighted a number of important themes:

- Despite many examples of interventions developed and used by skilled and committed practitioners from a range of backgrounds, there are still few intervention studies in Ireland and in other countries.

- Intervention studies, where they are undertaken, are typically small. This can limit the value of the individual study and can also make it difficult to generalise from one setting to another. It is important to recognise the limits of any single study, in terms of evidence.
- There are few replication studies so the findings from single studies, even those which are well-designed, are not confirmed.

It is important to be aware of these limitations to the evidence base on effective interventions.

## Key messages about oral language development services and interventions

- Supports for promoting the development of oral language are best provided in naturally occurring environments and throughout the activities of the child's life at home, preschool and school.
- Research findings support the provision of high-quality supports to parents and families before children start to talk.
- It is better to intervene to prevent problems developing than to wait until difficulties arise.
- Services should be organised so that the most resources are dedicated to the promotion of language development through universal service provision, fewer resources should be allocated to targeted provision to meet needs not adequately addressed through universal services, and specialist services should be provided to meet the needs of a small proportion of the population with rare, unusual or complex needs.
- A public health approach to language development refocuses the organisation of services to respond to the needs of the whole population and according to socially determined needs, with a focus on primary prevention.
- Effective promotion of language development includes interventions to strengthen the capacity of parents and early years educators.
- Programmes are ways of formalising and increasing attention to approaches that have good evidence and can be helpful at both universal and targeted levels.
- Approaches to improve language and communication outcomes for children should include support for parent-infant interaction and for positive parenting practices as well as programmes specifically aimed at language development.
- Programmes that strengthen parents' capacity to support and encourage language and communication are useful, but need to be carefully chosen and implemented to ensure that they are a good fit for parents living with disadvantage.
- Where children are already showing problems with language and communication, targeted interventions should be designed and supported by specialist speech and language resources but may be more effectively delivered by skilled early years personnel using evidence-informed frameworks, approaches and programmes.
- Further research is required to identify which types of children and/or parents may benefit from different types and delivery of interventions and services.

## 5. Conclusions and recommendations for the ABC Programme

### Conclusions

There is compelling evidence for universal service provision for the promotion of speech and language development of children. Language development occurs across the lifecycle of children. Focus is needed on the early years from birth onwards but support with language development is also needed for older children. Oral language development needs to be supported across the lifecycle and multiple services and systems are needed to achieve this. The separate organisation and funding of ways of meeting different aspects of need does not reflect how children develop. There is a pressing need to integrate services across organisational boundaries including health, education, social care, and disability. The development of a common language, common practices and shared assessment and interventions across health and education systems are required to maintain a focus on the child.

As well as strengthening such universal services, targeted services should be available where problems are identified. The speech and language therapy resources available to deliver such services are currently inadequate and must be improved. Mainstream services are persistently on the edge of being overwhelmed. This does not position a scarce resource to impact on greatest need. Speech and language therapists also need to develop skills in working with parents and others involved with pre-school children, to support the development of their skills and knowledge. Although there are examples of speech and language therapy services based in non-clinical settings in Ireland, the current speech and language therapy system is, functionally, a medical model. This does not reflect how children learn language and the evidence about effective interventions. A strengths-based model, using appropriate settings and approaches is required. A small number of children, with specific problems in speech and language, need access to specialist supports.

Evidence in relation to what works in promoting language development in children experiencing disadvantage is growing. Individual projects have developed good practice and models of prevention and intervention and achieved good outcomes for children. There are working models and theories of language development and what supports it, a range of interventions, approaches and programmes that reflect these understandings and an emerging body of evidence in relation to these interventions. However, there are still gaps and results of studies of new or adapted programmes should be treated with caution: many factors influence the results.

There is strong evidence that problems in learning and using speech and language are common and that they have long-term, negative impact for individuals and families. Such problems can be addressed in a range of ways, but early intervention has been demonstrated to be effective. Although there is no one 'best' way to achieve this, giving parents and early years educators the knowledge and skills to support children's language development does make a difference. It is important to have a focus on speech and language from infancy and to ensure that all services involved with children and parents understand the central role of language. Programmes with evidence of effectiveness are useful in systematising support for language learning but are not sufficient – language is integral to all parts of the child's life.

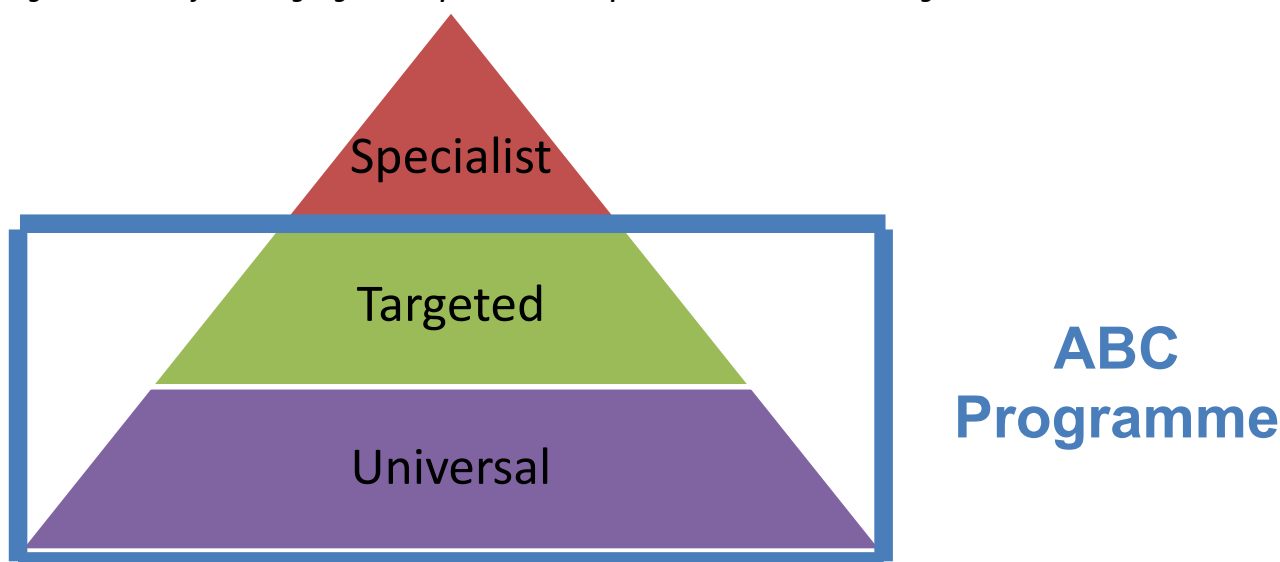
The implementation of evidence-informed approaches requires attention to a wide range of issues including leadership and partnership, a common language and integration of services, support for

different aspects of delivery, competent, skilled and experienced staff and a focus on the child, the family and the environment in which the child is learning language. Any approach must have a rationale not only for *what works* but on *why, what works, works*. Interagency working is complex and it takes time, commitment, resources and consistency to achieve interagency working that delivers benefits to children. Learning communities and routine, ongoing collaboration, alongside tools for monitoring and feedback, support practice that is ‘good enough’.

## Recommendations

- 1. Areas in the ABC Programme should focus on universal and targeted services for oral language development.**

*Figure 3 Levels of oral language development services provision under the ABC Programme*



Those consulted in the preparation of this review emphasised the opportunity presented by the ABC programme to consider the evidence in relation to early language development and to ensure that the programme reflects the learning from research and practice. The ABC programme presents an important opportunity to make explicit the understandings about the central role of language in early development, to develop universal services which make use of research evidence about how to prevent problems in speech and language from developing and to design and implement interventions which recognise and integrate the specialist skills and knowledge of all the adult resources in the child’s life. Overall, a focus on the development of language and the availability of specialist resources should be integrated into the overall approach to supporting early development and education. This requires effective, measurable interagency and multi-disciplinary working.

To achieve the changes that meet children’s needs requires changes to models of service delivery. The current constraints on resources have resulted in an increase in ‘silo’ mentality, as separate strands of service seek to protect their own area. The ABC Programme is an opportunity to use the existing evidence base, to build an Irish evidence base and to share learning across services,

professional perspectives and practices. It affords an opportunity to build an approach to language development that takes on board the findings of the review and deliver services that:

- Are **strengths-based**;
- Adopt a **prevention and early intervention approach**; and
- Operate primarily at **universal and targeted levels**, as outlined in Figure 3.

## **2. Prioritise strengthening capacities in parents who are the best resource for developing language in children.**

Parents are the most important influence on all aspects of the development of a child’s language. When trying to get better outcomes for children, parents are the first and best resource. If we build competencies in parents, we build competencies in children. Approaches in universal and targeted service provision should prioritise strengthening capacities in parents.

All those who interact with parents should understand the importance of language and be able to model and support activities to promote language development. Key messages about speech and language should also be reinforced throughout the parent’s environment and attention should be brought to the importance of ‘talking with your child’. These messages should be strongly reinforced across all services.

Parents are different, so a wide range of approaches to support them is needed. The challenge is to have supports that respond to parents rather than services that require parents to adjust to them. Home-based and group-based programmes for parents can help to model and encourage positive parent-child interaction. Programmes for parents are a good fit for some parents, but not all. Time and capacity to value the perspective of parents and build that value into services is needed. Parental engagement should be prioritised and the evidence about what works for parents experiencing disadvantage should be applied.

## **3. Enhance the transfer of skills from speech and language therapists to early years educators and schools.**

The development of core skills of early years educators in promoting oral language development and supporting parents’ role is critical. This depends on confident, skilled, professional early years practitioners, who understand how what they are doing creates the environment for children to develop language and communication skills in the context of their overall development. Approaches to supporting language should not be seen as separate to other aspects of early years settings: the whole environment should provide supports for language. Frameworks like *Aistear* and *Síolta*<sup>11</sup> focus on oral language skills and establish a shared language for practitioners and resources. Staff training, and ongoing coaching and mentoring are needed to support their implementation. Specialist speech and language resources cannot compensate for limited skills in delivering universal and targeted supports for language development.

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<sup>11</sup> *Síolta* is the National Quality Framework for Early Childhood Education, developed by the Centre for Early Childhood Development and Education on behalf of the Department of Education and Skills.

Effective early years settings, with skilled staff implementing proven frameworks for language development, should be supported by specialist speech and language resources. These resources should be involved in initial and continuing staff training in relation to language development and providing guidance and feedback on a regular basis, as programmes are delivered. The quality of coaching and mentoring provided is really important to ensure fidelity, to respond to difficulties, and to provide encouragement. Where specialist services are required, streamlined access to services should be available.

As part of a multi-disciplinary team supporting the delivery of high-quality early years education, the speech and language therapist should also be available to respond to concerns of staff about language development, to engage in dynamic assessment and monitoring of children's response to intervention and to provide specialist intervention when this is needed (Caesar, 2013). Children from disadvantaged backgrounds may continue to experience difficulties with language when they have started formal school. Specialist support for teachers should be available, to enable them to provide appropriate support for children.

#### **4. Speech and language therapists should be deployed as the specialist designers and resources to the system, not as the only form of intervention.**

It is important to examine the use of the specialist knowledge and expertise of speech and language therapists, which are scarce and costly, in order to strengthen the capacity for more effective intervention across the system. The focus of speech and language therapy needs to be broader. Speech and language therapists should provide a lead role in designing, supporting and monitoring universal and targeted oral language development services, and an exclusive role in specialist oral language development services.

The dissemination of the knowledge of speech and language therapists should be prioritised. Speech and language therapists are communication specialists: the challenge is for speech and language therapy to become increasingly effective in framing, communicating, supporting, monitoring and enhancing knowledge and understanding and behaviours in others that are supportive of good early language environments.

We need more speech and language therapists working in prevention and early intervention. This requires a change from measuring throughput in services and waiting lists to measuring outcomes for children. A shift in thinking is needed to establish the principle that speech and language *support*, rather than speech and language *therapy*, can be delivered by multiple skilled people.

#### **5. The ABC Programme should provide a platform for sharing and pooling knowledge, experience, resources and evidence on oral language development.**

The ABC Programme Learning Community can provide opportunities to build skills and capacities for practitioners working with families across health, education and voluntary organisations in promoting oral language development and engaging effectively with parents, particularly those experiencing disadvantage. It can also be used as a platform to develop a common language about oral language development, build skills and capacity in multi-disciplinary and interagency working, and embed the gathering, analysis and use of data into existing service provision. It can be a forum for developing the capacity of practitioners to employ evidence-informed practice.

## References

- Axford, N., & Barlow, J. (2013a). Better Evidence for a Better Start: Overview of interventions identified and the evidence of their impact. Dartington: The Social Research Unit at Dartington.
- Axford, N., & Barlow, J. (2013b). The science within: What matters for child outcomes in the early years. Dartington: The Social Research Unit at Dartington.
- Axford, N., & Barlow, J. (2013c). What works: An overview of the best available evidence on giving children a better start. Dartington: The Social Research Unit at Dartington.
- Baxendale, J., & Hesketh, A. (2003). Comparison of the effectiveness of the Hanen Parent Programme and traditional clinic therapy. *International Journal of Language & Communication Disorders*, 38(4), 397-415.
- Bedore, L. M., & Pena, E. D. (2008). Assessment of bilingual children for identification of language impairment: Current findings and implications for practice. *International Journal of Bilingual Education and Bilingualism*, 11(1), 1-29.
- Bercow, J. (2008). The Bercow Report: A review of services for children and young people (0-19) with speech, language and communication needs. Nottingham: The Department for Children, Schools and Families, United Kingdom.
- Broomfield, J. (2013). Report of learning from workshop in Ballymun with Dr Jan Broomfield: Developing an evidence-based children's Speech and Language Therapy Service. Retrieved 2 December 2014, from [http://www.youngballymun.org/fileadmin/user\\_upload/files/Report\\_of\\_Learning\\_from\\_Jan\\_Broomfield\\_session..pdf](http://www.youngballymun.org/fileadmin/user_upload/files/Report_of_Learning_from_Jan_Broomfield_session..pdf)
- Caesar, L. G. (2013). Providing Early Intervention Services to Diverse Populations: Are Speech-Language Pathologists Prepared? *Infants & Young Children*, 26(2), 126-146.
- Chambers, B., Cheung, A., Slavin, R. E., Smith, D., & Laurenzano, M. (2010). *Effective early childhood education programs: A systematic review*: Best Evidence Encyclopedia
- Childress, D. C. (2004). Special instruction and natural environments: Best practices in early intervention. *Infants & Young Children*, 17(2), 162-170.
- Conroy, P. (2014). The case of Speech and Language Therapy: A working paper prepared for and by Inclusion Ireland. Dublin: Inclusion Ireland.
- Cosgrove, J., McKeown, C., Travers, J., Lysaght, Z., Bhroin, Ó. N., & Archer, P. (2014). Educational Experiences and Outcomes for Children with Special Educational Needs. Dublin: National Council for Special Education.
- Delhaxhe, A., & Motiejūnaitė, A. (2009). Tackling social and cultural inequalities through early childhood education and care in Europe. Brussels: Education, Audiovisual and Culture Executive Agency, European Commission.
- Department for Children, S. a. F. (2008). Every child a talker: Guidance for early language lead practitioners. Nottingham: Department for Children, Schools and Families, United Kingdom.
- Dockrell, J., Lindsay, G., Roulstone, S., & Law, J. (2014). Supporting children with speech language and communication needs: an overview of the results of the Better Communication Research Programme. *International Journal of Language and Communication Disorders*.
- Dockrell, J. E., & Marshall, C. R. (2014). Measurement Issues: Assessing language skills in young children. *Child and Adolescent Mental Health*.



- Dockrell, W. (1966). Secondary education, social class and the development of abilities. *British Journal of Educational Psychology*, 36(1), 7-14.
- Enderby, P., Pickstone, C., John, A., Fryer, K., Cantrell, A., & Papaioannou, D. (2009). Resource manual for commissioning and planning service for SLCN. London: Royal College of Speech and Language Therapists.
- Field, F. (2010). *The Foundation Years: preventing poor children becoming poor adults, The report of the Independent Review on Poverty and Life Chances*: The Stationery Office.
- Genesee, F., & Nicoladis, E. (2009). Bilingual first language acquisition. In E. Hoff & M. Shatz (Eds.), *Blackwell handbook of language development* (pp. 324-342). Chichester, UK: Blackwell.
- Girolametto, L., Weitzman, E., & Greenberg, J. (2006). Facilitating language skills: Inservice education for early childhood educators and preschool teachers. *Infants & Young Children*, 19(1), 36-46.
- Hanft, B. E., & Pilkington, K. O. (2000). Therapy in natural environments: The means or end goal for early intervention? *Infants & Young Children*, 12(4), 1-13.
- Harris, A., & Goodall, J. (2007). Engaging parents in raising achievement: Do parents know they matter?: A research project commissioned by the Specialist Schools and Academies Trust. Warwick: University of Warwick.
- Hartshorne, M. (2006). The cost to the nation of children's poor communication: I CAN Talk Series - Issue 2. London: I CAN.
- Hayes, N., Keegan, S., & Goulding, E. (2012). Evaluation of the Speech and Language Therapy Service of Tallaght West Childhood Development Initiative. Dublin: Childhood Development Initiative.
- International Society on Early Intervention. (2014). The growing need for effective early intervention programs Retrieved 2 December, 2014, from <http://depts.washington.edu/isei/index.html>
- Karoly, L. A., Greenwood, P. W., Everingham, S. S., Houbé, J., & Kilburn, M. R. (1998). *Investing in our children: What we know and don't know about the costs and benefits of early childhood interventions*. Santa Monica, CA: Rand Corporation.
- Law, J. (2011). The long term outcomes for children with developmental language difficulties. In N. Botting & K. Hilari (Eds.), *The Impact of Communication Disability Across the Lifespan*. London: J&J Publishers.
- Law, J., Boyle, J., Harris, F., Harkness, A., & Nye, C. (2000). Prevalence and natural history of primary speech and language delay: Findings from a systematic review of the literature. *International Journal of Language & Communication Disorders*, 35(2), 165-188. doi: 10.1080/136828200247133
- 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, United Kingdom.
- Law, J., Reilly, S., & Snow, P. C. (2013). Child speech, language and communication need re-examined in a public health context: a new direction for the speech and language therapy profession. *International Journal of Language & Communication Disorders*, 48(5), 486-496.
- Lindsay, G., Dockrell, J., Desforges, M., Law, J., & Peacey, N. (2010). Meeting the needs of children and young people with speech, language and communication difficulties. *International Journal of Language & Communication Disorders*, 45(4), 448-460.
- Lockivood, S. L. (1994). Early speech and language indicators for later learning problems: Recognizing a language organization disorder. *Infants & Young Children*, 7(2), 43-52.
- Marshall, C. (2012). *Current Issues in Developmental Disorders*. Hove: Psychology Press.

- McKeown, K., Haase, T., & Pratschke, J. (2014). Evaluation of the National Early Years Access Initiative and Siolta Quality Assurance Programme: A study of child outcomes in pre-school: Summary Report. Dublin: National Early Years Access Initiative
- Meins, E., Fernyhough, C., Arnott, B., Turner, M., & Leekam, S. R. (2011). Mother-Versus Infant-Centered Correlates of Maternal Mind-Mindedness in the First Year of Life. *Infancy*, *16*(2), 137-165.
- National Economic and Social Forum. (2009). Child literacy and social inclusion: Implementation issues - Supplementary report to NESF Report No. 39. Dublin: National Economic and Social Forum.
- Nelson, H. D., Nygren, P., Walker, M., & Panoscha, R. (2006). Screening for Speech and Language Delay in Preschool Children: Systematic Evidence Review for the US Preventive Services Task Force. *Pediatrics*, *117*(2), e298-e319. doi: 10.1542/peds.2005-1467
- Roy, P., & Chiat, S. (2013). Teasing apart disadvantage from disorder: The case of poor language. *Current Issues in Developmental Disorders*, 125-150.
- Shiel, G., Cregan, Á., McGough, A., & Archer, P. (2012). Oral language in early childhood and primary education (3-8 years). Dublin: National Council for Curriculum and Assessment.
- Snowling, M. J., Hulme, C., Bailey, A. M., Stothard, S. E., & Lindsay, G. (2011). Better communication research project: language and literacy attainment of pupils during early years and through KS2: does teacher assessment at five provide a valid measure of children's current and future educational attainments? London: Department for Education, United Kingdom.
- The Children's Plan. (2008). Better communication: An action plan to improve services for children and young people with speech, language and communication needs. London: Department for Children, Schools and Families, UK.
- The National Evaluation of Sure Start Team. (2007). Understanding variations in effectiveness amongst Sure Start local programmes (Sure Start Report 024). London: Institute for the Study of Children, Families & Social Issues, Birkbeck, University of London.
- Wake, M., Tobin, S., Girolametto, L., Ukoumunne, O. C., Gold, L., Levickis, P., . . . Reilly, S. (2011). Outcomes of population based language promotion for slow to talk toddlers at ages 2 and 3 years: Let's Learn Language cluster randomised controlled trial. *British Medical Journal*, *343*, d4741.
- Waldfoegel, J., & Washbrook, E. (2010). Low income and early cognitive development in the UK *Sutton Trust*. London.
- Williams, J., Murray, A., McCrory, C., & McNally, S. (2013). Growing Up in Ireland: Development from birth to three years. Dublin: Department of Children and Youth Affairs, Ireland.
- Young, A. R., Beitchman, J. H., Johnson, C., Douglas, L., Atkinson, L., Escobar, M., & Wilson, B. (2002). Young adult academic outcomes in a longitudinal sample of early identified language impaired and control children. *Journal of Child Psychology and Psychiatry*, *43*(5), 635-645.

## Appendices

### Appendix 1 - Those who participated in the consultation conducted as part of this review

Aoife Doyle	Speech and Language Therapist, Happy Talk, Cork
Anne Healy	Speech and Language Therapy Manager Chair, Irish Association of Speech and language therapists
Anne Horgan	Speech and Language Therapy Manager
Anne Marie Aberg	Principal Speech and Language Therapy
Beth Fagan	Early Learning Initiative, National College of Ireland
Caitriona Mulhall	Speech and language therapist, Childhood Development Initiative
Michelle Quinn	Senior Speech and language therapist, Childhood Development Initiative
Duana Quigley	Oral Language Development Officer, youngballymun
Elaine Weitzman	Executive Director, The Hanen Centre (by correspondence)
Emma Byrne MacNamee	Early Years Programme, Preparing for Life (PFL)
Geraldine French	School of Social Sciences and Law, Dublin Institute of Technology
Gráinne Smith	Childhood Development Initiative, Tallaght
Judith Thornton	Principal Speech and language therapist and Hanen trainer and specialist
Kate Hayes	Speech and language therapist, Little Voices Programme, Limerick Childrens' Services Committee
Margaret Creevey	Speech and Language Therapy Manager
Martine Smith	Associate Professor in Speech & Language Pathology and Head of School of Linguistic, Speech and Communication Sciences
Mary Byrne	Head of Special Education, National Council for Special Education
Noirin Hayes	Visiting Professor at Trinity College Dublin Professor [Emeritus] at Dublin Institute of Technology
Patricia Curtis	Apley Speech and Language Therapy Services
Rosemary Curry	Speech and Language Therapy Manager
Sheila Dillon	Happy Talk Coordinator, Cork City Partnership

Sinead Finn	Senior SLT, Class for Specific Speech and Language Impairment, St. Patrick's N.S., Drumcondra
Siobhan Dowling	Speech and language therapist with Happy Talk
Speech and Language Therapy Team	HSE Dublin South West
Una O'Sheil	Speech and Language Therapy Clinical Supervisor

## Appendix 2 – Criteria for reviewing evaluations (Law et al., 2012)

1. Does the intervention have reasonable theoretical underpinning given the current state of knowledge in the relevant area?
2. Does the intervention have good face validity – does it make sense, is it easy to follow etc.?
3. Is the intervention “manualised”, or presented in such a way that it would be possible for a service to adopt it without adaptation?
4. Is the intervention feasible in the sense that it could be introduced within budget, given available resources and materials and time available?
5. Is there formal training involved and a procedure to be followed or is it principally a set of materials to be freely used?
6. Has the intervention been formally evaluated and if so how? Six levels of intervention evidence are commonly used as follows:

- a. Well conducted systematic reviews of randomised controlled trials
- b. Individual well conducted randomised controlled trials
- c. Quasi-experimental studies with matched groups receiving and not receiving the intervention in question
- d. Experimental single subject designs which demonstrate effective change in individual children relative to a “control” or untreated period.
- e. “Before and after studies” – do the children show progress over time relative to the standard score of a specific language or related measure? In other words it is possible to see change relative to what we know about the children’s development anyway.
- f. Descriptive studies. These describe the intervention but provide no data which would allow the reader to make a judgement as to whether the intervention should or should not be introduced.

### 7. Who developed the intervention and is it commercially available?

Evaluations are commonly separated into first generation and second generation studies. In the former the person who developed the intervention then evaluates it. In the latter another group adopts the intervention, evaluating it independently. When examining any intervention the second approach is preferable over the first because it would be considered more objective. It is commonly assumed that studies carried out by the teams that developed them tend to obtain better results than second generation studies.

### 8. Has it been shown that it is possible to assess “treatment fidelity” – that is, the capacity of those who use the programme to stick to what is expected in the manual?

There is always a tension between adopting a well-developed intervention and following the guidance in the manuals as opposed to tailoring a given intervention to the individual and the population which a teacher or therapist is primarily concerned. Again experience reported in greater detail in the BCRP technical report ‘Implementing Interventions’ tells us that both teachers and therapists are very creative in the use of programmes and freely adapt them to the needs of the children.

### 9. Do we know how children were allocated to the intervention and control groups? If we don’t is there likely to have been a bias which may affect the results?

### 10. Do we know what happened to all the children who started in a study? Did those who start all complete the intervention? Who dropped out and why?

### Appendix 3 – Summary of evidence from interventions delivered in Ireland to promote oral language development

The following table provides a summary of interventions delivered in Ireland to promote oral language development. This does not pertain to be an exhaustive list of all interventions being delivered in Ireland. In line with the empirical evidence supporting provision of quality supports to parents and professionals to promote oral language development, the table below includes interventions which work with parents and a variety of professionals as a primary focus, in addition to interventions which work directly with children. The evidence presented below relates solely to speech and language outcomes and enabling outcomes such as parent-child and professional-child relationships and interactions, and other indicators of verbal interchanges with children which can promote oral language development. For some of the interventions listed below, evaluations also reported effects on child health, child behaviour, and other aspects of parenting skills and parental mental health. For a more comprehensive overview of the evaluations, links to full reports have been included where available.

It is important to be aware that some of the evidence presented below is extracted from interim evaluations, and further results from more long-term evaluations is pending. In addition, a variety of methodologies and forms of assessment/measurement were used, including longitudinal randomised control trials, and more short-term impact and process evaluation studies. There are also a wide variety of intervention approaches listed below, including more traditional speech and language therapist led interventions, targeted interventions for children already displaying some form of language difficulty, to preventive programmes in early years, school, home and community-based settings which had language development as a programmatic component. Thus, the interventions listed below should not be compared directly, but considered individually in terms of the programme objectives, approach and target group.

Summary of Irish Oral Language Development Interventions and Evaluation Findings			
Programme	Organisation / Area	Programme Description	Evidence on Speech and Language Outcomes
3>4>5 Learning Years	Young ballymun	A programme providing active training, mentoring and coaching for the implementation of Síolta National Quality Standards and High Scope curriculum in Early Years services, supporting children’s social and emotional development, and language and literacy skills.	In terms of service outcomes, there were objective improvements to day settings in terms of quality ratings for carer–child interactions, routines and curriculum planning and assessment. Staff had better self-reported understanding of child development and quality early childhood care and education. Staff felt more confident identifying children who needed additional support and in giving feedback to parents.  Source: SQW (2012) <a href="http://www.youngballymun.org/fileadmin/user_upload/files/Learning_Years_Evaluation_Report_Final_Edits2.pdf">http://www.youngballymun.org/fileadmin/user_upload/files/Learning_Years_Evaluation_Report_Final_Edits2.pdf</a>

Summary of Irish Oral Language Development Interventions and Evaluation Findings			
Programme	Organisation / Area	Programme Description	Evidence on Speech and Language Outcomes
Chatterbox	PCS & CCCs in Monaghan and Cavan.	An early intervention service aimed at the early identification, prevention and minimising of speech and language difficulties within the pre-school population (0-6 years) in targeted areas of identified need. The service encompasses a range of speech and language support services including screening, parental support/training, training for childcare providers, tailored early intervention programmes, on-site support for language development in preschool and joint projects with community groups/other agencies.	<p><i>No known evaluations to date</i></p> <p><b>Information on Programme:</b> Cavan County Childcare Committee (2014) <a href="http://www.cavancce.ie/wp-content/uploads/ChatterboxMay2014.doc">www.cavancce.ie/wp-content/uploads/ChatterboxMay2014.doc</a></p>
Community Mothers	Nationwide	A parent support programme in which local women known as Community Mothers carry out monthly structured visits by appointment to first-time parents during the first year of their babies' lives, providing empathy and information in a non-directive way to foster parenting skills. Family Development Nurses facilitate the Programme. Its aim is to develop the skills of parents of young children with a focus on overall child health and development. The model is one of parent-enablement and empowerment.	<p>Parents were more likely to read to their children and play more cognitive games, compared to a control group. Positive long-term effects (7 years later) on parenting attitudes and practices and maternal self-esteem, with benefit extending to subsequent children.</p> <p><b>Source:</b> Johnson et al. (2000); Johnson et al. (1993) <a href="http://jpubhealth.oxfordjournals.org/content/22/3/337.full.pdf">http://jpubhealth.oxfordjournals.org/content/22/3/337.full.pdf</a> <a href="http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1677859/pdf/bmj00022-0033.pdf">http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1677859/pdf/bmj00022-0033.pdf</a></p>
Doodle Den	Childhood Development Initiative	An after-school programme for children aged 5-6 years. It aims to improve children's literacy, contribute to more frequent school attendance, encourage more learning outside of school and increase parental involvement in out-of-school time education. It also aims to enhance children's relationships with their parents and peers.	<p>Strong evidence that the programme improved children's literacy. Children showed better comprehension, concentration, and increased reading at home, and family library activity. Increased participation led to greater improvements.</p> <p><b>Source:</b> Biggart et al. (2012) <a href="http://www.twcdi.ie/images/uploads/general/Doodle-Den-Report-web-version.pdf">http://www.twcdi.ie/images/uploads/general/Doodle-Den-Report-web-version.pdf</a></p>
Eager and Able to Learn	Early Years, Northern Ireland	A comprehensive centre-based and home-based early care and education programme for children aged 2-3 years. The targeted outcomes include that children are cognitively able to take advantage of learning opportunities, are motivated to learn and are socially and emotionally able to enter into relationships with adults and other children so learning can be promoted.	<p>Improvements in how parents used play to support their children's learning (such as with song and dance, and using different materials); improvement in levels of engagement between parents and child care settings.</p> <p>In relation to child outcomes, results showed significantly improved social emotional development and a negative effect on cognitive development, particularly emergent literacy skills.</p> <p>Early Years services showed improvements in how the day care staff interacted and played with the children and parents. The average quality for settings improved, with 20% of settings moving into the 'excellent' range.</p> <p><b>Source:</b> McGuinness et al. (2012) <a href="http://www.early-years.org/coral/research-docs/eal-crossover.pdf">http://www.early-years.org/coral/research-docs/eal-crossover.pdf</a></p>

Summary of Irish Oral Language Development Interventions and Evaluation Findings			
Programme	Organisation / Area	Programme Description	Evidence on Speech and Language Outcomes
Early Years Programme	Tallaght West Childhood Development Initiative	An early childhood care and education programme for children aged 2½-3 years. It is designed to develop and enhance all domains of children’s physical, psychological and social well-being, including their cognitive skills and language development, their social and emotional development, and their capacity for learning. It also seeks to support the child’s family by focusing on parents’ psychological health, building on their parenting strategies and encouraging a positive parent–child relationship.	<p>Significant influence on child cognitive and language outcomes.</p> <p>The Parents Plus Community Course, which was part of the programme, was shown to improve the children’s home-learning environment, even 2 years later.</p> <p>For services, significant improvements were reported in curricular and planning quality; some improvement in the quality of the literacy environment in the pre-school settings and a better range of activities targeted at promoting children’s learning and development.</p> <p style="text-align: right;"><b>Source:</b> Hayes et al. (2012) <a href="http://www.twcdi.ie/images/uploads/general/CDI-Early_Years_Report_24.01-web.pdf">http://www.twcdi.ie/images/uploads/general/CDI-Early_Years_Report_24.01-web.pdf</a></p>
Happy Talk	Cork City Partnership	An early years language and learning intervention project based in the Glen and Mayfield areas of Cork city. It supports children aged 0-6 years, their parents and educators in 30 settings including: crèches, pre-schools, Junior Infant classes, parent and toddler groups and Public Health Nurse Clinics. Core elements are training and coaching for parents and educators and developing a language rich environment in the community. Happy Talk takes a proactive approach to engaging with parents and facilitating and empowering parents to become active participants in their child’s language and literacy development.	<p>There were significant improvements in children’s overall speech and language development between pre- and post-intervention and significant reductions in the severity of language delay. Community-based data on a measure of children’s readiness to learn at school demonstrated significant improvements over time. There were high levels of participation by parents and parents experienced the programme as empowering and reported increased time spent reading at home. Children referred to specialist speech and language therapy services through the programme had higher levels of attendance than the general client list. Early years educators and teachers had increased knowledge and skills relating to oral language and literacy.</p> <p style="text-align: right;"><b>Source:</b> Kenny, Thorne &amp; Hennessy (2014) <a href="https://www.pobal.ie/Publications/Documents/Happy%20Talk%20NEYAI%20Consortium%20Evaluation%20Final%20Report.pdf">https://www.pobal.ie/Publications/Documents/Happy%20Talk%20NEYAI%20Consortium%20Evaluation%20Final%20Report.pdf</a></p>
Language and Literacy Project: A Collaboration between Speech and Language Therapy and Teaching	DES, HSE and Dublin City CYPSC	A collaborative classroom-based programme language intervention programme that targeted improvement in language skills. The programme was delivered one morning a week to Senior Infants across a school year while teachers continued to teach programme elements during lesson time.	<p>For children, there were significant increases across almost all standard language scores from pre to post intervention testing. More children scored above the average range and fewer in the below average range, compared to previous senior infants class scores.</p> <p>In addition, results indicated the development of shared understanding between SLTs and teachers; increase in skills; cultivation of positive working relationships; and sharing of resources. However, it was difficult for SLTs to ‘justify’ the programme against the backdrop of the demands on time for delivery of clinic supports.</p> <p style="text-align: right;"><b>Source:</b> HSE, TCD and St Brigid’s Primary School (2012) <i>Unpublished report</i></p>
Language Enrichment Programme	Ballyfermot/Chapelizod Partnership	The programme consists of three strands: Teacher Talk Training (based on the Hanen Programme), Chatter Matters and a ‘Listening Group’. <i>Chatter Matters</i> is a parent and child education programme conducted over eight sessions, focused on the development of early communication followed by shared activity	<p>The programme was found to have significant and positive impact on practitioner’s interactions with children in early years settings. There was also a positive impact on the quality of settings including the learning environment, routine and adult-child interactions.</p>



Summary of Irish Oral Language Development Interventions and Evaluation Findings			
Programme	Organisation / Area	Programme Description	Evidence on Speech and Language Outcomes
		with the children. A 'Listening Group' was delivered by early years educators immediately after the Chatter Matters group. There were also three Teacher Talk training sessions (based on the Hanen Programme) and follow-up video sessions over one year with early years educators.	<p style="text-align: right;"><b>Source:</b> French (2014)  <a href="https://www.pobal.ie/Publications/Documents/LET%20THEM%20TALK.pdf">https://www.pobal.ie/Publications/Documents/LET%20THEM%20TALK.pdf</a></p>
Lifestart Growing Child Home Programme	Nationwide	A structured month-by-month curriculum of information, knowledge and practical learning activities for parents consisting of age-specific information on child development supported by art, story, music and movement resources tailored to suit each individual child and family. The programme is delivered by trained family visitors in the parent's own home.	<p><b>Note:</b> Early stage findings available after 10 months participation and progress will be assessed again at 3 &amp; 5 years when programme impact will be clearer.</p> <p>As to be expected at the early stage of evaluation, there were no statistically significant effects on child outcomes. There were consistently positive effects on language development, cognitive development, and socio-emotional development.</p> <p>There were also improvements in parental self-efficacy and social support approaching statistical significance and a reduction in parenting stress.</p> <p style="text-align: right;"><b>Source:</b> McClenaghan (2012)  <a href="http://www.effectiveservices.org/images/uploads/2012%20Lifestart%20Educating%20Parents,%20Developing%20Children(1).doc">http://www.effectiveservices.org/images/uploads/2012%20Lifestart%20Educating%20Parents,%20Developing%20Children(1).doc</a></p>
Little Voices	Paul Partnership Limerick	The aim of the initiative is to improve oral language development and emergent pre-literacy skills among children aged 0-4 years. The project involves working collaboratively with children, families, early years settings, speech and language therapists, adult learning tutors, and schools. The project has a full-time Speech and language therapist (SLT) and the SLT and PHN deliver joint clinics for the 19-21 month developmental check. Mentoring and support in early oral language development is provided to staff in schools and early years settings. There is an Early Years/Classroom based programme that introduces parents to simple tips and exercises that they can use to help their children develop their oral language skills, similar to the 'Happy Talk' project.	<p><i>No known evaluation to date</i></p> <p style="text-align: right;"><b>Information on Programme:</b> Paul Partnership (2013: pgs 37-38)  <a href="http://www.paulpartnership.ie/wp-content/uploads/2014/05/PAUL-Partnership-Annual-Report-2013.pdf">http://www.paulpartnership.ie/wp-content/uploads/2014/05/PAUL-Partnership-Annual-Report-2013.pdf</a></p>

Summary of Irish Oral Language Development Interventions and Evaluation Findings			
Programme	Organisation / Area	Programme Description	Evidence on Speech and Language Outcomes
Marte Meo	Nationwide	A video-based programme aimed at enabling parents to identify and develop skills to enhance their interactions and relationships with their children. Concrete and practical information is provided to parents and carers on supporting the communicative, social, emotional aspects of child development. It offers support and advice for parents of children who are experiencing developmental delay, behavioural difficulties, have a diagnosis of autism, ADHD or because of other social or family problems. It was developed in the 1970s in The Netherlands.	<p>In terms of the impact on parent-child interactions, parents developed greater confidence in their parenting skills and rediscovered their ability to parent their child beyond her/his diagnosis or behaviour problem.</p> <p>Public Health Nurses developed a wider focus that facilitates a shift in their clinical practice toward enhanced understanding, and a focus on affirming parents and building on parents' strengths. It was experienced as an empowering model of interaction in their work.</p> <p><b>Sources:</b> O'Donovan (2011); Clark et al. (2011)  <a href="http://doras.dcu.ie/16583/1/Public_Health_Nurses'_Experiences_of_Training_in_Marte_Meo_Communication_Skills.pdf">http://doras.dcu.ie/16583/1/Public_Health_Nurses'_Experiences_of_Training_in_Marte_Meo_Communication_Skills.pdf</a>  <a href="http://doras.dcu.ie/17629/1/The_Dynamics_of_Sharing_Professional_Knowledge_and_Lay_Knowledge-A_study_of_parents'_and_professionals'_experiences_of_childhood_interventions_within_a_Marte_Meo_framework.pdf">http://doras.dcu.ie/17629/1/The_Dynamics_of_Sharing_Professional_Knowledge_and_Lay_Knowledge-A_study_of_parents'_and_professionals'_experiences_of_childhood_interventions_within_a_Marte_Meo_framework.pdf</a></p>
NICHE Speech and Language Pilot Programme	Cork	A collaborative community- based speech and language intervention between the Northside Community Health Initiative and the HSE Cork North SLT Department and Community Work Department. It was piloted in the Knocknaheeny/Holyhill area of Cork, from September 2008 to December 2012. The programme had six core interventions: capacity building, early intervention, traveller engagement, staff training for class and group settings, individual therapy and group therapy. The individual therapy sessions consisted of one to one sessions with children and modelled exercises for staff and parents. The group therapy consisted of group therapy sessions with identified children with Speech and Language needs.	<p>There were improvements in children's speech and language skills and 17% of children were discharged from the SLT service.</p> <p>Results reported for parents included increased understanding and skill development for language stimulation; increased access to services and positive relationship building between parents and service providers.</p> <p>For services, results indicated earlier referrals, shorter wait-times, significantly higher attendance rates, and increased access to other services. Teachers/Early Year practitioners also reported increased understanding and skills in oral language development.</p> <p><b>Source:</b> Brennan (2014)  <a href="http://www.nicheonline.ie/documents/NSLPP%20Evaluation%20full%20doc.pdf">http://www.nicheonline.ie/documents/NSLPP%20Evaluation%20full%20doc.pdf</a></p>
Parent Child Home Programme	Early Learning Initiative	A home based literacy and parenting programme that strengthens families and prepares children to succeed academically. Over a two year period, Home Visitors model oral language, reading and play in their twice weekly visits. The families then continue the activities in their own time, thereby enabling the PCHP child and his/her siblings to develop their language, literacy and numeracy skills. A substantial body of US research evidence exists on the impact of the PCHP on children's academic attainment.	<p>In an evaluation of a pilot with 25 children in Ireland, it was not possible to attribute child outcomes to participation in the programme. Research in the U.S. has demonstrated positive effects of participant's cognitive development and secondary school completion rates.</p> <p>Home Visitors experienced personal and professional benefits including the development of their own parenting skills and increases in confidence and professional development. Enhanced social inclusion was found in that home visitors had the capacity to link groups such as immigrants, professionals and marginalised families to other activities in the community.</p> <p><b>Source:</b> Share et al. (2011)  <a href="https://www.tcd.ie/childrensresearchcentre/assets/pdf/PCHP%20Report.pdf">https://www.tcd.ie/childrensresearchcentre/assets/pdf/PCHP%20Report.pdf</a></p>

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Parents Plus Early Years Programme		A solution-focused programme which aims to promote close, connected relationships between parents and children (0-6 years). The course covers topics such as being a responsive parent, encouraging and supporting children, promoting children's language and development, helping children concentrate and learn, building cooperation in young children, and managing tantrums, misbehaviour and problems.	There were reported improvements in parent-child interaction; reduction parental stress and a reduction in parent-defined problems.  <b>Source:</b> Griffin et al. (2010) <a href="http://www.redalyc.org/pdf/337/33712250005.pdf">http://www.redalyc.org/pdf/337/33712250005.pdf</a> ; <a href="http://www.parentsplus.ie/node/12">http://www.parentsplus.ie/node/12</a>
Preparing For Life	Northside Partnership	A community-based initiative that works to improve children's lives by supporting parents, early years practitioners and teachers to use proven approaches to help children achieve their full potential. This is done by working in partnership with families, health services, pre-schools and schools from pregnancy through to childhood. Family mentors visit families in their homes and give information on child development and parenting, with the aim of improving school readiness. Antenatal care and education is provided in local community centres, the Triple P Positive Parenting Programme is offered to parents, and there is training and mentoring with early years professionals and primary school teachers.	No significant effects seen at 6 months of age on child development. By 12 months of age, children were less likely to be at risk for social and emotional difficulties. At 24 months, children exhibited stronger cognitive development.  For parents, at 6 months, mothers had higher quality and more frequent interactions with their child, and there was a higher quality home environment with more appropriate learning. In terms of the impact on parent child interactions, by 24 months, mothers reported higher self-efficacy, and were less likely to experience clinically significant levels of parenting stress.  <b>Source:</b> Doyle et al. (2013) <a href="http://geary.ucd.ie/preparingforlife/wp-content/uploads/2014/03/24MoReport_final.pdf">http://geary.ucd.ie/preparingforlife/wp-content/uploads/2014/03/24MoReport_final.pdf</a>
Ready Steady Grow	Young ballymun	<b>Ready Steady Grow</b> aims to improve the wellbeing of children from pre birth to 3 years. The programme is based mainly on the <i>Parent Child Psychological Support Programme</i> with additional service components including <i>Hanen 'You make the difference'</i> : a 9 week, parent education programme aimed at supporting parent child interaction with a particular focus on language. This aspect of the programme is delivered by Speech and language therapists.	The outcomes for child development did not show significant improvements for those in the treatment group and those in the comparison group.  For parents, in terms of impact on parent-child interactions, there were reductions over time in certain aspects of parenting stress; improvements in sense of parental competence; and improvement over time in intrusive, protective and sensitive behaviours in relation to the parent-child relationship.  For services, results indicated a contribution towards early identification of and intervention with children at risk.  <b>Source:</b> youngballymun (2013) <a href="http://www.youngballymun.org/fileadmin/user_upload/pdf/Evaluation_Reports/RSGEvaluationReportFinal_Cover_2.pdf">http://www.youngballymun.org/fileadmin/user_upload/pdf/Evaluation_Reports/RSGEvaluationReportFinal_Cover_2.pdf</a>

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Speech and Language Therapy Service	Tallaght West Childhood Development Initiative	The model of service utilises a three pronged approach, involving assessment and therapy with children, support and training with parents and support and training with staff. The service was an original component of the <i>Early Years Programme</i> aimed at improving school-readiness through the provision of quality pre-school care, education and access to health services.	Over half the children who received therapy were discharged within normal service limits. Parents had better understanding of their children's speech and language needs. In terms of service outcomes, the SLT services appear to have had a positive impact on relationship building between services.  <b>Source:</b> Hayes et al. (2012) <a href="http://www.twcdi.ie/images/uploads/general/CDI-Early_Years_Report_24.01-web.pdf">http://www.twcdi.ie/images/uploads/general/CDI-Early_Years_Report_24.01-web.pdf</a>
Speech and Language Therapy Service In-School Provision	Limerick City	An integrated approach in the delivery of speech and language therapy services to primary school age children from low SES areas in the Limerick Local Health Office area.	Child outcomes indicated positive speech and language therapy gains and decreased levels of frustration, shyness and difficulty making themselves understood. Results for services included easier access, increased attendance compared to clinic-based appointments, and increased collaboration.  <b>Source:</b> O'Connor et al. (2012) <a href="http://www.mic.ul.ie/ted/Documents/ReportTEDSL.pdf">http://www.mic.ul.ie/ted/Documents/ReportTEDSL.pdf</a>
Start Right Community Wraparound (S&LT service)	Limerick City	Using a multi-agency approach, Start Right works with families, service providers and local community organisations, to ensure that children on the south side of Limerick, an area characterised by high levels of socio-economic disadvantage, can enjoy fulfilling, healthy and happy childhoods. The project aims to enhance the capacity of parents, families, and services to work collaboratively in the best interests of children aged 0-6 years, and to develop integrated work practices and resource-sharing in the early years across statutory, community and voluntary agencies.	<i>Evaluation pending</i>  <b>Information on initiative:</b> Paul Partnership <a href="http://www.paulpartnership.ie/lifelong-learning/start-right-limerick/">http://www.paulpartnership.ie/lifelong-learning/start-right-limerick/</a>
Tús Maith	Barnardos (Dublin, Cork, Thurles)	An early year's care and education programme for children aged 3-5 years with an overall outcome of ensuring that children are ready for school. Tús Maith integrates the High/Scope curriculum with the REDI programme in order to maximise the developmental outcomes (emotional; social; language, literacy and communication; and physical) for children. High/Scope is a well-established curriculum implemented in early years settings, which is evidenced to lasting outcomes for children, and REDI is a programme which has been shown to enhance the High/Scope curriculum and achieve higher level outcomes in the domains of social and emotional competence and emergent literacy for 3-4 year olds.	<i>Evaluation pending</i>  <b>Information on programme:</b> Barnardos <a href="http://www.barnardos.ie/what-we-do/our-services/barnados-centres/t%C3%BAs-maith.html">http://www.barnardos.ie/what-we-do/our-services/barnados-centres/t%C3%BAs-maith.html</a>

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Wizard of Words	Barnardos (Dublin and Limerick)	Wizards of Words (WoW) is a paired literacy improvement programme for children in first and second class in primary school with reading difficulties, involving older volunteers. It was inspired by the <i>Experience Corps</i> programme in the USA, a school-based mentoring programme for children with a reading difficulty that has a positive impact on young children's reading levels.	Significant positive effects on some phonological outcomes including phonemic awareness, word recognition, but no significant effects on reading accuracy, phonic knowledge, reading comprehension, or vocabulary.  <p style="text-align: right;"><b>Source:</b> Fives et al. (2013)  <a href="http://www.barnardos.ie/assets/files/Services/WOW/WoW%20Final%20Report%202013.pdf">http://www.barnardos.ie/assets/files/Services/WOW/WoW%20Final%20Report%202013.pdf</a></p>
Writeminded	Young ballymun	An area-based literacy strategy that works across schools and community to build children's literacy and language competency through the following elements: the implementation of a balanced literacy framework; tailored capacity-building activities and coaching; an integrated family and school transition programme; rigorous data capturing and review; training and capacity-building of parents and community-based practitioners; and the integration of literacy across a multiple of community-based services and supports.	Promising benefits were reported for children's literacy experiences. Parents reported more reading in the home and increased confidence in supporting their children's development of literacy skills. Schools felt it had brought a greater focus on literacy, and a cross-curricular approach. Teachers reported having more confidence and enjoyment in teaching literacy.  <p style="text-align: right;"><b>Source:</b> SQW (2012)  <a href="http://www.youngballymun.org/fileadmin/user_upload/pdf/Summary_Report_Write-Minded.pdf">http://www.youngballymun.org/fileadmin/user_upload/pdf/Summary_Report_Write-Minded.pdf</a></p>

**Abbreviations:** CCC: County Childcare Committee; CYPSC: Children and Young People's Services Committee; DEIS: Delivering Equality of Opportunity; DES: Department of Education and Skills; HSE: Health Services Executive; PCS: Primary Care Speech and Language Services; SLT: Speech and Language Therapy