## School Project Park Hall 2004-2005

### **INPP Programme December 2004 to December 2005**

#### Introduction

Eight children were selected to undergo the INPP school's programme, which is a general programme of exercises that are specifically designed to help children with developmental difficulties arising out of uninhibited primitive reflexes and immature postural reflexes. Children were selected for the programme by their class teacher, on the basis that the teacher felt the child would benefit from the programme, and with the exception of two, because their progress had stalled. Parents agreed to fill in an INPP questionaire at the beginning and end of the programme. Children also underwent a before and after test of to identify any unhibited primitive reflexes and underdeveloped postural reflexes.

# Progress of INPP children compared to children at the same level

	Writing					
	Progress					
_						
Child	Points per year prior to		Points per year by end of			
H	INPP		INPP			
		Other		Other	Has rate of	
		children at		children at	progress	
	Child	same level	Child	same level	increased?	
Α	1	2	7	7	Yes	
В	1	1	5	2	Yes	
С	1		3		Yes	
D	0	1	8	5	Yes	
Е	2		6		Yes	
F	2	3	1	6	No	
G	1	1	2	4	Yes	
Н	1		2		Yes	
Ave	1.1	1.6	4.3	4.8		

Writing: Seven out of eight children increased their rate of progress during the 'INPP' year, 4 out of 5 improving at a faster rate than children at an equivalent level. The average improvement in by INPP children is 3.2 points compared to 3.2 points by other equivalent children.

# Progress of INPP children compared to children at the same level

	Reading					
	Progress cor					
Child						
	Points per year prior to INPP		Points per year by end of INPP			
	Child	Other children at same level	Child	Other children at same level	Has rate of progress increased?	
Α	1	3	7	4	Yes	
В	2	2	5	7	Yes	
С	2		4		Yes	
D	2	1	7	3	Yes	
Е	1		5		Yes	
F	3	2	5	7	Yes	
G	3	1	3	5	No	
Н	0	3	2	4	Yes	
Ave	1.8	2.0	4.8	5.0		

Reading: Seven out of eight children increased their rate of progress during the 'INPP' year, with 3 out of 6 improving at a faster rate than children at an equivalent level. The average improvement in by INPP children is 4 points compared to 3 points by other equivalent children.

# Progress of INPP children compared to children at the same level

	Maths						
	Progress						
	Points per year prior to		Points per year by end of				
Child	INPP		INPP				
		Other children at		Other children at	Has rate of progress		
	Child	same level	Child	same level	increased?		
Α	2	2	4	3	Yes		
В	1	3	2	3	Yes		
С	0.5		8		Yes		
D	2	3	4	3	Yes		
Е	1		0		No		
F	2	2	5	3	Yes		
G	2	1	2	1	No		
Н	1	2	3	3	Yes		
Ave	1.4	2.2	3.5	2.7			

Maths: Six out of eight children increased their rate of progress during the 'INPP' year, with 5 out of 6 improving at a faster rate than children at an equivalent level. The average improvement in by INPP children is 2.1 points compared to 0.5 points by other equivalent children.

# NDD- One barrier to learning that can be removed – follow up

I recently published a document showing that

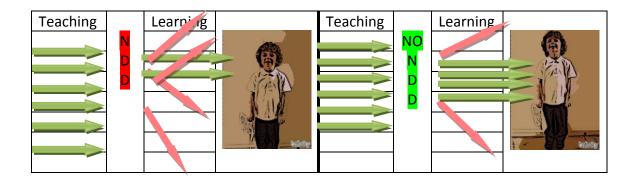
- 1. About 40% of a sample of 198 children had Neuro Developmental Delay(NDD)
- 2. However amongst the below age expected achievement children, in core subjects the average number of NDD children was at 75%.
- 3. The incidence of three primitive reflexes was significantly more prevalent amongst poor readers.
- 4. I demonstrated that of the NDD low achieving children a reflex inhibition and development movement programme reduced the children's NDD.
- 5. Consequently the more the children's NDD was reduced generally the greater their progress in core subjects.

This study has been replicated by a number of other studies for instance a large scale study by the North Eastern Education Library Board (NEELB) in Northern Ireland (2004) of 384 8-9 year olds found that

- 35% of children retained primitive reflexes
- 57% of those with a reading age below their chronological age had retained primitive reflexes
- That there was a significant improvement in reading amongst those children who were poor readers and had retained reflexes after they had undergone the movement programme.

#### From my research

- 75% of underachieving children (85% reading, 67% writing and 75% maths) have NDD.
- Of 75 children across three schools who underwent the movement programme in the year of reflex inhibition 70% made a year or more progress which at least brought them closer to age expected attainment. Those who benefitted least seemed to have either very high NDD scores or very low NDD scores. They were placed on the movement programme because of their attainment not their NDD profile. A better assessment of NDD could have resulted in
  - Only those children most likely to benefit engaging in the programme.
  - Some children being put on an individualised programme.
- Other research shows that the gains made from engaging with the programme are continue.



### Assuming that

- About 20% of children in a school are underachieving.
- That of these about 75% have NDD (From my study 85% reading, 67% writing and 75% maths)

In a two form entry school, with 8 classes of 30 in key stage 2 there are at least there will be 48 children under achieving of whom 36 would benefit from the INPP movement programme. The greater the proportion of children underachieving, the greater the number that would benefit.

Nationally, with about 20% of children underachieving then looking at the results of my research and that of NEEB, then at least 10-15% of the Junior school population are underachieving because NDD is a contributory factor. It would be interesting to look at the relationship between those children who at age 7 are predicted a level 5 by the age of 11, but do not achieve it and the prevalence of NDD.