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# West of Scotland Research and Development

## Form 8

<b>Final report form</b>	<b>Reference number:</b>  <b>FV PC 56</b>
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**Please complete this form in 12 point font size**

Project title:	
A Survey And Cohort Intervention Using Indirect Speech And Language Therapy For Children With Primary Language Impairment In Schools	
Start date: 1 <sup>st</sup> August 2003	Finish date: 31 <sup>st</sup> July 2004

Grantholders:

Elsbeth McCartney, Speech & Language Therapy Department, University of Strathclyde, Southbrae Drive, GLASGOW, G13 1PP	Mary Turnbull, Head SLT, Speech & Language Therapy Department, Forth Valley Primary Care NHS Trust, Stirling Royal Infirmary, Livilands, STIRLING, FK8 2AU
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## 1. Summary

A cohort intervention was carried out with 42 children with primary language impairment (PLI) receiving intervention from education staff in their mainstream school following discussion with and on the advice of a speech and language therapist (SLT). This is a widely-used consultancy model. No significant language gains were made on standardised language or reading tests, but the children fared as well as a comparable group in another research project who received community-based SLT services. The model was broadly acceptable to schools, but amount and patterns of intervention varied considerably amongst school classes. A survey of SLT managers provided a critique of the model, confirming that variation in implementation would be a likely issue. SLT services adopting this model will require to undertake careful audit of service provision and monitor the implementation of intervention in schools.

## 2. Original aims

SLT and educational services work together for children with PLI, which is not attributable to sensory, cognitive, environmental or other known causal factors. This project investigated an intervention model widely used in mainstream schools where SLTs, classroom teachers (CTs) and learning support teachers (SLANT) meet to plan language activities for children that are then carried out in school. It also surveyed SLT managers about service delivery, addressing the following research questions:

### **From a cohort intervention study in Stirling district**

- 1- Do children with language impairments who participate in a collaborative intervention programme make accelerated language and literacy gains compared with research cohorts of comparable children, as measured by standardised assessments?
- 2- What opinions do participating educational staff hold about the collaborative intervention programme, its effects and how it could be improved?

3- What opinions do participating children and their parents hold about the collaborative intervention programme, its effects and how it could be improved?

### **From a survey of paediatric SLT services managers in WoSRaD Partnership Trusts**

4- How are SLT services delivered to primary-school aged children with language impairments across the Partnership Trusts?

5- What opinions do SLT services in the Partnership Trusts hold about the collaborative cohort intervention programme and how it could be improved?

6- What are the implications of the collaborative cohort intervention programme for other SLT services and local authorities?

7- What service development plans exist amongst SLT services in the Partnership Trusts to meet the needs of primary-school aged children with language impairments?

### **3. Methodology**

A cohort intervention study was carried out with children, and a survey of WoSRaD SLT managers.

#### **Changes from original proposal: intervention study**

- 42 children entered the study
- one research SLT carried out initial assessments and intervention
- two graduate SLT students undertook final re-assessments
- twenty pre-intervention meetings could not include SLANT teachers, who were contacted separately; sixteen mid-intervention meetings did not take place due to SLT illness
- entry criteria were adapted with ethics permission to include non-verbal IQs at 74, and to remove NARA-2 results, recruiting children considered by their class and SLANT teachers to have literacy problems

- the four-month intervention period took place January - June 2004. Intervention weeks per child (from receiving a materials pack to reassessment, excluding school holidays) ranged from 13 - 21, mean 16.58, SD 1.75
- training sessions were supplemented by written handouts, and two ‘twilight’ information exchange sessions, to allow participating education staff to attend
- the pack of language materials was reproduced by the project, not schools.

**Intervention Study Recruitment**

Names received:	89
Class could not support intervention (head-teacher decisions):	7
Parents contacted (51 SLANT referrals; 21 SLT; 10 joint):	82
Consent received (17 no reply; 6 no consent):	59
To other care package:	1
Assessed:	58
Ineligible (13 CELF scores too high; 3 WASI scores too low):	16
<b>Entered intervention (36 classes; 19 schools):</b>	<b>42</b>
<b>Post-assessed (1 long-term vacation; 1 ill):</b>	<b>40</b>

All children who received intervention met entry criteria.

**Survey Returns**

All five SLT managers responded: Forth Valley to Part A only as it hosted the intervention study.

## 4. Results

### Audit of Intervention

A minimum of three intervention targets were set per child, mean 3.2, range 3 – 6. Several targets could be within one language area: 41 children undertook Comprehension Monitoring: 24 Word Learning Strategies: 31 Common Vocabulary: 14 Grammar markers: eight Colourful Sentences and one Narrative.

Teachers were asked to log when activities were carried out on a chart provided (Appendix I) and to comment upon children's responses. Logs maintained throughout the whole intervention period were returned for 29 children (69%) with comments included for 19 (45%): remaining logs were incomplete or not returned. From the 29 complete logs, contacts ranged from eight sessions throughout the intervention period to 70. Seven of these children worked with one SLANT teacher for 30 minutes weekly. Otherwise length of session was not always recorded, and relevant activities could also have taken place during class work.

### Research Question 1

An intention-to-treat analysis failed to show significant improvement following intervention on the primary outcome measures, CELF-3<sup>UK</sup> scores, a test of language, with 95% Confidence Intervals revealing considerable variability, indicating marked differences in the children's responsiveness to intervention. Full details appear in Appendix II. In Expressive Language, some of the children made improvements in their post-intervention scores which were clinically-significant (i.e. outwith the range of test/re-test error based on the standard error measurement). The data were also compared with the outcomes from a randomised control group from another study carried out by the principal authors. This control group (N=31) comes from the same population as the participants in the present study, providing a means of comparing the outcomes from the present study with the level of outcomes likely from children receiving community-based SLT services over a similar time-scale. Mixed model ANOVAs with data collection point (pre- versus post-test) as repeated measures and WoSRaD versus comparison children as a between-group factor revealed no differences between the groups in regard to the outcomes for Expressive Language or Total Language Scores on the CELF 3<sup>UK</sup>; and a main between-group effect approaching significance for Receptive Language, with children in the comparison group achieving a marginally higher overall score than the WoSRaD project children, although there was no significant difference between the two groups in regard to the gains made. The children in the present study thus fared at the same level as children receiving community-based levels of therapy in regard to the primary outcome measures. There were no significant changes between pre- and post-intervention scores for the secondary outcome measures, PhAB, a test of phonological processing, or NARA-2, a reading test.

## **Research Question 2**

Questionnaire returns from education staff are summarised in Appendix III. Where responses are coded a reliability check showed percentage agreement of 94 - 96%. SLANT teachers (N = 11 respondents, 85%) tended to want more direct SLT work with the child; CTs (N = 23, 64%) and ten assistants more time to carry out language activities and better materials, although positive comments were also received on materials. SLANT teachers commented favourably on aspects of the language programme, and teachers and assistants on child enjoyment and progress. Class teachers also commented upon changes to their own communications with children. Only six head-teachers responded (32%), with mainly positive comments, although two noted the high demands on education staff time. Three commented upon useful approaches and resources.

## **Research Question 3**

Questionnaires from parents (N = 14, 33%) and interviews with children (N = 40, 100%) are summarised in Appendix IV. Parents would have liked more communication and information about the project, but reported their children enjoyed it. Children agreed they enjoyed the work, and listed their favourite and less favourite activities.

## **Research Questions 4 - 5**

Full details of survey responses are in Appendix V. There was evidence of policy development amongst health and education services with supporting structures and a variety of service delivery models. Where policies and structures had not been developed, there were plans to do so, with respondents clear as to where further improvements were needed.

## **Research Questions 6 - 7**

All trusts offered indirect therapy via education staff, although one did not offer the precise model of the intervention programme and one only with assistant support. There was a fair amount of agreement on potential benefits of the model in integrating therapy into child educational experiences and increasing the understanding of education staff. The problems foreseen were potential inconsistency in educational staff's availability and willingness to undertake activities, and their skill in doing so. The implications for services centred around the need to increase



resources, and acceptance by services and parents, based if possible on evidence of effectiveness. Respondents were not all convinced that enough resources would be forthcoming or that a consistently good service could be delivered.

## **5. Discussion**

The intervention and survey were carried out as planned, with the recruitment target exceeded by two children. Children did not make significant gains on standardised language tests, but fared as well as comparable children in community SLT services. The model of intervention was broadly acceptable to schools, children and parents, although schools reported time pressures and parents lack of involvement. Implementation of language activities in schools varied greatly, and SLT managers' predictions that this would be the case were borne out. There were reports of changes in teachers' communication behaviours, and of increased insights into children's language difficulties, but this again varied.

## **6. Conclusions**

The present research has supplied new insights into the process of SLT service delivery in schools and on child outcomes, in an area where clinical trials are rare. The model did not accelerate language and literacy gains compared with a research control group of comparable children, as measured by standardised assessments, but achieved comparable levels of success. There appeared to be considerable variation in schools' ability to support interventions, and time pressures were signalled. The model was generally useful but the transfer of workload to experienced learning support and classroom teachers can be high. SLT services adopting this model will require to ensure that planned programmes of activity are followed, and careful monitoring through audit and school-based agreements will be necessary.

## **7. Importance to NHS and possible implementation**

The widely used model of SLT 'consultation' approaches in school did not show accelerated language gains for all children with PLI, although gains were comparable to those achieved by current therapy approaches. There is therefore a place for this model in service delivery, and in some cases it enhanced school experiences for children. There was considerable variation shown in schools' implementation of intervention activities, and engagement with the project. This requires further correlation with child outcome, but at present careful auditing of service provision and monitoring of intervention implementation in schools is required.

## **8. Future research**

Future research is needed to:

- correlate child outcomes more closely with intervention activities
- capture more and different real-life examples of school based approaches, and child outcomes
- investigate what factors are relevant in facilitating school engagement with language change in children with PLI
- devise better materials and information for schools, fitting the school curriculum
- carry out cost-benefit analyses that consider education costs in service delivery as well as health /SLT costs.

A project to develop classroom materials and information has been funded in 2004 –2005.

## **9. Dissemination**

Scientific and professional papers are being produced, and a dissemination event will take place in Autumn 2004, for participants and interested local parties.

## **10. Research workers**

[Omitted].

## **5. Final Financial statement**

[Omitted].

## **6. Executive summary**

### **Researchers**

Elsbeth McCartney, James Boyle, Susan Bannatyne, Mary Turnbull, Sue Ellis.

### **Aim**

To investigate a widely used model of speech and language therapy (SLT) intervention for children with language impairment and reading problems, where language activities are carried out in their mainstream schools by education staff, on the advice of an SLT; and to survey SLT managers in the West of Scotland about this approach.

### **Project Outline**

A cohort of 42 children in mainstream primary schools undertook language activities over a four month period. Children were chosen to match those in another research study, and had language and reading difficulties. Language activities were carried out by their learning support and class teachers and class-based assistants using targets set in discussion with an SLT. A survey of SLT managers gave opinions on this model and on how such children's difficulties were currently managed.

## **Key Results**

The intervention model did not accelerate language and literacy gains compared with an historical research control group of comparable children, as measured by standardised assessments, but achieved comparable levels of success. There was variation in how much language intervention the children received during the study period. SLT managers surveyed had predicted such variability.

## **Conclusions**

The model was generally useful, but the transfer of workload to experienced learning support and classroom teachers could be high. SLT services adopting this widely-used model will require to ensure that planned programmes of activity are followed, and careful monitoring through audit and school-based agreements will be necessary.

## **What does this Study add to the Field?**

The present research is believed to be the first cohort study giving outcome measures for this widely used model of intervention. Comparison with an historic cohort suggested the children fared as well as a comparable group in another research project who received community-based SLT services.

## **Implications for Practice and Policy**

The widely-used consultative SLT model of service delivery for children with language impairment in some cases enhanced school experiences for children, but did not accelerate language learning over a four month period as measured by standardised tests. There was considerable variation in schools' implementation of intervention activities and in engagement with the project. This requires further correlation with child outcome, but at present careful auditing of service provision and monitoring of intervention implementation in schools is required.

### **Where to Next**

Future research is needed to:

- correlate child outcomes more closely with intervention activities
- capture more and different real-life examples of school based approaches, and child outcomes
- investigate what factors are relevant in facilitating school engagement with language change in children with PLI
- devise better materials and information for schools, fitting the school curriculum
- carry out cost-benefit analyses that consider education costs in service delivery as well as health /SLT costs.

### **Further Details from**

Elsbeth McCartney, Speech & Language Therapy [Division], University of Strathclyde, Southbrae Drive, GLASGOW, G13 1PP

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- I.** Log sheet provided for teachers to record activity and comments
  
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**APPENDIX I**

**Child's name:** \_\_\_\_\_

**Project number:** \_\_\_\_\_

LANGUAGE WORK RECORD SHEET: WEEK \_\_\_\_\_

TEACHER:

THERAPIST:

SLANT TEACHER:

CLASSROOM ASSISTANT:

Date	Activity	Notes
		Signed:
		Signed:
		Signed:

### Analysis of data

#### Results

Test/re-test data were available for 42 children, 35 males and 7 females, with an average age at first assessment of 8y 10m (SD=16.02 months, range 6y 1m – 11y 0m). Means (and standard deviations) of pre- and post-intervention test scores are shown in Table 1 and details of missing data are summarised in Table 2.

**Table 1:** Mean Pre- and Post-Intervention Scores for Outcome Measures

<i>Outcome Measure</i>	<i>Mean (SD) Pre-Intervention</i>	<i>Mean (SD) Post-Intervention</i>
CELF 3 <sup>UK</sup> Expressive Language SS	69.81 (5.69) N=42	71.68 (8.87) N=40
CELF 3 <sup>UK</sup> Receptive Language SS	72.93 (7.82) N=42	72.63 (9.30) N=40
CELF 3 <sup>UK</sup> Total Language SS	69.10 (6.27) N=42	70.18 (8.64) N=40
WASI Non-Verbal IQ	86.33 (8.63) N=42	N/A
PhAB Alliteration Test SS	84.10 (9.85) N=41	85.88 (11.24) N=40
PhAB Rhyme Test SS	84.85 (13.35) N=41	84.25 (10.46) N=40
PhAB Spoonerisms Test SS	86.80 (10.58) N=40	84.10 (8.23) N=39
PhAB Non-Word Reading Test SS	93.50 (13.26) N=40	92.77 (11.19) N=39
PhAB Naming Speed Test (pictures) SS	89.58 (13.50)	90.05 (14.09)



	N=40	N=40
PhAB Naming Speed Test (digits) SS	90.12 (13.99) N=40	87.59 (11.76) N=39
PhAB Fluency Test (Alliteration) SS	92.13 (13.39) N=39	92.23 (15.78) N=39
PhAB Fluency Test (Rhyme) SS	93.87 (12.82) N=39	93.05 (13.61) N=39
PhAB Fluency Test (Semantic) SS	97.17 (13.87) N=35	95.94 (15.32) N=35
NARA II Accuracy SS	81.03 (11.30) N=33	80.09 (10.51) N=34
NARA II Comprehension SS	82.48 (12.61) N=33	82.41 (10.95) N=34

**Table 2: Summary of Missing Data by Collection Point**

1. 2. Outcome Measure	<i>Pre-Intervention</i>	<i>Post-Intervention</i>
CELF 3 <sup>UK</sup> Expressive Language SS	0	2
CELF 3 <sup>UK</sup> Receptive Language SS	0	2
CELF 3 <sup>UK</sup> Total Language SS	0	2
WASI Non-Verbal IQ	0	N/A
PhAB Alliteration Test SS	1	2
PhAB Rhyme Test SS	1	2
PhAB Spoonerisms Test SS	2	3
PhAB Non-Word Reading Test SS	2	3
PhAB Naming Speed Test (pictures) SS	2	2
PhAB Naming Speed Test (digits) SS	2	3
PhAB Fluency Test (Alliteration) SS	3	3
PhAB Fluency Test (Rhyme) SS	3	3
PhAB Fluency Test (Semantic) SS	7	7
NARA II Accuracy SS	9	8

NARA II Comprehension SS	9	8
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Intention to treat analyses (Chalmers, 1998) were carried out to minimise bias which may arise from missing data. The procedures used to deal with missing data were as follows:

- Primary Outcome Measures

Missing post-intervention scores for the CELF 3<sup>UK</sup> Scales for two children were replaced by the appropriate pre-intervention scores.

- Secondary Outcome Measures

Missing pre-intervention scores for PhAB subtests were replaced where possible with post-intervention scores for the same child and missing post-intervention scores were replaced by the appropriate pre-intervention scores. This dealt with missing PhAB data from all but two children. Pre-intervention scores for these two were imputed by means of Expectation Maximum (SPSS Inc., 2002) and then used also to replace their missing post-intervention counterparts.

In three cases, missing pre-intervention data from the NARA II accuracy and comprehension scales was replaced by the appropriate post-intervention score, or missing post-intervention scores replaced by their counterpart pre-intervention scores. The remaining six missing pre-intervention scores were imputed by Expectation Maximum (SPSS, 2002) and these values were used also to replace the missing post-intervention scores for the children involved.

These procedures permitted the inclusion of data from all participants in the analyses that follow and minimised effects of bias.

### ***Primary Outcome Measures***

Comparison of pre- and post-intervention scores for the CELF 3<sup>UK</sup> Expressive, Receptive and Total Language Scales failed to show any significant improvement following intervention, as shown in Table 3. The 95% Confidence Intervals reveal considerable variability, indicating marked differences in the children's responsivity to intervention. This is particularly noticeable in the case of Expressive Language, where some of the children made improvements in their post-intervention scores which were clinically-significant (i.e. outwith the range of test/re-test error based on the standard error measurement).

**Table 3:** Results of Intention to Treat Analyses of Primary Outcome Measures

Outcome Measure	Mean Difference (Post-Pre)	SD	95% Confidence Interval of the Difference	t	df	Sig. (2-tailed)
CELF 3 <sup>UK</sup> Expressive	+1.71	8.08	-0.80/+4.23	1.375	41	.177
CELF 3 <sup>UK</sup> Receptive	-0.50	8.77	-3.23/+2.23	-0.370	41	.714
CELF 3 <sup>UK</sup> Total	+0.81	6.93	-1.35/+2.97	0.758	41	.453

2.1.1

2.1.2

**2.1.3** *Similar results were observed from a protocol analysis of those children for whom complete test/re-test data are available.*

The data were also compared with the outcomes from a randomised control group from another study carried out by the principal authors. This control group (N=31) consists of 27 males and 4 females, with an average CA 8y 1m, who had average pre-test scores of 70.10 (SD 4.39) for the CELF 3<sup>UK</sup> Expressive Scale, 75.90 (SD 9.94) for the CELF 3<sup>UK</sup> Receptive Scale, 70.55 (SD 6.48) for the CELF 3<sup>UK</sup> Total Language Scale, and 90.94 (SD 10.13) for the WASI. Comparison with Table 1 reveals that this control group comes from the same population as the participants in the present study (all p-values > 0.157).

The control group participants were known to community-based speech and language therapy services, with 14 receiving an average of 5-6 sessions of therapy over the equivalent of the intervention period in the present project while the others were monitored and received no therapy

sessions. These 31 children provide a means of comparing the outcomes from the present study with the level of outcomes likely from children receiving community-based services over a similar time-scale to the intervention phase here.

Mixed model ANOVAs with data collection point (pre- versus post-test) as repeated measures and Stirling versus Comparison children as a between-group factor revealed no differences between the groups in regard to the outcomes for Expressive Language or Total Language Scores on the CELF 3<sup>UK</sup> (all F-values (1,71) < 1, all p-values > 0.365). However, the main between-group effect approached significance in the case of the Receptive Language Scale (F (1,71) = 3.69, p = 0.059). The children in the Comparison Group achieving a marginally higher overall score of 76.47, compared to the 72.68 of the Stirling Project children, although there was no significant difference between the two groups in regard to the gains made (F (1,71) = 0.828, p = 0.366). The children in the present study thus fared at the same level as children receiving community-based levels of therapy in regard to all three of the primary outcome measures.

### *Secondary Outcome Measures*

Intention to treat analyses were also carried out on the data from the pre- and post-intervention PhAB subtest scores and the NARA II Standard Scores for reading accuracy and reading comprehension. These are summarised in Table 4. (Note that no comparable data is available from the Comparison Group for these measures.)

**Table 4:** *Results of Intention to Treat Analyses of Secondary Outcome Measures*

<b>Outcome Measure</b>	<b>Mean Difference (Post-Pre)</b>	<b>SD</b>	<b>95% Confidence Interval of the Difference</b>	<b>t</b>	<b>df</b>	<b>Sig. (2-tailed)</b>
PhAB Alliteration SS	+2.00	10.67	-1.33/+5.33	1.214	41	.232

PhAB Rhyme SS	-0.74	10.79	-4.10/+2.62	-0.443	41	.660
PhAB Spoonerisms SS	-2.64	9.88	-5.72/+0.44	-1.733	41	.091
PhAB Non-Word Reading SS	+0.07	7.11	-2.14/+2.29	0.065	41	.948
PhAB Naming Speed (pictures) SS	+1.76	8.54	-0.90/+4.42	+1.337	41	.189
PhAB Naming Speed (digits) SS	-1.67	5.85	-3.49/+0.16	-1.848	41	.072
PhAB Fluency (Alliteration) SS	+0.05	13.31	-4.10/+4.20	0.023	41	.982
PhAB Fluency (Rhyme) SS	-1.31	10.62	-4.62/+2.00	-0.799	41	.429
PhAB Fluency (Semantic) SS	-2.79	12.97	-6.83/+1.26	-1.392	41	.171
NARA II Accuracy SS	-0.07	3.98	-1.31/+1.17	-0.116	41	.908
NARA II Comprehension SS	+0.45	6.73	-1.65/+2.55	0.435	41	.666

These results again indicate no significant changes between pre- and post-intervention scores for any of the secondary outcome measures. As before, the 95% Confidence Intervals show marked levels of responsivity to treatment, with some children showing sizeable gains in the Alliteration, Naming Speed (pictures) and Fluency (Alliteration) sub-tests of the PhAB. But this must be offset against an equally sizeable decline in performance across the intervention period for some of the children on the Rhyme, Spoonerisms, and above all the Fluency (Alliteration), Fluency (Rhyme), and Fluency Test (Semantic) PhAB subtests. Similar results were obtained from a protocol analysis using only complete pre- /post-intervention data.

### *References*

- Chalmers, I.** (1998). Unbiased, relevant and reliable assessments in healthcare. *British Medical Journal*, 317, 1167-1168.  
**SPSS Inc.** (2002) *SPSS for Windows Release 11.5.0*. Chicago, Ill: SPSS Inc.

**A STUDY OF SPEECH AND LANGUAGE THERAPY AND READING SUPPORT IN SCHOOLS**

**Post-Intervention Questionnaire - SLANT**

**A child you work with has just finished receiving language support in this project. We would like you to answer some questions about how you felt about the project. They should only take a few minutes to complete.**

**Please answer all of the questions and return in the envelope provided.**

There were 11 respondents, covering 36 children (1 for 7 children, 1 for 6, 1 for 5, 1 for 4, 3 for 3 and 1 for 2). Where responses were duplicated, they have only been counted once. Where comments differed for different children they have been listed separately.

For some questions, multiple responses are possible.

<b>1. What is your job title?</b>	Support for Learning/SLANT Teacher 11
<b>2. How long have you been working in education?</b>	0-2 years 0 3-5 years 0 6-10 years 1 11-15 years 1 16 years + 9



<b>3. Were you given enough information about the project before language activities started?</b>	Yes 9 No 2
<b>4. Who usually carried out the language activities with the child?</b>	ALL RESPONSES LISTED  class teacher 4 classroom based assistant 11 support for learning teacher 10 combination (please specify) 11 CT + SLANT 3 CT + SLA 4 CT + HT 1 CT + SLANT + SLA 3
<b>5. Why was this pattern chosen?</b>	Person with time available/ time restrictions 5 Best suited routine 4 Management decision 3 Educational reason 5 Other 1

<p><b>6. How often were the language activities carried out?</b></p>	<p>ALL RESPONSES LISTED</p> <p>4-5 times a week    8  2-3 times a week    11  once a week            7  other                    6  Unknown                4</p> <p>COMMENTS:  As often as it could be fitted in  Varied  Not always possible  Only a few sessions in total</p> <p>During weekly slot  Continuity  Continued support</p> <p>Chosen by teacher  Teacher's choice – as suited class</p>
<p><b>7. Why was this amount chosen?</b></p>	<p>Staff time availability                    5  Staffing difficulties                        1  Class/child/timetable factors – lots to do    4  Educational reason                        2  Unknown / no answer                       3</p>

<p><b>8. This was:</b></p>	<p>not often enough 3  about right 9  too often 0  Not known 2</p> <p>Some SLANTs gave different responses relating to different individuals they worked with</p>
<p><b>1. Did you contact the research speech &amp; language therapist? (please give details)</b></p>	<p>Yes – Twilight 2  Yes – requested meeting / training/ resources 2  Yes – routine 2  No 6</p> <p>COMMENTS  Twilights very useful</p> <p>Contacted as CT worried about time  Spoke to CT who consulted SLT  CT spoke to SLT</p> <p>To ask for more resources</p>

<p><b>2. Can you suggest anything that would have made it easier to carry out the language activities?</b></p>	<table> <tr> <td>Modelling/joint working opportunities</td> <td>3</td> </tr> <tr> <td>Training in advance</td> <td>1</td> </tr> <tr> <td>Better presentation of materials</td> <td>1</td> </tr> <tr> <td>Less individualized targets to allow group working</td> <td>4</td> </tr> <tr> <td>More time</td> <td>3</td> </tr> <tr> <td>Direct SLT work</td> <td>1</td> </tr> <tr> <td>No suggestions</td> <td>6</td> </tr> </table>	Modelling/joint working opportunities	3	Training in advance	1	Better presentation of materials	1	Less individualized targets to allow group working	4	More time	3	Direct SLT work	1	No suggestions	6								
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<p><b>4. How (if at all) have you altered your communication within the classroom?</b></p>	<table> <tr> <td>Changing own 'talk'</td> <td>2</td> </tr> <tr> <td>Changing monitoring and checking of child(ren)'s understanding</td> <td>1</td> </tr> <tr> <td>Attitudinal change</td> <td>1</td> </tr> <tr> <td>Other</td> <td>2</td> </tr> <tr> <td>No change</td> <td>8</td> </tr> </table>	Changing own 'talk'	2	Changing monitoring and checking of child(ren)'s understanding	1	Attitudinal change	1	Other	2	No change	8
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Changing monitoring and checking of child(ren)'s understanding	1										
Attitudinal change	1										
Other	2										
No change	8										
<p><b>5. Do you think the child enjoyed the language activities?</b></p>	<p>ALL RESPONSES LISTED</p> <table> <tr> <td>Yes</td> <td>23</td> </tr> <tr> <td>No</td> <td>2</td> </tr> <tr> <td>Some</td> <td>6</td> </tr> <tr> <td>Unknown</td> <td>2</td> </tr> </table>	Yes	23	No	2	Some	6	Unknown	2		
Yes	23										
No	2										
Some	6										
Unknown	2										

<p><b>6. Can you list two or three things about the project that you would like to change?</b></p> <p><b>Can you list two or three things about the project that you would like to change?</b></p>	<p>ALL COMMENTS LISTED</p> <p>[direct] SLT would be more beneficial  More SLT input  More direct SLT input, more embedded work  More direct input from SLT  Modeling by SLT so know what is expected</p> <p>Less activities would be less daunting  Fewer and more simplified activities</p> <p>Working folder in graded steps  Sheets too easy  Worksheets too easy  Sheets too babyish, have more appealing sheets</p> <p>Timing – ready at start of year</p> <p>Too many individualized targets  Organization for working towards targets</p> <p>Should include reading activities  Reading not targeted though assessed</p> <p>Follow up activities for CT/support staff to reinforce</p> <p>Use a different model of provision – not 1:1</p>
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<p><b>7. Can you list two or three things about the project that you thought were good?</b></p>	<p>ALL COMMENTS LISTED</p> <p>Twilight and collaboration  Twilight session, resources provided  Reading and Speech &amp; Language course attended was excellent</p> <p>Excellent language material</p> <p>Good listening and comprehension activities  Comprehension and auditory memory exercises  Memory, auditory and sequential activities</p> <p>Boardmaker  Word webs very effective  Flash cards good</p> <p>Focus on specific targets  Tasks broken down, helps staff focus on support required  Highlighted difficulties</p> <p>Assessment and appropriate programme  Assessment opportunity and information, access to additional resources</p> <p>Able to give 1:1  Gave time for 1:1 work with child</p> <p>Good to see project in action</p>
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8. Please rate the following statement by ticking the appropriate box to show whether you agree or disagree with them.

**ALL DIFFERENT RESPONSES COUNTED**

	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>	<b>Not applicable</b>
<b>This method of working expects too much from the SLANT teacher</b>		4	4	3	1	2
<b>I would recommend this approach to other teachers</b>		2	5	3	3	1
<b>This approach is disruptive for the rest of the class</b>	2	6	3	1		2
<b>I would have preferred the speech &amp; language therapist to work with the child</b>		1	2	7	3	1
<b>In future I would be happy to use this model of working</b>	1	1	5	4	3	2



**9. Any other comments?**

ALL COMMENTS LISTED

**Liaison and staff development was excellent  
Increased confidence, 'upskilled'**

**Would like (research SLT) to work directly in schools**

**Only happy to use this model in future if nothing else available**

**If input from SLT not available, better than nothing**

**Direct, intensive SLT better, with close communication between SLT,SLANT, CT to put in place short term targets for IEP with regular assessment better**

**More effective to work jointly**

**Gave school ownership, great way of working as long as not a substitute for direct SLT work when this is best form of support (could be useful when SLT still assessing /providing materials / workplan).**

**Needs to be more embedded into the classroom, needs to be more workable for teachers**

**Worthwhile project, but communication at start muddled**

**Clearer guidelines at start would have helped to sell it to schools**

**Difficult to keep track as CT took control and was then absent**

**Project undertaken mainly by CT, who spent time carrying out reading work**

**Feel unable to comment as no direct support given to child**

**Child's progress did not develop**

**Model not suitable for this particular child**

**Resources a bit dreary, could be de-motivating for younger, less accepting children**

**Complicated trying to work on individual(ised) targets, grouping meant they would end up working towards different targets. More general single target would give more scope for implementing**

Thank you for taking the time to answer these questions. (Please return this questionnaire in the stamped addressed envelope provided to: Susan Bannatyne, Speech & Language Therapist, Speech & Language Therapy Department, Stirling Royal Infirmary, Livilands, Stirling FK8 2AU)

**Research Team:**

Elspeth McCartney, Speech & Language Therapy Department, University of Strathclyde.

James Boyle, Psychology Department, University of Strathclyde.

Sue Ellis, Primary Education Department, University of Strathclyde.

Mary Turnbull, Speech & Language Therapy Department, Forth Valley Primary Care NHS Trust.

**A STUDY OF SPEECH AND LANGUAGE THERAPY AND READING SUPPORT IN SCHOOLS**

**Post-Intervention Questionnaire – Class Teachers**

**A child in your class has just finished receiving language support in this project. We would like you to answer some questions about how you felt about the project. They should only take a few minutes to complete.**

**Please answer all of the questions and return in the envelope provided.**

There were 23 respondents covering 26 children (3 for 2 children).

Where responses were duplicated, they have only been counted once. Where comments differed for different children, they have been listed separately.

For some questions, multiple responses are possible.

<p><b>1. What is your job title?</b></p>	<p>Class teacher    23</p> <p>Of these 23:</p> <p>Headteacher       1</p> <p>Principal teacher   1</p> <p>Supply teacher     1</p>
<p><b>2. How long have you been working in education?</b></p>	<p>0-2 years        4</p> <p>3-5 years        0</p>

	6-10 years 4 11-15 years 0 16 years + 15
<b>3. Were you given enough information about the project before language activities started?</b>	Yes 17 No 6
<b>4. Who usually carried out the language activities with the child?</b>	ALL RESPONSES LISTED  class teacher 3 classroom based assistant 5 support for learning teacher 5 combination (please specify) 13 CT + SLANT 1 CT + SLA 9 SLANT + SLA 1 CT + SLANT + SLA 2
<b>5. Why was this pattern chosen?</b>	Person with time available/ time restrictions 13 Best suited routine 6 Management decision 1 Educational reason 3 Other 1
<b>6. How often were the language activities carried out?</b>	ALL RESPONSES LISTED  4-5 times a week 5

	2-3 times a week      14 once a week            4 other                      3  COMMENTS  When possible Varied Once a week – but not every week Ticked 2-3times – but closer to 3-4 times per week Sometimes less than 2-3 times per week  Depended on time available
<b>7. Why was this amount chosen?</b>	Staff time availability      7 Class/child/timetable factors lots to do      13 Educational reason      4 Unknown / no answer      1
<b>8. This was:</b>	Not often enough      3 About right              19 too often                0  No answer              1
<b>9. Did you contact the research speech &amp; language therapist? (please give details)</b>	Yes – requested training/information/resources      5 Yes – routine              2 No                            15

<p><b>10. Can you suggest anything that would have made it easier to carry out the language activities?</b></p>	<table> <tr> <td>Modelling / joint working opportunities</td> <td>2</td> </tr> <tr> <td>Training in advance</td> <td>1</td> </tr> <tr> <td>Presentation of materials</td> <td>2</td> </tr> <tr> <td>Direct SLT work</td> <td>2</td> </tr> <tr> <td>More assistant time</td> <td>3</td> </tr> <tr> <td>No – it was good</td> <td>3</td> </tr> <tr> <td>No suggestions</td> <td>6</td> </tr> </table>	Modelling / joint working opportunities	2	Training in advance	1	Presentation of materials	2	Direct SLT work	2	More assistant time	3	No – it was good	3	No suggestions	6
Modelling / joint working opportunities	2														
Training in advance	1														
Presentation of materials	2														
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<p><b>11. How (if at all) has involvement in the project helped you develop ideas for working with –</b></p> <p><b>c) this project child?</b></p> <p><b>d) other children?</b></p>	<p><b>11a</b></p> <p>Analyse/gain insight into child's needs 5</p> <p>Useful resources/ideas/techniques for child 2</p> <p>Reassurance 3</p> <p>No 6</p> <p>No answer 3</p> <p>Other: 5</p> <p>    Showed benefit of regular 1:1 working 2</p> <p>    Not involved in this project 2</p> <p><b>11b</b></p> <p>Insight into language difficulties generally 2</p> <p>Useful resources/techniques/ideas 3</p> <p>Good ideas for listening and comprehension monitoring 5</p> <p>No 6</p> <p>No answer 3</p> <p>Other 3</p>
<p><b>12. How (if at all) have you altered your communication within the classroom?</b></p>	<p>Changing own 'talk' 2</p> <p>Changing monitoring and checking of child(ren)'s understanding 9</p> <p>Encouraging child(ren)'s own repair 2</p> <p>No change 3</p> <p>No answer 5</p> <p>Other 1</p>

**13. Do you think the child enjoyed the language activities?**

ALL RESPONSES LISTED

Yes	17
Sometimes	3
Other (too easy)	1



**14. Can you list two or three things about the project that you would like to change?**

ALL COMMENTS LISTED

Main problem is lack of time  
Not enough time to carry out activities  
Ability to find someone dedicated to giving up time  
More time available in class  
Less dependence on CT time as limited, more assistant help  
Too time consuming, SLT should carry out test [activities?]  
Worked well with assistant/SLANT but not if had to be administered by CT

Bright colourful materials, not bland photocopies, backed onto colourful card, the font would replicate handwriting style used in class  
More interesting colourful sheets

More games  
'help cards' sometimes difficult to keep together and understand  
Some activities were too difficult

Too American  
Some materials too American- confusing for child

Begin in August  
Longer length for project

Should have smaller area of focus  
Timetable of activities

Better communication  
More meetings to chart progress  
More consultation

**15. Can you list two or three things about the project that you thought were good?**

ALL COMMENTS LISTED

Inservice background to study

Good resources and informative leaflets

Resource pack

Resources (3)

Choice of materials

Range of activities

Explanation of introduction to worksheets and strategies to be used

Range of materials

Varied and enjoyable activities

Word webs

Naming nouns

Communication friendly classroom activities were excellent

Boardmaker pictures

Child enjoyed board games and past tense verb sheets

Suitability of materials for use as whole class items

Varied materials could be used for groups and whole class – benefits all round

Focus on particular areas of behaviour e.g. listening

Good focus each week

Showed child's level of performance

Highlighted child's specific difficulties

Awareness of child's difficulties and how to overcome them

1:1 was good

Dedicated time with no distractions

Creates time for specific individuals

**16. Please rate the following statement by ticking the appropriate box to show whether you agree or disagree with them.**

**ALL DIFFERENT RESPONSES COUNTED**

	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>
<b>This method of working expects too much from the class teacher</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>7</b>	<b>5</b>
<b>I would recommend this approach to other teachers</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>6</b>	<b>5</b>
<b>This approach is disruptive</b>	<b>4</b>	<b>7</b>	<b>5</b>	<b>1</b>	<b>2</b>

<b>for the rest of the class</b>					
<b>I would have preferred the speech &amp; language therapist to work with the child</b>	<b>1</b>	<b>3</b>	<b>5</b>	<b>5</b>	<b>5</b>
<b>In future I would be happy to use this model of working</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>10</b>	<b>3</b>

**17. Any other comments?**

ALL COMMENTS LISTED

**Would be helpful to work in tandem with therapist.**

**Enjoyable experience working with you  
Thanks to SLT for support and interest**

**Feel guilty about gaps in delivery – so hard to fit in (but not put off!)**

**Child very disruptive so needed to be taken out for activities – helped him to concentrate**

**Extract model – child taken out by SLANT and SLA – worked very well, but would have been very difficult for CT to carry out.**

**“to find an extra 10 minutes per day in a class of 29 children with 6 children on staged intervention, 4 reading groups, 5 spelling groups, 4 writing groups – IMPOSSIBLE!”**

**Don't think programme has made any difference to child's concentration or awareness, but would like to know results of testing**

**Child enjoyed the activities and listening has improved**

**Noticeable change in child from start of programme – more focused, asks for help.**

**Child really enjoyed the programme**

**Excellent progress in child, but due to constant individual support rather than programme**

**Progress mostly due to an intensive reading programme**

**Time was allocated to work on reading instead**

**Situation with resources expected too much from class teacher – held back by ‘politics’ , felt like go-between from DHT to SLT “both myself and the classroom assistant were willing and able and felt frustrated at the lack of consideration and the impact this had on the potentially worthwhile project and activities”**

**Because sheets were so varied it was hard to channel into programme of work, and as language sheets too easy, they were an ‘extra’. Maths sheets more valuable as they focused on real area of difficulty**

**Would have been more useful at the start of the year**

**Filling in questionnaires at this time of year is a bad idea as other record keeping tasks necessary**

**NA as I did not work with child**

**Additional comments not from questionnaire form, from a supply teacher whose involvement did not continue throughout the whole duration of the project:**

**Very difficult to fit in**

**1:1 work in class may draw attention to child – prefers to be away from class**

**Child feels content is too easy – objects to spending time on this rather than classwork**

**Do not feel this is an effective way to support child's speech & language needs**

Thank you for taking the time to answer these questions. (Please return this questionnaire in the stamped addressed envelope provided to: Susan Bannatyne, Speech & Language Therapist, Speech & Language Therapy Department, Stirling Royal Infirmary, Livilands, Stirling FK8 2AU)

**Research Team:**

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**APPENDIX III (iii)**

**A STUDY OF SPEECH AND LANGUAGE THERAPY AND READING SUPPORT IN SCHOOLS**

3. Post-Intervention Questionnaire - Assistant

**A child you work with has just finished receiving language support in this project. We would like you to answer some questions about how you felt about the project. They should only take a few minutes to complete.**

**Please answer all of the questions and return in the envelope provided.**

There were 10 respondents covering 12 children: 1 assistant responding for 3. Where responses were duplicated, they have only been counted once. Where comments differed for different children, they have been listed separately.

For some questions, multiple responses are possible.

<b>7. What is your job title?</b>	Support for Learning Assistant 8 Classroom Assistant 2
<b>8. How long have you been working in education?</b>	0-2 years 3 3-5 years 1 6-10 years 4 11-15 years 2 16 years + 0

<b>9. Were you given enough information about the project before language activities started?</b>	Yes 9 No 1
<b>10. Who usually carried out the language activities with the child?</b>	ALL RESPONSES LISTED  class teacher 1 classroom based assistant 6 support for learning teacher 2 combination (please specify) 3 CT+SLANT 1 SLANT +SLA 1 Unspecified 1
<b>11. Why was this pattern chosen?</b>	Person with time available/time restrictions 6 Best suited routine 1 Educational reason 1 Unspecified 2
<b>12. How often were the language activities carried out?</b>	ALL RESPONSES LISTED  4-5 times a week 6 2-3 times a week 6 once a week 0 other 0
<b>7. Why was this amount chosen?</b>	Staff time availability 2 Class / child / timetable factors – lots to do 5 Educational reason 3



<b>8. This was:</b>	not often enough 0 about right 8 too often 0 Unspecified 2
<b>10. Did you contact the research speech &amp; language therapist? (please give details)</b>	Yes – requested meeting/training/resources 2 No 7
<b>11. Can you suggest anything that would have made it easier to carry out the language activities?</b>	Better presentation of materials 1 More time 1 No – it was good 2 No 6
<b>12. How (if at all) has involvement in the project helped you develop ideas for working with –</b>  <b>e) this project child?</b>  <b>f) other children?</b>	<b>11a</b> Gain insight/understand child’s needs 1 Useful resources/ideas/techniques for this child 2 No answer 8  <b>11b</b> Insight into language difficulties 1 Useful ideas/resources/techniques 3 No answer 7
<b>13. How (if at all) have you altered your communication within the</b>	Changing own ‘talk’ 1 Not applicable 3

classroom?	No answer            5
<b>14. Do you think the child enjoyed the language activities?</b>	ALL RESPONSES LISTED  Yes                    9 Sometimes        1 Unknown            1
<b>15. Can you list two or three things about the project that you would like to change?</b>	ALL COMMENTS LISTED  More time for consultation More time needs to be allocated to support staff  More challenging games Too American so difficult to understand Resources would be more interesting in colour Higher level of resources  More suitable accommodation
<b>16. Can you list two or three things about the project that you thought were good.</b>	ALL COMMENTS LISTED  Pack was user-friendly, easy to understand  Good language resources  Word web, naming nouns Vocabulary and word finding,

	<p>Memory activities, pairs  Child enjoyed materials, especially memory activities</p> <p>Board game, past tense verb sheets  Right and left sheets  Board game, silly stories</p> <p>Raised awareness of difficulties</p> <p>Dedicated time for small group work  1:1 working</p> <p>Improvement in pupil's confidence  Fun activities, kept children's attention + interest,  increased ability to concentrate</p>
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**17. Any other comments?**

ALL COMMENTS LISTED

Taken out of class – too much distraction  
Activities not all completed  
Child has improved

Thank you for taking the time to answer these questions. (Please return this questionnaire in the stamped addressed envelope provided to:  
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2AU)

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**A STUDY OF SPEECH AND LANGUAGE THERAPY AND READING SUPPORT IN SCHOOLS**

**Post-Intervention Questionnaire - Assistant**

**A child you work with has just finished receiving language support in this project. We would like you to answer some questions about how you felt about the project. They should only take a few minutes to complete.**

**Please answer all of the questions and return in the envelope provided.**

There were 10 respondents covering 12 children: 1 assistant responding for 3. Where responses were duplicated, they have only been counted once. Where comments differed for different children, they have been listed separately.

For some questions, multiple responses are possible.

<b>1. What is your job title?</b>	Support for Learning Assistant 8 Classroom Assistant 2
<b>2. How long have you been working in education?</b>	0-2 years 3 3-5 years 1 6-10 years 4 11-15 years 2 16 years + 0
<b>3. Were you given enough information about the project before language activities started?</b>	Yes 9 No 1

<p><b>4. Who usually carried out the language activities with the child?</b></p>	<p>ALL RESPONSES LISTED</p> <p>class teacher 1  classroom based assistant 6  support for learning teacher 2  combination (please specify) 3  CT+SLANT 1  SLANT +SLA 1  Unspecified 1</p>
<p><b>5. Why was this pattern chosen?</b></p>	<p>Person with time available/time restrictions 6  Best suited routine 1  Educational reason 1  Unspecified 2</p>
<p><b>6. How often were the language activities carried out?</b></p>	<p>ALL RESPONSES LISTED</p> <p>4-5 times a week 6  2-3 times a week 6  once a week 0  other 0</p>
<p><b>7. Why was this amount chosen?</b></p>	<p>Staff time availability 2  Class / child / timetable factors – lots to do 5  Educational reason 3</p>

<p><b>8. This was:</b></p>	<p>not often enough 0  about right 8  too often 0  Unspecified 2</p>
<p><b>9. Did you contact the research speech &amp; language therapist? (Please give details)</b></p>	<p>Yes – requested meeting/training/resources 2  No 7</p>
<p><b>10. Can you suggest anything that would have made it easier to carry out the language activities?</b></p>	<p>Better presentation of materials 1  More time 1  No – it was good 2  No 6</p>
<p><b>11. How (if at all) has involvement in the project helped you develop ideas for working with –</b></p> <p><b>this project child?</b></p> <p><b>other children?</b></p>	<p><b>11a</b></p> <p>Gain insight/understand child’s needs 1  Useful resources/ideas/techniques for this child 2  No answer 8</p> <p><b>11b</b></p> <p>Insight into language difficulties 1  Useful ideas/resources/techniques 3  No answer 7</p>
<p><b>12. How (if at all) have you altered your communication within the classroom?</b></p>	<p>Changing own ‘talk’ 1  Not applicable 3  No answer 5</p>

<p><b>13. Do you think the child enjoyed the language activities?</b></p>	<p>ALL RESPONSES LISTED</p> <p>Yes            9  Sometimes    1  Unknown       1</p>
<p><b>14. Can you list two or three things about the project that you would like to change?</b></p>	<p>ALL COMMENTS LISTED</p> <p>More time for consultation  More time needs to be allocated to support staff</p> <p>More challenging games  Too American so difficult to understand  Resources would be more interesting in colour  Higher level of resources</p> <p>More suitable accommodation</p>
<p><b>15. Can you list two or three things about the project that you thought were good.</b></p>	<p>ALL COMMENTS LISTED</p> <p>Pack was user-friendly, easy to understand</p> <p>Good language resources</p> <p>Word web, naming nouns  Vocabulary and word finding,</p> <p>Memory activities, pairs  Child enjoyed materials, especially memory activities</p>



	<p>Board game, past tense verb sheets  Right and left sheets  Board game, silly stories</p> <p>Raised awareness of difficulties</p> <p>Dedicated time for small group work  1:1 working</p> <p>Improvement in pupil's confidence  Fun activities, kept children's attention + interest,  increased ability to concentrate</p>
--	---

**16. Any other comments?**

ALL COMMENTS LISTED

Taken out of class – too much distraction  
Activities not all completed  
Child has improved

Thank you for taking the time to answer these questions. (Please return this questionnaire in the stamped addressed envelope provided to:  
Susan Bannatyne, Speech & Language Therapist, Speech & Language Therapy Department, Stirling Royal Infirmary, Livilands, Stirling FK8  
2AU)

**Research Team:**

Elsbeth McCartney, Speech & Language Therapy Department, University of Strathclyde.

James Boyle, Psychology Department, University of Strathclyde.

Sue Ellis, Primary Education Department, University of Strathclyde.

Mary Turnbull, Speech & Language Therapy Department, Forth Valley Primary Care NHS Trust.

**Questionnaire for Headteachers of Schools Involved in the Study**

This questionnaire was sent by email to each school involved, marked for the attention of the (named) headteacher. Six returns were received.

**Research Project:**

**A Study of Speech & Language Therapy And Reading Support In Schools**

**Your school has recently participated in this project, where 1 child with language impairment undertook language activities that had been decided on in consultation among the classroom teacher, SLANT teacher and research speech & language therapist.**

**We would be most grateful if you could take a few minutes to respond to the following six questions about the project. All answers will be collated and summarised anonymously.**

**1. What impact (if any) did participation in the project have upon the school?**

**SCHOOL A** N/A – [School] joined project later on

**SCHOOL B** It provided us with another avenue to explore for some of the children we have who are having little success with reading. It was also excellent development for the staff involved.

**SCHOOL C** The project did not disturb the running of the school. I used SLA time to work with the 3 children involved every morning. This was very easy to support in a quiet area.

**SCHOOL D** We felt that the ideas given to work with children were extremely good. There were frustrations in that we knew of parents who had not returned applications because their paperwork is always slow, but we were not able to contact them or influence them.

**SCHOOL E** Teachers found it extra work. Unfortunately they were unable to use info. to support other children. As work and methodology didn't suit their needs

**SCHOOL F** No impact

**2. Was the project discussed among the staff, for example by presentations at PAT nights, in-service sessions, staff meetings or year group meetings?**

- SCHOOL A** Not necessary for one child. Discussion with class teacher was sufficient. Also, there were two twilight sessions which SLANT teacher attended.
- SCHOOL B** Not possible due to lack of time in an already full calendar but it was discussed informally by staff.
- SCHOOL C** Yes. Staff involved went along to a twilight session about the project.
- SCHOOL D** Only at staff meetings and with individual staff. It was mentioned at our School Board.
- SCHOOL E** NO. Timescale was inappropriate – very rushed
- SCHOOL F** NO – only involved one child

**3. Who did you personally talk to about the project?**

- SCHOOL A** [RESEARCH SLT], [SLANT], [CLASS TEACHER]
- SCHOOL B** Support for Learning teachers and assistants and parents.
- SCHOOL C** Fellow Headteachers and class teachers.
- SCHOOL D** Mostly [RESEARCH SLT] and one researcher [RESEARCH ASSISTANT], for a brief time at the end.  
In early stages there were conversations with Stirling SLANT staff. This caused early misunderstandings! We were all under the impression that the work would be staffed by S and L people in school. It was later that we realised that his was not the case.
- SCHOOL E** [RESEARCH SLT] and learning support teacher
- SCHOOL F** Support for learning teacher

**4. Were there any positive and / or negative effects of the project on the ethos of the school?**

- SCHOOL A** N/A
- SCHOOL B** It raised the self esteem of the children involved as they felt important and they enjoyed the activities.
- SCHOOL C** All positive I think. It was well organised and only needed the support of the SLA.
- SCHOOL D** Mostly positive in that we believed the task to be helpful to children.  
**Negative, where we felt guilty as we could not keep up the level of support required.**
- SCHOOL E** Negative in the beginning, more positive once started
- SCHOOL F** None

5. **Were there any positive and / or negative effects of the project on teaching and learning in the school?**

- SCHOOL A** Hopefully positive from SLANT teacher's delivery point of view & class teacher re board maker points for good listening etc.
- SCHOOL B** Positive  
**We now have a new approach which we can use with children and a range of useful resources. We have also purchases one or two of the resources which you recommended.**  
Negative  
The work took up a great deal of the Support for Learning Teacher's time as it was not possible for the class teachers to carry out the activities.
- SCHOOL C** No. I think the project enhanced the confidence of our young people.  
**Because it was on a one to one the children could really concentrate and focus on the task without disruption.**
- SCHOOL D** These were all positive. We picked up good ideas and wanted to try them with others.
- SCHOOL E** Feedback; work seemed to be too easy for the children
- SCHOOL F** NONE

6. **What would you like to see as the next steps?**

- SCHOOL A** Modelling from Speech & Language Therapist - in school if possible.
- SCHOOL B** More input of this nature from Speech and Language therapists.  
**Individual/group follow-up work for those who would benefit from it.**
- SCHOOL C** I would like to see these children continue and develop the skills they have been working on. I would be delighted to support another S & L Project.
- SCHOOL D** To hear of any results and advice on what made an impact overall in the whole project.
- SCHOOL E** I would like to see staff development where speech and language therapist share their knowledge and skills about lang development. Idea of pack for use by teachers a good one if meets the children's needs
- SCHOOL F** No response

## A Study of Speech & Language and Reading Support in Schools Teacher Questionnaire: Pre-Intervention

**NB the same questionnaire with adapted text was used post intervention**

Before your pupil takes part in our study, we would like to ask you some questions about how you feel your pupil has recently been progressing in terms of speech and language development.

**How much progress do you think your pupil has made over the last 4 months in the following aspects of speech and language?  
Please rate your answer on a scale of 1 to 5, where 1 means no progress and 5 means lots of recent progress, and circle the number that indicates your choice.**

Areas of Language	Not an area of difficulty	No progress	A little progress	Satisfactory progress	Good progress	Very good progress
<b>Understanding</b>						
Understanding spoken words		1	2	3	4	5
Understanding spoken sentences		1	2	3	4	5
Understanding spoken questions which begin with 'wh' words – what, who, where, which, why		1	2	3	4	5
Understanding other spoken questions		1	2	3	4	5
Following spoken instructions		1	2	3	4	5
Following stories		1	2	3	4	5
<b>Speech</b>						
Speech clearness		1	2	3	4	5
Repeats sounds or words		1	2	3	4	5
Repairs errors		1	2	3	4	5
<b>Spoken Language</b>						
Finding the right word		1	2	3	4	5
Using words accurately		1	2	3	4	5
Forming simple sentences		1	2	3	4	5
Using longer sentences		1	2	3	4	5
Producing more complicated sentences		1	2	3	4	5
Producing more complete sentences /words not left out		1	2	3	4	5
Telling stories		1	2	3	4	5
<b>Using Language</b>						
Reporting daily events		1	2	3	4	5
Asking questions		1	2	3	4	5
Answering questions		1	2	3	4	5
Starting a conversation		1	2	3	4	5
Keeping to the topic		1	2	3	4	5
<b>Literacy</b>						
Reading interest		1	2	3	4	5
Reading accuracy		1	2	3	4	5
Reading comprehension		1	2	3	4	5
Spelling		1	2	3	4	5
<b>General behaviour</b>						
Taking the initiative		1	2	3	4	5
Turn taking		1	2	3	4	5
Eye contact		1	2	3	4	5

Self confidence		1	2	3	4	5
Mixing socially with peers		1	2	3	4	5
Behaviour problems (e.g. tantrums)		1	2	3	4	5

**Thank you for taking the time to complete this questionnaire.**

**Teacher Pre Intervention Ratings**

Child	Under- standing Total	Under- standing Mean	Speech Total	Speech Mean	Spoken Language Total	Spoken Language Mean	Using Language Total	Using Language Mean	Literacy Total	Literacy Mean	General Behaviour Total	General Behaviour Mean
6	14	2.333	6	2	9	1.286	9	1.8	6	1.5	8	1.6
7	15	2.5	9	3	17	2.429	14	2.8	6	1.5	7	1.75
9	18	3	7	2.333	17	2.249	16	2.667	8	2	17	2.833
10	12	2	3	1	10	1.429	12	2	6	1.5	11	2.2
15	17	2.833	9	3	18	2.571	13	2.6	4	1	9	1.5
16	11	1.833	0	0	17	2.429	13	2.167	14	3.5	8	1.6
20	24	4	8	2.667	20	2.857	18	3.6	12	4	19	3.8
23	12	2	6	2	13	1.857	4	1.333	8	2	10	2
33	17	2.833	7	2.333	13	1.857	11	2.2	9	2.25	14	2.333
35	18	3	8	2.667	17	2.429	18	3	11	2.75	16	2.667

**Teacher Post Intervention Ratings**

Child	Under- standing Total	Under- standing Mean	Speech Total	Speech Me an	Spoken Language Total	Spoken Language Mean	Using Language Total	Using Language Mean	Literacy Total	Literacy Mean	General Behaviour Total	General Behaviour Mean
6	12	2	5	1.667	8	1.333	4	1	4	1	4	1.333
7	20	3.333	10	3.333	24	3.429	17	3.4	15	3.75	14	3.5
9	19	3.167	9	3	24	3.429	20	4	14	3.5	20	3.333
10	24	4	9	3	22	3.143	17	3.4	12	3	20	4
15	18	3	9	3	21	3	15	3	20	5	18	3
16	16	2.667	6	2	14	2	10	2	8	2	12	2
20	27	4.5	8	4	29	4.143	20	4	18	4.5	25	5
23	12	2	6	2	14	2	10	2	8	2	12	2
33	12	2	6	2	15	2.5	10	2	9	2.25	12	2
35	14	2.333	6	2	13	2.167	13	2.6	6	1.5	11	2.75

Notes: Only data where both pre and post intervention information was received have been included.  
This data is taken from the six language areas covered in detail on the questionnaire. (see following page)



**A STUDY OF SPEECH & LANGUAGE THERAPY AND READING SUPPORT IN SCHOOLS**

**Post-Intervention Questionnaire – Parents**

**Your child has just finished receiving language support in this project. We would like you to answer some questions about how you felt about the project. They should only take a few minutes to complete. Please answer all of the questions and return in the envelope provided.**

**Child's Name:** \_\_\_\_\_  
\_\_\_\_\_

**Project No.:**

14 parents responded to this questionnaire.

<p><b>1. Were you given enough information about the project</b></p> <p><b>(a) before the language activities started?</b></p> <p><b>(b) throughout the project?</b></p>	<p><b>1a</b> yes 13 no 1</p> <p><b>1b</b> yes 10 no 4</p> <p>Comments: Informed by letter I was well informed about what was involved with the project and kept up to date throughout</p> <p>Initially unsure of the structure – we phoned and structure was explained [low direct SLT involvement]</p> <p>Additional feedback on what was happening and where parents could assist would be advantage</p> <p>Have no idea what child was doing – project exercises part of school, not home</p> <p>Poor communication between parents and school</p>
<p><b>2. Did you contact the research speech &amp;</b></p>	<p>Yes 2</p>

<p><b>language therapist? (please give details)</b></p> <p><b>Did you contact the research speech &amp; language therapist? (please give details)</b></p>	<p>No 12</p> <p>Contacted as didn't realize project had started and that it was CT based not appointments with SLT</p> <p>Did not need any additional info</p> <p>Met at staged intervention meeting</p> <p>School got in touch with SLT</p>
<p><b>3. Did you get any ideas that were helpful to you?</b></p>	<p>Yes 4 No 10</p> <p>No teacher feedback, no ideas – verbally or written – quite disappointing as we are used to assisting with SLT sessions</p> <p>Short term targets sheet was useful in identifying areas child needed help with</p> <p>Yes - starting a notebook to jot down things child would like to remember</p>
<p><b>4. Do you think that your child enjoyed being in the project?</b></p>	<p>Yes 12 No 1 Don't know 1</p> <p>Limited feedback for teacher/therapist</p> <p>Yes except when missed TV/drama/music/art during class time</p> <p>Child found it helpful</p> <p>Most definitely!</p> <p>Don't know as child has never said</p>
<p><b>5. Can you list two or three things about the project you would like to change?</b></p>	<p>Additional feedback for parents on what was happening and where parents could assist</p> <p>Parent information/help pack</p> <p>More communication between school, parent and project</p> <p>Communication dependent on school and pupil</p>

	<p>Work more in line with school work</p> <p>No, but if project shows this is useful form of teaching, hope this would be available to child</p>
<p><b>6. Can you list two or three things about the project that you thought were good?</b></p>	<p>Child enjoyed programme 4</p> <p>Child benefited from programme 2</p> <p>Child felt special /that they 'helped' 1</p> <p>Programme within school environment 1</p> <p>Initial assessment gives credibility to findings 1</p> <p>Child talking and expressing more 1</p>
<p><b>7. Any other comments?</b></p>	<p>Progress very satisfactory though feedback poor</p> <p>Positive experience for child</p> <p>Enjoying reading and more confident in tackling words they are unsure of, not so frustrated</p> <p>Enjoyed work and will hopefully benefit academically in future</p>

Thank you for taking the time to answer these questions (Please return this questionnaire in the stamped addressed envelope provided to: Susan Bannatyne, Speech & Language Therapist, Speech & Language Therapy Department, Stirling Royal Infirmary, Livilands, Stirling FK8 2AU)

**Research Team:**

Elspeth McCartney, Speech & Language Therapy Department, University of Strathclyde.  
 James Boyle, Psychology Department, University of Strathclyde.  
 Sue Ellis, Primary Education Department, University of Strathclyde.  
 Mary Turnbull, Speech & Language Therapy Department, Forth Valley Primary Care NHS Trust/

A Study of Speech & Language Therapy And Reading In Schools

**Post-Intervention Child Questionnaire**

(to be read to child by blind assessor and the child's responses written)

Script: I'm going to ask you about the special language games and activities you've been doing at school - all the things about good talking and good listening. I want to find out how you feel about it.

NAME: \_\_\_\_\_ PROJECT NUMBER: \_\_\_\_\_

**1. Did you enjoy doing the language games and activities?**

Yes - 33

No - 2

A bit - 5

**Any examples of good ones?**

Most of them

All of them

The ones I cut with glue and scissors

Point to the picture

Word web - 2

Ask questions e.g. 'am I...?'

Got to guess it

Headbanz - 4

Naming ones

One minute to say what an object is - 2

Odd one out - 2

Rhyme stuff

Numbers

Lining up instructions [comprehension monitoring?]

Don't fidget

Spot the difference

Pictures - colouring - 2

Listening to stories

Bingo one

Snap - 2  
Treasure  
Mazes  
Pirate game  
Picture ones  
Pluto [?]

**2. Do you think they helped you at all?**

Yes - 32    No - 2    A bit - 4    Don't know - 1    Other - 1

**Any examples?**

All of them  
To pronounce them properly

Helped not to fidget  
Helped to listen  
Drama about listening [?]  
Listening  
Repeat it so I can say it

Words  
Go back and think about what was done if stuck with language  
Headbanz  
Names on cards

Knowing before / after & is /are

Classwork  
Reading - 3  
Writing - 2  
Spelling  
Playing  
Numbers

By looking at the picture  
Picture ones

**3. Was there anything you didn't like?**

Yes - 9

No - 27

Other (not done a lot) - 1

**Any examples?**

Nouns - language nouns, odd one out (found this hard)

Word game

All the same

Shapes one (too many)

Reading - didn't like being alone - better in a group

Pictures where you had to say what they were doing

Language, reading, hard work

Maths

Silly sentences

Word shark [?]

**APPENDIX IV (iii)**

**Parent Pre Intervention Questionnaire**

Child	Under- standing Total	Under- standing Mean	Speech Total	Speech Mean	Spoken Language Total	Spoken Language Mean	Using Language Total	Using Language Mean	Literacy Total	Literacy Mean	General Behaviour Total
2	17	2.833	7	2.333	17	2.429	14	2.8	7	1.75	15
3	18	3	9	3	22	3.143	18	3.6	13	3.25	24
6	22	3.667	14	4.667	32	4.571	24	4.8	16	4	27
8	19	3.167	12	4	22	3.143	16	3.2	17	4.25	18
20	13	2.167	5	1.667	13	1.857	10	2	9	3	15
24	4	2	9	3	15	3	13	2.6	6	1.5	4
26	12	2	5	1.667	13	1.857	10	2	9	2.25	10
28	7	1.167	3	1	7	1	5	1	5	1.25	7
32	18	3	6	2	13	1.857	10	2	10	2.5	16
33	4	1.333	1	1	4	1	3	1	2	1	3
38	3	1	2	2	2	1	7	1.75	4	1	8
39	24	3	10	3.333	36	3.6	22	3.667	23	3.833	21
42	15	2.5	7	2.333	17	2.429	16	3.2	12	3	16

**Parent Post Intervention Questionnaire**

Child	Under- standing Total	Under- standing Mean	Speech Total	Speech Mean	Spoken Language Total	Spoken Language Mean	Using Language Total	Using Language Mean	Literacy Total	Literacy Mean	General Behaviour Total	General Behaviour Mean
2	19	3.167	8	2.667	12	2	14	2.8	6	1.5	16	2.667
3	18	3	11	3.667	26	3.714	19	3.8	10	2.5	15	3
6	16	2.667	7	2.333	15	3	19	3.8	9	2.25	23	3.833
8	20	3.333	10	3.333	22	3.143	17	3.4	16	4	24	4
20	23	3.833	10	3.333	23	3.286	16	3.2	20	5	23	3.833
24	6	3	9	3	21	3	15	3	8	2	6	3
26	18	3	8	2.667	24	3.429	15	3	12	3	20	3.333
28	11	1.833	8	2.667	8	1.143	11	1.833	6	1.5	7	1.75
32	18	3	3	1	12	1.71	11	2.2	13	3.25	17	2.833
33	12	2	2	2	8	2	10	2	7	1.75	7	2.333
38	21	3.5	12	4	25	3.571	15	3	11	2.75	15	2.5
39	9	2.25	8	2.667	23	3.29	16	3.2	10	2.5	-	-
42	27	4.5	13	4.333	29	4.143	25	5	17	4.25	22	3.667

Notes: Only data where both pre and post intervention information was received have been included  
This data is taken from the six language areas covered in detail in the questionnaire (see following page)

**A SURVEY AND COHORT INTERVENTION USING INDIRECT SPEECH AND LANGUAGE THERAPY FOR CHILDREN WITH PRIMARY LANGUAGE IMPAIRMENT IN SCHOOLS.**

**THE WoSRaD PARTNERSHIP TRUSTS SURVEY**

**INTRODUCTION**

SLT services within the WoSRaD Partnership were surveyed to address four research questions:

- 1- How are SLT services delivered to primary-school aged children with language impairments across the Partnership Trusts?**
- 2- What service development plans exist amongst SLT services in the Partnership Trusts to meet the needs of primary-school aged children with language impairments?**
- 3- What opinions do SLT services in the Partnership Trusts hold about the collaborative cohort intervention programme, and how it could be improved?**
- 4- What are the implications of the collaborative cohort intervention programme for SLT services and local authorities?**

To investigate these questions a questionnaire 'The Partnership Trusts Survey' was developed with advice from an honorary consultant SLT, Kate MacKinnon, who had extensive experience in running SLT services for school-aged children with language impairment in a neighbouring, non-WoSraD trust. Lindsay and Dockrell (2002) note that a variety of terms are used in practice to identify children with language impairments. A working definition of the children in focus was therefore given. Service provision and development plans were explored in Part A under systems headings previously used to investigate SLT service delivery in schools (McCartney, MacKay et al. 1998; McCartney 1999), requesting information on SLT services' Aims and Policies (functions), Structures and Processes. In Part B an outline of the intervention study was given, and comments on perceived advantages and disadvantages of this model requested.

Ethics permission to undertake the survey was sought via the NHS Central Office for Research Ethics Committees (COREC: Ref. MREC 03.8/101) and forwarded by them to the North West Multi-Centre Research Ethics Committee, who considered that the survey did not require approval from an NHS research ethics committee. It was sent by e-mail as planned in December 2003 to managers of the then five WoSRaD partnership trusts with paediatric SLT services (Ayrshire and Arran; Forth Valley; Lanarkshire; Lomond & Argyll and Renfrewshire & Inverclyde. Since on April 1<sup>st</sup> 2004 Lomond & Argyll and Renfrewshire & Inverclyde have merged into one trust, Argyll & Clyde.) Responses were received from all



five managers. Forth Valley was involved in running the intervention study, and so responded to Part A only.

There is no one-to-one correspondence between NHS trusts and Education Authorities (EAs), and each trust SLT manager dealt with more than one EA. Ayrshire and Arran dealt with three (North Ayrshire, South Ayrshire, and East Ayrshire); Forth Valley also with three (Clackmannanshire, Falkirk and Stirling); Lanarkshire with two (North Lanark and South Lanark); Lomond & Argyll with two (Argyll & Bute and West Dunbartonshire) and Renfrewshire & Inverclyde with three (part of East Renfrewshire, Renfrewshire and Inverclyde).

Responses are collated under question number and by principal research question. In view of the low number of respondents surveyed, and the fact that respondents answered each question and often gave additional comments, each response and all comment has been listed. Square brackets [ ] are used when a researcher's interpretation of ambiguity is offered. Interpretation of responses appears in the Discussion section.

## **RESPONSES TO PART A- Five respondents**

### **1- How SLT services are delivered to primary-school aged children with language impairments across the Partnership Trusts.**

#### **Aims and Policies**

**Question 1** Do you have written policies that encompass service delivery principles for the children in focus? *(Please attach or send documents if possible).*

Two trusts attached copies of written policies, one reporting that there were inconsistencies across the Trust and variation due to working across two EAs and eight Local Health Care Co-operatives (LHCCs: a local level of management structure).

Of the three trusts who did not report policies, one noted that where similar children were in language units documentation existed, and one that some aspects of service delivery were captured by general paediatric policies.

**Question 2** Do you have written policies that encompass assessment of the children in focus? *(Please attach or send documents if possible).*

No trust reported such policies, although some of the written policies forwarded mentioned general policies on assessment.

**Question 3** Do you have written policies that encompass joint working between SLTs and mainstream schools that would include these children? *(Please attach or send documents if possible).*

Four trusts had written policies: three attached copies and the fourth noted that their policy was being updated.

**Question 4** Are there policies that suggest when a particular model of intervention might be used?

Only one trust responded 'yes', saying that their policies (not forwarded) for all children could apply to the children in focus. One responding 'No' commented that in forwarded documents about 'Working Together', constructed by health and education staff, the model of intervention would be mutually agreed to best meet the needs of each individual child.

**Question 5** Is your service involved when your local Education Authority or Authorities construct(s) their service development plans?

Two trusts reported that their service was involved. One of these reported separate meetings between SLT services and the respective Education Officers in the two EAs involved.

Two trusts reported that their service was not involved. One reported that they added to or commented upon Children's Plans for each EA after these had been produced, and the other that they would like to be and should be involved.

The fifth manager was unclear about involvement from past arrangements, but reported that regular meetings were now scheduled whereby they would be aware of service developments. They were unsure however if there would be any discussion prior to plans being announced.

**Question 6** Do you think that the new Education (Additional Support for Learning) (Scotland) Bill will change how your service works with the children in focus? **6a** If so how and why?

Trusts were not certain what would happen. One thought there would be no change 'unless resources come into it', and one was not sure. A third thought there would be change, saying they could not specify in advance just how, but that but parental expectations would be recognised, and it was likely that all children with language disorder would require [the new] co-ordinated support plan. One trust anticipated increased collaboration, liaison and documentation. The last also mentioned inclusion, but as potentially problematic, responding yes 'due to inclusion. Not sure, as we try to deliver a service based on the child's risk and clinical needs. In one LA children who have SLI would have attended the language unit but will not in the future due to inclusion. This is a concern for our service.'

**Question 7** How do education and SLT services join together to decide how SLT services are delivered to the children in focus? *(Please give details or forward documents if possible).*

One Trust noted decisions would be on an individual [child] basis, and the others reported meetings. One noted regular monitoring meetings, but that the children in focus were not a

high priority for education. Another listed SLT meetings with Education Officers and Core Group or Admission Panel meetings, and meetings about Records of Need and Individual Education Plans (IEPs). In a fourth the head of SLT met with the Education Head of Service and Principal Educational Psychologist in one EA, with less frequent meeting taking place in their other EA. The fifth Trust had three-monthly meetings.

**Structures: (Responses to questions 9 –15)**

**Question 9** Please state how many SLTs (FTE) in your Trust provide services in any setting to the children in focus, as all or part of their caseload.

One trust said 14, another 15.6 SLTs for all paediatric services. A third said 5.1, but that the number was difficult to specify: they had calculated the number of peripatetic sessions provided to mainstream primary schools, which in the main would cover the children in focus. One could not quantify, noting 'the children in focus defined by the project is a very small group. More profound/severe difficulties are sometimes seen with specialist provision'. One Trust was unable to pull statistics for the whole service.

**Question 10** Is there an SLT with a specialist remit for the children in focus?

Four trusts had such an SLT and the fifth reported that there were 2.4 WTE staff based at a language unit who were more specialist in this area, but that all paediatric staff had children with specific language impairment on their caseload.

One specialist SLT whose remit included the children in focus worked also with children with autistic spectrum disorders. One respondent noted that not all LHCCs had a specialist, and another was also referring to an SLT based in a specific language unit who did not have a remit for the whole of the trust area.

**Question 11** Are there inter-agency (health and education) structures such as committees or working groups to organise services that would encompass the children in focus?

Four trusts reported inter-agency structures. One referred again to meetings with Education Officers, Core Group and Admission Panel meetings, and Record of Needs and IEP meetings as detailed in response to Question 7. These were held in the main to discuss contracts, developments and placements. Two other trusts agreed there were inter-agency structures, but these had problems. One noted that SLTs had no access to existing structures, and the other that 'despite good relationships SLT is perceived as secondary to education, e.g. decisions are made and then SLT [services] are invited to comment, rather than joint planning'.

**Question 12** Please mark all models of service delivery that are at times offered to the children in focus:

a direct therapy via an SLT to individual focus children:

- b indirect therapy via an SLT assistant to individual focus children:
- c indirect therapy via education staff (class teacher and/or classroom assistant) to individual focus children:
- d direct therapy via an SLT to focus children in groups:
- e indirect therapy via an SLT assistant to focus children in groups:
- f indirect therapy via education staff (class teacher and/or classroom assistant) to focus children in groups.

All marked a, c and d; four marked f; three marked b and two e. All used a range of service delivery types, marking either four or six different models.

**Question 13** If several models are available in your service, how is it decided which to use?

Decisions on which model to use were based in three trusts on individual child factors and SLT decision-making. One listed consideration being given to [a child's] 'individual stage of development, age, etc., [and the] school and staff involved would also colour [the SLT's] judgement'. Another also specified assessment of individual needs and context, and the third listed SLT choice, time available and caseload numbers as relevant factors. A fourth used a collaborative approach noting 'SLT targets are (should be) integrated into IEPs. After an episode of care targets are reviewed and changed accordingly, as is input. [The] decision is generally made by SLT on the basis of their needs assessment of each child and [the] whole team (and parents) are involved in the process.' The last trust said there was no clarity or consistency at present.

**Question 14** Have you developed school-based service level agreements about SLT work with the children in focus? If school-based service level agreements exist, how are these audited?

Three trusts had such agreements : two had not and made no further comments. One of the three with agreements said they covered all children involved with SLT, not just the children in focus. This trust audited via Education Officers and the SLT manager. Another reported that agreements did not cover all LHCCs and the third that they were flexible to the needs of each school as described in their joint education/health 'Working Together' document and 'School Agreement Form' (both forwarded). This trust sent three questionnaires in May of each year to be completed by parents, the school and the SLT to audit the service.

**Question 15** Is there opportunity for joint in-service training for teachers and SLTs?

Opportunities for joint in-service training for teachers and SLTs also varied. One trust reported no opportunities, and one wrote 'very rarely. Sometimes SLTs are invited to training organised in education and we often deliver training to teachers.' The other three responded yes. One noted opportunities were mainly with one EA, and another commented there were opportunities on in-service days. Their SLT service had arranged joint in-service training across one EA about four years ago', and there had been requests to repeat this.

**Question 16** Are there any further inter-agency structures you would like to see set up? Please explain.

All managers made comments. One noted that with three EAs they found it difficult to maintain existing structures, which would be 'OK if meetings were not cancelled, changed etc.'. Two wanted more opportunity for joint in-service work, one specifying continuing professional development and working with education networks. A fourth wanted 'grass-roots planning and formalised links with [the] EA training department' and the fifth also wanted changes in the decision making process, writing 'the strategic structures often do not involve the right people. I would like integrated/joint funding and equality for decision-making'.

**Processes: (Responses to questions 18 –22)**

**Question 18** When a referral is received, is it routine practice to carry out at least part of the assessment in school?

Three trusts routinely carried out at least part of the child's assessment in school on referral, although one of these indicated that this was not the case across the whole trust, and in some LHCCs all of the assessment was done in clinic. A fourth trust commented that in-school assessment was not routine, but that it would be considered to be good practice if issues about the child's school performance- and/or literacy were raised.

**Question 19** Do you routinely collect information about literacy attainments of the children in focus?

Two trusts routinely collected this information, and it was collected if literacy difficulty was suspected or part of the reason for referral in a third. Practice was again variable in a fourth trust, where most LHCCs did not collect such information but one did. In the fifth trust it would be an individually based decision.

**Question 20** Is the child's IEP normally the focus for therapy planning?

Where a child's IEP existed it was normally the focus for therapy planning in one trust, but it was noted in another that few of the children in focus had an IEP. A third agreed it would be the planning focus but other SLT targets could be added. A fourth trust said the IEP would be the focus 'from the SLT point of view. Depending on schools and personalities, SLTs are not always invited to IEP planning or given access to IEPs.' The last trust said no.

**Question 21** Are school staff such as learning support staff or class teachers routinely involved in therapy planning?

This question was answered by 'no' in three trusts, one of which wrote '[I] don't think they should be - it is our job'. Another said that where it was important it was done within

available resources and prioritisation for the child, and the last that it took place only in a specific language unit.

The two trusts responding 'yes' indicated that practice was not entirely pervasive, one noting that it again varied across the trust area, and the other that it was done 'regularly but perhaps not routinely in all localities/ schools'.

**Question 22** Is the child's parent formally involved in therapy planning?

The child's parent was formally involved in therapy planning in three trusts, two noting that parents did not always take up the offer, or that not all parents got involved formally. Parental involvement was being developed through a 'care aims' approach in the third trust.

One of the trusts replying 'no' mentioned that parents were informed that children were receiving the service, and that some LHCCs used therapy agreements that involved parents agreeing the aims of therapy.

**Further comments: (Responses to question 23)**

**Question 23** Have you any further comments on therapy planning or intervention?

Three trusts responded. One commented 'we feel it is important to note that the children in focus (as defined by the project criteria) do not constitute a homogeneous group in terms of policies and provision. They are often covered by general policies relating to all children in terms of paediatric guidelines. More policies relate to children with specific language impairment, and this group is of considerably greater concern to this department. The 'children in focus' doesn't really capture the group of children which this service is most concerned about.'

Another said 'in general some aspects of inclusion concern our service when a language unit model has been so successful for many years. Reduced clinical effectiveness is a concern and staffing/resources could always be improved.'

The third wrote 'it needs [much more] work. We are currently undergoing a review of mainstream support [SLT] service'.

**2 Service development plans in the Partnership Trusts to meet the needs of primary-school aged children with language impairments.**

**Aims and Policies: (Responses to question 8)**

**Question 8** Are there plans to change or develop policies that encompass the children in focus, or on working with education? If so how and why?

Three trusts were changing or developing policies. One was involved with two EAs, reviewing and developing how they worked with education. A second stated that they were increasing collaborative working and joint training was being discussed. The third was less optimistic, noting that the developments being undertaken were 'not necessarily positive for the children in focus. The EA have made the decision that (SLI) children will be included in mainstream and SLT have concerns that the knowledge and competence of all staff working with these children will not be adequate. [This will involve] huge issues, e.g. training and support of [education] staff, slower progress due to less intensive input and a less robust collaborative model.'

### **Structures: (Responses to question 17)**

**Question 17** Are there plans to change or develop structures for the children in focus or for working with education? If so how and why?

One trust said that there were plans to develop structures, not just for the children in the study, but working with the learning support department to use both [SLT and education] resources more effectively.

### **RESPONSES TO PART B - Four respondents**

**3 The opinions of SLT services in the Partnership Trusts about the collaborative cohort intervention programme and how it could be improved.**

### **Opinions on the cohort intervention programme: (Responses to questions 24 – 28)**

**Question 24** Is this model used at all in your service?

One said 'yes', one 'no', one 'no, unless a Special Educational Needs auxiliary was employed to support a child and carry out the responsibilities'; and one that it was not used routinely but may be used for individual children.

**Question 25** Please list three potential advantages of this model.

No hierarchy was implied amongst the three, so all responses are listed below, grouped where similar comments were received. One SLT gave two advantages, but noted as the third a 'general feeling that any advantages would be outweighed by the disadvantages'. This comment has been omitted from the list, giving 11 in total:

**Potential advantages:**

- [therapy] integrated into child's school;
- opportunities for child to generalise learning into different situations;
- classroom/curriculum specific for child;
  
- teacher and assistant have increased understanding of language and vocabulary development;
- others could use processes, with a gain for similar children;
  
- emphasis on school to implement SLT aims therefore recognition of SLT role;
- increased understanding of role of SLT
- true partnership/collaborative working with mutual understanding and respect of the different roles and responsibilities i.e. true team work;
  
- good use of resources
- frees up SLT time to assess and plan for more children
- allows SLT to use knowledge and skills to maximise potential while allowing others to carry out the tasks.

**Question 26** Please list three potential disadvantages of this model.

Twelve comments were received, grouped as before by similar content.

**Potential disadvantages:**

- it is dependant on the co-operation of education staff and they would need time allocated over and above their normal duties to reinforce the SLT aims;
- education staff may not be keen to undertake what is still seen as SLTs' work;
  
- there may not be good enough communication between SLT and teacher;
- [SLTs would be] unsure what teachers and classroom assistant had learned from the [joint] discussion;
- Each teacher/assistant may well have very different levels of skills with this group of children;
- there is no way of knowing if the application of materials is correct/appropriate;
- SLTs are not on site to monitor and adapt targets, leading to a de-skilling of SLT by acting in an advisory capacity;
- targets may be changed without consultation of the SLT;
  
- keeping in touch by email/telephone might prove problematic;
- logistics/practicalities of email/phone contact due to lack of IT and confidentiality;
  
- therapists may fear loss of control;
  
- parents (at present) often don't accept this as a useful model of interventions (i.e. demanding face to face)[therapy].



#### **4 The implications of the collaborative cohort intervention programme for SLT services and local authorities.**

**Question 27** What would be needed to introduce such a model of delivery in your service?

The following list of comments was collated from the four trusts that responded:

- enthusiasm of all parties;
- more SLTs, teachers, computers and joint training;
- strategic agreement between SLT/teacher, accepting this [model] as part of their role and accepting a consultancy SLT model. Research/evidence of effectiveness being available;
- evidence that the model was effective. Would it be effective with different grades of therapist input? Agreement with EA.

**Question 28** Have you any other comments you would like to make on the intervention?

The following list of comments was collated from the three trusts that responded:

- it would require an unrealistic unless increase in staffing. It is too weighted to SLTs as advisers. Would it not be better to use SLT assistants?
- [I] would welcome it and look forward to the outcome of the research.
- it may be difficult in a service that has 52 schools to cover. The quality of input from teacher/assistant would be difficult to evaluate. The receptive nature of education staff may be variable. There are questions about parent choice. It is a 'one service fits all approach' which is perhaps not philosophy being promoted by Education and NHS. It requires much input in in-service training and transferring skills.

### **DISCUSSION**

Much useful information was gained about practice across the WoSRaD trusts. This is discussed in relation to the research questions.

#### **Part A**

##### **1- How are SLT services delivered to primary-school aged children with language impairments across the Partnership Trusts?**

There was evidence of ongoing detailed policy development, to effect 'joined up thinking' amongst health and education services at a local level, whilst still allowing room for individual flexibility. There was at least consultation about service development plans, if not always in advance, in line with national policies on good practice (cf. SOEID 1998 @A4 p 34). There were uncertainties about the effects of new legislation on SLT services, and

concerns in one trust about the potential effects of inclusive policies in diluting expertise and the skill base available to children. It was routine to discuss individual children in depth.

Structures to support policies had been developed. Relatively small numbers of SLTs are in post (and cf. Scottish Executive (2003)), and figures were difficult to collate. Specialist SLTs were available in each trust, who could presumably be called upon for advice. Inter-agency structures were in place to organise services, although not always working well. A wide variety of service delivery models was used, varying according to the employment of SLT assistants, determined by individual child factors in the main. Only one trust explicitly mentioned collaborative decision-making. The existence of school based service level agreements varied, but where these were used examples of good audit procedures were in place. Opportunities for joint in-service training were however limited, and more would have been welcome.

The processes of working with children involved schools with literacy attainments and IEP targets frequently, but not uniformly, noted. Joint planning was however not routine, and parental involvement in planning was also varied across trusts.

## **2- What service development plans exist amongst SLT services in the Partnership Trusts to meet the needs of primary-school aged children with language impairments?**

Where policies and structures had not been developed, there were plans to do so, and to further knit SLT and Education services together.

### **Conclusions: Part A**

The overall picture therefore is of sustained and developing inter-agency approaches, and with respondents clear where further improvements are needed. Partnerships with education are evolving, and are further developed in some trusts, and parts of trusts, than others. There is considerable variation across the WoSRaD Partnership, and also within individual trusts, but much evidence of 'joined-up' practice. Structural issues continue to cause planning limits, and some 'two culture' problems remain.

### **Part B**

## **3- What opinions do SLT services in the Partnership Trusts hold about the collaborative cohort intervention programme, and how it could be improved?**

All trusts reported offering indirect therapy via education staff (Question 12 Model c) to the children in focus, but one trust did not offer the precise model involved in the collaborative cohort intervention programme and one only if there was a classroom assistant to support. There was a fair amount of agreement on potential benefits, with therapy integrated into educational experiences, increasing the understandings of education staff about language and the role of the SLT and efficient use of time and resources. The problems foreseen were

around probable inconsistency in educational staff's availability and willingness to undertake activities, and in their skill in doing so. SLTs would be unable to monitor closely what was going on, communication might be difficult and SLT control would be lost. An important point was the perception that parents may not find the model acceptable.

#### **4- What are the implications of the collaborative cohort intervention programme for SLT services and local authorities?**

The implications of the model for services centred around the need to resource it properly, with an increase in resources required, and its acceptance by services, based if possible on evidence of effectiveness. However, respondents were not all convinced that enough resources would be forthcoming to adopt this model across all schools and children, or that a consistently good service could be delivered.

#### **Conclusions: Part B**

The model was used and accepted, but it respondents were not confident that the needs of all children could be met this way. Flexibility and individual decisions would be needed, since SLT services could not at present rely on the expertise of school staff to support children in a uniformly excellent manner. These perceptions would influence the model of service delivery, and its acceptance by the SLT field..

#### **REFERENCES**

Lindsay, G. and Dockrell, J. (2002) Educational Provision for Children with Specific speech and Language difficulties in England and Wales: final report. Centre for Educational Development, Appraisal and Research, University of Warwick, Coventry.

McCartney, E. 1999: Speech/language therapists and teachers working together. London: Whurr

McCartney, E., Mackay, G., Cheseldine, S. & McCool, S. (1998). The Development of a Systems Analysis Approach to Small-Scale Educational Evaluation. *Educational Review*, 50, 65 - 73. (ISSN 0013 1911).

Scottish Executive (2003) A Scottish Executive Review of SLT, Physiotherapy and OT for Children, and SLT for Adults with Learning Difficulties and Autistic Spectrum Disorder, 2003. The Scottish Executive, Edinburgh

Scottish Office Education and Industry Department (SOEID), 1998, Professional Practice in Meeting special Educational Needs (the Manual of Good Practice). Scottish Office Education and Industry Department, Edinburgh