



Speech and Language Baseline Measures North Stoke Sure Start

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Prepared by: Joanne Baddley, Speech and Language Therapist,
Newcastle-under-Lyme PCT and,
Michael Convey, Monitoring and Data Analysis Officer,
Stoke Speaks Out

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1) Executive Summary

The second assessment of the speech and language ability of children in the North Stoke Sure Start area has demonstrated that there has been a change in the levels of delay found in children. It can also be seen that because the 2001 assessment was the trailblazer for all the assessments conducted in Stoke-on-Trent that the 2004 assessment is a more realistic baseline.

The key findings are:

- A decrease, by 1 percentage point, of children with comprehension and word finding delay within normal limits has been found.
- 30% of children in 2004 have language ability within normal limits, compared to 31% in 2001.
- The incidence of speech delay in the Stoke North Sure Start area was observed during the assessments. Including these observations demonstrates that in 2001 78% of children had a delay in comprehension, word finding or speech. In 2004 this figure had fallen to 70%, an improvement of 8 percentage points.
- The incidence of comprehension delay has fell by 5 percentage points from 55% in 2001 to 50% in 2004.
- The incidence of word finding delay has remained unchanged between 2001 and 2004 at 64%.
- The incidence of either comprehension or word finding delay has increased by 1 percentage point from 69% in 2001 to 70% in 2004.
- The observed incidence of speech delay has increased from 18% in 2001 to 24% in 2004.
- 36% of children who spoke English as their first language were within normal limits in 2004. An increase by 4 percentage points from the 32% found in 2001.

North Stoke Sure Start has made improvements in some areas of speech and language. Further work is needed to ensure that improvement is found in all areas and that the Sure Start target of a 5 percentage point reduction in the number of children requiring specialist intervention is achieved.

2) Introduction

In the year 2000 Sure Start set a national target to reduce, by 5 percentage points, by 2004, the number of children with speech and language problems requiring specialist intervention.

The drive behind reducing the number of children requiring specialist intervention from Speech and Language Therapists is to raise educational and social aspirations and abilities of children.

In Stoke-on-Trent the initial survey was carried out in the Stoke North Sure Start Area in 2001. This survey was used as a model for all those in Stoke-on-Trent which took place after it. In 2005 the survey was repeated to establish if there had been a reduction in the number of children requiring specialist intervention.

It had been recognised, by 2000, that there was an underlying 10% of children who had a need for speech and language therapy (Law, 2000) due to genetic or medical issues. This is significant as it establishes a minimum level of children who would be requiring specialist intervention.

Also of concern in Stoke-on-Trent is the high level of deprivation. That is, Locke and Peers (2002) demonstrated that children from an economically deprived background could be at considerable risk of language delay. This is significant for Stoke-on-Trent which, in 2004, was ranked as the 18th most deprived local authority out of 354, nationally (Office for National Statistics).

The consequences of Law's and Locke and Peers' work for the North Stoke Sure Start Speech and Language Baseline Measure are enormous. That is, the closer the number of children who are within normal limits is to 90% the better the support and assistance given to children is. This is important given that the 2001 figure for children who were within normal limits for comprehension and word finding ability was 31%. This means that if an improvement to 36% of children within normal limits for either comprehension or word finding delay in the North Stoke Sure Start area is gained then the programme has achieved a 5 percentage point improvement.

The 2004 survey was carried out in eight settings: Burnwood Primary School, Jackfield Infants' School, Mill Hill Primary School, Norton Primary School, St Mary's CE (A) Primary School (Tunstall), St Wilfrid's Catholic Primary School, Summerbank Primary School and Whitfield Valley Primary School.

St Mary's Catholic Primary School (Norton) took part in the 2001 assessment but not in the 2004 survey. Stanfields Nursery which participated in the 2001 survey did not do so in 2004 as the nursery had closed.

3) Assessment Methods

The assessment methodology was consistent in each of the eight settings.

All assessments were carried out on children aged no younger than three years and six months and no older than four years. The assessments were carried out on children who:

- Lived in the North Stoke Sure Start Programme geographical area, and
- Attended a nursery setting that fell in the geographical footprint of the North Stoke Sure Start Programme.

Parental permission was gained for all children who took part in the surveys.

The surveys were all carried out in the first term of the academic year. This is because it is suspected that spending time in a nursery setting helps a child to develop speech and language ability (Cooper, 2002).

Two tests were used to assess the language ability of children:

- The Reynell Developmental Language Scales 3 Comprehension scale was used to assess comprehension levels.
- The Renfrew Word Finding Vocabulary Scale was used to assess vocabulary levels.

These tests are able to assess a child's ability to understand language and look at expressive vocabulary.

The Reynell Developmental Language Scales 3 Comprehension scale and Renfrew Word Finding Vocabulary Scale were used in the initial baseline study in 2001. This means that the results of the two studies are comparable.

The assessment carried out in 2001 initially included the Edinburgh Articulation Test to survey children's speech ability. The Edinburgh Articulation Test was dropped from the baseline assessments after being attempted in two settings. This was because "*...many of the children did not have the vocabulary to name the pictures spontaneously*" (Cooper, 2002).

Observations of children's speech ability were recorded, though, and the clinical judgement of the Speech and Language Therapist conducting the assessments was recorded in both the 2001 and 2004 assessments. The results of these observations are included in the results but cannot be used to determine an actual movement in ability as they are non-standardised assessments. They can, however, be used to demonstrate, in the view of the Speech and Language Therapist responsible for conducting the assessments, that change in the area of speech ability has been made.

4) Results and Analysis

4.1) Results of 2004 Survey

4.1.1) Anonymity

The results show the findings from each of the eight settings without reference to either the school name or children's name. This is to conserve confidentiality.

4.1.2) Setting 1

Setting 1 had an intake of 54 children, of whom 22 fitted the criteria for assessment. Of the 22 children assessed, eleven were boys and eleven were girl. No translators were required as all children spoke English as their first language. The results of the assessment are held in Table 1.

This results table and all that hold the same results includes the standardised comprehension and word finding results as well as the observations of speech made by the Speech and Language Therapist conducting the survey.

Child	Actual Age	Comprehension	Word Finding	Speech	1 st Language
F1	3;11	Delay	Delay	WNL	English
F2	3;10	Delay	Delay	WNL	English
M3	3;10	WNL	Delay	Delay	English
M4	3;08	WNL	WNL	WNL	English
M5	3;08	Delay	WNL	WNL	English
F6	3;09	Delay	Delay	WNL	English
M7	3;10	WNL	Delay	WNL	English
M8	3;07	Delay	Delay	WNL	English
F9	3;06	Delay	Delay	Delay	English
F10	3;11	WNL	No Response	Delay	English
F11	3;10	WNL	Delay	WNL	English
F12	3;11	Delay	Delay	WNL	English
F13	3;11	WNL	Delay	Delay	English
M14	3;11	WNL	Delay	WNL	English
M15	3;10	Delay	Delay	WNL	English
F16	3;11	WNL	WNL	WNL	English
F17	3;08	WNL	WNL	WNL	English
M18	3;08	Delay	Delay	WNL	English
M19	3;08	Delay	Delay	Delay	English
M20	3;07	Delay	Delay	Delay	English
M21	3;08	Delay	Delay	Delay	English
F22	3;11	Delay	Delay	Delay	English

Table 1 - 2004 Survey results from Setting 1

NB

WNL = Within Normal Limits

M = Boy

F = Girl

The results from Setting 1 are summarised in Table 2.

	Number	Percent
Intake assessed	22	41%
Boys	11	50%
Girls	11	50%
Comprehension delay	13	59%
Word Finding delay	17	77%
Comprehension or Word Finding delay	18	82%
Speech Delay	8	36%
Comprehension, Word Finding or Speech Delay	19	86%

Table 2 – Summary of results from Setting 1

4.1.3) Setting 2

Setting 2 had 26 eligible children from an intake of 50. Thirteen of the 26 children were assessed. The thirteen children who were not assessed were absent on the assessment days. Of the thirteen children assessed five were boys and eight were girls. No translators were required at Setting 2 as all children spoke English. Table 3 holds the results from Setting 2.

Child	Actual Age	Comprehension	Word Finding	Speech	1 st Language
M1	3;07	Delay	Delay	Delay	English
M2	3;10	WNL	WNL	WNL	English
F3	3;07	Would not cooperate	Delay	WNL	English
F4	3;08	WNL	WNL	WNL	English
M5	3;09	Delay	Delay	Delay	English
F6	3;11	WNL	Delay	WNL	English
F7	3;08	WNL	WNL	WNL	English
F8	3;08	Delay	Delay	Delay	English
F9	3;07	WNL	Delay	WNL	English
M10	3;07	WNL	WNL	WNL	English
F11	3;08	WNL	WNL	WNL	English
F12	3;07	WNL	Delay	WNL	English
M13	3;09	Delay	Delay	WNL	English

Table 3 – 2004 Survey results from Setting 2

The summary of the thirteen children assessed in Setting 2 is held in Table 4.

	Number	Percent
Intake assessed	13	26%
Boys	5	38%
Girls	8	62%
Comprehension delay	4	31%
Word Finding delay	8	62%
Comprehension or Word Finding delay	8	62%
Speech Delay	3	23%
Comprehension, Word Finding or Speech Delay	8	62%

Table 4 – Summary of results from Setting 2

4.1.4) Setting 3

Setting 3 had an intake of 48 children of which eighteen matched the criteria for assessment. Of these eighteen children nine were boys and nine were girls. Five of the children assessed were bilingual. The translation needed for Setting 3 was provided locally through North Stoke PCT. Table 5 holds their results.

Child	Actual Age	Comprehension	Word Finding	Speech	1 st Language
M1	3;07	Delay	Delay	WNL	English
F2	3;07	WNL	WNL	WNL	English
M3	3;06	Delay	Delay	Delay	English
M4	3;11	Delay	Delay	Delay	English
M5	3;06	WNL	WNL	WNL	English
M6	3;08	Delay	WNL	WNL	English
F7	3;07	WNL	Delay	WNL	English
M8	3;10	WNL	WNL	WNL	English
F9	3;11	WNL	WNL	WNL	English
M10	3;07	WNL	Delay	WNL	English
M11	3;07	Delay	Delay	Delay	English
F12	3;09	Delay	Delay	WNL	Punjabi
F13	3;06	Delay	Delay	WNL	Punjabi
M14	3;06	Delay	Delay	WNL	Punjabi
F15	3;11	Delay	Delay	WNL	Punjabi
F16	3;11	WNL	Delay	WNL	English
F17	3;10	WNL	Delay	WNL	English
F18	3;06	Delay	Delay	WNL	Punjabi

Table 5 – 2004 Survey results from Setting 3

Table 6 holds a summary of the results gained from the eighteen children assessed at Setting 3.

	Number	Percent
Intake assessed	18	38%
Boys	9	50%
Girls	9	50%
Comprehension delay	10	56%
Word Finding delay	13	72%
Comprehension or Word Finding delay	14	78%
Speech Delay	3	17%
Comprehension, Word Finding or Speech Delay	14	78%

Table 6 – Summary of results from Setting 3

4.1.5) Setting 4

Setting 4 had an intake of 25 children. Nine of these children matched the assessment criteria. Two of the children were boys and seven were girls. No translators were required at Setting 2 as all children spoke English. Table 7 shows the results from Setting 4.

Child	Actual Age	Comprehension	Word Finding	Speech	1 st Language
F1	3;07	WNL	Delay	Delay	English
F2	3;11	WNL	WNL	WNL	English
F3	3;08	WNL	Delay	WNL	English
F4	3;10	Delay	Delay	Delay	English
F5	3;10	WNL	WNL	WNL	English
M6	3;09	Delay	WNL	Delay	English
F7	3;11	Delay	Delay	Delay	English
F8	3;11	WNL	WNL	WNL	English
M9	3;09	WNL	WNL	Delay	English

Table 7 – 2004 Survey results from Setting 4

Table 8 holds a summary of the results gained from the nine children assessed at Setting 4.

	Number	Percent
Intake assessed	9	36%
Boys	2	22%
Girls	7	78%
Comprehension delay	3	33%
Word Finding delay	4	44%
Comprehension or Word Finding delay	5	56%
Speech Delay	5	56%
Comprehension, Word Finding or Speech Delay	6	67%

Table 8 – Summary of results from Setting 4

4.1.6) Setting 5

Setting 5 had an intake of 25 children of which fifteen matched the criteria for assessment. Of these fifteen children nine were boys and six were girls. Four of the children assessed were bilingual. The translation needed for Setting 5 was provided locally through North Stoke PCT. Table 9 holds their results.

Table 10 holds a summary of the results gained from the fifteen children assessed at Setting 5.

Child	Actual Age	Comprehension	Word Finding	Speech	1 st Language
F1	3;10	WNL	WNL	WNL	English
M2	3;11	Delay	Delay	WNL	English
M3	3;07	WNL	WNL	WNL	English
F4	3;06	WNL	WNL	WNL	English
M5	3;10	WNL	WNL	WNL	English
F6	3;07	WNL	Delay	WNL	English
M7	3;11	Delay	Delay	WNL	English
F8	3;08	Delay	Delay	WNL	Punjabi
F9	3;09	WNL	Delay	WNL	English
M10	3;08	Delay	WNL	Delay	English
M11	3;06	Delay	Delay	WNL	English
M12	3;09	WNL	Delay	WNL	English
F13	3;11	Delay	Delay	WNL	Punjabi
M14	3;10	Unable to cooperate	Unable to cooperate	WNL	Punjabi
M15	3;11	Delay	Delay	WNL	Punjabi

Table 9 – 2004 Survey results from Setting 5

	Number	Percent
Intake assessed	15	60%
Boys	9	60%
Girls	6	40%
Comprehension delay	8	53%
Word Finding delay	10	67%
Comprehension or Word Finding delay	11	73%
Speech Delay	1	7%
Comprehension, Word Finding or Speech Delay	11	73%

Table 10 – Summary of results from Setting 5

4.1.7) Setting 6

Setting 6 had an intake of 28 children of which eight matched the criteria for assessment. Of these eight children three were boys and five were girls. All children spoke English as their first language. Table 11 holds their results.

Child	Actual Age	Comprehension	Word Finding	Speech	1 st Language
F1	3;08	WNL	WNL	WNL	English
M2	3;09	WNL	WNL	WNL	English
F3	3;11	Delay	Delay	WNL	English
M4	3;07	Delay	Delay	Delay	English
F5	3;08	WNL	Delay	WNL	English
F6	3;06	WNL	WNL	WNL	English
F7	3;06	WNL	WNL	WNL	English
M8	3;06	WNL	WNL	WNL	English

Table 11 – 2004 Survey results from Setting 6

Table 12 holds a summary of the results gained from the eight children assessed at Setting 6.

	Number	Percent
Intake assessed	8	29%
Boys	3	38%
Girls	5	62%
Comprehension delay	2	25%
Word Finding delay	3	38%
Comprehension or Word Finding delay	3	38%
Speech Delay	1	13%
Comprehension, Word Finding or Speech Delay	3	38%

Table 12 – Summary of results from Setting 6

4.1.8) Setting 7

Setting 7 had an intake of 38 children of which eleven matched the criteria for assessment. Of these eleven children four were boys and seven were girls. Six of the children assessed were bilingual. The translation needed for Setting 5 was provided locally through North Stoke PCT. Table 13 holds their results.

Child	Actual Age	Comprehension	Word Finding	Speech	1 st Language
F1	3;10	Delay	Delay	WNL	Punjabi
M2	3;06	WNL	Delay	Delay	English
F3	3;10	WNL	WNL	WNL	English
M4	3;08	Delay	Delay	Delay	Punjabi
F5	3;06	Delay	Delay	WNL	Punjabi
F6	3;06	Delay	Delay	WNL	Punjabi
F7	3;06	Delay	Delay	WNL	Punjabi
F8	3;08	Delay	Delay	Delay	English
M9	3;11	WNL	WNL	WNL	English
M10	3;10	WNL	WNL	WNL	English
F11	3;08	Delay	Delay	WNL	Punjabi

Table 13 – 2004 Survey results from Setting 7

Table 14 holds a summary of the results gained from the eleven children assessed at Setting 7.

	Number	Percent
Intake assessed	11	29%
Boys	4	36%
Girls	7	64%
Comprehension delay	7	64%
Word Finding delay	8	73%
Comprehension or Word Finding delay	8	73%
Speech Delay	3	27%
Comprehension, Word Finding or Speech Delay	8	73%

Table 14 – Summary of results from Setting 7

4.1.9) Setting 8

Setting 8 had an intake of 28 children of which nine matched the criteria for assessment. Of these nine children four were boys and five were girls. All children spoke English as their first language. Table 15 holds their results.

Child	Actual Age	Comprehension	Word Finding	Speech	1 st Language
M1	3;11	WNL	WNL	WNL	English
F2	3;06	Delay	Delay	Delay	English
F3	3;09	Delay	Delay	WNL	English
F4	3;11	Delay	Delay	WNL	English
M5	3;09	Delay	Delay	WNL	English
F6	3;06	WNL	WNL	WNL	English
M7	3;11	WNL	WNL	WNL	English
F8	3;11	WNL	WNL	WNL	English
M9	3;08	Delay	WNL	WNL	English

Table 15 - 2004 Survey results from Setting 8

Table 16 holds a summary of the results gained from the nine children assessed at Setting 8.

	Number	Percent
Intake assessed	9	32%
Boys	4	44%
Girls	5	56%
Comprehension delay	5	56%
Word Finding delay	4	44%
Comprehension or Word Finding delay	5	56%
Speech Delay	1	11%
Comprehension, Word Finding or Speech Delay	5	56%

Table 16 - Summary of results from Setting 8

4.1.10.1) Analysis

The eight settings have different requirements for specialist help. The collective results are held in Table 17.

	Number	Percent
Intake assessed	105	35%
Boys	47	45%
Girls	58	55%
Comprehension delay	52	50%
Word Finding delay	67	64%
Comprehension or Word Finding delay	74	70%
Speech Delay	25	24%
Comprehension, Word Finding or Speech Delay	74	70%

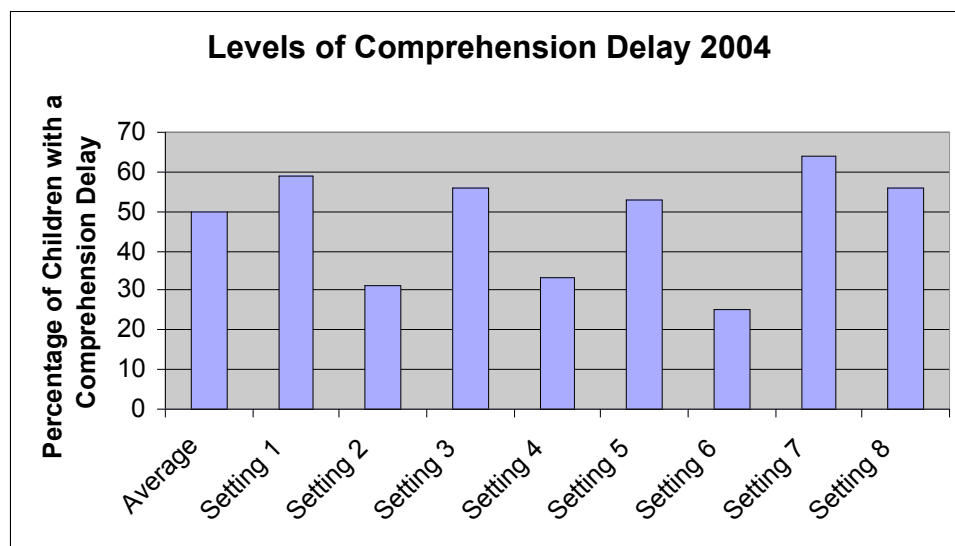
Table 17 - Summary of results from all eight Settings

32 children were identified as being 'Within Normal Limits'. Of these fourteen were boys and eighteen were girls. Within the population this means that 31% of the surveyed children displayed the comprehension and word finding ability that is consistent with their age. These figures also show that 30% of the boys and 31% of the girls were within normal limits.

4.1.10.2) *Comprehension Delay*

Fifty-two children were identified as having a comprehension delay. Graph 1 shows how the eight settings compare against each other and against the average.

The graph shows that the eight settings have varying scores. Five of the eight settings have scores above average. The three settings which have below average scores all have much lower scores with the closest to average being 17% below the average of 50%. This demonstrates that in the settings where children had below the average level of comprehension delay that it was significantly below.

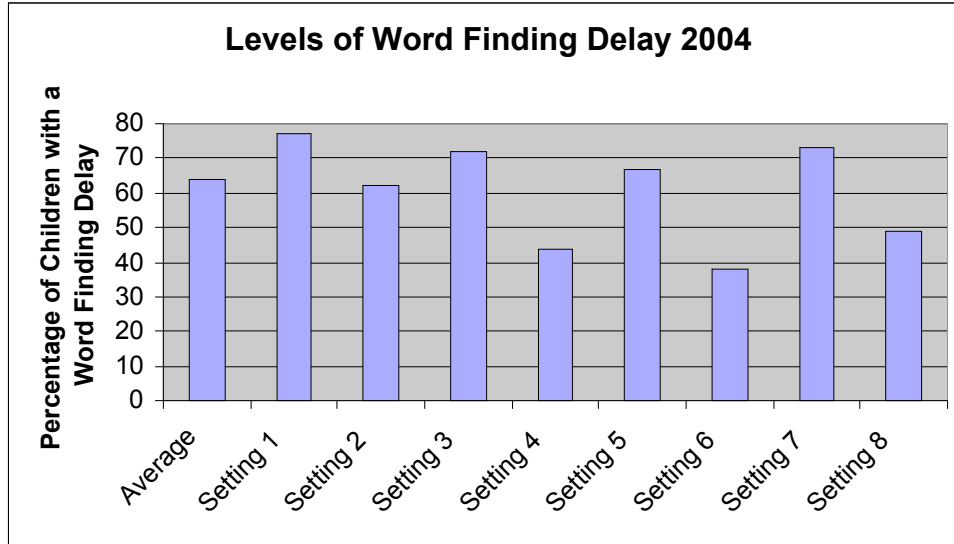


Graph 1 – Levels of Comprehension Delay 2004

4.1.10.3) *Word Finding Delay*

Word Finding delay was identified in 64% of children. The 67 children which were in need of specialist help to increase their word finding ability came from all eight settings. Graph 2 shows the levels of word finding delay found.

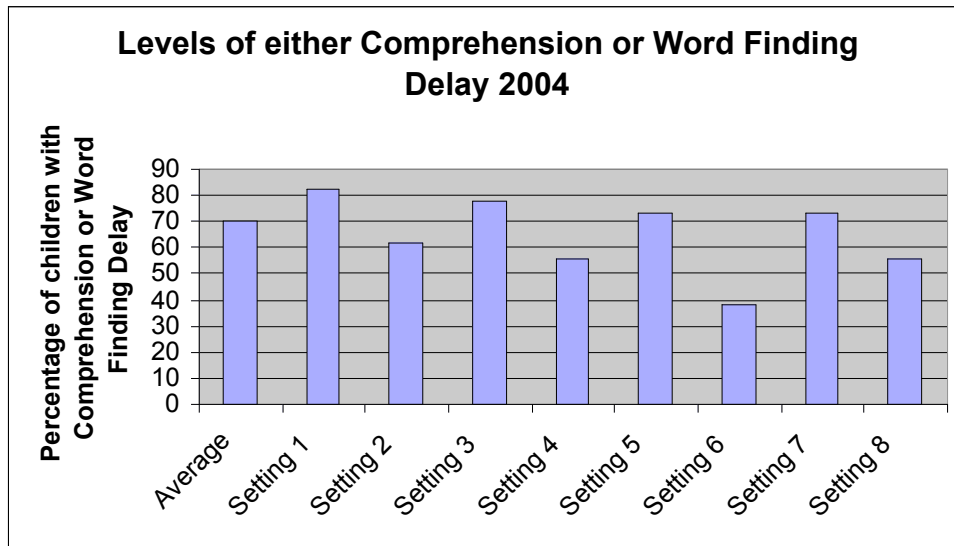
The average of 64% for word finding delay is built up of scores ranging from 38% (Setting 6) to 77% (Setting 1).



Graph 2 – Levels of Word Finding Delay 2004

4.1.10.4) Comprehension or Word Finding Delay

The level of children with either a comprehension or word finding delay is higher than that for either comprehension or word finding. The percentage of children who had delay was 70%. Graph 3 shows how the eight settings compare with the average.

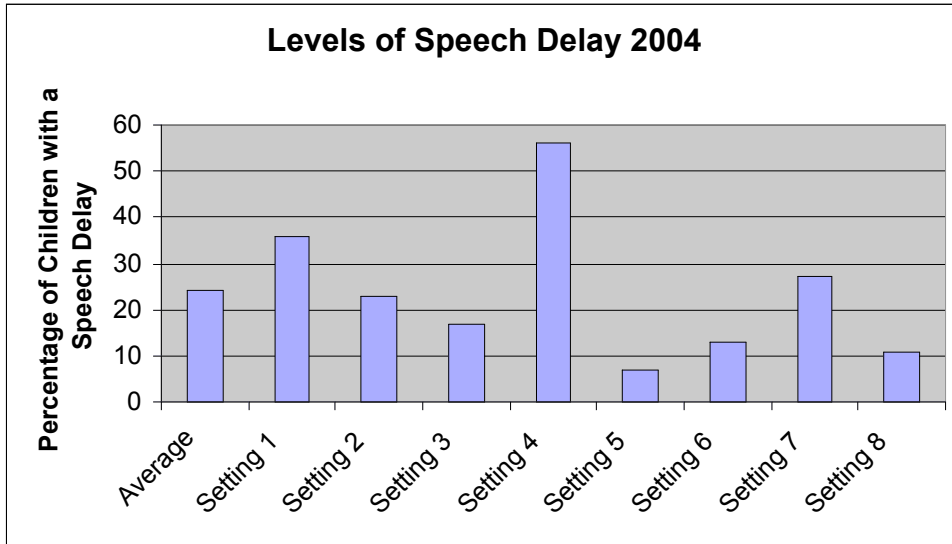


Graph 3 – Levels of Comprehension or Word Finding Delay 2004

4.1.11) Speech Delay

The incidence of speech delay was observed by the Speech and Language Therapist conducting the assessments. These observations have been tabulated and the results are shown in Graph 4. They demonstrate that

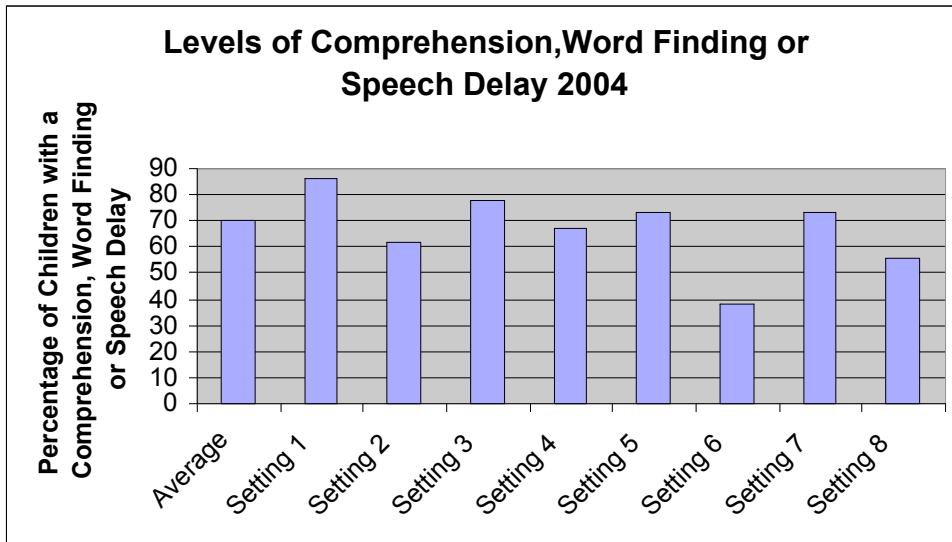
there is, on average 24% of children in the North Stoke Sure Start area with a speech delay.



Graph 4 – Levels of Speech Delay 2004

4.1.12) Comprehension, Word Finding or Speech Delay

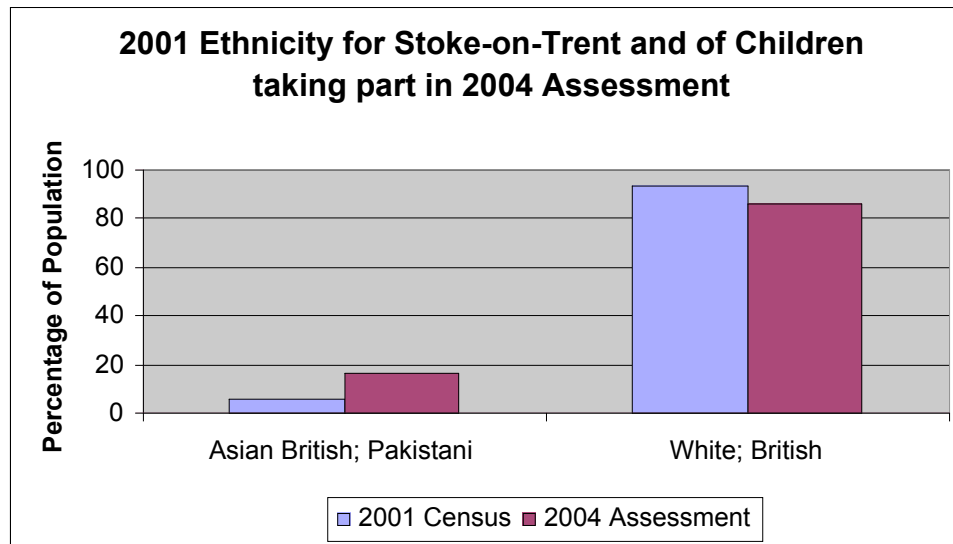
The observations of the Speech and Language Therapist conducting the assessments were used to produce this result. It shows that 70% of children in the North Stoke Sure Start had a comprehension, word finding or speech delay. The results are shown in Graph 5.



Graph 5 – Levels of Comprehension, Word Finding or Speech Delay

4.1.13) Ethnicity

The high ethnic levels found in Stoke-on-Trent are reflected in the children assessed. However, the actual levels of ethnicity in the Stoke-on-Trent are different from those found in the assessment. Graph 6 shows the ethnicity of the children assessed and the actual levels of ethnicity found in the 2001 census.



Graph 6 – 2001 Ethnicity for Stoke-on-Trent and of Children taking part in 2004 Assessment

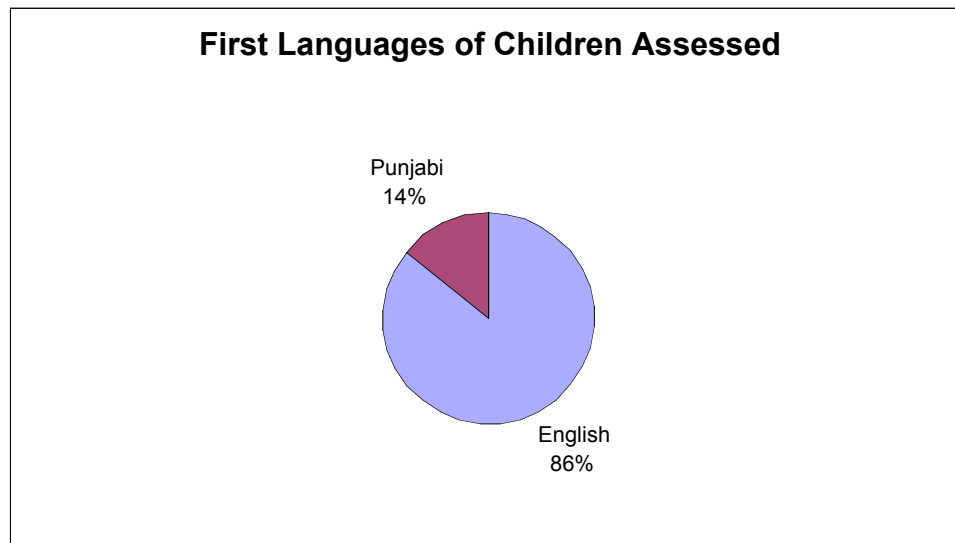
Graph 6 shows that English speakers account for the greatest percentage in both the 2001 census and the 2004 assessment. However, the percentage of Punjabi or Urdu speakers is much higher for the 2004 assessment than was actually found in the 2001 census. This may have an adverse effect on the results found as it is recognised in both assessments that the norms are calculated for children who speak English as their first language. Graph 7 shows the first languages of the children assessed.

First Language	English		Punjabi	
	Number	Percentage	Number	Percentage
Number of children	90	86%	15	14%
WNL	32	36%	0	0%
Comprehension Delay	37	41%	15	100%
Word Finding Delay	52	58%	15	100%
Comprehension or Word Finding Delay	58	64%	15	100%
Speech Delay	24	27%	1	7%
Comprehension, Word Finding or Speech Delay	59	66%	15	100%

Table 18 – Results of Assessment by First Language

Thirty-two of the children assessed were within normal limits. All of these had English as their first language. This means that for English speakers

36% are within normal limits. English speakers made-up 86% of those assessed; Punjabi speakers accounted for the remaining 14% of the children.



Graph 7 – First Languages of Children Assessed

Table 18 shows how the two language groups fared in the assessment. The results for delay and for those within normal limits are assessed within the language groups. The results show that all children who spoke Punjabi as their first language had a delay in comprehension and word finding ability.

It can be seen that only one of the children who spoke Punjabi as their first language had a speech delay. This means that 7% of those who spoke Punjabi as their first language had a speech delay compared with 66% of those who spoke English as their first language.

4.2) Comparison with 2001 Assessment

4.2.1) Analysis

Six of the eight settings assessed in 2004 were assessed in 2001. For these settings a direct comparison between the settings can be made. A comparison cannot be made for the settings assessed in 2001 or 2004 alone.

Tables 19, 20, 21, 22, 23 and 24 show the summaries of results from the six settings assessed in both 2001 and 2004.

	2001	2004
Intake assessed	38%	41%
Boys	56%	50%
Girls	44%	50%
Comprehension delay	75%	59%
Word Finding delay	75%	77%
Comprehension or Word Finding delay	88%	82%
Speech delay	0%	36%
Comprehension, Word Finding or Speech delay	88%	86%

Table 19 – Summary of results from Setting 1 for 2001 and 2004

Setting 1 has seen improvements in levels of comprehension delay and either word finding or comprehension delay. It has, however, seen a decrease in word finding delay. It has also seen an observational increase in the incidence of speech delay but a decrease in the incidence of comprehension, word finding or speech delay. The changes have been:

Comprehension Delay	27.1%
Word Finding Delay	-2.6%
Comprehension or Word Finding Delay	7.3%
Speech Delay	36%
Comprehension, Word Finding or Speech Delay	2.3%

Setting 2, for the purpose of comparison can be judged as comprising of two settings from the 2001 assessment. This is because one of the settings assessed in 2001, Stanfields Nursery, closed before the 2004 assessment. It's intake of children have been absorbed by Setting 2. Therefore, the 2001 results for Setting 2 are actually a combination of Setting 2 and Stanfields Nursery.

Setting 2 has improved results in all comprehension delay. It has, though, seen a decrease in ability for both word finding delay and either comprehension or word finding delay. It was observed that there has been an increase in levels of speech delay but a reduction in the levels of comprehension, word finding or speech delay.

	2001	2004
Intake assessed	33%	26%
Boys	47%	38%
Girls	53%	62%
Comprehension delay	35%	31%
Word Finding delay	35%	62%
Comprehension or Word Finding delay	41%	62%
Speech delay	%	36%
Comprehension, Word Finding or Speech delay	88%	86%
Speech delay	19%	23%
Comprehension, Word Finding or Speech delay	70%	62%

Table 20 – Summary of results from Setting 2 for 2001 and 2004

The changes found at Setting 2 are:

Comprehension Delay	12.9%
Word Finding Delay	-43.5%%
Comprehension or Word Finding Delay	-33.9%
Speech Delay	-17.4%
Comprehension, Word Finding or Speech Delay	12.9%

Setting 3 improved in all areas. The greatest improvement was made in the area of comprehension delay where an increase of 10.7% was made. The results for word finding delay and either comprehension or word finding delay were improved but by only 6.9%. It was also observed that there were improvements in speech ability.

	2001	2004
Intake assessed	30%	38%
Boys	46%	50%
Girls	54%	50%
Comprehension delay	62%	56%
Word Finding delay	77%	72%
Comprehension or Word Finding delay	77%	72%
Speech delay	39%	17%
Comprehension, Word Finding or Speech delay	85%	78%

Table 21 – Summary of results from Setting 3 for 2001 and 2004

The changes in delay at Setting 3 between 2001 and 2004 are:

Comprehension Delay	10.7%
Word Finding Delay	6.9%
Comprehension or Word Finding Delay	6.9%
Speech Delay	129.4%
Comprehension, Word Finding or Speech Delay	9.0%

	2001	2004
Intake assessed	28%	36%
Boys	29%	22%
Girls	71%	78%
Comprehension delay	43%	33%
Word Finding delay	43%	44%
Comprehension or Word Finding delay	43%	56%
Speech delay	14%	56%
Comprehension, Word Finding or Speech delay	57%	67%

Table 22 – Summary of results from Setting 4 for 2001 and 2004

Setting 4 has seen an improvement in comprehension delay but a decrease in word finding delay and either comprehension or word finding delay. Observation also demonstrated deterioration in the speech ability of children attending Setting 4. The results are shown below:

Comprehension Delay	30.3%
Word Finding Delay	-2.3%
Comprehension or Word Finding Delay	-23.3%
Speech Delay	-75.0%
Comprehension, Word Finding or Speech Delay	-14.6%

Setting 5 has seen an improvement in comprehension delay but a decrease in word finding delay and either comprehension or word finding delay. There was an observed increase in speech ability but a decrease in the levels of comprehension, word finding or speech ability.

	2001	2004
Intake assessed	37%	60%
Boys	80%	60%
Girls	20%	40%
Comprehension delay	60%	53%
Word Finding delay	60%	67%
Comprehension or Word Finding delay	60%	73%
Speech delay	20%	7%
Comprehension, Word Finding or Speech delay	70%	73%

Table 23 – Summary of results from Setting 5 for 2001 and 2004

The changes in delay at Setting 5 between 2001 and 2004 are:

Comprehension Delay	13.2%
Word Finding Delay	-10.4%
Comprehension or Word Finding Delay	-17.8%
Speech Delay	185.7%
Comprehension, word Finding or Speech Delay	-4.2%

Setting 8 improved in all areas. The greatest improvement was made in the area of word finding delay where an increase of 127.3% was made. The results for comprehension delay and either comprehension or word finding delay also improved.

	2001	2004
Intake assessed	27%	32%
Boys	29%	44%
Girls	71%	56%
Comprehension delay	57%	56%
Word Finding delay	100%	44%
Comprehension or Word Finding delay	100%	56%
Speech delay	14%	11%
Comprehension, Word Finding or Speech delay	100%	56%

Table 24 – Summary of results from Setting 8 for 2001 and 2004

The results are shown below:

Comprehension Delay	1.8%
Word Finding Delay	127.3%
Comprehension or Word Finding Delay	78.6%
Speech Delay	27.3%
Comprehension, Word Finding or Speech Delay	78.6%

4.2.2) Summary Comparison

The comparison of individual settings demonstrates changes that have occurred in the delay levels of children at those settings. The important comparison, and the one which North Stoke Sure Start will be assessed on, is the figure for the entire Sure Start area. Table 25 holds the summary information for both surveys.

	2001	2004
Intake assessed	33%	35%
Boys	51%	45%
Girls	49%	55%
Comprehension delay	55%	50%
Word Finding delay	64%	64%
Comprehension or Word Finding delay	69%	70%
Speech delay	18%	23%
Comprehension, Word Finding or Speech delay	78%	70%

Table 25 – Summary of results from all eight Settings 2001 and 2004

The changes found between the assessments are varied. Improvements were seen in the areas of comprehension delay and comprehension, word finding or speech delay. There was no change in the incidence of word finding delay and comprehension or word finding delay and speech delay both

deteriorated. The changes found between the two assessments are shown below:

Comprehension Delay	10.0%
Word Finding Delay	0.0%
Comprehension or Word Finding Delay	-1.4%
Speech Delay	-21.7%
Comprehension, Word Finding or Speech Delay	11.4%

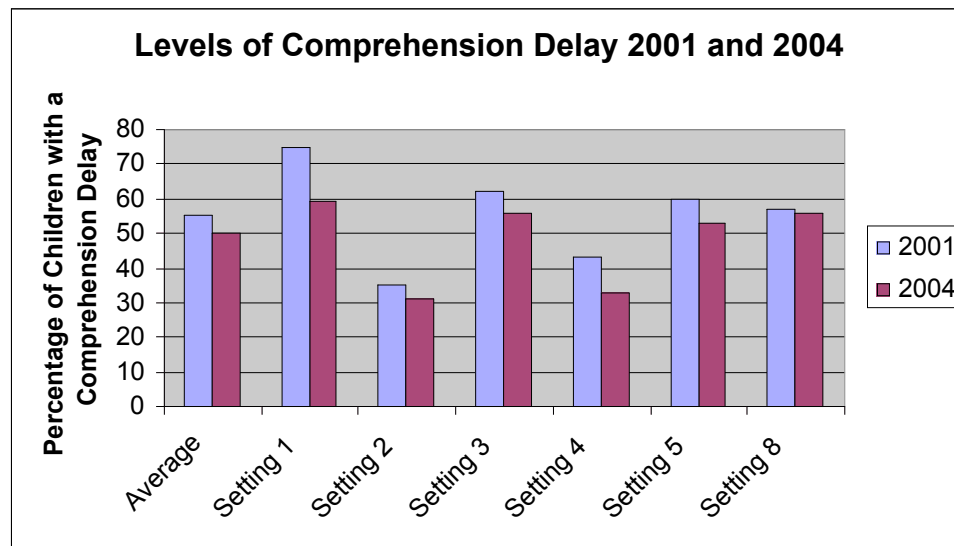
4.2.3) Analysis

Twenty-five children were identified as being 'Within Normal Limits' in the 2001 assessment. Of these twelve were boys and thirteen were girls. Within the population this means that 31% of the surveyed children displayed the comprehension and word finding ability that is consistent with their age. These figures also show that 29% of the boys and 33% of the girls were within normal limits. In 2004 the percentage of boys whose ability was within normal limits rose to 30% and the girls' percentage fell to 31%. Overall, in 2004, 30% of the children assessed were within normal limits.

The 2004 figure of 30% of children with no demonstrated delay in speech and language represents a -1.4% decrease in ability.

4.2.4) Comprehension Delay

The difference between the two assessments, in terms of comprehension delay can be seen in Graph 8 which shows the figures from 2001 and 2004.



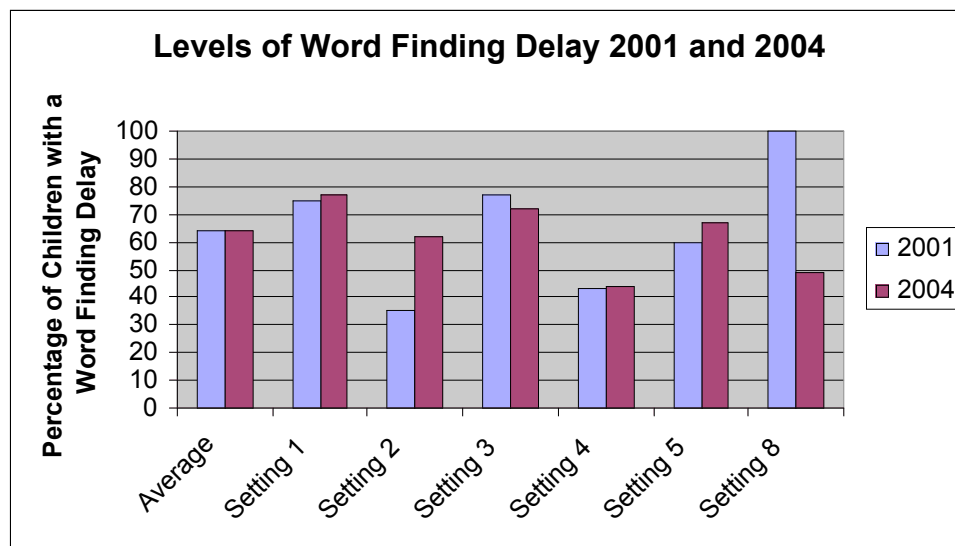
Graph 8 – Levels of Comprehension Delay 2001 and 2004

The average comprehension delay has decreased by 10% in the North Stoke Sure Start Area between 2001 and 2004. All settings that were assessed in both 2001 and 2004 saw a decrease in the level of comprehension delay.

The figure of 50% of children with a comprehension delay in 2004 is a promising result that can be improved on in the future.

4.2.5) Word Finding Delay

The overall level of word finding delay in the North Stoke Sure Start area remained static between 2001 and 2004 at 64%. Four of the six settings that were assessed in both 2001 and 2004 saw an increase in the incidence of word finding delay. Only two saw a decrease in the incidence of word finding delay. Graph 9 shows how the different results compare.

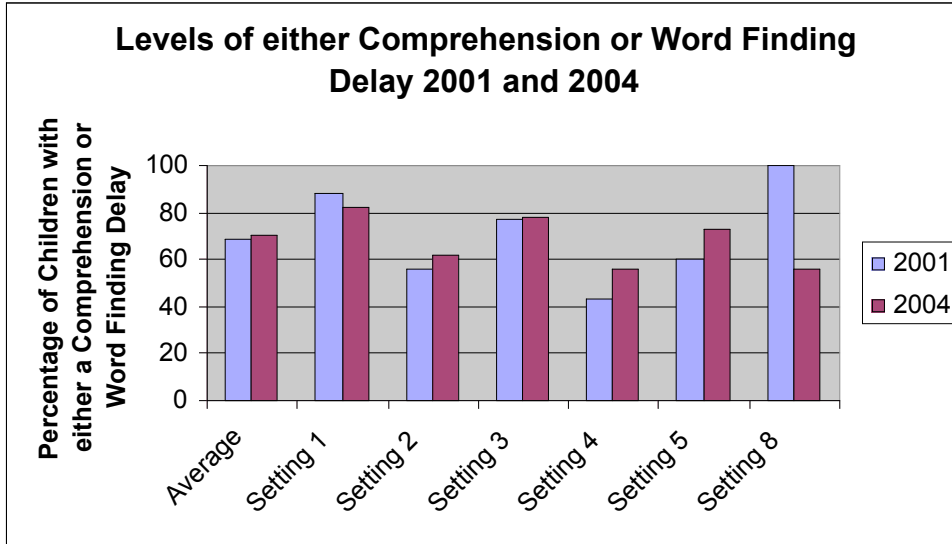


Graph 9 – Levels of Word Finding Delay 2001 and 2004

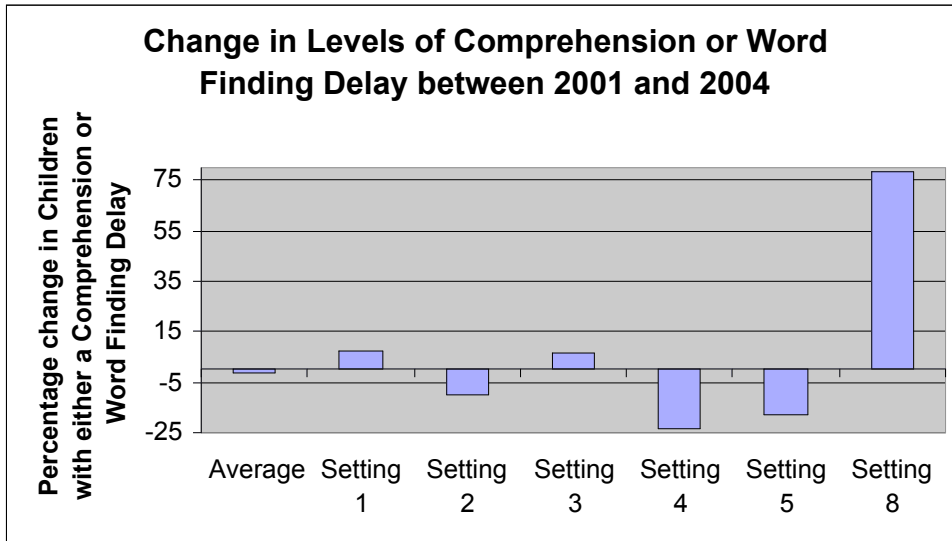
4.2.6) Comprehension or Word Finding Delay

The overall incidence of either comprehension or word finding delay increased between 2001 and 2004 by 1.4%. This is a negative movement. This increase in the level of comprehension or word finding delay was seen in four of the settings assessed in both 2001 and 2004. Only Settings 3 and 8 saw a decrease in the incidence of either comprehension or word finding delay. Graph 10 shows the comparison between the results of the two assessments.

The difference between the two assessments is shown on Graph 11. It shows that Settings 1, 3 and 8 achieved an increase greater than the 5% improvement targeted. All other Settings and the overall score did not achieve the 5% improvement. The average change was in the order of -1.4% which represents an increase of 1 percentage point in the number of children with a delay in either comprehension or word finding.



Graph 10 – Levels of either Comprehension or Word Finding Delay 2001 and 2004



Graph 11 - Change in Levels of Comprehension or Word Finding Delay between 2001 and 2004

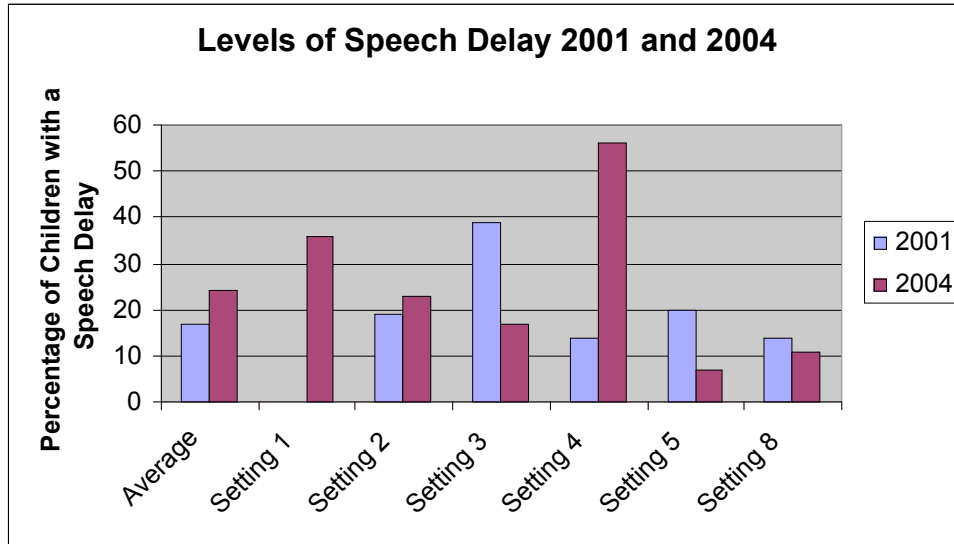
4.2.7) *Speech Delay*

The incidence of speech delay was observed by the Speech and Language Therapist responsible for conducting the assessments. As previously noted these results are not based on a standardised assessment but on the clinical judgement of the professional responsible for the assessments.

The observations demonstrated that the incidence of speech delay increased on the 2004 assessment. Graph 12 shows how the settings assessed in 2001 and 2004 compared and the overall average.

The results show that three of the six settings assessed saw a decrease in the incidence of speech delay but that three also saw an increase. The

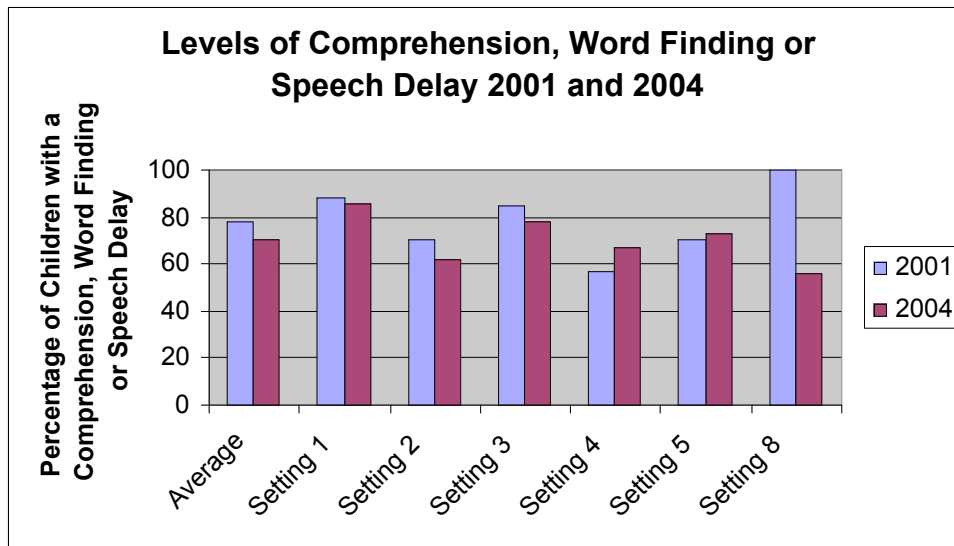
cumulative effect of this was to increase the observed incidence of speech delay.



Graph 12 – Change in Levels of Speech Delay between 2001 and 2004

4.2.8) Comprehension, Word Finding or Speech Delay

The number of children with an observed delay in comprehension, word finding or speech delay dropped between 2001 and 2004 from 78% in 2001 to 70% in 2004. Graph 13 shows the settings compared.



Graph 13 – Change in the Levels of Comprehension, Word Finding or Speech Delay between 2001 and 2004

Graph 13 demonstrates that reductions in the incidence of comprehension, word finding or speech delay were seen in four of the six settings. The

greatest reduction was seen in Setting 8 where a reduction of 44 percentage points was observed.

4.2.9) Ethnicity

It is known that only one child in 2001 assessment did not have English as their first language. This enables a comparison to be drawn between the two assessments. Table 26 shows how children who spoke English as their first language and children who did not performed in the two assessments.

First Language	English		Punjabi	
	2001	2004	2001	2004
Number of children	99%	86%	1%	14%
WNL	31%	36%	0%	0%
Comprehension Delay	54%	41%	100%	100%
Word Finding Delay	63%	58%	100%	100%
Comprehension or Word Finding Delay	68%	64%	100%	100%
Speech Delay	16%	27%	0%	7%
Comprehension, Word Finding or Speech Delay	76%	66%	100%	100%

Table 26 - Comparison between 2001 and 2004 on the basis of First Language

The results show that children who spoke English as their first language improved in the areas of comprehension delay, word finding delay, comprehension or word finding delay and comprehension, word finding or speech delay. They did, however, see an increase in the observed delay of speech.

The results for children who did not speak English as their first language are the same in both assessments for comprehension and word finding delay. That is, there is a 100% incidence of comprehension and word finding delay. Interestingly, though, only one child in either assessment who did not speak English as their first language was observed to have a speech delay.

5) Conclusion

The following conclusions can be made following the analysis of the results gathered in the four assessments of 2001 and 2004.

- There has been a 1.4%, or 1 percentage point, decrease from 31% in 2001 to 30% in 2004, in the number of children with comprehension or word finding delay within normal limits in the North Stoke Sure Start area. This falls below the target of a 5 percentage point increase. North Stoke Sure Start has, therefore failed to achieve its target of a 5 percentage point improvement.
- The observation of speech delay in the North Stoke Sure Start area has demonstrated that there has been a reduction in the number of children with a comprehension, word finding or speech delay by 8 percentage points from 78% in 2001 to 70% in 2004. This change is encouraging as it suggests that real progress has been made. However, the lack of a standardised assessment in either the 2001 or 2004 assessment means that it can be used as an observation only.
- The incidence of comprehension delay has improved by 5 percentage points, from 55% in 2001, to 50% in 2005. This shows a positive improvement.
- The incidence of word finding delay has remained constant between 2001 and 2004. This means that 64% of children in both assessments have a word finding ability that is below that expected for their age.
- The incidence of either comprehension or word finding delay has increased between 2001 and 2004 by 1 percentage point from 69% in 2001 to 70% in 2004. This is the measure by which the performance of North Stoke Sure Start is being assessed.
- The observed incidence of speech delay has increased from 18% in 2001 to 24% in 2004. This 6 percentage point increase is worrying as a reduction in the number of children specialist intervention for speech and language issues was one of the Sure Start targets.
- If children who speak English as their first language are only considered from the 2004 and 2001 assessments then it can be seen that 36% of children in 2004 have comprehension and word finding ability within normal limits. This is an increase of 4 percentage points from the figure of 32% of children with comprehension and word finding delay within normal limits in the Stoke North Sure Start area in 2001. This can be considered as it is recognised in both assessments that the norms are calculated for children who speak English as their first language. This consideration of the results shows that Stoke North Sure Start have come very close to achieving the 5 percentage

point improvement in the number of children requiring specialist intervention.

- Although the overall level of decrease in ability in the North Stoke Sure Start area of 1 percentage point is below the target level some individual settings have made significant improvements. For example, Setting 8 has seen an increase of 44 percentage points. It has also seen improvements in the observed levels of speech delay. Setting 8 was the only setting assessed where the children exhibited improvements in all areas that were assessed or observed.
- The children who attend Setting 8 have been able to use resources made available through the Sure Start programme to have contact with practitioners who are aware of and actively promote parent/carer-child interaction. This is believed to be the major reason for the increase in ability of the children attending this setting.
- There is no significant difference in the levels of comprehension or word finding delay between boys and girls. That is, in 2001, 29% of boys were within normal limits; in 2004 this figure had risen by 1.4%, or 1 percentage point, to 30%. In the corresponding period girls fell from 33% within normal limits, in 2001, by 6.5% or 2 percentage points to 31%, in 2004.
- The first language spoken by children has a direct impact on their comprehension, word finding and speech ability. It has been found that those children who do not speak English as their first language all have a delay in comprehension or word finding ability. It was also observed that only one of these children, in either assessment, had a speech delay. The lack of speech delay for children who have both a comprehension and word finding delay is unusual. It suggests that the use of speech delay as a measure should only be used as an observation, not as concrete figure.
- The work carried out in the North Stoke Sure Start area was conducted as the initial work for all speech and language baselines in Stoke-on-Trent. It demonstrated that the assessment of speech was not a valid tool. The observation of speech delay in the 2001 and 2004 assessments should be considered as an observation only and not as a tool to measure children's ability with. By being the first assessment carried out and repeated Stoke North Sure Start's results have been used to improve services in both its own area and in others. This means that the weaknesses spotted in the Stoke North area have been noted and acted on in other Sure Start areas in Stoke-on-Trent.

6) Recommendations

It is recommended that:

- Work needs to be carried out across the Stoke North Sure Start area to improve the speech and language ability of children. This is needed so that children in this area improve in line with Sure Start targets.
- Work is needed to improve children's comprehension and word finding ability. This can be done by increasing the stimuli that children are exposed to. By enriching the experiences that children have and then talking about them to embed the vocabulary children should be able to improve both word finding and comprehension ability.
- Stoke North Sure Start needs to have contact with as many children as possible. This is because contact with Sure Start can help to reduce the incidence of comprehension and word finding delay.
- An investigation is made to find if an appropriate tool exists to assess the language ability of children in their first language. If one can be found then it should be used to establish what the actual ability levels of children are. If one can be found and used it will help to reduce the incidence of comprehension or word finding delay.
- The children at Setting 8 are revisited to further explore why their language ability has significantly improved between 2001 and 2004. Once this has been done any finding should be shared with other settings to enable children there to improve.
- A tool to assess children's speech ability is found. This is so that the speech ability of children can be accurately assessed.
- Practitioners working within the Stoke North Sure Start area should attend as much training as possible to enable them to give the best possible start to children.
- The assessment is repeated in 2007 to identify if further improvements can be made, and if so, by how much. The 2007 assessment should be carried out in the same settings as the 2004 assessment so that direct comparisons can be made.

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