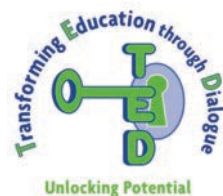


Evaluation
of the
Speech
and Language
Therapy Service
In-School
Provision
in Limerick
City Schools



Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive



Evaluation of the Speech and Language Therapy Service In-School Provision in Limerick City Schools

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*“The clinic has always reported that their time was wasted constantly by people not turning up for appointments.
Now, with the new ‘in-school’ service, the therapist’s time is not being wasted”*

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List of Abbreviations and Acronyms

CDU	Curriculum Development Unit
CELF	Clinical Evaluation of Language Fundamentals
CNA	Could Not Attend
CSO	Central Statistics Office
DEAP	Diagnostic Evaluation of Articulation and Phonology
DEIS	Delivering Equality of Opportunity in Schools
DES	Department of Education and Skills
DH&C	Department of Health and Children
DNA	Did Not Attend
ECCE	Early Childhood Care and Education
ED	Electoral Division
EPSEN	Education of Persons with Special Educational Needs Act
ERC	Education Research Centre (St. Patrick's College, Drumcondra)
HSE	Health Service Executive
KITE	Kids Communication Impairment Therapy Effectiveness
LHO	Local Health Office
LIT	Limerick Institute of Technology
MIC	Mary Immaculate College
N/A	Not Applicable
NEET	Not in Employment or Education
NCCA	National Council for Curriculum and Assessment
PCCC	Primary and Continuing Community Care
PLUS	Primary Liaison with University Services
SES	Socio Economic Status
SLD	Specific Language Disorder
SSLI	Specific Speech and Language Impairment
SLT	Speech and Language Therapist / Therapy
SNA	Special Needs Assistant
SPSS	Statistical Package for the Social Sciences
TED	Transforming Education through Dialogue Project
UL	University of Limerick
UN	United Nations
UNCRC	United Nation' Convention on the Rights of the Child
WNL	Within Normal Limits



Glossary of Terms

BLOCK OF THERAPY

A specific number of appointments and therapy focussed on remediating specific difficulties.

CARE PATHWAYS

in the context of Limerick SLT refers to the anticipated intervention for a client based on the presenting condition, the severity of the need and the age of the child.

CARRYOVER

Carryover (in the context of the Limerick SLT service) is the practice of therapy tasks between therapy sessions or after a therapy block of sessions has finished. Parents of children who attend the clinic are usually asked to do this. In the schools a person (either a special needs assistant (SNA) or a Resource/ Learning Support Teacher) is designated by the school to attend sessions with the children and do carryover tasks until the next session with the speech therapist. In some cases the parents attend the sessions and do the carryover with their child.

DEIS

Delivering Equality of Opportunity In Schools - Department of Education and Skills strategy for designated disadvantaged schools.

GLIDING

This is a typical speech process identifiable in children aged up to approximately 6 years. It involves the child substituting 'R' sounds with 'W' sounds e.g., 'Run' becomes 'Wun' etc.

STAGED PROGRESS

In the context of Limerick SLT refers to the stage of acquisition of speech processes



Foreword

Over the last decade, government policy driven by research in the area of health and social gain has encouraged the provision and integration of services to support the development and improve the life chances of all young children particularly those living in and attending school in low Socio Economic Status (SES) areas.

The introduction of Regeneration Schemes such as those initiated in Dublin and Limerick over the last number of years have highlighted the need not only for structural change but for social regeneration in targeted areas. This requires the alignment, co-ordination and integration of those resources and services already present in these areas in order to support the health and educational outcomes for these vulnerable children (See Humphreys et al., 2012).

In every child's life the development of speech, language and communication skills is pivotal. It is a key factor in their social development, educational achievement, levels of confidence and self-esteem. The strong link between early speech and language therapy development, literacy attainment and academic success is widely documented in research literature and in the strategic government policy of many OECD countries. Recognition of the importance of this link has resulted in the development and implementation of national targeted early intervention programmes for young children in low socio-economic areas. These programmes e.g. Sure Start in the UK promote integration between health trusts, local authorities and education at policy level. The result of this has been the delivery of holistic integrated services to young children and their families.

In the absence of any such direct strategic initiatives from national or local government to drive the integration agenda between health and education, a project was initiated in the Limerick Area between the Speech and Language Therapy Department and the Transforming Education through Dialogue Project (TED) and school principals to achieve such 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.

It was agreed that HSE funded Speech and Language Therapy Services would change their clinic based model of service delivery and initiate the delivery of a school-based service for children living in low SES areas. The objective for all involved was to promote accessibility to services, increase attendance rates and uptake of services, facilitate increased collaboration and co-ordination between educational and health staff and achieve more positive outcomes for children and their families.



This report provides an overview of the pilot project. It documents the outcomes achieved in terms of increased attendance, increased collaboration and positive speech and language therapy gains for the children who participated in this model of service delivery. It also makes strategic recommendations for the future of service delivery in DEIS (Delivering Equality of Opportunity in Schools) schools based on the findings of this research and on the subsequent developments which arose due to the links forged between education and health services.

What started as a pilot project in a number of DEIS schools has evolved over the last number of years into a strategic model of service delivery. The introduction and implementation of this initiative has provided great learning for all those involved. It has provided the essential building blocks for a comprehensive plan to develop and reform local services to meet the needs of children in these areas. It has also highlighted the challenges faced in attempting to continue such a model of service delivery in the absence of any additional resources and in a challenging economic climate.

It is my hope that the positive outcomes and the key learning from this project can contribute to future service planning and the social regeneration of low SES communities in Limerick. We have learned that through co-coordinating our resources better outcomes can be achieved. This type of development must be at the centre of future social development planning in the city. The needs of the children and families in these areas and the current model through which services are delivered are not achieving the targeted integrated programmes that are required. In the absence of national policy on the integration between health and education initiatives such as this should be funded on a more permanent basis.

Kate Duggan

Speech and Language Therapy Manager, HSE Limerick

September 2012



CHAPTER

1

Introduction to the Evaluation of the Speech and Language Therapy Service

1.1 Introduction

“More specialist intervention at the right time, can give children with communication disabilities the chance they need to make the transition to literacy, learning and later academic, social and emotional success”.

(I CAN Talk Series Issue 2, 2006)

Under the National Children’s Strategy (Department of Health and Children, 2000) the Irish Government has made a commitment to improve the life chances of all young children living in the state, especially where children experience disadvantage or have particular needs. Additionally, the Education Act (1998), and the Education of Persons with Special Educational Needs (EPSEN) Act (2004), reference school-age children’s rights to specific provisions. These policies underline the need for educational structures and health services to provide for those rights and needs and encourage the delivery of services which meet children’s rights and needs where, and as they arise. The Quality and Fairness: A Health System for you (2001) document which reviewed the Irish Health system states the new vision for the health system as: *“A health system that supports and empowers you, your family and community to achieve your full health potential. A health system that is there when you need it, that is fair, and that you can trust. A health system that encourages you to have your say, listens to you, and ensures that your views are taken into account”.* (Ibid :8)

1.2 Background to Project

The Limerick Speech and Language Therapy (SLT) Department, in their pursuance of meeting client centred objectives such as those outlined in Quality and Fairness (2001) had long recognised the need to consider different service delivery models based on the needs of different client groups and the importance of the school setting in facilitating this.

In the years 2005-2006 a review of the high level of ongoing non-attendance for SLT provision in areas such as Moyross, Ballynanty, Southill and Rathkeale highlighted the fact that the existing model of clinic-based service provision within the HSE was not meeting the needs of the population in these areas.



This was reiterated at a meeting between the SLT Manager and members of the PLUS¹ Network in 2006. Within the Limerick geographical area a number of schools and early childhood care and education (ECCE) settings had previously accessed school-based SLT services, but for a variety of reasons, this service had been discontinued (See Appendix B).

It was agreed at the PLUS meeting that engagement with a number of schools would be initiated in an effort to renew a model of school-based speech and language services that had been previously offered in the Limerick area. This engagement involved members of the SLT Department meeting with the principal and/or staff members of eleven schools to discuss an alternative model of delivering SLT interventions in the school environment. The eleven schools were: St. Anne's Primary School, Rathkeale; St. Joseph's Boys' National School, Rathkeale; St. Lelia's National School; St. Munchin's Girls' National School; St. Munchin's Boys' National School; Corpus Christi National School; Our Lady of Lourdes National School; Our Lady Queen of Peace; Galvone National School; Gaelscoil Sheoirse Clancy and Southill Junior School.

Following this engagement process, it was agreed that the SLT Department would deliver a school-based SLT pilot programme, and that the Transforming Education through Dialogue (TED) project (based in the Curriculum Development Unit (CDU) of Mary Immaculate College (MIC)) would evaluate the delivery of that pilot project in collaboration with the SLT team.

1.2.1 Objective of the School-Based Speech and Language Therapy Pilot Project

The objective of this school-based SLT service was to provide on-site speech and language therapy in designated DEIS² schools in the Limerick area in order to improve the life chances of all children as set out by the National Children's Strategy (2000). This was facilitated through:

- Assessment of speech and language skills of those attending the designated schools who were presenting with speech and language difficulties;
- Provision of individual and group based therapy as appropriate;
- Liaison and collaboration with school staff;
- Provision of education and training regarding speech and language difficulties for school staff;
- Review and monitoring of speech and language development as appropriate.

1.2.2 Evaluation of the Project

The need to evaluate the school-based pilot project was crucial in determining the future planning of the SLT service. For the purposes of the evaluation, the TED team from the CDU in MIC agreed to examine the perspectives of children, parents, schools, teachers, and speech and language therapists involved in the process of delivering Speech and



¹PLUS Primary Liaison with University Services (PLUS) is a network of 20 Limerick schools that is facilitated in monthly meetings through the Transforming Education through Dialogue (TED) project located in the Curriculum Development Unit in Mary Immaculate College.

²DEIS strategy: Delivering of equal opportunity in schools is an initiative of the Department of Education and Skills which began in 2008 that delivers additional support and resources, including training, in schools operating in areas of particular disadvantage.

Language Therapy in the participating schools. The objectives of the evaluation were to examine the following aspects of the SLT Department's school-based service provision:

- Σ Children's attendance rates;
- Σ Assessment outcomes/children's progress;
- Σ Teacher/parent satisfaction levels;
- Σ Therapist outcomes, collaboration, etc.;
- Σ Benefits and challenges of the school-based service;

and to make recommendations for future service delivery models based on the evaluation findings.

Four areas where clinic-based services had noticed high levels of discharge due to non-attendance were chosen for the initial delivery of the pilot programme. As outlined earlier, a total of eleven schools were included across the four identified areas – all of which were located in areas where there was also a clinic-based service.

The project commenced in September 2007 with Speech and Language Therapists providing an on-site service in ten of the eleven previously cited DEIS schools (service in one school did not commence as referrals had not been received on time).

In each of the schools, children (where parental consent was obtained) were referred to the service by teachers and/or parents for assessment by the Speech and Language Therapist in the school.

In order to keep the base of the pilot project small for evaluative purposes, only children with suspected speech sound difficulties were initially referred and included. Children with receptive / expressive language difficulties and those with other communication difficulties, e.g., voice and fluency difficulties, were not included in the service until January 2008. Children with global difficulties requiring intervention from Early Intervention and School-Age Teams were not part of the project's remit (such children require a team-based approach to support their difficulties, therefore community/primary care-based SLT services were not appropriate). Children from outside the Limerick LHO Area but who were attending a school involved in the project had to be excluded as responsibility for their SLT service provision lies with different geographical LHO areas.

1.3 Outline of the Report

This report contains the evaluation findings of the in-school SLT service which was implemented on a pilot basis in ten of the Limerick DEIS primary Band 1 schools. This chapter has provided a brief introduction to the background of the pilot school-based SLT



service and has outlined the objectives of the evaluative processes. The second chapter sets out the context of the SLT in-school service and includes a geographic and demographic profile of Limerick, the context of the participating schools and of the Speech and Language Therapy Department. The third chapter provides a review of the literature relating to speech and language therapy in education, the theoretical underpinnings of the evaluation, as well as models of best practice relative to SLT. This chapter also includes the historical context of the in-schools projects from the perspective of the SLT Department. The fourth chapter describes the evaluation methodology and in the final two chapters the findings and recommendations that emerged from the evaluation are outlined.



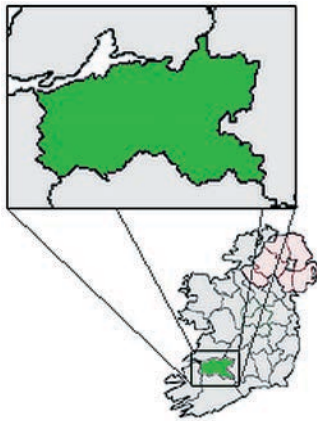
CHAPTER 2

Context of the Evaluation

2.1 Introduction

This chapter begins with a geographic and demographic profile of Limerick City. Information is then provided on the departments involved in this project and a brief description of similar projects initiated by the SLT Department in the past.

2.2 A Geographic and Demographic Overview



Limerick city is located in the County of Limerick, on the Western sea-board of the island of Ireland. It is considered to be the manufacturing, commercial, administrative, historical and cultural capital of the mid-west region of the country, and is an important centre of higher education in Ireland with a number of third-level educational institutions e.g., Mary Immaculate College (MIC), the University of Limerick (UL) and Limerick Institute of Technology (LIT). After Dublin, Cork and Galway, Limerick city is the fourth most populous city in the Republic of Ireland with a population of 52,539 (CSO, 2006a).

Figure 1: Map of Ireland, Specifying Geographic Location of Limerick County

Throughout the Irish economic upturn (1999-2007) Limerick held higher levels of unemployment than other cities in Ireland. The 2006 Census figures show that while unemployment rates in the Irish Republic as a whole were at levels of 8.5% of the population, Limerick experienced unemployment levels of 14.6% (CSO, 2006a). The high levels of unemployment were complemented by some of the most disadvantaged areas in the country as a whole (Limerick City Council, 2009) and one of the highest percentages of public housing among local authorities at 41% of the population (McCafferty, 2005). The city also displays low levels of educational attainment with 10% of the city's population leaving school 'at or under 15 years' (11% amongst males and 9% amongst females), compared to national figures of 7.6% (8.2% amongst males and 7% amongst females) (CSO, 2006a). This is compounded by the fact that 22% of Limerick's population have 'no formal education'/'primary school level only', which is over 3% higher than national figures (CSO, 2006a).



Limerick city comprises 38 Electoral Divisions (EDs)³, of which two are relevant to the current Speech and Language evaluation i.e., Moyross and Southill. Moyross is located on the north side of Limerick city, and Southill is located on the south. In 2006 Moyross had a population of 3,468 (a decline of 15.6% from 4,110 in 2002) and Southill had a population of 3,276 (a decline of 18.3% from 4,006 in 2002) (CSO, 2006b; CSO, 2002). In 2006, 39.6% of the Moyross population aged over 15 years had attained either ‘no formal’ education or ‘primary education only’; with 33.5% attaining lower second-level, 16.5% upper second-level, 4.4% technical or vocational education, and 6% third level. The respective figures in the Southill area were: 42.4% ‘no formal/primary education only’, 32.9% lower second-level, 14.9% upper second-level, 4% technical or vocational education, and 5.9% third level. 29.6% of the Moyross population aged 15 years and over left school ‘at or before 15-years’, whilst 26.1% of the respective population in Southill left ‘at or before 15-years’ (CSO, 2006b). With regard to labour, 24.6% of the population of Moyross were unemployed/first-time job-seekers in 2006 (an increase of 3.3% from 21.3% in 2002), whilst 29.2% of Southill’s population were unemployed/first-time job-seekers (an increase of 4.4% from 24.8% in 2002) (CSO, 2006b; CSO, 2002).

Limerick County consists of 135 EDs of which only Rathkeale is of relevance to the current Speech and Language Evaluation. Rathkeale is in West Limerick. In 2006 it had a population of 1,445 of whom 17.5% were aged 14 years and under. In Rathkeale 47.1% of the population aged over 15 years were reported as having ‘no formal education or primary level education only’ and 13.8% had completed 3rd level education. In regard to labour statistics the unemployed/first time job seekers rate in Rathkeale in 2006 was 24.6%, an increase of 2.7% from 2002.

With regard to disadvantage, the relative index scores as calculated by Haase and Pratschke (2008) outline the levels of deprivation/affluence of any one area relative to all other areas at that point in time e.g., 1991 census year / 2006 census year. The index scores range from -30 (extremely disadvantaged) to +30 (extremely affluent). Table 1 below outlines the relative index scores for Ireland, Limerick city, Moyross and Southill respectively, for the years 1991, 1996, 2002 and 2006.

Table 1: Relative Index Scores - Ireland, Limerick City, Moyross & Southill

Census Year	Divisions				
	Ireland	Limerick City	Moyross	Southill	Rathkeale
1991	2.3	-2.4	-26.8	-25.3	-12.7
1996	3.0	-1.9	-21.1	-25.0	-14.8
2002	3.3	-4.0	-23.9	-29.7	-22.9
2006	2.1	-7.9	-32.3	-38.5	-35.1

³ An Electoral Division (ED) is the smallest geographic area for which census data was available in 2006 and preceding years.

These scores are visually represented on the line graph below (Figure 2), where one can view the progression (be it positive/negative) for each respective district over the fifteen year period. Ireland's level of deprivation remained relatively static over that period of time (ranging from +2.3 in 1991 to +2.1 in 2006); Limerick also remained relatively static from 1991 (-2.4) to 1996 (-1.9), but started to decline between 1996 (-1.9) and 2002 (-4), and declined even more drastically between 2002 and 2006 (-4 to -7.9 respectively). With regard to Moyross, its level of deprivation started to positively increase between 1991 and 1996 (from -26.8 to -21.1, respectively), but sharply declined between the ten-year period 1996-2006 (from -21.1 to -32.3, respectively). Southhill remained relatively static between 1991 (-25.3) and 1996 (-25), but declined rapidly from -25 in 1996 to -29.7 in 2002 and -38.5 in 2006. Rathkeale, unlike the other EDs, shows a small decline between 1991 and 1996 followed by a sharp decline by 2002 and a further decline up to 2006 resulting in an overall decline during the 10 year period (from -12.7 to -35.1) (Haase and Pratschke, 2008).

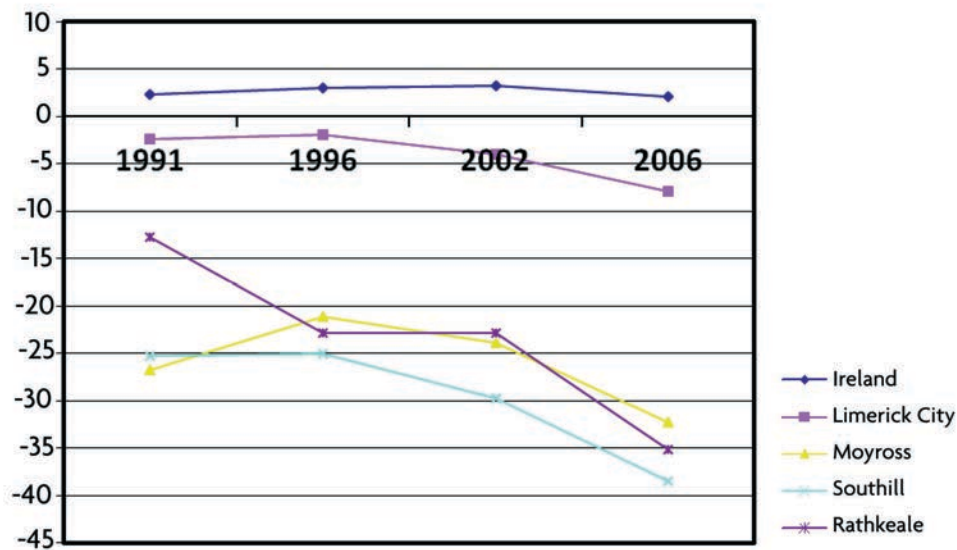


Figure 2: Relative Index Score - Ireland, Limerick City, Moyross, Southhill and Rathkeale

2.3 Transforming Education through Dialogue (TED) Project

TED seeks to improve and enhance educational outcomes for children. This is achieved through harnessing the expertise of Mary Immaculate College in the service of children, parents and teachers, primarily in DEIS contexts. Through dialogue and collaboration we seek to unlock the enormous potential within learning communities.



The primary objectives of the TED project are to:

- Work within MIC to support its students' understanding of educational disadvantage in a manner which contributes to their professional practice;
- Increase social inclusion within the College;
- Influence and contribute to the development of educational policy vis-à-vis addressing educational disadvantage;
- Work in partnership with other educational stakeholders in identifying needs and designing, conducting, monitoring and evaluating interventions which address educational disadvantage;
- Develop an understanding of educational disadvantage in order to stimulate educational innovation and policy and to promote good practice through research.

The majority of schools with which TED works are designated DEIS schools (DES, 2005) i.e., they are recognised by the Department of Education and Skills (DES), in conjunction with the Educational Research Centre (ERC), St. Patrick's College, Dublin as schools experiencing heightened levels of educational disadvantage. For the purpose of this study, educational disadvantage can be defined as:

"...the impediments to education arising from social or economic disadvantage which prevent students from deriving appropriate benefit from education in schools." (DES, 1998: Section 32, No. 9).

The DEIS Action Plan concentrates on addressing the educational needs of children and young people living in designated disadvantaged communities through the allocation of resources (human and financial) over the five-year period, 2005-2010. The action plan considers the differences between urban and rural disadvantage, as well as the ongoing development of "provision for pupils with special educational needs in light of the enactment of the Education for Persons with Special Educational Needs Act (2004) and the establishment of the National Council for Special Education" (DES, 2005: 18).

TED facilitates three networks which are a central pivot of TED work. The Networks serve as an important forum for discussion of educational issues and challenges, for sharing good practice and information and for delivery of training. The networks have been the seed bed for the development and delivery of TED initiatives and intervention programmes. The PLUS (Primary Liaison with University Services) Network (2012) comprises 18 DEIS Band 1 primary schools, 2 DEIS rural schools and 2 non-mainstream schools in Limerick city and county. The primary aim of the TED-facilitated networks is to act as mechanisms whereby participating schools have a forum to raise issues of concern to them, with a view to taking practical steps to bring about solutions and change. Therefore, the unique position of TED staff as facilitators, allows the TED project to identify areas of need that require addressing with the main aim of bringing about solutions to problems identified and ultimately, therefore, change.



2.4 Limerick Speech and Language Therapy (SLT) Department

The Limerick SLT Department is a Primary and Continuing Community Care (PCCC) service. It provides speech and language therapy to children and adults living within the Limerick LHO Area, who present with difficulties in the areas of speech, receptive, expressive and social language, fluency (stammering), voice, eating, drinking and swallowing, and communication difficulties. Children who present with complex developmental delays, or, disabilities and who require specialist multidisciplinary services receive their speech and language therapy from Limerick Early Intervention Service (birth-6 years) and Children's Services (6-18 years).

The administrative and management aspects of the service are based in HSE buildings in Raheen Business Park. Speech and language therapists (SLTs), both basic grade and senior grade, are based in health centres across Limerick city and county. These include Ballynanty, Moyross, Southill, Dooradoyle, Rathkeale, Newcastlewest, Abbeyfeale, Dromcollagher, Foynes and Kilmallock. In addition, therapists provide services to two junior language classes (Scoil Máthair Dé; Courtney Boys National School) and one senior language class (Scoil Máthair Dé). This specialist school-based service provides the setting for teachers and therapists to work collaboratively and intensely with children diagnosed with Specific Language Impairment and who meet the criteria for access as specified by the Department of Education.

2.5 Historical Overview of Previous Speech and Language Therapy Projects in Limerick Primary Schools

The concept of Speech and Language Therapists (SLTs) working within schools in the Limerick area is not a new departure. Over the past 17 years the SLT Department has been involved in four projects aimed at developing services within clinics and within schools in low Socio Economic Status (SES) areas within Limerick City. These projects were:

- 1. Project 1, 1992/1993:**
Moyross Health Centre area and Corpus Christi School, Moyross.
- 2. Project 2, 1998/1999:**
Non-attendance at Clinic Appointments in Southill Health Centre.
- 3. Project 3, 1999 – 2001:**
SLT School Service Provision in socio-economically disadvantaged areas, including Moyross and Southill.
- 4. Project 4:**
Preschool/Crèche Intervention in the Moyross and Southill areas of Limerick.



These projects had similar rationale for implementation. These included:

- Concerns regarding high non-attendance rates at health centres for SLT in disadvantaged areas;
- A higher incidence (as described by teachers and pre-school staff) of speech and language difficulties among the population;
- Acknowledgement that regular consultation between education and health services could facilitate earlier identification of speech and language difficulties amongst children in these areas;
- Opportunities for consultation and liaison that would ensure the implementation of speech and language programmes.

Each of the projects outlined above were evaluated (O’Sullivan, 1999; Primary Liaison with University Services, 1999; Speech and Language Therapy Department, 2001). The findings included the following:

- Increased collaboration meant that all people involved with a child (including parents, teachers and SLTs) had the same goals;
- Carryover of intervention was carried out in school if it could not be done at home;
- Children who had never attended the clinic service were identified received follow-up therapy;
- Consistency in attendance for intervention (during the life of the project) resulted in increased benefits for the child;
- More efficient use of therapy time was identified (this contrasted with regularly missed clinic-based appointments);
- There was less disruption to children’s school days (in comparison to leaving school to attend the clinic);
- Therapists were able to provide individual and group based intervention for children (including whole-class language development programmes);
- Training was implemented for school staff in some of the areas.
(These projects are described in more detail in Appendix B)

As a result of staff shortages in the Limerick SLT Department most of the aforementioned projects had to be discontinued.

The current school-based service model project was a new initiative which re-established an on-site school based service in the DEIS schools in the Limerick area. It aimed to facilitate early identification and assessment of children requiring SLT services in the schools. It was expected that the project would lead to the implementation of individual and group based therapy programmes; training and education of staff to promote collaboration; and joint-thinking in managing the holistic needs of the children in the school environment.



2.6 Conclusion

This chapter described the context of the SLT evaluation. It described the areas of Limerick city where the school-based work of the Limerick Speech and Language Therapy Department takes place and an outline of TED's work with the schools concerned was also given. A description of current SLT provision in the Limerick LHO area was provided. The chapter concluded with an outline of the previous SLT projects undertaken in an attempt to integrate SLT service provision and education.



CHAPTER

3

Review of the relevant literature and cost analysis of services

The most significant act of our early life, perhaps our whole life, is the acquisition of our mother tongue. Once we have language at our disposal we have a key which will unlock many doors.” (Crystal, 1986:206)

3.1 Introduction

Research literature is full of supportive documentation in relation to the importance of speech and language development and academic success. This chapter provides an outline of the theoretical basis and best-practice guidelines relative to speech and language services documented in the literature. It also provides information on the costing associated with clinic-based and school-based service provision.

3.2 Review of Relevant Literature:

“Quite simply, speech and language disorders in childhood constitute a major problem for society, in terms both of the human misery that they cause, and the economic costs inevitably incurred when a subset of the population cannot participate fully as members of the community.” (Bishop, 2000, p. ix)

Communication development does not run smoothly for many children. There are estimates that between 5% and 10% of children present with some form of speech or language difficulty in childhood. The ‘I CAN Talk’ Report (2006) distinguishes between persistent communication disability and transient language difficulties. 10 % of children are likely to have a persistent difficulty (i.e., long-term communication disability) and ‘upwards of 50% of children will have impoverished (transient difficulties which with the right support, may catch up with their peers) language on school entry’ (ibid). Speech and language difficulties can lead to literacy, social, emotional and occupational difficulties in later life which are outlined below.

3.2.1 Prevalence of Speech, Language and Communication Difficulties

There is evidence in certain areas of the UK which indicates that nearly 50%-84% of children are entering school without adequate vital oral communication skills. (I CAN



Talk Series Issue 2, 2006). These impoverished or transient language difficulties are at their highest in socially disadvantaged / low SES areas.

In addition, Law et al (2000) found that 5% of children in the UK, which is equivalent to 36,000 5 year old children, will present with Specific Speech and Language Impairment each year (SSLI). SSLI is a specific persistent difficulty diagnosed in the absence of any other cognitive difficulty and it must be noted here that not all children with significant language needs are diagnosed with SSLI.

To date there have been no prevalent studies in Ireland relating to language delays or disorders. However, the Irish Association of Speech and Language Therapists (IASLT) in a position paper on SSLI have estimated (based on the UK figures and the Irish 2006 Census) that 5,818 children in Ireland, between the ages of 5 and 6 years, present with SSLI.

Although research into the prevalence of speech sound disorders is not as widespread as research that relates to disorders of language, it has been estimated that 15.6% of 3 year olds present with speech sound disorders (Campbell, Dollaghan and Rochette 2003) and 3.8% continue to present with difficulties at 6 years (Shribery, Tomblin and Mc Sweeney 1990).

In addition to speech and language disorders, speech and language therapists also work with children presenting with a wide variety of other communication disorders including disorders of voice, fluency and selective mutism. Tentative research figures suggest prevalence of fluency disorders at 5%; disorders of voice at 6%; and selective mutism at 1.5 %.

In her review of the prevalence data Johnson (2007 p6) concludes “*A large proportion of children have speech and language disorders, which may be associated with adverse, long-term outcomes that impact on individuals, families, and communities. A challenge for our society is to foster the science required to promote better futures for these children in a world where academic, social, and economic success relies heavily on communication skills*” (Ruben, 2000).

3.2.2 *Speech and Language Development and Academic Success*

It is widely recognised that language is central to learning because students access the curriculum through language. Language development affects all other aspects of development that are key to a child’s academic success. It is an “*integral and interrelated aspect of a child’s socio-cognitive profile and difficulties with language are likely to affect other aspects of development*” (Dockrell and Lindsay, 1998: p.117). Language skills



therefore have long been regarded as good predictors of academic performance and success. Many studies conducted throughout the years, including Snowling (2000), Stothard et al. (1998), Tizard et al. (1988), examine the relationship between language skills and academic success. Research conducted by Tizard et al. as far back as 1988 and more recent research conducted by Rhea Paul in 2000 indicates that vocabulary development and oral language skills are a significant predictor of success in reading and writing. Stothard et al. (1998) carried out a longitudinal study of language impaired preschoolers whom they followed up into adolescence. This study showed that a significant proportion of language difficulties are persistent and have long term effects. They suggest that if a child's language difficulties persist past 5 or 6 years of age the overall prognosis for the child is poor as they will be at risk of language, literacy and emotional difficulties throughout childhood and into adolescence. Snowling (2000) examined the relationship between speech processing and phonological skills and later reading and spelling development. She found that the evidence suggests that children with reading difficulties experience broader language difficulties early in their development. The research indicates that there is a strong relationship between a pre-school child's phonological processing ability and later reading and spelling development.

Children's rights are enshrined in the United Nation's (UN) Universal Declaration of Human Rights (UN, 1948) and the UN Convention on the Rights of the Child (UNCRC) (UN, 1989). Children have the right to adequate health care and to education. However as the Bercow Report (2008) highlighted, early speech and language delay impacts on the development not only of children's communication skills, but also on educational achievement (in particular literacy), as well as social and emotional development. Therefore early identification and remediation of speech and language needs is crucial to intervention and successful outcomes (Creegan, 2006; Rinaldi, 2000).

3.2.3 *Speech and Language Development and Socio Economic Status (SES)*

Language skills vary across different socio economic status (SES) backgrounds. In areas of poor economic growth and social disadvantage early language delay is more prevalent. Locke and Peers (2000) highlighted pre-school staffs' concerns relating to poor language development of children entering pre-school, particularly amongst children from economically deprived backgrounds. Worryingly, such language delays can impact on later development and education experience. The pre-school children low SES backgrounds in the Locke, Ginsborg and Peers' study (2002) performed "...on average, well below the level expected in the general population; more than half could be diagnosed as having moderate, moderate to severe, or severe language delay" (Locke et al., 2002: p.xx). Significantly, these children had cognitive skills comparable to the general population.



Evidence from research in the United States and the United Kingdom (Locke, et al., 2001; Catts and Kamhi, 1999; Hart and Risely, 1995; Byrant, McLean and Bradley, 1990; Bradley and Bryant, 1983; and Goodman and Goodman, 1979) suggests that children from low socio-economic status (SES) backgrounds have poorer oral language skills than children from higher SES backgrounds. Researchers have tentatively alluded to the reduced amounts of language addressed to children of lower SES for the first two and a half years of life (Hart and Risley, 1995). The suggestion is that early linguistic environments can impact on early academic success (ibid, 1995, Landry and Smith 2006). Hoff's 2002 study looks at the difference in language addressed to children in differing SES categories and concludes that parents of children from higher SES: produce more speech per unit of time interacting; use a richer vocabulary; issue less behaviour directives and ask more open ended questions. Children from higher SES backgrounds also experience more joint book reading than children from lower SES (US Department of Education 1998). Paul (2000) also noted some evidence of this. She suggests that even small differences in SES affect the outcome for children with language delays.

Literacy and numeracy are seen as two of the core goals of education - but early language skills impact directly on the development of such skills and so are increasingly becoming more critical. There are high levels of literacy difficulties in low SES areas. A number of studies in Ireland and elsewhere have highlighted that children from low SES backgrounds are more likely to experience literacy difficulties than are children from other backgrounds (see for example Cosgrove, Kellaghan, Forde & Morgan, 2000; Weir, Milis & Ryan, 2002; Eivers, Shiel & Shortt, 2005; Westby, 1985; Goodman and Goodman, 1979; Catts and Kamhi, 1986 and 1999; Dockrell and Lindsay, 1998; Gallagher, et al., 2000). Gallagher et al. (2000) found that children whose literacy skills were delayed at 6 years were shown to have significantly slower speech and language development than a control group.

“It is not sufficient to be able to use language to communicate with others: in school, language must also be used to regulate thinking, to plan, reflect, evaluate and to acquire knowledge about things that are not directly experienced” (Norris 1989: p.206).

3.2.4 Speech and Language Development and Social and Emotional Development

Speech and language skills not only impact on the academics of school life but also on the social and emotional development of those experiencing difficulties. Language difficulties have wide reaching effects including ability to interact effectively, to understand situations, to negotiate and develop healthy relationships.

Many researchers have looked at the relationship between poor language skills and emotional and behavioural difficulties (Johnson et al., 1999; Botting and Conti-Ramsden,



2000; Conti-Ramsden and Botting, 2004) and suggest that poor language skills result in difficulties accessing the curriculum but also in developing social relationships. A cohort of 242 children who had been attending language units (language classes) at age 7 were followed up by Conti Ramsden and Botting (2004) and they found that more than half of these children (at age 11) were displaying clinical level social/ behavioural difficulties.

Goodyer (2000), Botting and Conti Ramsden (2000), Clegg, Hollis and Rutter (1999) all report that children with SLD have an increased rate of emotional/behavioural disorders compared to the community at large. Children with SLD at pre-school age are more likely to show the following difficulties as well: over activity; attention difficulties; wetting and soiling. For children of a school going age attention difficulties persist but other social emotional difficulties become more apparent i.e., antisocial behaviour in SLD children. It also puts them at risk of rejection and isolation from their peers. Learning and language difficulties which persist, not only have a long term impact on education but also on mental health outcomes.

3.2.5 *Speech and Language Development and Employment and Life Opportunities*

Consideration must be given to the long term effects for children of the aforementioned speech, language, literacy, academic, social and emotional difficulties as they develop into teenagers and adults. These aspects impact on their later life opportunities. Although the impact of SES on later life opportunities has been well recognised, researchers are only recently beginning to link early language and literacy difficulties with later life achievements.

Rutter and Mawhood (1991) did a follow up study of adults who had SSLI diagnoses in childhood. They noted poor outcomes in social skills, education and employment terms for a sub sample of those who presented with receptive language difficulties in childhood. Bryan (2004) carried out a preliminary study of language difficulties among the population detained in a Young Offenders Institution. Her results indicated that 43% had difficulty with naming (e.g., items in a picture description task), 73% had difficulty with grammatical competency, 23% had difficulty with comprehension and 47% had difficulty with picture description tasks. Whilst Bryan outlines that the limitations of the study included brief screening and sampling bias, the implications of this study of 18 to 21 year olds should not be ignored.

The Education and Skills committee Special Educational Needs review (2005/2006) in the UK note that in Youth offenders institutions 15% of the population present with statements of SEN. This is compared to 3% of the entire population. Studies have shown the extent to which dyslexia is over represented in the prison population with as many as 20% of prisoners having dyslexia and related learning difficulties. Other studies in the UK have reported that 50% of prisoners have literacy difficulties in comparison to 17% of the



population as a whole. In an Irish context a survey in 2000 of learning difficulties in the prison population was completed. Of significance 18.3% of the sample population demonstrated a significant deficit (below 70) on the Reading sub-test from the Wide Range Achievement Test. 37.6% of the sample population demonstrated a significant deficit (below 70) on the Spelling sub-test from the Wide Range Achievement Test and 44.5% of the sample population demonstrated a significant deficit (below 70) on the Arithmetic subtest from the Wide Range Achievement Test (Carey et al 2000).

Speech and language difficulties persist in a wide range of guises well into adulthood and affect people in many different aspects of their lives. Positive early intervention for children with early language delay can have a considerable impact on their school career and later life opportunities.

3.2.6 *Speech and Language Therapy in an Educational Setting*

Language develops through social interaction and is best supported in a group or community setting (Rinaldi, 2000: p.12). Although children with specific speech and language disorders may benefit from explicit strategies and awareness-building activities, their language is a social construct that mediates their learning and will therefore benefit from interaction within the classroom environment in conjunction with such strategies (Rinaldi, 2000: p.12). This is especially the case for older children as the increasing demands of the curriculum depend more heavily on successful language and literacy skills (Martin and Miller, 2003).

A number of Irish studies (McGough et al., 2006; Quigley, 2006) have compared levels of accessing clinic-based services in populations living in areas of designated disadvantage against those living in non-designated disadvantaged areas. In each of these studies strong perceptions existed that potential service users living in designated disadvantaged areas did not regularly access clinic-based services. Quigley's (2006) study looked specifically at patterns of accessing such services by children with special educational needs in Limerick. She found that while 9% of schools in designated disadvantaged areas agreed or strongly agreed that their pupils regularly attended service appointments, the corresponding figure was 80% for schools in non-disadvantaged areas. The authors recommend that alternative models of service provision need to be examined and, where possible, put in place to ensure that children can access the appropriate and necessary services.

3.2.7 *Collaboration in Speech and Language Provision in Educational Settings*

The Bercow Report (Bercow, 2008) is a critical review of Speech and Language Therapy provision for children aged birth to nineteen years in England and Wales. The findings focused on the need for integrated, collaborative and systematic delivery of speech and language therapy services and highlighted such as being the most appropriate model for service provision.



In Martin and Miller's (2003) discussion of collaboration between education and health professionals, the opportunities for collaboration between the two professions in how they approach children's needs are clearly outlined. Martin and Miller point out that "... the two perspectives on language are complementary and necessary if children are to learn effectively in school". It is highlighted that both professionals (teachers and SLTs) use language as the main tool in their work. What is suggested is that these professionals need to know more about how the others work in order to plan "...activities that use and promote language in a classroom setting".

Bercow's report (2008) highlighted five key issues in services for children with speech and language needs. Firstly, the report highlighted the centrality of children's development of communication skills in leading to successful social interactions at all levels. Secondly, it highlighted the need for early intervention to ensure that children are not disadvantaged in their learning environment. Furthermore, the report highlighted the following three points related to the delivery of services:

- A continuum of services, designed around the family, is needed;
- Joint working is critical;
- The system is characterised by high variability and a lack of equity which needs to be addressed (Bercow, 2008).

Bercow (2008), in an entire chapter devoted to joint-working, also analysed how much collaboration there was between health and education services in the UK and found that the picture was very different in different parts of the country. Services varied from complete collaboration, to no collaboration of the health and education services (Bercow, 2008).

The need for a collaborative approach to the provision of children's services has been noted in contexts other than Ireland and a move to providing intervention and therapy in school is becoming the model of choice in many countries. Gascoigne (2000) highlights that:

"The key point to note is that with the increased emphasis on the importance of language and communication skills, prevention and early intervention in Sure Start Children's Centres and mainstream schools, there is an increasing remit for SLTs to be part of the workforce at this universal level and not, as has historically been the case, purely at the level of specialist and - to some degree- targeted services"

(Gascoigne, 2000: p.145)

Reed (1992) describes two models of consultation: the "expert" and the "process" model. In the expert model the SLT gives materials, recommendations and suggestions to the



teacher. The process model is more collaborative and both parties work together to develop programmes for intervention (Reed, 1992). She highlights her case for collaborative consultation with the idea that “*language does not exist in a vacuum*” (Reed, 1992: p.60) and “*intervention needs to be not only focussed on the child but also on those interacting with them*” (Reed, 1992: p.61). Reed states that although working collaboratively can be achieved in a short period of time, it can take up to 3-5 years to establish effective practice (Reed, 1992).

3.3 Funding, Costs & Benefits

Given the evidence cited in the literature of the long term effects of speech and language difficulties in childhood it is expected that these also transfer to costs for the state. Up to 75% of these children are in need of special education (Snowling et al 2001) therefore the cost of their education is high. Ruben (2000) examined the cost to the State of service provision in the US to people with communication disabilities. This cost was estimated to be between 154.3 and 186 billion dollars per year and contributing to economic disadvantage as employment relies more and more on communication based jobs. Also according to the NEET (Not in Employment or Education) service for 16-18 year olds in the UK, the cost to the state of a child in this service is £97,000. Early diagnosis and early intervention can reduce these costs significantly in later life particularly in the case of impoverished or transient language difficulties which with the right support should catch up (Basic Skills Agency 2002).

3.3.1 Costs of SLT in Ireland

The current average hourly cost of a speech and language therapist in Ireland is €27.45. The average clinic-based day is 7 hours long; therefore the average cost per clinic-based day is €192.15.

The average school-based day is 4 hours long; therefore the average cost per school-based day is €109.80. Table 2 below clearly illustrates the total cost per day per setting-type.

Table 2: Cost Per Day of SLT Service

Setting-Type	Cost Per Hour of SLT	Number of Hours Per Setting	Total Cost Per Day
Clinic-Based SLT	€27.45	7	€192.15
School-Based SLT	€27.45	4	€109.80

In consideration of these figures, non-attendance at clinic-based services results in speech and language therapists not utilising his/her time cost-effectively during that period for speech and language therapy with children. This is in contrast to the situation in schools where another client may be easily accessed for a vacant slot.



3.4 Conclusion:

A review of the literature has highlighted the significant and urgent need for speech and language services in area of low SES. This will support children's learning, social and emotional needs as well as their life opportunities. The chapter discussed the overall impact to individuals and to society of speech, language and literacy difficulties and concluded by providing a comparison between the costs associated with clinic-based and school-based SLT services in Ireland.



CHAPTER

4

*Research Methodology***4.1 Introduction**

As outlined previously, the SLT Department decided to reintroduce the school-based service on a trial basis in 2007 to assess whether or not this service delivery model would be effective with the target population. The reintroduction of this model was carried out in conjunction with the schools that participate in the PLUS network. Service provision was delivered and co-ordinated by the Limerick SLT Department, and was evaluated by the SLT Department and the TED project in MIC.

4.2 Evaluation Methodology

The evaluation drew on quantitative and qualitative techniques to gather primary data. The primary data instruments consisted of a questionnaire and semi-structured interviews with teachers, principals, parents and therapists and focus groups with children accessing the in-schools service (see Appendix A for samples of the evaluation instruments).

Secondary data, in the form of HSE records, were also analysed. The secondary data analysis consisted of a review of HSE attendance records (at both school-based and clinic-based appointments) and information relating to the speech and language assessments carried out by the SLT Department pre- and post-therapy. The sample of secondary data was obtained through a retrospective request for parental permission to access client records for the purposes of the evaluation research.

4.2.1 Primary Data

A questionnaire was designed by the TED research team in conjunction with the Speech and Language Therapy Department. The questionnaire was largely quantitative and aimed to gather data relating to the child's appointment history and also to the teachers' rating of the children's progress. The questionnaire was divided into three parts, two of which related to the child outcomes and were completed by the therapist (Part A1) and by the teacher⁴ (Part A2) and related to the child's interaction with the SLT service and the outcomes for a variety of speech, language and social outcomes, as rated by the teachers. The third part (Part B) was completed by teachers and related to the service delivery and the benefits and challenges of having such a service in schools.

⁴ Teachers will be used as a general term for class teachers and resource and learning support teachers unless otherwise stated.



Teachers from 9 out of the 10 schools involved in the SLT in-school pilot service completed questionnaires Part A2 and B and the therapists returned questionnaires relating to children from all 10 schools. The analysis of the questionnaire data would also give indications in relation to children's attendance rates, therapy outcomes and also teachers' satisfaction ratings with the in schools service.

The questionnaire was largely quantitative in nature, but also contained one qualitative section. It had three distinct parts, namely:

Part A1 – this section was completed by the therapists and outlined the therapy record for each child availing of therapy under the pilot project;

Part A2 – was completed by the teachers (both class teachers and resource or learning support teachers) whose pupils were engaging with the school-based programme. This part invited teachers to rate the children's therapy outcomes on a range of aspects relating to SLT service delivery; and

Part B – contained open-ended questions relating to the benefits and challenges of the delivery of SLT in schools.

A total of 101 questionnaires Part A were returned by the therapists and teachers in relation to the children, and 31 Part B questionnaires were returned by principals and teachers at the end of the first academic year of the project, 2007/2008, in relation to the speech and language schools-based service. Of the returned questionnaires a number were incomplete, for example, only one part had been completed for some children, either the therapist's A1 section or the teacher's A2 section was blank, and this is indicated in Table 3 below which details the quantitative participants and the instruments used to gather the primary data.

Table 3: Quantitative Participants

Primary Data			
Questionnaires	Part A1	Part A2	Part B
Number completed	95	61	31
Participants	Completed by 6 SLTs	Completed by 25 teachers (not all were fully completed) (Class and resource or learning support teachers)	Completed by 8 principals 21 Class teachers 2 Learning support teachers



The primary data gathered through the questionnaire was analysed using the Statistical Package for the Social Sciences (SPSS). Simple frequency analyses and data cross-tabulations were conducted to analyse the quantitative data. The qualitative data was analysed thematically. Themes that emerged from the initial analysis of the completed questionnaires were used to develop: (i) an interview schedule, which was the basis for interviews with therapists, teachers and parents, and (ii) a focus group schedule, which was used with children. The interview schedules were designed to: (i) gather a detailed account of the teachers' and therapists' perspectives of the service and the benefits and challenges of having the service in schools, and (ii) ensure that the voices of the service users, the children and their parents, were included in the evaluation. The focus group data highlighted the children's knowledge and awareness of the SLT service and their perception of the benefits and challenges of the school-based service.

Two of the nine schools that completed questionnaires were selected to carry out the follow-up interviews and focus groups. These schools were selected based on:

- An unbroken service for the duration of the project i.e., no staff changes or substitutions;
- High numbers of children and teachers involved in the delivery of the in-school service;
- Ease of access to parents.

The interviews and focus groups were carried out in the schools towards the end of the 2nd year of the service, i.e. in May 2009.

4.2.2 Secondary Data

The secondary data made available to the evaluation team included:

1. The attendance records from 6 therapists who worked in the clinic and school settings. These records were collated by the Senior SLT co-ordinating the school-based service. The records contained information relating to appointments offered, appointments cancelled (Could Not Attend (CNA)) and appointments that were not attended (Did Not Attend (DNA)). These records were examined on a child-by-child basis. The majority of the attendance records were over a five-year period pre-dating the pilot service, but some were a little older. The MIC evaluation team only accessed the records of children whose parents consented to be included in the evaluation. All attendance information was anonymous. A comparative analysis of school-based and clinic-based attendance was conducted.
2. Information on pre- and post-therapy speech and language assessments. These were compared for evidence of change.



3. Carryover data: Some additional information was available for a number of children relating to the availability of an adult e.g., teacher, resource teacher, learning support teacher, SNA or parent in the school to carry out therapy tasks with the child in between therapy sessions.

All confidential records/information shared between the SLT team and the TED evaluation team were completely anonymous i.e., no identifying information was included and parents signed a consent form to this effect.

4.2.3 Participants

The evaluation report endeavoured to include the perspectives of all stakeholders involved in the process of implementing the school-based service i.e., school representatives (principals and teachers), parents, children and speech and language therapists. A total of ten schools participated in the project, nine of which were based in Limerick city and one of which was based in Co. Limerick. Table 4 below shows the variety of perspectives gained through the evaluation.

Table 4: Number of Interview/Focus Group Participants and questionnaire respondents

	Parents	Principals	Teachers	Speech and Language Therapists	Children	Total
Interviews and Focus groups	9	2	8	6	9	34
Questionnaire	0	8	23	6	0	37

To protect participants' identities and retain their right to anonymity and confidentiality, codes were developed when preparing the data. Each school was assigned a number and each teacher a number. Hence principal and teacher quotations are referenced by using the assigned school number followed by a capital 'T' followed by their number e.g., 1T09, 4T14, 2T02 and so on. Parents' quotations are referenced by using the number assigned to the school followed by a capital 'P' followed by their number e.g., 2P02, 3P03 and so on. In similar fashion, children's quotations were referenced by using the school number, followed by the letter 'C', followed by their individually assigned number e.g., 5C03, 1C02 and so on. Similarly, Speech and Language Therapists were referenced using the letter 'S', followed by their individually assigned number, e.g., S02.

Of the total number of PLUS member schools (18 Limerick city schools and 2 Limerick county schools), 10 in total were offered the SLT school-based service in 2007. The following are the schools that were initially offered the service.



Table 5: Participating Schools, Location and Corresponding Clinic

School	Location	Clinic
St Anne's	Rathkeale	Rathkeale
St Joseph's	Rathkeale	Rathkeale
St Munchin's Girls' School	Ballynanty	Ballynanty
St Munchin's Boys' School	Ballynanty	Ballynanty
Corpus Christi National School	Moyross	Moyross
Our Lady of Lourdes	Rosbrien	Southill
Our Lady Queen of Peace	Janesboro	Southill
Gaelscoil Seoirse Clancy	Southill	Southill
Southill Junior School	Southill	Southill
Galvone National School	Galvone	Southill

It is important to note that all of the PLUS member schools are not in the Limerick LHO catchment area. A service was offered to all primary schools that fell within the Limerick LHO catchment area. A number of the schools that are members of the TED/PLUS network did not continue to access the SLT service into 2008. This was due to a number of reasons: lack of suitable accommodation for a therapist; non-referral of children to the service initially; failure of specific client group to benefit from the service due to non-attendance as a result of their nomadic culture. The project commenced on a pilot-basis with SLTs visiting the 10 schools named above to conduct assessments.

However, since its inception in 2007, SLT staff shortages also impinged on the number of schools that the SLT could provide the service to. This resulted in the number of schools accessing the school-based SLT service being reduced from 10 to 8 schools between January 2008 and January 2009. Those eight schools (in alphabetical order) were: Corpus Christi National School, Gaelscoil Seoirse Clancy, Galvone National School, Our Lady Queen of Peace, Southill Junior School, St. Munchin's Boys' School, St. Munchin's Girls' School and St. Anne's Primary School, Rathkeale. The staff shortages in the SLT department also prevented the expansion of the service to additional schools that expressed an interest, through the PLUS network, in accessing the school-based SLT service. In September 2009, 6 (out of the original 10) schools had access to a therapist, due the reasons outlined above, and approximately 170 children (presenting with speech, language, voice and fluency difficulties) had access to the service through these schools in the academic year 2009/2010. Those six schools (in alphabetical order) are: Corpus Christi National School, Galvone National School, Our Lady Queen of Peace, Southill Junior School, St. Munchin's Boys' School and St. Munchin's Girls' School.



4.3 Limitations

A number of key limitations emerged throughout the evaluation of the school-based SLT pilot project. Those limitations predominantly related to the survey instrument that was used to gather the evaluation data (see Appendix A for a copy of the survey instrument), and are listed below:

- The rating scales that the teachers were requested to complete were entirely subjective. The teachers were not provided with specific criteria / descriptors to guide them in their rating of each individual child, which could have ensured or contributed to the objectivity of the rating scale;
- In terms of rating the children's awareness of their speech and language difficulties, the participating teachers did not consult the children. This would question the reliability of the ratings which were based on the teachers' perspectives rather than the children's;
- Additionally, as a result of difficulties in accessing parental participants for the survey instrument, the participating teachers rated the sections that referred to the children's home experiences. The teachers did not consult with the parents in this regard, leaving the reliability of the teachers' perspectives open to question.

4.4 Ethical Considerations

Due consideration had to be given to the ethics of accessing children's health records and perspectives. Written consent to access anonymous data and to talk with the children was sought from parents and guardians. This process was carried out by the Speech and Language Therapy Department through the schools. An information leaflet was drawn up by the evaluation team. The leaflet outlined the nature and purpose of the SLT evaluation, its evaluation methods, how the information gathered would be used, assurances of confidentiality and anonymity in the handling of the data, and participants' right to withdraw from participation in the research at any time. This information leaflet was disseminated amongst prospective participants and was read through with them prior to requesting their consent for (i) anonymous records to be passed to the TED evaluation team, (ii) their own participation in the interviews and (iii) in a sample of cases the participation of their child in the focus groups.



CHAPTER 5

Evaluation Findings

5.1 Introduction

This chapter is divided into two distinct parts, containing: (i) the SLT secondary data relating to children's attendance records, and (ii) the quantitative and qualitative findings of the questionnaire that was disseminated as part of the speech and language therapy in-school evaluation.

5.2 Secondary Findings

Secondary data was accessed by the evaluation team, via the SLT Department. Anonymous data was supplied for 95 children from among the 10 schools. At the time of data collection there were 135 children attending the school-based service. Of the 135 children, the parents of 95 children responded to a request for consent to the evaluation team accessing their children's SLT records. Only secondary data for children from whom parental consent was secured to view their attendance records, were included in this aspect of the evaluation.

The data related to children previously accessing clinic-based services and now availing of the school-based service during the implementation of the pilot SLT school-based programme. It detailed the nature of the therapeutic intervention, attendance records for the children, relating to both their clinic- and school-based history; and pre and post therapy outcomes. The data covered the academic years of the project i.e., 2007/2008, 2008/2009 and 2009/2010 and included information relating to children who were awaiting therapy in schools where the service had been curtailed or withdrawn due to staffing issues⁵. However, some of the latter children had been attending clinic services before their transfer to the school-based service and may therefore be included in the attendance comparison data.

The SLT service targeted children ranging in age from 5 to 12 years in the school-based pilot project. The 95 children ranged in age from 4.1 to 12.3 years with clusters at age 5, 6 and 7 years (Junior Infants to 1st class). Of those same children: 59 had received blocks of therapy; 23 were awaiting therapy following assessment; 6 were not suitable for the service (in these cases it was found that the children had other more complex needs e.g., autism, Down syndrome, etc. which indicated that a multi-disciplinary team-approach

⁵ For these children there is little information to report at this time.



would be more appropriate) and the remaining 7 had been assessed and found to be within normal limits for speech, but were awaiting language therapy.

5.2.1 Referral and Discharge History relating to Clinic -based Speech and Language Therapy Services

As indicated previously, one of the concerns that the school-based service aimed to address was the high number of children who were discharged from the service for non-attendance at clinic-based appointments. Children are discharged for failing to attend consecutive sessions without contacting the speech and language therapist. An examination of records of discharges from the clinic-based service for the 95 children is illustrated in Figure 3 below.

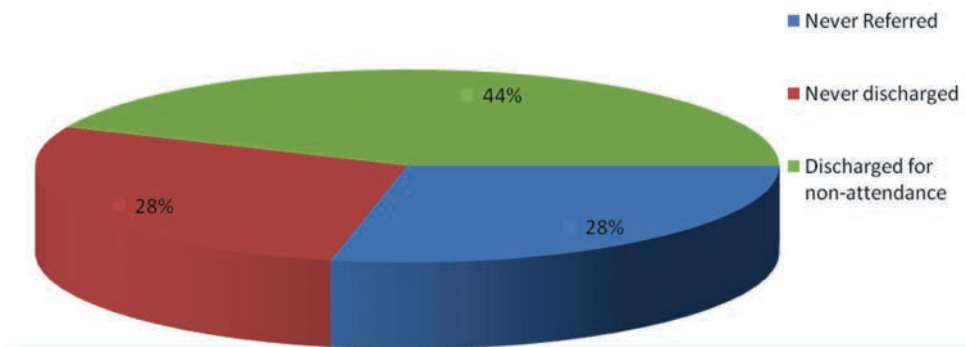


Figure 3: Attendance and Discharge History Recorded for 95 Children

This figure illustrates 41 out of 95 (44%) of the children now attending a school based service had been discharged from a clinic based service in the past. These 41 children, having been identified as requiring speech and language therapy services and referred to the service, were not availing of speech and language therapy intervention at the time immediately prior to the instigation of this project. 27 out of 95 (28%) of the children receiving a school-based therapy as part of this pilot project had never been referred to (and therefore never discharged from) the clinic-based service. Of notable importance is the fact that, had the service not been offered in the schools, those children would not have received speech and language therapy. This is indicative of a situation where some children are not identified in their early years' assessments as being in need of speech and language therapy and who would possibly continue to miss out on therapy if the school-based service did not afford teachers the opportunity to identify their needs and avail of the opportunity to refer them to the school-based service. Twenty – seven children (28%) of the 95 children were never discharged and therefore were accessing clinic based speech and language therapy services prior to the instigation of this pilot project.



5.2.2 Comparison of Attendance Rates between School- and Clinic-Based Settings

The secondary data supplied by the SLT Department allowed comparison between clinic- and school-based appointments attended by twenty-seven children from seven of the participating schools. Secondary data for children: (i) from whom parental consent was secured to view their attendance records, and (ii) who had previously attended the clinic-based SLT service, were included in this comparison. The clinic-based data refers to the period 2003 – 2008, and the school-based data refers to the academic years 2007/2008 and 2008/2009. For ease of reading, the data contained in figure 4 below has been collated by school, rather than by individual child⁶. The figure illustrates that children attended school-based therapy more regularly than they had clinic-based therapy⁷.

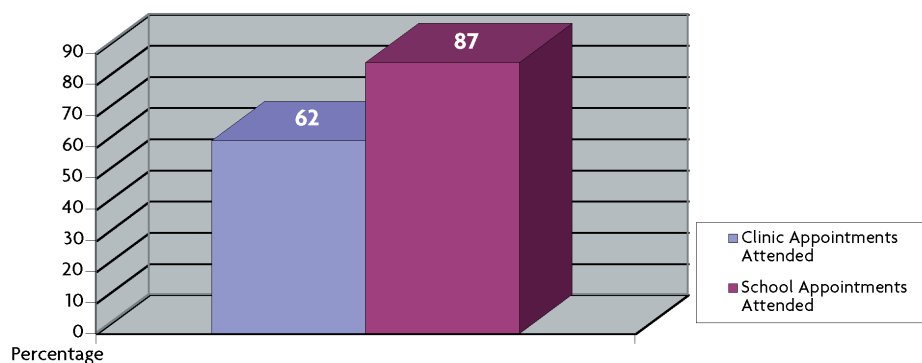


Figure 4: Appointments attended

5.2.3 Pre-therapy and Post-therapy School-based Assessments

Children's speech skills were re-assessed to monitor progress following two terms of therapy and children's language assessments were re-administered following 18 months to 24 months of therapy either group or individual. The evaluation team are aware that this is not controlled data and that other factors may have impacted on children's progress. Comparison between pre and post assessment scores were made to monitor progress using the same standardised assessment tool.

Speech assessments: Data was available for 34 children relating to pre- and post-therapy speech assessments, as 34 parents gave consent for their children's assessment and reassessment data to be made available to the evaluation team. Also these children were administered the same assessment pre and post therapy which allowed for better analysis. This allowed the team to analyse and present progress data relating to the children who presented with speech difficulties. Diagnoses of severity were made based on the Diagnostic Evaluation of Articulation and Phonology (DEAP) assessment (Dodd et al., 2002). Also consulted were the results of the Kids communication Impairment Therapy Effectiveness (KITE) project (Broomfield and Dodd, 2000), on which the SLT

⁶ To ensure confidentiality and anonymity, the individual schools have not been identified.

⁷ As noted previously, this data refers to the same twenty-seven children for whom parental consent was received to view their secondary SLT data. Although there is an overlap in the time period, no one child was attending clinic-based SLT services at the same time as he/she was attending school-based services. A number of the children were discharged from the clinic for non-attendance then re-referred by their teachers to the school-based service. Others were transferred from the clinic to the school-based service when the pilot project commenced.



Department's care pathways and classification of delay/disorder are based. Differentiation between delay and disorder were not made. Most children were reassessed within a 10-15 month timeframe.

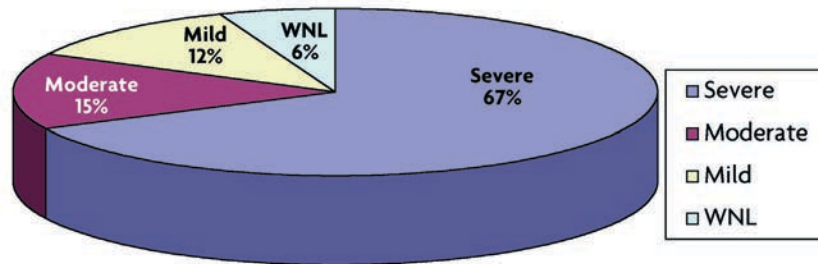


Figure 5: Severity Rating of Speech Pre-Therapy

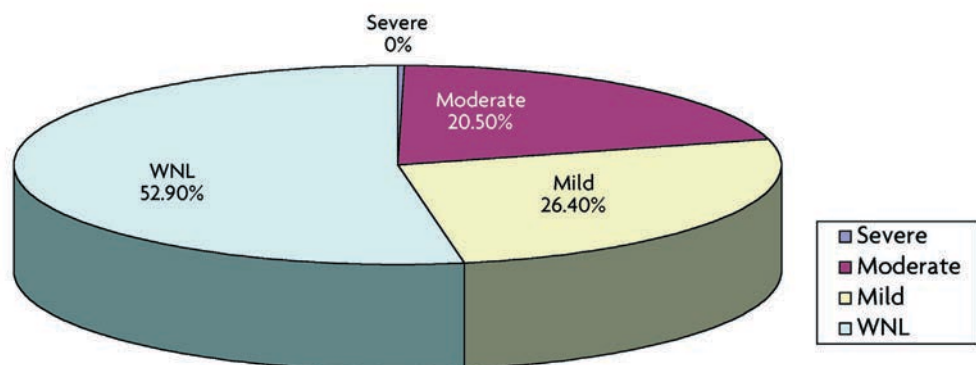


Figure 6: Severity Rating of Speech Post Therapy

The results indicate that 29 out of 34 (i.e., 85%) of the children made progress. Examination of results indicates that in 29 out of 34 cases, children's diagnoses progressed to a milder state i.e., a severe phonological delay progressing to a mild phonological delay etc. Percentages were rounded up or down.

In figure 7 the children's progress in the period between initial and review assessments is evident. It is particularly evident that those with the most severe diagnoses have made significant progress in their speech difficulties.



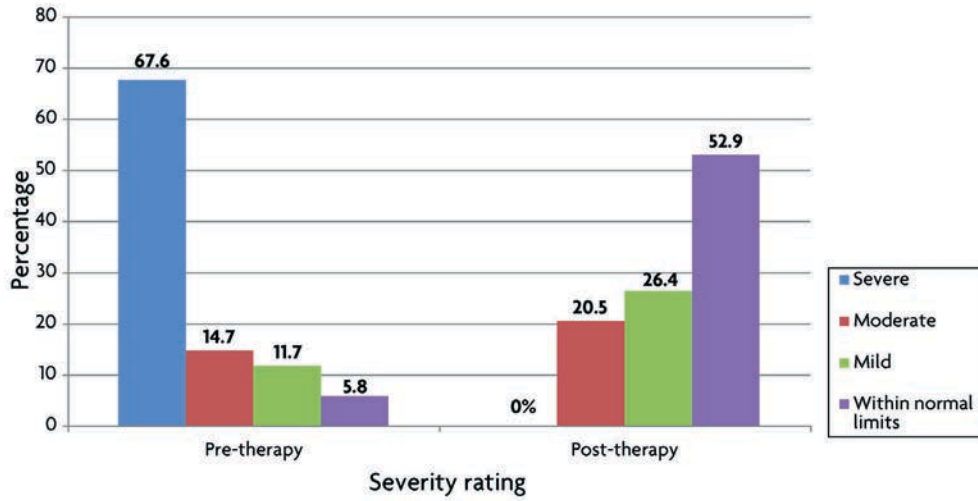


Figure 7: Severity Rating of Speech Comparison Pre- and Post-Therapy

Language Assessments

The parents of 24 children gave permission for their language assessments pre and post therapy to be compared. Children were assessed on the Clinical Evaluation of Language Fundamentals (CELF). The CELF P, CELF 3 and CELF 4 were used. Core language scores were compared and diagnoses were analysed for improvements. This is an overall/combination score of the receptive (understanding) and expressive subtests of the assessment. 20/24 of the pre assessments were administered in school and 4 were assessed in clinic prior to attending the school service.

Total/core language scores showed a 75 % improvement. Overall improvement in severity of diagnosis was 58.3%. This is displayed in figure 8 below.

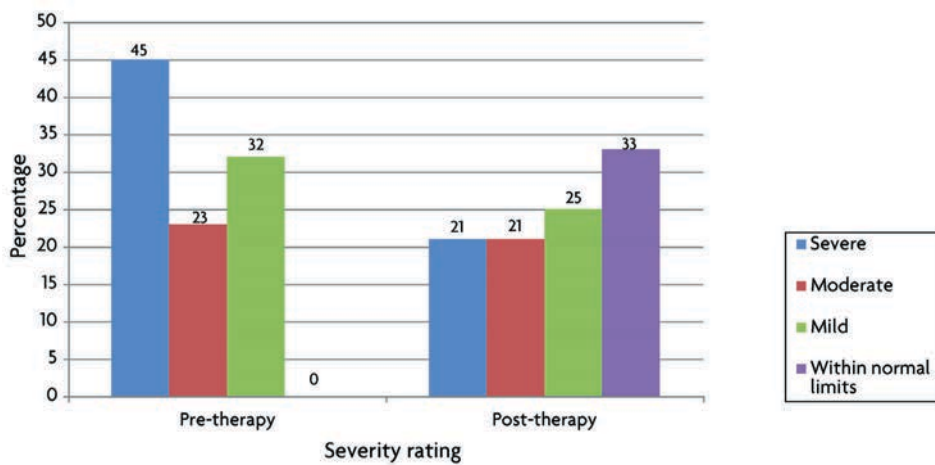


Figure 8: Severity Rating of Language Rating Pre- and Post-Therapy



Children's speech and language skills have improved significantly based on the standardised assessments administered. Since the beginning of the project in 2007 speech and language therapists and teachers in conjunction with the NEPs service have managed to procure extra resources (help) in school for many children. With this continued help and intervention children are much more likely to continue to improve their skills in speech and language development.

Although carryover data pertaining to 26 children was available and showed that 17 of the children had consistent carryover with a parent at home or a teacher within the school, it was not possible to identify if their progress was as a result of this consistency and continuity.

5.3 Primary Data Findings

5.3.1 Questionnaire Findings

As outlined above the initial data collection method was by means of a questionnaire containing three distinct parts (Part A1, Part A2 and Part B). Two parts examined service provision (Part A1 and A2) i.e., assessment and therapy outcomes for each child. The third (Part B) examined the schools' perception of service delivery in their schools and was completed by teachers and the principal of each school. The results of all three parts of the questionnaire are set out below.

5.3.2 Questionnaire: Part A1

This section examined the attendance rates for the participating children and gathered data relating to the child's class and number of appointments scheduled and attended in school.

Child's School Class

The participating children's class is illustrated in Figure 10 below. As expected there is a higher representation of children in the infant classes and first class, as early intervention is considered paramount by the SLT service and is also recommended in the research literature (e.g., Rinaldi, 2000; Martin and Miller, 2003; Bercow, 2008).



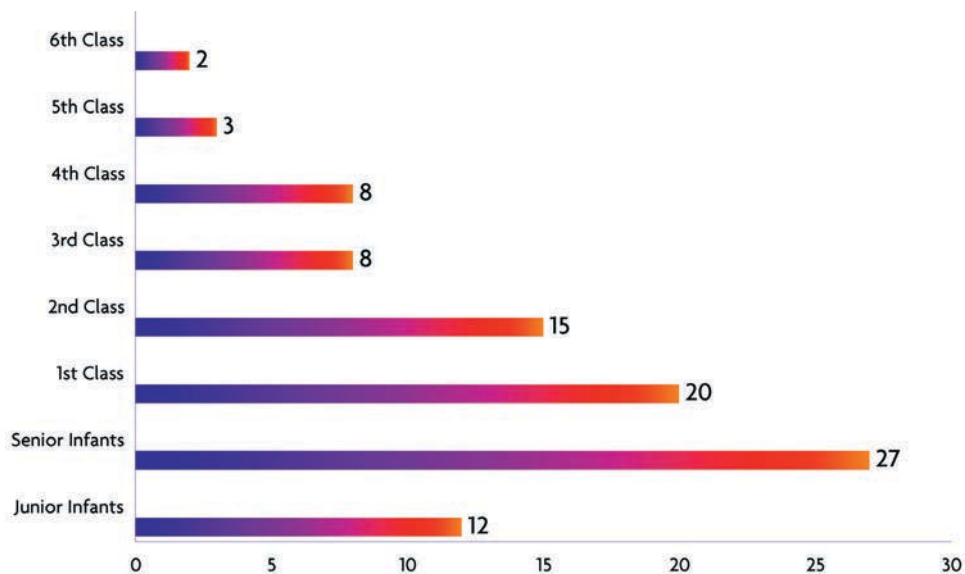


Figure 9: Numbers of Children by Class (N=95)

Reason for Referral

In the A1 section of the questionnaire the SLT could indicate the reason that the child was referred to the service. In 30 of the 95 (31%) cases, no reason for referral was selected. There were 36 (37%) children who were referred for speech difficulties and 12 (13%) children who were referred for language difficulties. The remaining 17 (18%) children were referred for both language and speech difficulties.

Children's Attendance at School-based Appointments

This section was completed by the therapists in relation to 95 children who were accessing the service at the beginning of the academic year 2007/08. Not all questionnaires were completed fully. However, sufficient information was available to explore the patterns of school-based appointments offered and attended. Therapists were invited to indicate why children did not attend appointments under two headings, notably: (i) "could not attend" (CNA), and (ii) "did not attend" (DNA). In the majority of cases (i.e., 56 children, 59%), the children attended over 75% of their appointments in school, with 22 (23%) children attending all of their appointments. Twenty-three children (24%) had attended assessments only and had either not begun therapy appointments in school, were on review (awaiting a second assessment) or had been assessed as not appropriate for therapy (due to needing a care team approach or being within normal limits on assessment). Reviewing the data gathered on a child-by-child basis highlights that children, who had been discharged more than once from the clinic for failing to attend (DNA), received the therapy they had been identified as needing when transferred to the school-based pilot SLT programme. This was the case for twenty-seven children for whom complete data was available (28%).



Attendance figures show that the majority of children in the school-based service had high attendance rates. Out of the 95 children, thirty two children attended all of their assigned sessions and 22 attended more than 75% of their sessions. The SLT Department indicated that some of these children had shown different patterns of attendance when compared to the clinic-based services, with some children having attended 50% or fewer sessions in the clinic.

However, a missed school-based appointment often resulted in another child being slotted in, which resulted in a more efficient use of the therapist's time. The number and percentage of non-attended appointments in the clinics (over the period 2003 – 2008) versus the schools (from September 2007 to June 2009) for twenty-seven children⁸, and the average cost of non-attended appointments for each setting are reported in table 6 below.

The twenty-seven children for whom parental consent was obtained were spread across seven of the schools participating in the pilot project and evaluation.

Table 6: Cost of SLT Appointments Attended and Not Attended

Clinic-Based Appointments				School-Based Appointments			
Setting	No. and % Appointments Offered	% Appointments Not Attended	Average Cost Per Day of Non-Attended Appointments (at a rate of €192.15 per day)	Setting	No. and % Appointments Offered	% Appointments Not Attended	Average Cost Per Day of Non-Attended Appointments (at a rate of €109.80 per day)
Moyross	27 (100%)	22%	€42.27	School 1	33 (100%)	3%	€3.29
Southill	133 (100%)	37%	€71.10	School 2	62 (100%)	21%	€23.06
Ballynanty	43 (100%)	53%	€101.84	School 3	31 (100%)	6%	€6.59
				School 4	35 (100%)	0	€0
				School 5	130 (100%)	15%	€16.47
				School 6	48 (100%)	23%	€25.25
				School 7	22 (100%)	5%	€5.49
TOTAL	203 (100%)	38%	€73.02	TOTAL	361 (100%)	13%	€14.27⁹

⁸ The data refers to the same group of children, for whom parental consent was received to view their secondary SLT data. Although there is an overlap in the time period, no one child was attending clinic-based SLT services at the same time as he/she was attending school-based services. A number of the children were discharged from the clinic for non-attendance then re-referred by their teachers to the school-based service. Others were transferred from the clinic to the school-based service when the pilot project commenced.

⁹ It should be noted, that more often than not a non-attended school-based appointment did not cost the SLT service anything, as more often than not another child was fitted in to the same time-slot.



On examination, we note a decrease in children's non-attendance at school-based SLT services in comparison to non-attendance at clinic-based services (38% non-attendance at clinic-based services versus 13% non-attendance at school-based services). If the cost per day of clinic-based services is €192.15 and there is (on average) a 38% non-attendance rate, the average cost (across all three clinics) of non-attendance per day is €73.02. In comparison, school-based non-attendance does not result in loss of capital as the therapist fits another child in to that time-slot. We can note that, not alone were less school-based appointments missed (13% in the schools versus 38% in the clinics), but the costs associated with missed school-based appointments were minimal. This suggests that school-based appointments are a far more efficient and cost effective method of delivering speech and language therapy than are clinic-based appointments. This finding must be considered in combination with the qualitative findings detailed throughout the remainder of this report.

5.3.3 Questionnaire: Part A2

Part A2 of the questionnaire examined teachers' assessments of the participating children's communication pre- and post-therapy. The questionnaire requested teachers to rate the individual children in relation to:

- Pre- and post-therapy speech and language skills;
- Communication abilities at home and at school;
- Teachers' overall rating of the Speech and Language service on a range of measures.

Questionnaires for 61 children were completed. The results are reported below. The teachers' views on the service are reported in tabular format.

Speech and Language Skills Before and After Therapy

Teachers were asked to rate their pupils' speech and language skills before and after therapy. Table 7 below details the frequency of responses.

Table 7: Teacher's Rating of the Child's Speech and Language Skills Before and After Therapy

Rating	Before Therapy N (%)	After Therapy N (%)
Very Poor	14 (23%)	4 (6.6%)
Poor	18 (29.5%)	10 (16.4%)
Fair	20 (32.8%)	12 (19.7%)
Good	8 (13.1%)	21 (34.4%)
Very Good	-	4 (6.6%)
Missing Answer	1 (1.6%)	10 (16.4%)
Total	61 (100%)	61 (100%)



Teachers rated approximately one-third of the children (20) as having ‘fair’ speech and language skills before therapy and 8 as ‘good’. The respective post-therapy ratings were 12 children (‘fair’) and 21 children (‘good’), detailing positive progress (with the number of ‘fair’ ratings decreasing and ‘good’ ratings increasing). Cross-tabulations comparing teachers’ ratings of the children pre- and post-therapy illustrate that of the 15 children rated as ‘fair’ before therapy, 9 had progressed to a ‘good’ rating and two progressed to ‘very good’ (see Table 8 below). The table does not include 10 missing answers from the post therapy ratings.

Table 8: Teachers' Ratings of Children's Speech and Language Skills Before Therapy CROSSTABULATED WITH Children's Speech and Language Skills After Therapy

Children's Speech and Language Skills before Therapy	Child's Speech and Language Skills After Therapy				
	Very Poor	Poor	Fair	Good	Very Good
Very Poor	4	7	0	0	0
Poor	0	2	8	6	0
Fair	0	0	4	9	2
Good	0	0	0	6	2
Missing Answer	0	1	0	0	0
Total	4	10	12	21	4

Children's Communication at Home and School

The participating teachers were asked to rate the children's ability to “get their message across” at home and at school pre-therapy. Fifteen teachers did not complete the question relating to communication at home and five did not rate communication in school¹⁰. Of the valid responses received, 7 children were rated as poor at getting their message across at home and 6 as very poor at getting their message across at home before therapy. Twenty-two children were classified as having ‘fair’ communication skills at home, 10 as ‘good’ and one as ‘very good’. The ratings relating to the school environment scored much lower: 13 children were rated as ‘very poor’ at getting their message across in school, 8 as ‘poor’, 28 as ‘fair’, 6 as ‘good’ and one as ‘very good’.



¹⁰ It is important to note that, originally, it was intended that this item would be completed by parents. The reader should be aware that this item was completed solely by teachers.

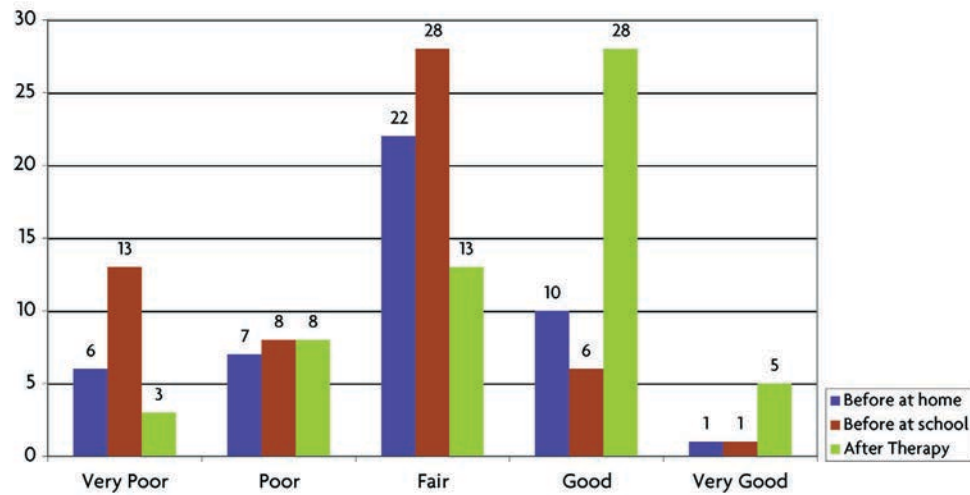


Figure 10: Teachers' Ratings of the Child's Level of Getting his/her Message Across Before and After Therapy

The respective ratings post-therapy progressed positively with 28 children being rated as 'good' at communicating at home (as opposed to 10 pre-therapy) and 13 as 'fair' (as opposed to 22 pre-therapy). The numbers of children rated as 'very poor' decreased from 13 to 3 (the number of children rated as 'poor' (3 children) remained the same pre- and post-therapy). None of the children's communication skills dis-improved post-therapy, 19 children remained the same and 25 progressed positively post-therapy. With regard to school, no children's communication dis-improved, 18 remained the same and 34 showed improvement. Missing answers are not illustrated in Figure 11 above. The number of missing answers for home was 15 while there were 5 missing answers for school and 4 missing answers for post-therapy ratings.

Difficulties Being Understood by Family, Teachers and Friends

With regard to being understood at home (pre-therapy), a number of teachers (16) did not rate the children attending their school i.e., there were sixteen missing responses. The valid responses outlined that: 9 children were rated as having 'little difficulty' being understood, 11 as having 'no difficulty', while 15 as having 'some difficulties', 6 as having 'difficulties' and 4 as having 'severe difficulties' being understood by family (see Table 9).



Table 9: Teachers' Ratings of Children's Levels of Difficulty Being Understood by Family, Teachers and Friends Pre- & Post-Therapy

Children's Difficulty being Understood				
	Pre-Therapy by Family	Pre-Therapy by Teachers	Pre-Therapy by Friends	Post-therapy (Teacher Rating)
Severe Difficulties	4	12	12	4
Difficulties	6	11	8	11
Some Difficulties	15	18	22	9
Little Difficulty	9	11	10	14
No Difficulties	11	8	7	17
Missing Answers	16	1	2	6
Total	61	61	61	61

In school, the number of children rated as having 'severe difficulties' being understood was 12, while 11 were rated as having 'difficulties'. Those rated as having 'some difficulties' was higher at school than at home (18) and those with 'little' or 'no difficulty' were slightly lower at 11 and 8, respectively (see Table 9 above). Difficulties being understood by friends showed slightly different outcomes, with 22 children rated as having 'some difficulties' being understood by peers; 12 as having 'severe difficulties', 8 having 'difficulties', 10 having 'little difficulty' and 7 having 'no difficulty'.

Table 10: Teachers' Ratings of Children's Difficulties Being Understood by Teachers Pre-Therapy crossed with Children's Difficulty Being Understood Post-Therapy

Pre-Therapy	Post-Therapy						Total
	Severe Difficulties	Difficulties	Some Difficulties	Little Difficulty	No Difficulties	Missing Answer	
Severe Difficulties	4	7	1	0	0	0	12
Difficulties	0	3	3	4	0	1	11
Some Difficulties	0	0	5	9	3	1	18
Little Difficulty	0	0	0	1	7	3	11
No Difficulty	0	0	0	0	7	1	8
Missing Answer	0	1	0	0	0	0	1
Total	4	11	9	14	17	6	61

Table 10 above is a cross-tabulation of teachers' ratings of children's difficulties being understood by their teachers pre-therapy, against their difficulties being understood post-



therapy. The table highlights that those children rated as having ‘some difficulty’ before therapy were most likely to show improvement post-therapy, with 12 out of 18 children being rated as having ‘little’ or ‘no difficulty’ being understood by their teachers post-therapy. Of the 12 children rated as having ‘severe difficulties’ being understood by their teachers pre-therapy, 4 remained at this level post-therapy while 7 were rated as having ‘difficulty’ and one as having ‘some difficulty’ post-therapy.

Negative Impact of Language Difficulties on Ability to Communicate

As illustrated in Figure 12 below, of the 22 children whose communication difficulties were rated as having a ‘significant’ (8 children) or ‘very significant’ (14 children) negative impact on their communication pre-therapy, 12 remained at that level post-therapy. Similarly those rated as having some negative impact dropped from 21 pre-therapy to 12 post-therapy. The number of children rated as having ‘little’ or ‘no impact’ on their ability to communicate increased from 8 and 9, to 18 and 17 (respectively) post-therapy. Figure 11 below clearly illustrates such a decrease. There was one missing answer in the pre-therapy data and two missing in the post-therapy ratings.

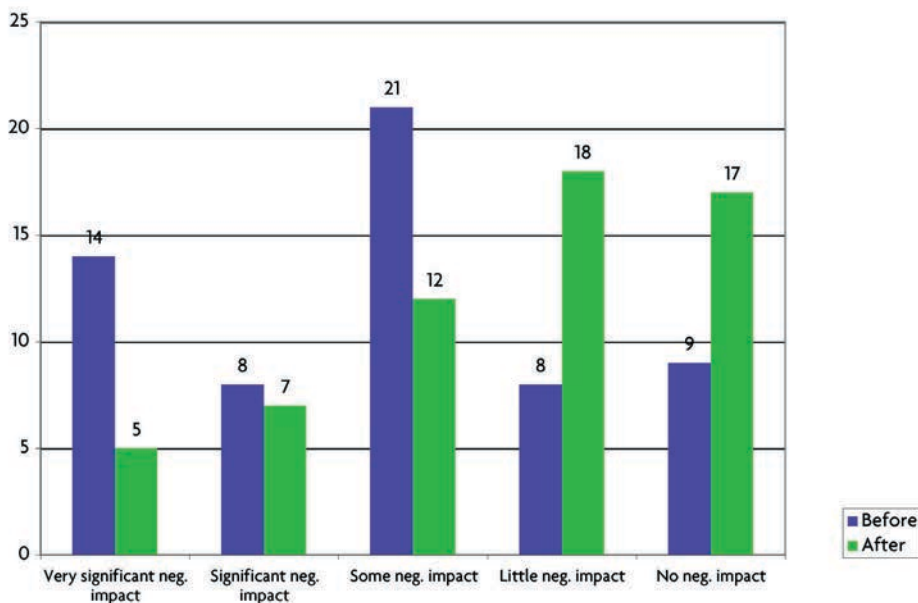


Figure 11: Teachers' Ratings of the Negative Impact of the Child's Speech and Language Difficulties on his/her Ability to Communicate Before and After Therapy

Cross-tabulations support such positive progression, with 5 (post-therapy) out of 14 (pre-therapy) children's Speech and Language difficulties having a ‘very significant impact’ on his/her ability to communicate post-therapy. All children whose speech and language difficulties were rated as having a ‘significant impact’ on their ability to communicate pre-therapy progressed positively/improved, whilst 12 of those rated as having ‘some impact’ progressed to having ‘little’ or ‘no negative’ impact.

Awareness of Speech and Language Difficulties

Teachers were asked to rate the children's awareness of their speech and language difficulties. As illustrated in figure 12 below, the teachers rated 11 of the 60 children as having no awareness of their difficulty before therapy. This increased after therapy to 14 and the number that were 'very aware' / 'aware' dropped from seven and ten, to five and seven respectively. Cross tabulation of these responses illustrate that those rated as having some awareness pre-therapy showed the most noticeable change after therapy with 7 out of 13 children being rated as having little awareness after therapy. There were no missing answers in the pre-therapy data and 3 missing in the post-therapy ratings.

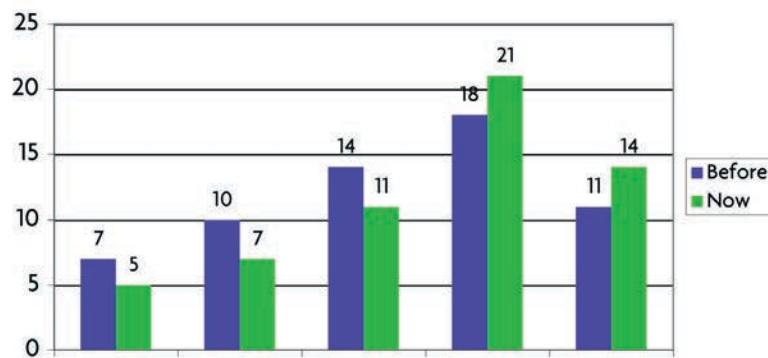


Figure 12: Teachers' Ratings of Children's Awareness of their Speech and Language Difficulties Before and After Therapy

Frustration Relative to Speech and Language Difficulties

Positive progression was highlighted with regard to children's demonstrated levels of frustration in relation to their speech and language difficulties pre- and post-therapy. The number of children who were 'very frustrated' or 'frustrated' before therapy dropped from 8 in both categories (to 3 in 'very frustrated' and 4 in 'frustrated'). 17 children with 'some frustration' dropped to 10 and those with 'little' (14) or 'no' (13) frustration rose to 19 and 22 respectively. Crosstabulations (i.e., comparisons of pre-therapy data against post-therapy data) underline this, highlighting that of the 16 children rated as having 'some frustration' before therapy 7 were rated as showing 'little frustration' and 3 as showing 'no frustration' after therapy. There was one missing answer in the pre-therapy data and 3 missing in the post-therapy ratings.



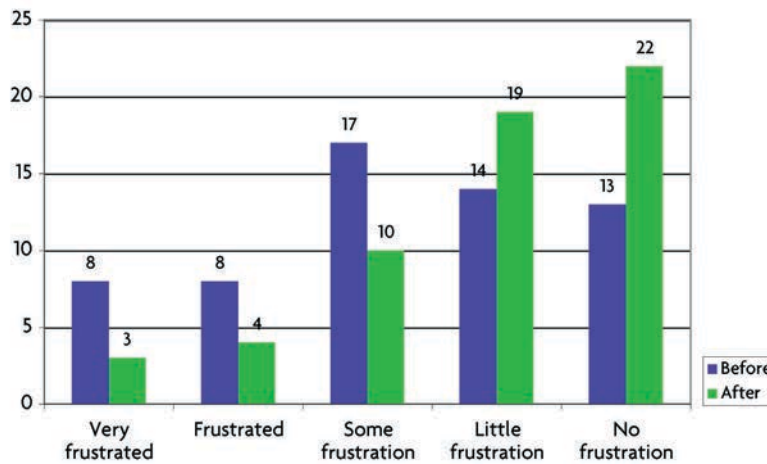


Figure 13: Teachers' Ratings of Children's Level of Frustration Regarding Speech and Language Difficulties Pre- and Post-Therapy

Shyness with Regard to Talking

The children's levels of shyness with regard to talking were also rated by their teachers in this study. In the ratings of how shy they were about talking before therapy, 21 of the 60 children were rated as having 'no shyness' about talking and a relatively high number (12) were rated as being 'very shy'. This latter figure dropped to two after therapy and the 'no shyness' figure rose to 31. The 'little shyness' and 'some shyness' showed an increase from 7 children to 9 children in both cases. There was one missing answer in the pre-therapy data and 4 missing in the post-therapy ratings.

Cross-tabulation comparisons illustrate that there was no change for those who had not been shy before therapy.

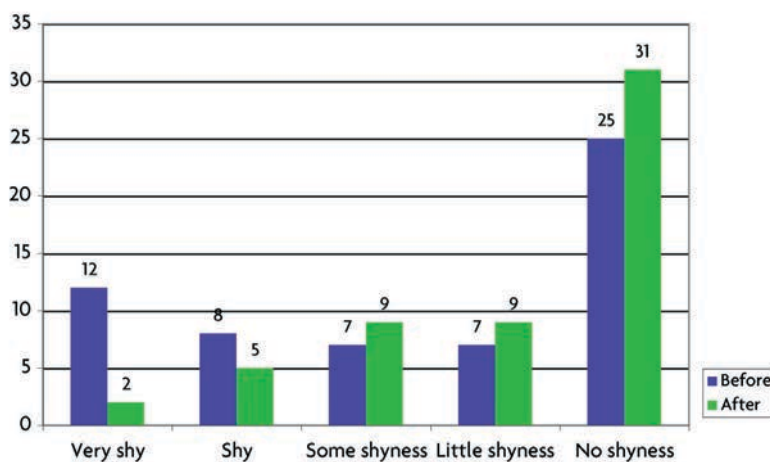


Figure 14: Teachers' Ratings of Children's Level of Shyness about Talking Pre- and Post-Therapy



Children's Reading Skills

Reading skills were also rated by teachers and although 20 of the children were rated as having fair reading skills, there were 4 children rated with 'poor reading skills' and 9 with 'very poor' reading skills. Teachers outlined that 18 of the children had 'good' skills, and 8 had 'very good' reading skills. There were two missing answers¹¹.

Table 11: Children's Reading Skills

Children's Reading Skills	Number	Valid Percent
Very Poor	9	14.8
Poor	4	6.6
Fair	20	32.8
Good	18	29.5
Very Good	8	13.1
Missing Answer	2	3.3
Total	61	100.0

Rating of the SLT Service

The final section of Part A2 of the questionnaire asked teachers to rate the language therapy service in the schools on a range of items, namely:

- Assessment;
- Intervention;
- Materials;
- Consultation;
- Information.

Table 12 below outlines the main findings relative to this section.

Table 12: Teachers' Rating of the School-Based Speech and Language Therapy Service

Please Rate the School-Based Speech and Language Therapy Service in Your School With Regard To:					
Rating	Assessment	Intervention	Materials	Consultation	Information
Very Poor	0	0	0	0	2
Unhelpful	0	5	3	5	6
Helpful	22	24	19	21	20
Excellent	16	9	13	9	9
Extremely Helpful	19	19	18	22	20
Missing Answer	4	4	8	4	4
Total	61	61	61	61	61

¹¹ It is important to note that the teachers' ratings were based on the teachers' subjective perspective, and were not deducted using an objective or standardised reading test instrument.



In relation to ‘assessment’, ‘intervention’ and ‘materials’, the most frequently chosen option was “helpful”. Twenty-two teachers rated ‘consultation’ as being “extremely helpful”, 20 rated ‘information’ as helpful, while an additional 20 teachers rated ‘information’ as extremely helpful. The “very poor” option was chosen by two teachers and related to ‘information’. Information was also the aspect of the service that was rated as ‘unhelpful’ by 6 teachers. As teachers gave a low rating to the level of information received this would suggest that the amount of information being shared with schools needs to improve.

Five teachers rated ‘intervention’ as being unhelpful, with 3 rating ‘materials’ as unhelpful, and 9 scoring the level of ‘consultation’ as being unhelpful. These low numbers of negative ratings indicate that most aspects of the service were scored largely positively (intervention - 85% positive; materials - 81% positive; consultation - 85% positive; information - 80% positive; and assessment - 100% positive). It is clear that the service is predominantly perceived as positive by the participating teachers. However, consideration needs to be given to any low scores/perspectives gathered.

5.3.4 Questionnaire: Part B

Part B of the questionnaire consisted of a series of closed and open-ended questions relating to the delivery of the school-based SLT service and the benefits and challenges of that service provision in the participating schools. Five principals and twenty-six teachers (in nine of the ten schools involved in the project) completed a questionnaire, a total of thirty-one completed questionnaires that were returned. Of those 31 questionnaires: 20 were completed in full and 11 were incomplete¹². The emergent themes determined the themes explored within the interview schedules that were designed for use with therapists, teachers/principals and parents (a copy of the interview schedules are contained in Appendix A). The interview schedules were designed to examine the challenges and benefits for children, parents, schools and the SLT service with regard to the school-based SLT service. The interviews allowed the evaluation team to access parents’ perspectives.

Delivery of the Speech and Language Therapy Service in the Schools

Benefits to Children

In relation to the benefits for children, 18 respondents highlighted greater effectiveness of the service as the main benefit; 22 respondents outlined that regular attendance at appointments resulted in little time wasting for the child or therapist:

“Speech and language therapy seen as part of the school day. Children are likely to attend appointments and benefit from therapy” (2T03).

¹² It is important to note that the responses obtained through Part B of the Questionnaire express the principals’ and teachers’ views, and not those of the children’s parents. Data pertaining to the parents’ perspectives was gathered via qualitative interviews; the findings of which are contained within the subsequent section of this report.



“The children miss less school time as they don’t have to travel to receive therapy. If the children are at school on a regular basis they are guaranteed to get therapy”¹³ (3T03).

“As they receive it in school they are more likely to regularly attend speech and language therapy” (2T05).

Eight respondents highlighted more general benefits for the child, including: familiarity (of the school setting as opposed to the clinic setting), therapy becoming part of the general school routine, increased levels of confidence and self esteem, and improvements in language / speech skills. For example:

“Children participate in exercises and activities to help improve their speech and language; increased confidence and self-esteem” (5T02).

Six respondents outlined that the child benefitted from increased collaboration between the teacher and therapist, primarily because the teachers developed a greater level of understanding of how to support children’s language needs and became more aware of the difficulties experienced by the child.

Benefits to Teachers

The responses to this question showed less uniformity than the previous question. The most endorsed view (12 respondents) was ‘knowledge building’ for teachers through greater contact with the SLTs. This was closely followed by nine respondents who identified collaboration as a benefit derived from the presence of the SLT service in the school:

“Help in providing suitable working plans – collaborate with staff – delivery of a better programme” (1T01).

“It is of great benefit for the class teacher to interact with the speech and language therapist on a regular basis and also to be in tune with the child’s workload and needs” (2T01).

“The benefits are that the resource teacher/class teacher is provided with the skills and materials with which to help the child in a professional manner” (4T01).

“School staff can meet Speech Therapist and implement programmes” (2T03).



¹³ Participant quotes are identified by unique codes. The initial number indicates one of the 9 schools that contributed to the questionnaire responses. The letter T indicates a teacher’s contribution, P a parent’s quote, C indicates a child participant and therapists are represented by the letter S.

Four teachers mentioned the increased effectiveness of the service through consistency of therapy and one commented on the efficiency of the service as being of benefit to teachers. There were four teachers who highlighted the shared benefit to teacher and child, pointing out that there was less frustration and more understanding when the service was delivered in the school.

Benefits to and Challenges for Parents

Twenty-two teachers outlined that keeping appointments was the feature of most benefit to their children's parents, with 12 explaining that the convenience of the school contributed to the increased level of appointments kept. Six teachers outlined that less reliance on transport contributed to the keeping of appointments and two specified that the more familiar surroundings of the school contributed to families keeping their appointments. For example:

"Direct contact on a weekly basis – easier for child and parent- no appointments" (1T01).

"I think the parents have liked the idea as it has been seen as both teachers working together for the benefit of the child" (2T01).

"Rules out the possibility of forgetting appointments. Parents may feel more comfortable coming to the school than the clinic" (8T02).

"Parents delighted that children are getting treatment. Appointments are not missed – continuity ensured" (2T03).

"Not having to travel for distances to get to a therapist having this service in a local area" (2T05).

"Parents don't have to remember appointments or travel distances to the service, as a lot of parents may not have transport" (2T07).

"Convenience" (4T02).

Other benefits for parents as identifiable through the responses included: support and collaboration (4 responses); the holistic approach of the service (2 responses); and parents' increased knowledge of how to help the child at home (1 response).



Benefits to Parents Accompanying their Children at the SLT service

The responses to this item reflected earlier emergent themes. Participants highlighted knowledge-building (19 responses) as a benefit to parents attending the service and, consequently, a greater ability to help the children at home (12 responses), as seen in some of the sample responses below:

“The sessions will allow the parent to see what the child is learning and working on first hand and this will in turn enable the parent to continue the work at home” (2T01).

“See first-hand where their child is experiencing difficulties and go about helping them with the professional advice” (2T02).

“It would be an advantage for parents to see programme being implemented and would enable them to help with activities with the child at home” (8T03).

“The parents would be able to see for themselves how to improve their child’s speech so that they could use the same methods at home” (2T05).

“Greater knowledge by parents of child’s difficulties; better able to help child at home as a result; greater confidence by all” (7T01).

In addition, six respondents outlined that the support available in school was of benefit to parents attending the service and three felt that the holistic approach to dealing with the children’s needs benefited them.

Challenges for Parents Accompanying their Children at the SLT Services

Participating teachers identified two main challenges for parents accompanying their children at the school-based service, they were: (i) parents’ lack of knowledge and consequent lack of confidence in dealing with the SLT service; and (ii) the issue of time. In relation to this last point i.e., time constraints, teachers identified work commitments and child minding as the main issues for parents, and highlighted the difficulty associated with prioritising SLT over these existing commitments. Two other issues were also highlighted by some of the teachers. Firstly, the effect of family dynamics when parents attend therapy sessions with their offspring e.g., the child acting up, and/or the child or the parent feeling under pressure to perform at the session. For example:

“Children may act up in front of parents” (3T02).

Some issues that the teachers mentioned were: (i) negative perceptions of the service and the stigma attached to attending “therapy”; and (ii) a lack of perceived value in SLT, leading to a lack of interest on the part of the parents in attending sessions. Each of these



issues is dealt with in greater detail in the subsequent chapter of this report, which contains the findings from the qualitative parental interviews.

Benefits to the SLT Service

When asked about the benefits of the school-based service to the SLT service, the teachers again focused on the increased effectiveness of the service (as a result of appointments being kept and time was not being wasted):

“The knowledge that a valuable resource is being used to its optimum. Valuable learning /teaching time is not being lost” (6T05).

“Knowing the child will attend; being able to provide a consistent service” (8T01).

“The clinic has always reported that their time was wasted constantly by people not turning up for appointments. Now with the new ‘in school’ service the therapist’s time is not being wasted and the children are the winners in the long run” (8T02).

Challenges for In-school Provision

The challenges involved in SLT in-school provision were identified by the respondents as being:

“Time and space” (2T01).

“Huge list of children requiring speech and language therapy and not enough therapists to fill the needs” (2T02).

“Room for the therapist; finding time to suit the pupil, therapist and teacher; getting a member of staff available to help therapist” (2T05).

“Absenteeism; freeing up of staff to work with therapist” (2T07).

“Providing staff member to accompany child” (3T01).

“Many schools may not have a room to accommodate the speech therapists” (3T02).

“No dedicated room that meets criteria of SLT; difficult to free up a teacher even though the benefits are magnificent. Provision of suitable place so that the session would not be interrupted” (4T02).

“Finding a quiet space” (4T03).



5.4 Conclusion

This chapter presented the findings of: (i) the secondary data relating to attendance at appointments and therapy outcomes, and (ii) the questionnaire data. Attendance at clinic- and school-based appointments was examined as well as patterns of discharges for children. Attendance data indicated that school-based appointments were attended more than clinic-based appointments. The findings from the questionnaires, which were completed by the teachers, related to outcomes and illustrated that children had progressed on a range of measures, including decreased levels of frustration, shyness and difficulty making themselves understood. This was underlined by secondary data on pre- and post-therapy assessments which also showed progress for many of the children. A further positive trend in the school-based service, as evidenced by the questionnaire data, is the availability of 'carryover' and the likelihood that additional work with the children will be carried out between appointments. Finally the findings from the teachers rating of the SLT service in the schools showed a largely positive response to the service and set out some of the teachers' perspectives about how stakeholders (children, parents, teachers and therapists) benefitted from the school-based service.



CHAPTER

6

Evaluation Findings - Interviews and Focus Groups

6.1 Introduction

The following chapter contains the findings of the qualitative research that was conducted with a sample of stakeholders of the school-based Speech and Language service. In total, twenty-four semi-structured interviews were conducted with: parents, principals, teachers and representatives of the speech and language team. Two focus groups were also carried out with a small sample of children (9 children in total, from two schools). The qualitative data was analysed thematically and will be presented as such in the following section. Table 13 below outlines the stakeholders who were consulted for this phase of the evaluation.

Table 13: Number of Interview/Focus Group Participants

	Parents	Principals	Teachers	HSE Personnel	Children	Total
Frequency	9	2	8	5	9	33

6.2 Interview Findings

The twenty-four semi-structured interviews were designed to assess the benefits and challenges of the school-based SLT service for the children, the schools, the parents and the SLT service itself. The items included in the interview schedule were identified through data gathered in response to Part B of the questionnaire (see chapter three). The purpose of the interviews, therefore, was to further explore the issues identified through the questionnaires.

In addition, the interviews with parents and teachers enquired about: (i) their working relationship with the SLT Department, and (ii) the necessary supports that would ensure the continuation of the school-based SLT service in schools. Parents' interviews also included questions about: (a) their children's communication at home and at school, and (b) their children's outcomes and progress following therapy. Therapists' interviews included questions about the development and delivery of the in-school service. The results from the interviews will be examined under the following headings:



- Benefits of the in-school SLT service;
- Awareness of the development and delivery of the project;
- Knowledge of the project purpose and objectives;
- Perceptions of the SLT service;
- Perceptions of the future of the SLT service in schools.

6.2.1 Benefits of the In-School Speech and Language Therapy Service

Respondents were asked to look at a list of benefits that had been identified through the preceding questionnaire and to rank them, in order of importance, from 1 to 5. It was hoped that this would give some indication of what the participants felt the priorities for the service should be. This also allowed the parents the opportunity to comment on the data gathered during the initial data collection stage. Figure 15 below details the rankings.

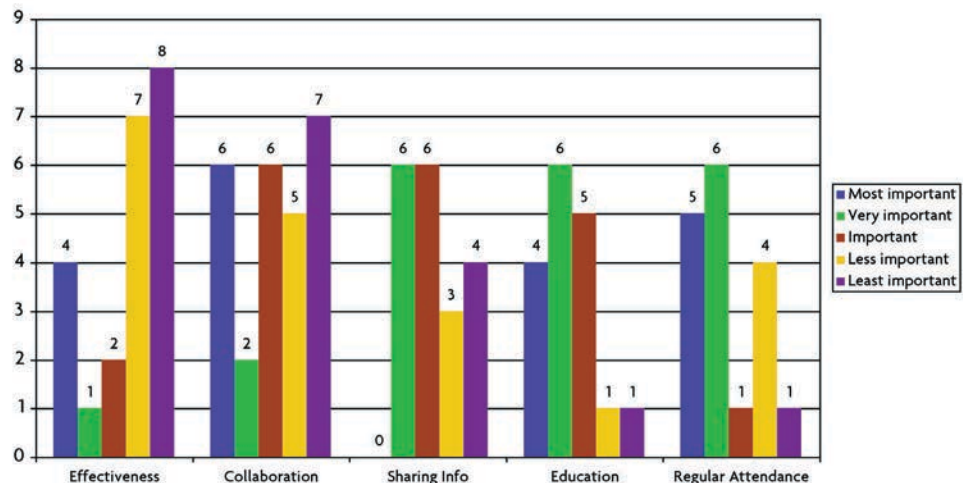


Figure 15: Interview Participants' Ratings of the Benefits of the School-Based SLT Service (as determined by Part B of the questionnaire).

Fifteen participants felt that regular attendance at appointments by the children was the “most important” or a “very important” benefit of the school-based service. Twelve felt that the child’s education was the “most important” or a “very important” benefit of children’s regular attendance. Shared understanding and the benefits of collaboration (notably, the latter had been consistently highlighted in the questionnaires) were rated as “less important” than the other benefits. Opinions in relation to the relative importance of the increased effectiveness of the service were evenly divided with ten respondents placing it in top or second position and nine placing it in 4th or 5th position. While it is difficult to interpret such findings it does suggest that the priority for teachers, parents and therapists are the children, and the benefits that they accrue as a result of engagement e.g., progress in speech and language abilities, and, as a consequence, greater access to the primary curriculum and education in general. The first benefit that was put forward by

teachers and therapists was that “children are getting the service they’re entitled to” (AT02). From the teachers’ perspective, this meant that the children’s attendance at appointments was far more likely to happen “as long as they were in school” (SLT03), than had been the case when they were accessing the clinic-based service. Such regular attendance was recognised by both teachers and therapists as essential if the children were to show evidence of progress.

6.2.2 *Awareness of the Development and Delivery of the In-School Speech and Language Therapy Service*

Both the parents and teachers valued the collaboration that emerged as a result of the school-based SLT service and the on-site presence of the speech and language therapist. This presence facilitated informal consultations; the possibility of comparing programmes and discussing children’s needs; and increased awareness of the role and work of the speech and language therapists:

“She first of all met the children and then she made out programmes for them. And the best part of all she was able to explain to the teachers how to carry out these programmes. We were able to sit in as she was carrying out these programmes either with individual children or with groups of children. We were able to see what a language lesson was about... I suppose the terminology was explained to us - what word retrieval meant, how to teach strategies to retrieve words from memory - especially children who had short term memory problems. She introduced us to games, which we could use with the children, which were great fun but at the same time the work was being done.” (AT05).

Therapists had different levels of awareness of the development and delivery of the school-based service. They were able to make clear comparisons between operating in the schools and in the clinics. They tied the delivery of the project to their experience of the difficulties that clients face in accessing the clinic-based service:

“Well, I suppose it developed out of the need to provide a service for children in the disadvantaged areas who weren’t availing of clinic based services. And where there was evidence of little progress being made. We consulted with... well we had always consulted with teachers in the past, but in a very informal way - so no formal structures had been set up. So, what we did was, we consulted with the teachers, principals... and the teachers in the disadvantaged schools in Limerick and just sat in on staff meetings and em... looked for what their needs were and what they would like... and it developed from there” (S02).



6.2.3 Knowledge of the In-School Speech and Language Therapy Service Purpose and Objectives

The data would suggest that the teachers were clear in their understanding of the objectives of the SLT project i.e., their belief that the SLT service was being delivered in the schools in order to target the children most in need:

“Well, to ensure that the resources that were made available by the health board were being used. Em... and also to ensure that as many of the professionals as possible who dealt with the child were all working off the same programme, and that the parents were getting an opportunity to see the value and the benefits for the child and encouraged to give as much help as possible at home.” (5T04).

However, some teachers viewed the service objectives as being broader and more focused on solving the problem of a language deficit in the general population; and believed that the appropriate children should be targeted:

“...you see, I suppose one of the things we have come to realise is that in a disadvantaged area the language deficit is quite big. You see, a lot of our children have a, what we would call a language disorder, and certainly the language problems are huge and they have a huge impact later on when at an older age the children are being tested on comprehension. And the child may have in place the strategies to read - but as they get older they may have problems in the area of comprehension, which is definitely down to language.” (8T02).

“Well, I think what we hope to do this year... I’m on the point of submitting the children for assessment for September and we’re certainly looking at some of the older children, whereas before we would have looked at 4, 5, 6 year olds we’re now looking at the older children. That they might be reading quite well but they don’t have the problem-solving skills. And we wouldn’t have thought of language before now we’re seeing it in a different light.” (5T03).

Therefore we can deduce that the development of realistic expectations (on the participating schools’ behalf) is dependent on the development of a shared understanding of the objectives of the SLT service at the beginning of any working relationship.

The effective use of HSE resources (in particular when responding to the children’s needs in the area) also arose amongst participants:

“Well, first of all a lot of the children we have here who would have been seen by SLTs – just, they did not attend the clinic sessions and the speech



and language therapist was left sitting pretty I suppose - with nobody in front of her. And a lot of time wasted whereas now the children come to school, they're in the building, the SLT collects them from the classroom - either individually or in groups - and em... they're not missing out on these sessions." (8T02).

"Well, to ensure that the resources that were made available by the health board were being used. Em... and also to ensure that as many of the professionals as possible who dealt with the child were all working off the same programme, and that the parents were getting an opportunity to see the value and the benefits for the child, and encouraged to give as much help as possible at home." (8T04).

These statements by teachers were underlined by one of the therapists when asked if the school-based project was reaching its target population:

"Yes, just even from our own records. I would have children on the caseload from school who would have been discharged several times from clinics, and then re-referred by the public health nurse or by a teacher or... and discharged again because of their non-attendance. And these children would now be being picked up in the school, and they've made good progress. Indeed, a lot of them I've been able to discharge because they're now within normal limits - so they won't be needing a further service." (S04).

The data suggests that parents' preference for clinic- or school-based appointments varied. One parental participant stated, categorically, that she would not be able to attend or arrange for her child to attend clinic appointments. While another asserted that it would not matter where the appointment was as long as the child received the necessary treatment. This latter parent however did prefer the school-based service and gave several reasons for such e.g., familiarity of surroundings and not feeling that he was the only one accessing therapy:

"Well, for me it doesn't make any difference [whether it's in the clinic or school], as long as he was getting whatever treatment he needs. But for himself, it's better in the school 'cause he's thinking it's like his school work so he's more involved in it. And then doing it outside, and going to school, and getting homework, and then coming home, and then have to go to the clinic, and getting something to do from there... so I prefer when it's already together - so he thinks it's all part of his school work. And then he's not feeling outside, because some of his friends would be going." (5P01).



Whereas other participants illustrated a preference for school-based appointments because of increased communication with the school and the teacher acting as mediator:

“I don’t know to be honest - it’s so long since I’ve been up there [at an appointment in the clinic]. I thought the appointment was shorter. Basically, they don’t tell you very much - you have a report at the end. [But with school appointments] Every now and again the teacher will come up and tell me how he’s getting on, and tell me that you can come and see her, and they have teachers that help them with their reading and that. And I went to see her, and she said that N was improving very good on his reading and his writing. And N2 is slowly improving, but he still has a lot to... em... go on a bit longer.” (8P01).

6.2.4 Perceptions of the In-School Speech and Language Therapy Service

The participating teachers confirmed what had been found in the questionnaires in relation to perceptions of benefits for the children and for the service. They were able to expand on the reasons why the school-based service was perceived to be more efficient when delivered in school. They described it as a more holistic approach involving a number of professionals in a united effort marked by collaboration and sharing of professional expertise:

“Much more, because there is much more communication - there’s better communication between the therapist and the teacher. Besides the fact that if the child attends the school, and they more than likely will get their session whereas if they’re asked to attend the appointment after school, more than likely the parent won’t remember the date or the appointment and may not be in a position to bring them after school. And also, it means that there is more input from as many areas as possible. I think you know that for language development, as many people as can get involved in the everyday life of the child using the same - if we’re all singing from the same hymn sheet - it seems to be more effective.” (8T01).

“Yes, and I think the parents are trusting. They’ve built up a long associate, a good relationship with the staff here. And if we make a recommendation, they see value in it, I think.” (5T02).

Benefits to Children

Teachers outlined the benefits to the child of several professionals working together to provide for his/her needs. This was also identified by therapists as being a holistic approach and having a significant impact on the effectiveness of therapy.

Parents referenced the change in language use and the increased confidence in their



children as they developed their speech and language skills through therapy. When asked to discuss changes in their children's speech and language at home, parents responded:

"Very bad I think... he finds it very hard, you know, to get out what he wants to say - he ends up talking gibberish... like, we can't understand him at all." (8P01).

"Well, all along - instead of 'school' he was saying 'cool'. So now he's saying it properly... like he's pronouncing a lot of his words properly now." (5P03).

"He was starting to get frustrated because people didn't understand him when he was starting to say something. But not now, because he has - as I said - improved a lot. Just a few little words you'd have to ask him again - but improved." (5P01).

"Em... hopefully like his speech will improve. Well, it's starting to improve slightly... I've seen slight progress in certain words, but it's not as good as I hoped it would have been." (8P01).

"It's a bit like at school. He's a very, very frustrated child. He'll spiel something off and you're supposed to understand it. If he has to repeat himself and you still don't catch what he's saying, he'll kind of go into a defensive mode. He's aware that people don't understand." (8P03).

The parents' expectations of therapy and its outcomes were often linked to their perception of the child's language difficulties at the beginning of their therapy term. The parents who didn't feel that their child(ren) needed therapy in the beginning were often the most appreciative of the progress that the child made, while those whose children had severe speech and language difficulties pre-therapy noted slow or very slight progress.

Benefits for Teachers and Schools

Collaboration in the school environment led to increased knowledge for therapists and teachers. The therapists outlined a greater understanding of the child in the environment and awareness of what resources were available in the schools. The increase in knowledge, as a result of greater collaboration, is evident in the following quote, which also clearly sets out the position of teachers who don't ordinarily have direct links with the SLT service:

"From the point of view of a resource teacher, over the years I would have been given a language assessment by an SLT and I didn't understand the terminology. Whereas now - if there is something I don't understand now - I can meet up with SLT and ask questions and find out what that means



and that is a big plus, because before, even what the CELF¹⁴ meant - it was foreign to me. And now you know ask questions if there's some indication about a child's achievement and we can have it explained to us and that's a big help. And I would have been at a meeting of resource teachers and the big complaint was that all these professionals send out reports and basically we as teachers have never been trained to read them and to interpret them - so that's a big plus..” (ST05).

6.2.5 The Future of the In-School Speech and Language Therapy Service

When asked how the service could be improved many respondents focused on time and the addition of extra hours. For the teachers and therapists this focus was on time in the school and time given to the service in general. Reasons given ranged from the number of children who presented with speech and language difficulties and the need for the therapist to complete paperwork and deal with administrative issues. In relation to this last point several of the teachers showed a keen awareness of the workload involved for the therapists:

“[The] therapist was put to the pin of her collar to see all the children. And there was paperwork and her clinic work as well.” (ST03).

The issue of streamlining the service, to ensure that waiting times were reduced to a minimum, also arose amongst the interview participants:

“Well, the service could be improved I suppose if we got more time - if we got more time allocated. We still have other children that need to be - that we suspect have problems. They need to be assessed... more quickly. We also, I think, have a serious problem with not getting this testing done early enough. We need to have it in Junior Infants when these children come to school, or maybe even before - or maybe even have the resources for when they start school so we can get off to... so that they, literally within a couple of weeks of coming into school, they get straight on a programme.” (ST04).

6.3 Children's Focus Group Findings

Two children's focus groups were convened in two participating schools (one in each school), with children engaged in the school-based SLT service. Nine children in total participated in this strand of the research, five from one school (ranging in age from six to seven years) and four children from the second school (all aged seven)¹⁵. The children's focus groups were designed to access the children's perspectives on:

1. Their knowledge and awareness of the SLT service;
2. The benefits of the school-based SLT sessions;
3. The challenges of the school-based SLT sessions.

¹⁴ CELF: Clinical Evaluation of Language Fundamentals.

¹⁵ To ensure anonymity, both the schools' and the children's identities will remain anonymous and therefore their individual perspectives will remain confidential.



An icebreaker game was introduced at the beginning of the focus group to allow the children to adapt to the surroundings and to put them at ease with the researchers. Creative techniques such as arts and crafts, circle time, drama, ‘emotion’ faces and storylines were employed to work effectively with the children. The researchers were cognisant, at all times, of the ethical implications of working with children e.g., consent, the right to withdraw, confidentiality, anonymity, child protection etc. (see chapter one for further details).

6.3.1 Children’s Knowledge and Awareness of the SLT Service

With regard to the participating children’s awareness of the SLT service, children were gathered into a small circle to discuss the following topics, using ‘happy’ / ‘sad’ face cards, which the children pointed to respectively. The main topics discussed during this discussion group related to:

- Their familiarity with the school-based SLT service;
- Prior attendance of clinic-based sessions;
- Likes and dislikes of the school-based SLT service.

The researchers recorded the children’s responses on a flip-chart and validated them with the children at the end of this discussion. The following are the main findings of the consultations with the participating children:

When asked what they did in speech class the children answered that they played games. Two children explicitly stated that the speech and language therapist helps them with language development i.e.:

“...she helps me with my words...” (5C03)

“I get good at the games...” (8C03)

“I get all my words right!” (8C03)

With regard to clinic-based attendance, the research identified that one of the nine children had previously attended a clinic-based service. The one child who previously attended the clinic-based service indicated that he liked going to the clinic because *“...it was good ’cause there were more games...” (5C02)*. Eight of the participating children outlined that they liked ‘speech class’¹⁶ and enjoyed going to it. One child indicated that he neither liked nor disliked ‘speech class’. All nine children indicated that they liked the therapist(s).

It is clear from the above findings that the children were aware of the speech and language service; could identify what they liked or disliked about it; and the connection between the school-based and clinic-based service. It is evident that the children like attending ‘speech class’ and held positive views of the speech and language therapists.

¹⁶ The participating primary school children referred to the school-based SLT service as ‘speech class’.



6.3.2 *Speech and Language Sessions*

Arts and crafts, and drama were used to access the children's concept of the school-based SLT sessions. All the participating children were requested to draw an illustration of their favourite thing about 'speech class'. Four of the nine children drew word/letter grids (of the kind used in word games) to represent an exercise that they did with the speech and language therapist. The other children drew pictures of people, pets and a car and in their explanations related them to the fun they had in speech class.

6.3.3 *Challenges of the School-Based Speech and Language Therapy Sessions*

In the final part of the focus group, the children were facilitated to construct a storyline relating to the challenges of the school-based SLT sessions. Going around the circle, the children were invited to complete the sentence: "*I am the new boss of speech class, and I will make it better by...*". The responses gathered with the children included:

"...have more games..." (5C01),

"Do it more than once a week!" (8C04), and

"Don't do it in PE time!" (8C05).

Despite the small research sample it was clear that the participating children enjoyed the SLT sessions and that they were aware of the purpose and benefits of the service. As the majority of participants had no prior experience of clinic-based appointments, it was not possible to make any comparisons between the two environments based on the children's data.

6.4 **Costs and Benefits**

Given the qualitative nature of the in-school SLT service evaluation, it is not possible to compare the speech and language outcomes for the school-based service against the clinic-based service. Neither is it possible to assess the costs in terms of the outcomes or benefits. It is, however, possible to compare: (i) the costs associated with administering a clinic-based service against a school-based service (as detailed in Table 2 above), and (ii) the cost of non-attendance of the school-based SLT service against the clinic-based service (Table 6 above). An increase in children's attendance at school-based services, as opposed to clinic-based services, would suggest readily apparent cost savings. Table 14 below displays the attendance rates for the same twenty-seven children detailed above who accessed the clinic-based service (over the period 2003 – 2008) versus the school-based service (from September 2007 to June 2009). The children included in this case study are children for whom the evaluation team accessed parental consent to view their anonymous case files and attendance records.



Table 14: Case Study of Twenty-Seven Children's Attendance at School-Based Versus Clinic-Based Speech and Language Therapy Services

	Total
No. Clinic-Based Appointments Made on Behalf of the Twenty-Seven Children	203 (100%)
No. Clinic-Based Appointments Attended by the Twenty-Seven Children (% of App.'s Made)	125 (62%)
No. Clinic-Based Appointments Not Attended by the Twenty-Seven Children (% of App.'s Made)	78 (38%)
No. School-based Appointments Made on Behalf of the Twenty-Seven Children	361 (100%)
No. School-based Appointments Attended by the Twenty-Seven Children (% of App.'s Made)	313 (87%)
No. School-based Appointments Not Attended by the Twenty-Seven Children (% of App.'s Made)	48 (13%)

We can note that of the 203 (100%) clinic-based appointments that were made for the twenty-seven children involved in the case study, a total of 38% of those appointments were not attended. In contrast, of the 361 (100%) school-based appointments made for the same twenty-seven children during the initial two-year period of the pilot project, 13% of appointments were not attended. Such outcomes do not solely suggest cost savings i.e., as per Table 15 above - it is more cost effective to provide school-based services, but also contribute to greater outcomes for children i.e., they are more likely to attend their SLT appointments when they are based in the school than they are when the appointments are based in the SLT clinic. It should also be noted that such cost savings do not solely relate to a specified period of intervention, but also to the future costs of both the SLT service and the HSE itself e.g., a child who receives early, good quality services/interventions will require less additional services/interventions at a later date.

While it is impossible to make strong statements regarding the relationship between SLT service costs and benefits, the potential for the school-based SLT service to make significant cost savings to both the SLT service and the HSE is evident. The preceding sections highlight the cost effectiveness of providing school-based SLT services in comparison with clinic-based services. Additionally, children's attendance rates have evidently risen as a result of the school-based intervention, in comparison to the clinic-based service.



6.5 Conclusion

This chapter reported on the findings from the qualitative interviews and focus groups that were based on the emergent themes from the questionnaires. The interviews and children's focus groups supported the positive view of the school-based SLT service that also emerged through the questionnaire. The parents commented favourably of the ease of children's attendance at school-based appointments on the ground of familiarity of the environment and ease of access. The data also highlighted that the number of children waiting for therapy in the school-based service was dependent on the smooth and uninterrupted implementation of the SLT service. Participants noted that, in the event that a scheduled child was absent, the therapist was in a position work with a child scheduled for a later time/date. The data contained in this chapter highlights the underlying need for speech and language services within particular areas of Limerick city. The clinic in Moyross has not been staffed full-time for some time, which has led to children not accessing SLT services. A further indication of the long term effects of this issue is the number of older children who were referred to the service from within the school but had not previously accessed clinic-based services. This highlights an underlying need that was not being met by the clinic-based services but is now being identified and addressed through the school-based intervention. A further positive trend in the school-based service is the availability of carryover and the likelihood that additional work with the children will be carried out between school-based sessions where human resources allow. Parents expressed their willingness to do the homework set by the therapists¹⁷. In contrast, one school outlined that 'carryover' assignments were rarely carried out by the parents of children attending their school (the same school highlighted experiences of poor progress and few positive outcomes)¹⁸. In response, the SLT team highlighted that this particular school did not have the human resources to support the children's 'carryover' and, although some work was done by an assistant therapist, consistent and regular 'carryover' was not evident. While the participating children spoke and illustrated positively about language development, the speech and language activities ('games') and the speech and language therapists; they expressed concerns about 'speech class' being administered during their PE class.



¹⁷ But the data suggests that this is more consistent when carried out in school by an available teacher / other school personnel. This is especially useful when a dedicated person from the school staff sits in on therapy sessions, thus: (a) gaining valuable insights into how the work is carried out, (b) how the exercises and activities can be used for the child's benefit during resource hours, and (c) how SLT language activities connect with curriculum goals.

¹⁸ While the lack of progress cannot be directly correlated with a lack of 'carryover', comparisons with the remaining schools would suggest that it may have been a contributing factor.

CHAPTER 7

Conclusions and Recommendations

7.1 Introduction

The following chapter aims to bring together the main conclusions which can be drawn from the evaluation and the evolving nature of the project as well as providing a set of recommendations in relation to the project's future operation. The chapter is in three sections. The first section draws together key conclusions in relation to project implementation and significant outcomes for the participating children and their families. The second section revisits the evaluation objectives in reaching an overall evaluation conclusion, while a set of recommendations regarding the project's future constitutes the chapter's third and last section.

The inclusion of multiple perspectives in this evaluation has allowed the evaluation team to triangulate the data gathered. This triangulation highlighted a high degree of uniformity between the responses gathered through the questionnaire, the interviews and the focus groups. Of most notable importance is the fact that the teachers reiterated and supported most of the comments that they made throughout the questionnaires, and that these responses were echoed and therefore validated by the therapists and the children's parents.

McCartney (2004) has highlighted the difficulties of evaluating work such as the school-based SLT project. She highlights the complexities of a school environment wherein it is difficult to "identify one set of experiences as critical" in any change process (ibid.: 163). She suggests that teachers, SLTs, and indeed parents, may not need to identify separate components of success as their ultimate focus is on the learning experiences of children. The evaluation team highlight that given the social and educational nature of the current evaluation, the adoption of empirical evaluation techniques was not possible at the time of the study. The current evaluation therefore drew on the stakeholders' perceptions of effectiveness (as collated through the secondary data (namely the attendance records and child outcome records), and the primary data, including the interviews, the questionnaires and the child focus groups).



7.2 Implementation and Outcomes – Key Conclusions

Overall, the reactions to the service have been hugely positive. Teachers and principals were pleased that this pilot programme facilitated children to attend appointments that they feel would most likely have been missed had the appointments been clinic-based. Fears relating to the SLT Department's ability to ensure continuation of the service in the face of cutbacks and staff shortages were a significant issue for the schools.

The SLT Department identified how they were providing a more accessible service as a result of the in-school provision. There was also increased effectiveness in the use of the therapists' time e.g., when there was a child who was absent and did not attend it was possible to access another child so that the session time was not lost or wasted. The SLT Department was also able to value the collaboration and cooperation between themselves and the school staff, and acknowledge how these aspects of the school-based service were helping them to provide a more holistic service in some of the participating schools. This collaborative model of working also emerged through the literature review, which highlighted that although collaboration between health and education services can vary from geographical context to geographical context (Bercow, 2008), ideally children should be receiving their SLT as part of their classroom education (Donnelly, 1992). This would result in shared responsibility between teachers and SLTs, and therefore greater collaboration (Donnelly, 1992; Reed, 1992).

The outcomes for individual children dealt with above relate specifically to the measurable outcomes of therapy for the individuals who receive therapy in accordance with their identified needs. However, it may be expected that there will also be outcomes related to the other personnel involved in the service delivery. Therapists and teachers are professionals working towards similar goals, although in different fields, with complementary approaches. These approaches, and their influences on work practices, are outlined by Martin and Miller (2003) in their discussion of collaboration between speech therapists and teachers. McCartney's work (1997: 122) also raises the issue of the difference of two approaches and highlights some of the areas where differences and/or potential misunderstandings may occur. One element of this is in the approach to service provision. McCartney suggests that the Speech and Language service, working with fewer, more specialised staff, has a system of providing targeted provision for specific children based on allocation of therapy determined by a prioritisation system which relates to the severity of the speech and language difficulty. This prioritisation system can result in the creation of a client waiting list. In some cases, teachers identify an immediate need for therapy; however, given the existence of the waiting list the child may not receive therapy as soon as originally anticipated. Teachers and parents may mistakenly feel that therapy is not being provided for the child. It is to avoid situations of this kind that McCartney (1997) highlights the need for regular contact "...to build the kind of social relations that



are important for joint working” (McCartney, 1997: p.127). It is evident from the findings in this evaluation that such regular contact is indeed building awareness between teachers and therapists of the constraints each is operating under, as well as providing opportunities for working in collaboration to meet the needs of the children.

Unless and until there is a unified approach to providing for children’s needs through school-based services, it will be necessary for schools and HSE Departments to negotiate the terms of their collaboration. The evidence from this research shows that such collaboration is valued and fostered by all concerned: parents, teachers, principals and therapists. The next step is for the appropriate authorities to recognise the value and benefits of collaboration in providing effective and accessible services for children. In doing so, they will recognise the key role played by the schools in linking these services to create a holistic model of education that ensures greater equity for pupils regardless of level of individual needs, socio-economic background or ethnicity.

The remainder of this section is presented thematically. The predominant themes that emerged through the evaluation were:

- Collaboration;
- Child and family outcomes;
- Attendance rates;
- The future of the in-school SLT service.

Each theme is discussed separately below. This is complemented by concluding remarks relative to the cost benefit analysis outlined in chapter three of this report.

7.2.1 *Collaboration*

The perception of the SLT service in the participating schools was overwhelmingly positive. The benefits reported focussed on the enrichment and effectiveness of the service as a result of the in-school service provision. That enrichment was the result of an increase in: (i) collaboration between teachers and therapists, and (ii) knowledge acquisition for teachers, therapists and parents.

The collaboration referred to, allowed teachers to:

- Sit in on SLT sessions;
- Develop programmes of work and resources that they could discuss and tailor to the needs of individual pupils;
- Access critical and supportive feedback from the therapists outlining where they were working in line with the therapists’ models of intervention;
- Gain a deeper understanding of how to work more effectively with the children using the materials and tools supplied by the SLTs. The teachers learned to focus on ‘staged progress’ with the children.



All of these aspects of collaboration were very important in fostering the positive feelings that the teachers demonstrated towards the SLT service. It is important that future models of delivery draw on this learning and that those elements be maintained, continued and built upon. The evaluation would suggest that a detailed review of delivery models e.g., those described by Donnelly (1992) and Reed (1992) in the literature review is undertaken. Such models describe appropriate models of collaboration between education and health services, such as children receiving their SLT as part of their classroom education (Donnelly, 1992), which would result in shared responsibility between teachers and SLTs (Donnelly, 1992; Reed, 1992).

In addition to teacher learning, the SLTs increased their knowledge relative to areas of the curriculum and gained an understanding of how resource teachers and class teachers could essentially aid and support speech and language tasks with the children. The SLTs also gained a better understanding of how schools work.

The second strand of the evaluation (that of greater effectiveness) was illustrated through the children's positive progress and outcomes as a result of the therapy. Such outcomes were illustrated through both the primary data i.e., the questionnaires, the interviews with parents and teachers and the children's focus groups, and the secondary data analysis i.e., the post-assessment outcomes. As highlighted by Rinaldi (2000), social researchers must consider the difficulties associated with isolating the specific outcomes of interventions within complex social, and particularly educational, contexts. Nonetheless, it is likely that the increased attendance at school-based appointments; the opportunities for carryover; and the strategies and increased knowledge adopted by parents and teachers (as a result of regular contact and communication with the SLTs) were factors that contributed to positive outcomes.

The issue of 'carryover' was identified as a key challenge to the delivery of the school-based SLT service. Some schools found it very difficult to free up a member of staff to attend therapy sessions and also to perform 'carryover' activities with the children. It was found that carryover within the school was more evident in cases where the child had an allocation of additional resource teachers hours or learning support for language difficulties. Following assessments, therapists frequently contributed to reports to the DES requesting the allocation of such resources. Therapists found that one short session of SLT per week, with no carryover or continuation, was ineffective. On occasions when carryover within the school was not possible parents were asked to attend sessions. This was beneficial to both the parent and the child. However, some issues regarding literacy levels of the parents arose. The key learning regarding 'carryover' is that if there is no carryover available in the school or through a parent, then therapy is not effective.



These fruits of collaboration are similar to those highlighted by Martin and Miller (2003: 146) and underline how complementary perspectives on language and learning enhance positive outcomes for the child.

7.2.2 *Child and Family Outcomes*

The pre- and post-therapy data highlighted that out of 34 children, 29 (85%) progressed to a less severe diagnosis. The teachers' ratings from the questionnaires illustrated levels of progress for children receiving therapy, with almost 80% of the children surveyed experiencing positive progression. In the absence of empirical control samples i.e., children who only received clinic-based therapy, it cannot be claimed that all of the positive progression and improvements can be attributed solely to the in-schools service. As outlined in the literature in chapter two, there are innumerable factors that would need to be considered when analysing the complex areas of child development and education. Therefore, the isolation of specific change factors is particularly difficult. Nonetheless, the evidence from parents, teachers and therapists indicates that progress in speech and language difficulties was made by a majority (87 out of 95) of the children.

Teachers focussed on several areas when expressing their satisfaction with the delivery of the SLT school-based service. They were pleased that the presence of the service in the school resulted in the children attending their appointments more regularly, and that they, as teachers, were being enabled to work more effectively with the children with regard to their speech and language needs. They were aware of the challenges to the service in providing the resources and the personnel to staff the in-schools service. Teachers were appreciative of the collaboration and the possibilities for them to learn more about working with the children with regard to their speech and language needs.

7.2.3 *Attendance Rates*

Increased attendance at appointments was a key issue that emerged through both the secondary and primary data. Originally, the school-based project emerged out of concerns about the low attendance rates of primary school pupils at clinic-based services. One of the stated objectives of the project was to increase attendance rates by placing the service within the schools. There is clear evidence that the attendance rates did increase as a result of this pilot project. This was the case for several chronic "no-showers" (i.e., children who had been discharged more than twice for not attending clinic-based appointments, or who had been identified as needing assessments but never attended clinic-based services for assessment), but also for the children who, as a result of the school-based service, now had attendance rates of greater than 75%. With regard to the SLT service, this had multiple benefits:

- The SLT service were fulfilling their role in providing the appropriate service for their target children;



- Consistent attendance, even at shorter appointments, meant that the children were making progress in relation to their speech and language abilities and skills. This was particularly evident in some of the individual cases where children’s history of clinic attendance showed sporadic attendance with discharge and re-referral but who (as a result of in-school provision) now accessed most of their SLT (in-school) appointments leading to remediation;
- Children missed few appointments when the service was based in the school. Where a child was absent from school and therefore missing an appointment, the therapist had the option of transferring the appointment time to another child;
- There was also the possibility of grouping children for therapy (where appropriate), as children were more easily accessible within the school setting.

These latter two benefits contributed to greater efficiencies within the SLT service as a whole, particularly with regard to effective time management.

7.2.4 *The Future of the In-School Speech and Language Therapy Service*

As outlined in the findings chapters, teachers, parents and therapists were aware of the difficulties of continuing the project in its present form. The schools had previously witnessed the departure and non-replacement of therapists (as a result of the public sector recruitment embargoes that were introduced during the 2008/2009 economic downturn). It appears that such fears are well founded, as the therapists highlighted that the future model of delivery would effectively result in schools accessing half of the SLT time that they had previously enjoyed. This has implications for waiting lists and the numbers of children being engaged by the service. The therapists outlined that they do not want to “prioritise the schools” and want to draw on the care pathways adopted in the SLT clinic. It is important that transparent communication exists between the schools and the SLT service, into the future. The schools would respect the provision of transparent and clear evidence to support any decisions (particularly with regard to withdrawal of the service) made by the SLT Department and the primary reasons behind them. Without authentic communication and partnership the school-based service runs the risk of remaining at pilot-project level, and will not, therefore, become part of the day-to-day workings of the schools and SLT Department.

This evaluation illustrates how the school-based SLT service contributes to the achievement of the goals of the SLT Department by providing the services as determined by their policies. It also clearly provides an effective and efficient means of targeting children who do not successfully access clinic-based services. The effectiveness of the school-based model would suggest that there are numerous benefits to be gained when this service model is integrated into the commonplace infrastructure of the SLT service and the schools. However, consideration will need to be given to the difficulties associated



with finding a balance between clinic-based work that (as identified through this evaluation) fails to access certain cohorts of children, and the efficient delivery of school-based SLT services.

7.2.5 Outcomes, Costs and Benefits

The fundamental purpose of any service evaluation is to enquire as to whether or not the service successfully accomplishes its core aims and objectives. In this case, the evaluation sought to discover the strengths and challenges of a school-based SLT service. The main aspects explored through the current evaluation included:

- Children's attendance rates;
- Speech and language assessment outcomes;
- Teacher/parent satisfaction levels;
- Therapist outcomes: professional satisfaction, caseload concerns etc.;
- Benefits and challenges of the in-school service.

The success of the in-school SLT service therefore depends on the presence of successful outcomes for service users, particularly with regard to an increase in their attendance rates and increased speech and language outcomes. As outlined earlier, this current study did not allow for the use of experimental approaches e.g., randomised control trials; therefore a cost-benefit analysis of speech and language outcomes was not possible. The study did, however, allow for the comparison of attendance rates between clinic-based and school-based services and the costs associated with the delivery of both. As described in chapter two, the analysis of attendance rates highlights distinct positive outcomes in relation to attendance. While other issues may have played their part in achieving these outcomes, the statistics clearly demonstrate the central role of the school-based service in the achievement of these outcomes and it is therefore possible to conclude that the school-based SLT service has contributed to the generation of positive outcomes for children, their families and their schools. While a full cost-benefit analysis is beyond the scope of this evaluation, it is apparent that the school-based SLT service is far less costly than clinic-based provision.

7.3 Evaluation Conclusions

This evaluation has worked towards the achievement of a number of objectives, notably to assess the:

- Children's attendance rates;
- Speech and language assessment outcomes / children's progress;
- Teacher/parent satisfaction levels;
- Therapist outcomes and collaboration;
- Benefits and challenges of the in-school service.



To the degree possible, the evaluation has demonstrated what has worked, what has not and why. It has identified areas where the project could be doing more to meet the needs of the service users. It has not uncovered major unanticipated outcomes. Overall, the evaluation should inform the future delivery of SLT services.

The key evaluation objective was to ascertain whether or not the evaluation of the SLT school-based service met its original objectives. As outlined in chapter one of this report, the pilot project's objectives can be inferred as its desired outcomes. In the context of this evaluation, these inferred outcomes relate to two main areas, namely: (i) attendance and child outcomes, and (ii) collaboration and communication. Based on the preceding analysis, it can be concluded that the project has met its objectives. With regard to the future existence of the school-based project, a number of areas require detailed consideration; however, the core objectives in relation to achieving positive change for the primary school children remain relevant to that target group.

7.4 Evaluation Recommendations

The following section outlines the key recommendations as determined by the evaluation process. They are drawn from the preceding chapters, as well as the discussion relative to such issues at the beginning of this chapter. They can be broken down into recommendations relating to: (i) required supports, and (ii) required systems. Each individual recommendation requires equal and absolute consideration.

7.4.1 Required Supports

There is a need to build awareness amongst the parents, children, families and schools of the value of an SLT service to their communities, as well as to their children and families. Parents must be accessed through other community agencies in addition to schools.

Parents and teachers appreciate the convenience of school-based services and consider themselves ready to accommodate and facilitate it in whatever way they can¹⁹. However, there needs to be a clearer understanding of the needs of the SLT Department in bringing the service to the schools and how their clinic/school balance dictates the level of service they can provide in the school setting. There are grounds for advocating for a model of SLT delivery that would fall beyond the sole remit of the health service. The DES and the HSE must be encouraged to work towards dedicated SLT services for schools that would deliver the service to school populations as opposed to current delivery models based on geographical/residential populations. This would take account of the fact that the catchment areas for schools and health services can often differ²⁰.

¹⁹ However they were not able to articulate what they could do to support such facilitation.

²⁰ E.g., for a number of reasons, a proportion of children and young people living in Limerick city do not attend their local primary schools, but travel elsewhere to access a similar service. Such children are therefore exempt from accessing the SLT service offered in the school that they attend, as residentially they fall beyond the remit of that community's local SLT clinic.



The advantages (child outcome and monetary) of providing a school-based SLT service, are evident.

The evaluation recommends the employment of additional Speech and Language Therapists to facilitate expansion of the current pilot project to all Limerick city schools, in particular those schools catering for children with heightened speech and language needs e.g., DEIS Urban Band 1 schools.

High numbers of children being referred to the SLT service as a result of teachers becoming increasingly more aware of the nature of speech and language difficulties has become increasingly evident throughout the lifetime of the school-based SLT pilot project. It has been noted through this evaluation, that teachers and parents are more adept at identifying speech and language difficulties among their children, and, as a result, are referring children more confidently and readily. The SLT Department of the HSE must prepare for an influx of referrals by establishing appropriate resources to respond to the increased need that is identified through the establishment of school-based services.

The evaluation team suggests that monetary savings incurred through school-based (as opposed to clinic-based) services could contribute to the cost of delivering an effective school-based service.

The SLT staff have very little time to liaise with school staff due to the limited time on site in the school. The evaluation has identified the enormous benefits of regular communication and collaboration between SLT and school staff.

The evaluation recommends that adequate supports and resources should be invested in the future delivery of school-based services to allow for this crucial interaction, communication and information sharing between SLTs and school staff.

The role of parents with regard to positive outcomes for children is clearly evidenced through this current evaluation e.g., in terms of attendance at sessions and carryover. The evaluation has learned that although parents were continuously invited to attend their children's SLT sessions, the majority of parents only attended one/two sessions. Although the SLT service has acknowledged the effectiveness of the participating schools in communicating with the children's parents, regular attendance of parents was the exception.



The evaluation team recommends that adequate procedures be explored and tested, to increase the attendance rates of parents/carers.

The positive outcomes that emerged as a result of children receiving carryover both at home and at school (between SLT sessions) would suggest the vital importance of this consistency and continuation.

The evaluation recommends that the SLT Department explore the option of delivering 'carryover' through working with key personnel in after school settings.

The school-based programme can only succeed with adequate administrative support and full engagement from teachers and SLTs so that they can develop, accept and witness the benefits of the programmes. The quality of this provision is compromised without the provision of adequate human resources.

The evaluation recommends that the SLT Department explore funding options (both internal and external) to support administration and human resources for the long-term, quality delivery of the school-based SLT project.

7.4.2 Required Systems

It is paramount that any SLT objectives are communicated equally to all participating teachers. This will ensure that the participating schools' expectations are appropriate to what is being offered by the SLT service.

It was found that carryover within the schools was more evident in cases where the child had an allocation of additional special needs resources or learning support hours for language difficulties. Therapists frequently contributed to reports, following assessments, to the DES requesting the allocation of such resources. One session of SLT per week, with no carryover or continuation, is ineffective.

The evaluation team recommend the expansion of the SLT service in parallel with the allocation of adequate resource hours to support 'carryover' for children.

The importance of collaboration between the education and health services was something that emerged through the primary data of this evaluation, but also through the accompanying literature review. This collaborative model highlighted that children should, ideally, be receiving their SLT as part of their classroom education (Donnelly,



1992; Reed, 1992). This model of delivery would result in shared responsibility between teachers and SLTs, and therefore require greater collaboration.

The evaluation recommends that the SLT Department conduct a thorough review of appropriate school-based SLT delivery models, which should inform future practice and delivery of the school-based project.

Many participants outlined that funding and staff replacement were the most significant supports that were needed for the successful future delivery of the school-based SLT service. In light of the acknowledged, and very evident, efficiency and effectiveness of the school-based SLT service it would seem extremely cost effective to invest in this model as the preferred model of service delivery for this population.

The evaluation recommends that the SLT Department in the HSE explore possible funding options to allow the continuation and expansion of the school-based SLT service.

The future implementation/expansion of the school-based SLT service is dependent on the availability of adequate accommodation / space within the participating schools. Consideration must be given to such a logistic prior to the permanent implementation of the school-based SLT service. The importance of Continuing Professional Development (CPD) for teachers cannot be emphasised sufficiently with regard to school-based SLT services. Consequently, the successful implementation of a permanent school-based SLT service must be complemented by comprehensive CPD for teachers.

The evaluation recommends any programme should include, for example, training relating to: referring children; supporting 'carryover' with children between SLT sessions; supporting parental involvement; and open communication/partnership between school and SLT staff.

7.5 Service Delivery following the Pilot Project

We now acknowledge the positive gains of this initiative and highlight the challenges in sustaining this model of school-based service delivery in the absence of dedicated resources.

The learning and positive gains for those involved in the pilot project have continued in the subsequent period. These sustainable outcomes include:

- An increase in the early identification of children presenting with speech and language difficulties in the schools served by the pilot project



- The appointment of two full-time resource teachers (Corpus Christi; Our Lady Queen of Peace) for children diagnosed with Specific Language Impairment. These appointments are the direct result of applications made by the SLT based in the school for children she identified as having significant language difficulties.
- The delivery of group based language therapy for children facilitated jointly by teachers and SLTs.
- The delivery of training programmes and workshops for 48 teachers from DEIS schools by SLT Department.
- Up-skilling of teaching staff. The collaboration of SLTs and teachers in running school-based language groups has evolved to a stage where teachers, particularly resource teachers, are confident in facilitating their own groups based on the assessment results and guidelines provided by the SLT.

Despite these significant advances, it is regrettable that the in-school service has been diluted since 2011 as a result of limited resources and an increased demand for speech and language therapy services. In addition, DEIS schools have faced significant challenges in maintaining their resource levels in a climate of educational cuts.

It must also be acknowledged that the single largest gap in the model of service delivery outlined is the lack of engagement, or, on-site services in the community pre-schools in these areas. Early identification is critical in the speech and language development of young children. This is particularly the case in low SES areas. One example which highlights this gap in services is that in September 2011, 16 children from a pre-school and 18 children from a Junior Infant class in a particular area were referred for delayed language development. This clearly illustrates the extent to which poor language development is of major concern for this young population.

It is unfortunate that advances have not been made at a national level to move towards the employment of Speech and Language Therapists by educational services. This model of service delivery has been proven across the OECD countries as the most effective way of managing and intervening with the educational and social issues consequential to speech and language difficulties in children.

The learning from literature, the positive outcomes of this pilot project and the subsequent developments highlighted must encourage service providers in health and education to work more collaboratively and strategically in service planning in this area. The development of appropriate and accessible services delivered in the pre-schools and schools to support families and staff to stimulate language development in children's home and educational environment must be prioritised.



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Appendices

Appendix A: Questionnaire and Interview Schedules.

1. Speech and Language Therapy Department, Limerick and TED Project: Questionnaire Part A1.
2. Speech and Language Therapy Department, Limerick and TED Project: Questionnaire Part A2.
3. Speech and Language Therapy Department, Limerick and TED Project: Questionnaire Part B.
4. Speech and Language Therapist Interview Schedule
5. Teacher Interview Schedule
6. Parental Interview Schedule
7. Child Focus Group Schedule

Appendix B: School and Early Childhood Care and Education-based Speech and Language Projects in the Limerick Region

Appendix A: Questionnaire and Interview Schedules

Questionnaires A1, A2 and B

Speech and Language Therapy Department, Limerick and TED Project

PART A (1) To be completed by SLT

Name of School: _____

Speech and Language Therapist: _____

Name of Child: _____

Date of Birth: _____

Age: _____ Class: _____ Date of Referral: _____

Reason for Referral:

Mispronunciation / Speech Difficulties

Language Understanding

Language Expression / Grammar

Stammering

Voice

Oral Motor Difficulties

Other (please specify) _____

Date of School Assessment: _____ Number of Assessment Sessions: _____

Time Waiting for Therapy: _____ Number of CAN: _____

Number of DNA (i.e., child absent): _____ Number of Sessions Attended: _____

Total Number of Therapy Sessions Offered in School: _____

Therapy Targets:

Speech Language Both

Other _____

Previous Attendance at Clinic: Yes

Attendance History i.e., Number of Sessions, CNAs, DNAs: _____

Previous Non-attendance at Clinic: Yes Date of Discharge: _____

PART A (2)

To be completed by Class Teacher / Resource Teacher / Learning Support / SNA

Note: One to be Completed Per Child

Note: Ratings are at the top of each question

Name of Informant: _____

Are You A: Parent Teacher *1=Very poor / 2=Poor / 3=Fair / 4=Good / 5=Very good*

1. Please Rate the Child's Speech/Language Skills BEFORE THERAPY:

1 2 3 4 5 1 (a). Child's Speech/Language NOW: 1 2 3 4 5

2. Was he/she good at getting his/ her message across BEFORE THERAPY

- At home 1 2 3 4 5 - In school 1 2 3 4 5 2 (a). Good at Getting Message Across NOW: 1 2 3 4 5 *1=Severe difficulties / 2=Difficulties / 3=Some / 4=Little / 5=No*

3. Did he/she have difficulty being understood by:

- Family 1 2 3 4 5 - Teacher 1 2 3 4 5 - Friends 1 2 3 4 5 3 (a). Difficulty being understood NOW: 1 2 3 4 5 *1=Very Significant Impact / 2=Significant Impact / 3=Some Impact / 4=Little / 5=No*4. Were his/her speech/language difficulties having a negative impact on his/her ability to communicate 1 2 3 4 5 4 (a). Having negative impact NOW: 1 2 3 4 5

1=Very Aware / 2=Aware / 3=Some Awareness / 4=Little Awareness / 5=No Awareness

5. Was he/she aware of his/her speech/language difficulties BEFORE:

1 2 3 4 5

5 (a). Aware of speech/lang. Difficulties NOW: 1 2 3 4 5

1=Very Frustrated / 2=Frustrated / 3=Some Frustration / 4=Little / 5=No Frustration

6. Was he/she frustrated about his/her speech/language difficulties BEFORE:

1 2 3 4 5

6 (a). Frustrated NOW: 1 2 3 4 5

1=Very Shy / 2=Shy / 3=Some Shyness / 4=Little Shyness / 5=No Shyness

7. Was he/she shy about talking BEFORE: 1 2 3 4 5

7 (a). Shy about talking NOW: 1 2 3 4 5

1=Very Poor / 2=Poor / 3=Fair / 4=Good / 5=Very Good

8. How would you rate his/her reading skills? 1 2 3 4 5

Please outline any difficulties he/she is experiencing in this area

9. Please rate the speech and language therapy service to your school, from 1 to 5 on the following themes:

1=very poor / 2=unhelpful / 3=helpful / 4=excellent / 5=extremely helpful

Assessment: 1 2 3 4 5

Intervention: 1 2 3 4 5

Materials: 1 2 3 4 5

Consultation: 1 2 3 4 5

Information: 1 2 3 4 5

Thank you for your co-operation.

PART B*Delivery of Speech and Language Therapy Service in Schools*

There are a number of requirements to be met for onsite delivery of the service in schools.

A. Designated Room for the Therapist:

1. Was your school able to provide a dedicated room? Yes No

1 (a). If YES, what room was used? Please tick the relevant box/es.

Classroom

Learning support/resource room

Parent room

Office

Staff room

Other – please specify _____

2. Did you experience difficulty making a room available? Yes No

2 (a). If YES, please elaborate in the space provided.

B. Use of a Photocopier:

1. Was your school able to provide access to a photocopier? Yes No

1 (a). If NO, please elaborate in the space provided.

C. Storage Area:

1. Was your school able to provide a cupboard/filing cabinet? Yes No

1 (a). If NO, please elaborate in the space provided.

D. Staff Member:

1. Was your school able to provide a staff member to work with the therapist?
Yes No

1 (a). If YES, please indicate which staff member.

Classroom Teacher

Special Needs Assistant

Learning Support Teacher

Resource Teacher

Principal

Home School Liaison

Other (please specify): _____

1 (b). If NO, please elaborate in the space provided.

E. Benefits and Challenges of Delivery of Speech and Language Therapy in Schools:

1. What do you think are the benefits of delivery of speech and language therapy in school for children?

2. What do you think are the benefits of delivery of speech and language therapy in school for school staff?

3. What do you think are the benefits of delivery of speech and language therapy in school for parents?

4. What do you think are the benefits of delivery of speech and language therapy in school for the service?

5. What would you describe as the challenges for schools of delivery of the service onsite?

6. What support measures/resources would make it easier for your school to accommodate delivery of services such as speech and language therapy in the future?

7. What other services for children, if any, would you like to see delivered in schools in the future?

F. Parental Involvement:

1. Did you experience any difficulty obtaining parental consent for delivery of speech and language therapy for their children in school? Yes No

- 1 (a). If NO, please elaborate in the space provided

2. Would you like to see parents attending speech and language therapy appointments in school with their children in the future? Yes No

3. What are the benefits of parents attending speech and language therapy appointments in school with their children?

4. What are the challenges of parents attending speech and language therapy appointments in school with their children?

Thank you for completing this questionnaire!

Therapist Interview Schedule

1. Can you tell me a little about the development and delivery of the school-based Speech and Language Therapy service?
(Probe: research, policy in relation to this intervention, referrals procedures, did they work etc.)
 - a. Could you describe the referral process for the school-based SLT service?
 - b. Where do you primarily and/or predominantly receive your referrals from?
 - c. Who decides which service users the SLT team work with in schools?
 - d. Could you describe the target group of the school-based SLT intervention?
 - e. Are SLT very specific about their target group?
 - f. Has the team successfully accessed its intended target group?
 - g. Were those children that engaged with the SLT school-based service, the most 'in need' of that intervention?

2. What do you think is the main purpose of having such a service delivered in schools?
(Aims and objectives)
 - a. In the questionnaire the following benefits were noted. Please select, from 1, most important to 5, least important?
 - b. Would you add anything to these? (unexpected outcomes, objectives not met? Benefits to individual children?)
 - c. Were there any negative outcomes?

3. Are there benefits for the Speech and Language Therapy department to having the in-schools delivery of the service?
 - a. What are those benefits?

4. What are the relationships between the SLT team and the participating schools like?
 - a. What are the relationships between the SLT therapists and the service users (children and parents/guardians) like (probe: clinic-based versus school-based)?
 - b. What are relationships between the SLT team and the referrers like?
 - c. Have you noted any distinct positive changes in service users since the transfer of the SLT service from clinic-based to school-based intervention?
 - d. And any negative changes?

5. Are there challenges for the service in the school-based delivery?
 - a. What are those challenges? (Follow up on caseload issues, dual locations, space issues, teacher/parent attendance at sessions and follow up options)
 - b. Are there challenges for the schools? Again what are those challenges?

6. What can schools do to support the school-based service?
7. Why do you think children's clinic appointments are not kept?
8. What can parents do to support the school-based service?
9. What other supports does the SLT Department need to continue the school-based service?
 - a. What supports can the HSE offer?
10. Can you state the project objectives for me: Has the project met its objectives? If yes, How, if no, Why not?
 - a. How do these objectives match with the overall service objectives/mission statement
11. How could the delivery of the service be improved from the point of view of the SLT dept?
12. How do you see the future of the school-based delivery?
13. In terms of therapy outcomes how effective has the school-based therapy been and can you compare that with clinic based therapy.
14. Anything else to add?

Teacher Interview Schedule

Preamble:

The questionnaire that was the basis of the investigation of the school-based SLT service gave us some themes to follow up on in order to get greater depth of information. You can elect not to answer some questions and we would also like to assure you at this point that the information you give when used in the report will be used anonymously.

1. Were you aware of the SLT service in the school?
(Probe: How? When? etc. Were you aware of the referrals procedure?)
 - a. If so, did you have any expectations in relation to the service?
 - b. What were those expectations?
 - c. Were your expectations met?
2. What do you think is the main purpose of having such a service delivered in schools?
 - a. Who are the target group of the SLT service in schools?
 - b. Do you think the service users are suitable to this service?
 - c. Could you suggest any other possible group who should be targeted?
3. In the questionnaire the following benefits were noted. Please select, from 1, most important to 5, least important?
 - a. Would you add anything to these?
 - b. Were there any negative outcomes?
4. Are there benefits for the Speech and Language Therapy Department to having the in-schools delivery of the service?
 - a. What are those benefits?
5. Are there challenges for the service in the school-based delivery?
 - a. What are those challenges?
6. Are there challenges for the schools? Again, what are those challenges?
7. What can schools do to support the school-based service?
8. What are/were the relationships between the SLT team and the participating schools/teachers/principals like?
 - a. How often did you interact with the SLT team?

9. What are the relationships between the SLT therapists and the service users (children and parents/guardians) like?
(Probe: clinic-based versus school-based).
10. Do you think children's attendance rates have increased/decreased during the time that the SLT service was delivered through schools?
 - a. Why do you think this was the case?
11. Why do you think children's clinic appointments are not kept?
 - a. Are children more likely to keep their SLT appointments when they are school-based or clinic-based?
 - b. How can children/parents/families be supported to keep their SLT appointments (school-based and/or clinic-based)?
 - c. What can parents do to support the school-based service?
12. What supports does the SLT Department need in order to continue the school-based service?
13. What are your overall experiences of the SLT school-based service?
14. In general, is there anything you would change?
15. What do you think were the objectives of the project: Has the project met its objectives? If yes How, if no, Why not?
16. How could the delivery of the service be improved?
17. How do you see the future of the school-based delivery?
18. Anything else to add?

Parent Interview Schedule

1. Can you tell me a little about Child's speech and language at home?
2. And at school?
(Probe interactions with family and with friends if no knowledge of school is offered)
3. And what did you expect when N had to go for therapy
4. Were you involved in the therapy?
5. Did you talk to anyone about N's therapy?
6. How did you know the SLT was available in school?
 - a. If clinic is mentioned - Which do you prefer, appointments in the clinic or in school.
 - b. And why?
7. How do you get on with the Therapist/with the SLT service?
8. What can you do to support the service in school?
9. What would you like to see as the future of the service in school?
10. Anything else to add?

Focus Groups with Participating Pupils

00.0 Welcome, Introductions, Intro. to Speech and Language & Housekeeping

- Closest toilets & rules for leaving the room i.e., tell adult first, length of workshop
- Respect for others present i.e., when one person talking, respect them & allow them to finish before you do

00.03 Small Groups:

Break larger group in to 2 smaller groups (every second child A & B).

00.04 Icebreaker (musical chairs / apples & oranges / ball game / Smiley face with key words Milk, chocolate, school, chips, speech class

Introduce them to the Smiley Faces by asking them to indicate whether they like chocolate, chips etc. etc.

00.07 Circle time

Facilitator to explain the following while children design their own name badge:

- Rationale for workshop i.e., to see if School-based Speech and Language Therapy is working & if anything needs to be improved or changed – stress that young people have a very important task i.e., to decide what is fed back to the Speech and Language Therapists.
- Structure of workshop i.e., 40 minutes in total that will start with discussion, then activities and finally back to discussion.
- Respect for others i.e., when one person talking, respect them and allow them to finish before you talk.
- Outline that 3 topics will be discussed throughout the workshop and that the young people will need to come up with solutions themselves to these themes.
- The activities will include (i) Build a Story, and let them choose between (ii) Role-Play OR Arts & Crafts.

00.10 Topic 1: Knowledge & Awareness of School-based Speech Class (the main points from each question below to be recorded on flip chart. Check with the children at the end of the discussion that they're happy with their collective response. It might be handy to bring pictures of a smiley face, neutral face and sad face with you to probe for answers):

- Have they heard of Speech Class?
- Where do they go to Speech Class?
 - Have they always gone to speech class in school (probe about the clinic and if they have attended clinic ask them about which they prefer and why, what did they not like about the clinic?)

- What do they do when they go to Speech Class?
- Do they like going to Speech Class (optional – covered in Topic 2)?
- Is there anything they don't like about Speech Class (optional – covered in Topic 3)?
- Do they think Speech Class has helped them?
 - If so, how has it helped them?
- What did they think of [Therapist name]?
- Would they prefer if their parents/guardians could bring them to Speech Class somewhere outside of school?

00.20 Topic 2: Speech Class Benefits

Drama OR Arts & Crafts:

- Firstly ask the children to think (“in their own heads”) about one way that Speech Class helped them
- Then ask them to draw a picture or construct a role-play about how Speech Class helped them.

00.30 Circle Time:

- Feedback to their small group about their play OR artwork i.e., how Speech Class helped them
 - If artwork; record their feedback on the back of each picture
 - If role-play; record their feedback on a flipchart.
- Children to agree, collectively, on how Speech Class helped them.

00.33 Topic 3: Speech and Language Challenges

Build a Story:

- Firstly ask the children to think (“in their own heads”) about one way that Speech Class could be made better
- Then pose the following statement and going around in a circle ask each child to respond:
 - *“I am the new boss of Speech Class and will make it better by...”*

00.38 Circle Time:

Children to agree on the main findings and record them on flip chart.

00.40 Thanks & End.

Appendix B: School and Early Childhood Education and Care-based Speech and Language Projects in the Limerick Region

Project 1: 1992/1993 - Moyross and Corpus Christi School

In 1992/1993 a case was made to pilot a project within the Moyross area and Corpus Christi school. The project was implemented due to:

- Concerns regarding high non attendance at health centres for SLT in this area;
- A higher incidence, as described by teachers, of speech and language difficulties among the population;
- The interest teachers showed in helping the children with speech and language difficulties in their classes,
- Consultation between services that could lead to earlier identification of speech and language difficulties which would help progress;
- Opportunities for consultation and liaison that would ensure the implementation of speech and language programmes.

The guiding principal of this project was:

“...the critical association between oral language and thinking, between oral language and the acquisition of knowledge and between oral language and educational success”

(Direct quote from “Report on Speech and Language Service to Children in Disadvantaged Areas’ Schools” Deirdre Kiernan, April 1993 Basis of the quote is from Corson (1988))

Assessments were carried out on 8 children who were identified by their class teachers as having speech and/or language difficulties. Four children were recommended as requiring one-to-one therapy, three were recommended for vocabulary work in the classroom i.e., a classroom-based programme, and one child had age-appropriate skills. The project soon expanded and a total of 27 children were referred for assessment. Interestingly the number previously referred to the clinic was only three. The number of children who required intervention was 21 and the number of children identified as having moderate to severe difficulties was 17. The speech and language therapy sessions took place in school. Two mornings per week were allocated for a 6-month period. Children were withdrawn for small group or individual SLT. Therapist subjectively agreed that the service was of benefit but there were some concerns regarding lack of scheduled time with teachers, limited carryover and language levels of children in general. The project, albeit short, was considered successful for the following reasons:

- Consistent attendance by parents resulted in a more reliable intervention;
- Carryover of intervention was done at home;
- Identification and treatment of children with moderate to severe difficulties not previously referred;

- Weekly liaison with teachers, which was extremely important for identification of children with problems and reinforcement of therapy programmes. Previously any liaison would have been minimal due to lack of resources;
- Children receiving consistent intervention as they attended for therapy once they were present in school and parents did not have to attend for each session;
- Less disruption to the child's school day. Children who attend the local health centre lose more time from school and regularly parents did not bring them back after clinic sessions; and
- More efficient use of therapist time- if a child was missing from school another child could be seen in his/her place (Kiernan, 1993).

These benefits have remained largely unchanged over 17 years. Following the project an application for further posts to sustain the project was made and resulted in the sanction of one half time post in 1999.

Project 2: 1998/1999 - Non-attendance in Southill Health Centre

“Non attendance continues to be an issue that must be addressed by all involved in health care delivery” (Broomfield and Dodd, 2004: 451).

In 1998/1999 a project was carried out to examine the rates of non-attendance in the SLT clinic in Southill Health Centre. Increased liaison and network meetings between Public Health Nurses and Social Workers in the health centre were set up. Copies of all appointments were sent to relevant professionals to ensure support to parents in making clinic appointments (where there was a family history of non-attendance). Barnardo's were also involved in speech and language programme implementation when families could not attend clinics. Rates of non-attendance at initial assessment were positively linked to children being re-referred and so leading to less productivity for the SLT involved. However, it was also found that school-age children were less likely to be re-referred (O'Sullivan, 1999, Unpublished Report). Rates of non-attendance after initial assessment (in most cases speech and/or language difficulties were identified at initial assessment) were worrying and of concern was that these children were now at risk of educational failure due to those difficulties. Children also failed to attend after a block of therapy and during a block of therapy. There were low rates of re-referral for these children. 52 children were discharged for non-attendance with less than 30% being re-referred and attending. This analysis led the SLT Department to again consider alternative service models for this client group.

Project 3: 1999/2001 - SLT Service Provision in Socio-economically Disadvantaged Areas

The 1999-2001 project was carried out on a larger scale than earlier projects. It had a designated half time post and looked at more than one model of SLT service provision within socially and economically disadvantaged areas in Limerick city. The 1999-2001 project is available on file. It was a larger scale project, which had a designated post and looked at more than one model of SLT service provision within socially and economically disadvantaged areas in Limerick city. The SLTs involved liaised with the PLUS network and MIC. The PLUS network had conducted a survey among the teachers in the PLUS schools in Limerick which highlighted the need for future work on social and communication skills in the junior cycle in local schools. The lack of opportunity to develop communication and language skills was in fact the highest rated deficit resulting from the removal or withdrawal of the three-year infant cycle (PLUS, 1999). This aim of this project was to increase the effectiveness of services in the area by piloting a joint health and education programme. The main barrier to an effective SLT service was lack of attendance by referred children to health centre clinic-based services. There were 5 main aspects of the project, which was carried out in the Southill and Moyross areas. They were:

- Classroom-based language development programmes for Junior and Senior Infants;
- Teacher training in speech, language and communication – age, stages and skills development;
- Individual therapy in school for children who had not attended clinic on 3 or more occasions;
- Pre-school and crèche-based language development programmes; and
- Pre-school and crèche staff training programmes in the areas of speech and language development.

Children participating in both the classroom programmes and attending for individual therapy were assessed and re-assessed to investigate the effectiveness of the programme. The classroom-based language programme resulted in significant increases in scores on *The Bus Story Assessment* Renfrew (1997) (story telling/ narrative skills) and the *Action Picture Test* Renfrew (1989) test in the area of information/ vocabulary used, grammatical and syntactical skills. Although reference is made to general maturation between test and re-test having an influence on scores, the effect of a classroom-based SLT-devised language programme for this population cannot be overlooked. Liaison between teachers and therapist(s) was described as invaluable following the programme. However, it was suggested that the large class sizes impacted negatively on the programme and children with very specific and severe difficulties were identified as requiring a continuation of one-to-one therapy in the clinic.

Six children were seen in another school for individual SLT. These children had failed to attend clinic appointments. The children were tested pre- and post-therapy. The children received 24 sessions of therapy over a period that stretched over four school terms (1998 – 2000). Reassessment indicated improvements in all areas targeted in therapy, they were:

- Attention and listening
- Speech sounds
- Receptive language
- Expressive language

Attendance in school was excellent. Although they were invited, parents did not usually attend the sessions.

Project 4: Preschool/Crèche Intervention

Coulter (1998) describes the results from a speech and language screening of children in an area of high levels of socio-economic deprivation. The results in the study indicated 42% of pre-school children in this area required speech and language intervention. Also 91% of children discharged for non attendance at clinic when followed up at pre-school required intervention (Coulter, 1998).

Two early start classes and a crèche setting were included in this particular project. Two speech and language therapists joined each setting for 6 sessions and a follow-up review. SLTs observed the children, with particular attention being paid to those children highlighted (by staff) as having particular speech and language needs. Small group tasks were undertaken. Ideas regarding speech and language development with individual children, listening programmes and resources were discussed with staff. Preschool staff reported that it was particularly useful to see SLTs working within their setting. The following areas were also reported to be of benefit:

- Developing receptive and expressive language skills
- Resources and materials
- Reassurance gained by being able to discuss individual problems with Speech and Language Therapists
- Increased liaison

In the crèche setting there were obstacles which hindered implementing change. These were:

- Number of children
- Variations in needs and abilities of children
- Staff training was a pre-requisite to hands on work
- High turnover of children within this setting.

As is the nature of projects involving children it was considered unethical to have a control group in any of the settings so it is difficult to attribute change directly to SLT input. However, as the evaluation of the project points out, there is not “...a *simplistic one factor solution to the highly complex multi factorial problem of developmental language delay in high risk communities*” (Cooper et al., 1997: 531)

This project was written up by the SLT Department of the HSE and used to strengthen further requests for supplementary staff to support the continuation of the project. As with both the 1993 project and the 1999-2001 project, progress was hindered by staff shortages and the ability to keep the project going under such constraints. On both occasions the school-based projects and alternative service provision in these areas was suspended as a result of staff

