

# Numbers Count



**Annual Report**

**Sample School**

## INTRODUCTION

Numbers Count is the numeracy intervention at the heart of Every Child Counts. It aims to enable children who have the greatest difficulties with mathematics to make greater progress towards expected levels of attainment so that they will catch up with their peers. It has two versions:

- Numbers Count 1 is designed mainly for children in Years 1 to 3;
- Numbers Count 2 is designed mainly for children in Years 4 to 9.

In both interventions, children normally have daily, 30-minute lessons with a specially-trained Numbers Count teacher in addition to continuing to take part in their normal class mathematics lessons. Accredited Numbers Count teachers decide whether to deliver each lesson individually or to two or three children together, according to the children's needs and the circumstances of the school. Teachers who are in training deliver all lessons individually.

Numbers Count lessons take place in a dedicated teaching area where children can use a wide variety of resources. The teacher begins by making a detailed diagnostic assessment of what each child knows and then plans an individualised programme of lessons for what each one needs to learn next: no two children follow the same programme. Lessons focus on number and calculation, follow a set routine and are rigorous and active. The teacher aims to help each child to become numerate and confident, to enjoy actively learning mathematics and to develop the skills and positive attitudes needed to continue to make good progress in normal class mathematics lessons after completing his or her Numbers Count programme.



A Numbers Count teacher normally teaches several children every morning or afternoon, liaising closely with class teachers to review and plan together for the children's progress. The teacher sets regular homework and meets parents to discuss how they can support their children's learning at home. The teacher undertakes a specialised professional development programme to learn about Numbers Count and about effective methods for teaching number and calculation.

Edge Hill University has developed Numbers Count and a wide range of Every Child Counts mathematics and literacy interventions. It provides them to schools on a not-for-profit basis. All Numbers Count teachers are trained and supported by local ECC Trainers, who in turn are trained and supported by Edge Hill University National Advisers.

This report is based on data submitted to the University's online data collection and analysis system. Its purpose is to help the school to monitor pupils' progress and to evaluate the effectiveness of the intervention. The level of detail in the tables depends on the data supplied and the time of year. If you have any queries, please contact the ECC team.

Edge Hill University  
Every Child Counts  
Woodlands Centre  
Southport Road  
Chorley PR7 1Q

W: [everychildcounts.edgehill.ac.uk](http://everychildcounts.edgehill.ac.uk)  
E: [ecc@edgehill.ac.uk](mailto:ecc@edgehill.ac.uk)  
T: 01257 517 190

## 1. PARTICIPATION IN THE PROGRAMME

Numbers Count is designed for pupils in Years 1 to 9 who have the greatest difficulties with mathematics.

**Table 1.1 Pupils receiving Numbers Count support  
Sample School**

	NC 1	NC 2	All Pupils
<b>Entry</b>			
Pupils who began a programme	6	4	10
<i>School Year</i>			
Y5		3	3
Y3		1	1
Y2	6		6
<b>Exit</b>			
Pupils who completed a programme	6	4	10

Entered: all pupils who began a programme

Completed: all pupils who completed a programme and for whom entry and exit outcomes were reported

## 2. LESSONS

A pupil's Numbers Count programme normally lasts for at least 40 lessons, including an assessment phase and a teaching phase. Assessment lessons and all lessons taught by new teachers in training are delivered 1-to-1. Accredited teachers decide whether teaching should be delivered 1-to-1, 1-to-2 or 1-to-3 to match the needs of the pupils and the circumstances of the school.

**Table 2.1 Length of programme and lessons received  
Sample School**

<b>Numbers Count 1</b>	
<i>Number of pupils</i>	6
Average calendar weeks	13.4
Average calendar months	3.1
Average number of lessons	47.2
- diagnostic assessment lessons	5.7
- 1-to-1 lessons	6.5
- 1-to-2 lessons	22.7
- 1-to-3 lessons	12.3
<b>Numbers Count 2</b>	
<i>Number of pupils</i>	4
Average calendar weeks	17.9
Average calendar months	4.1
Average number of lessons	40.0
- diagnostic assessment lessons	7.3
- 1-to-1 lessons	32.5
- 1-to-2 lessons	0.3
- 1-to-3 lessons	0.0
<b>Sample School - all pupils</b>	
<i>Number of pupils</i>	10
Average calendar weeks	15.2
Average calendar months	3.5
Average number of lessons	44.3
- diagnostic assessment lessons	6.3
- 1-to-1 lessons	16.9
- 1-to-2 lessons	13.7
- 1-to-3 lessons	7.4

pupils who completed a programme and for whom the programme length or number of lessons was reported

### 3. ATTITUDES TO MATHEMATICS

When pupils have completed the programme, their class teachers can assess the attitudes that they show in class towards mathematics. The teachers use an Every Child Counts Attitude Survey to report on 8 aspects of each pupil's attitude, such as taking an active part in lessons, concentration and willingness to 'have a go' without asking for help. For each aspect, they decide whether the pupil is now more positive, about the same, or less positive than before taking part in Numbers Count.

**Table 3.1 Changes in pupils' attitudes towards mathematics  
(number of pupils)  
Sample School**

	<b>Pupils</b>
<i>Number of pupils</i>	10
Pupils who were more positive after the programme	9
Pupils whose attitudes did not change	1
Pupils who were less positive after the programme	0
Net gain	9

pupils who completed a programme and for whom an Attitude Survey was reported

**Table 3.2 Changes in pupils' attitudes towards mathematics  
(number of aspects)  
Sample School**

	<b>Aspects</b>
Average number of aspects in which pupils became more positive	4.2
Average number of aspects in which pupils' attitudes did not change	3.8
Average number of aspects in which pupils became less positive	0.0
Net gain	4.2

pupils who completed a programme and for whom an Attitude Survey was reported

## 4. TEST OUTCOMES

Schools are encouraged to test pupils' mathematics when they enter and exit from the programme. Entry testing helps to identify their initial attainment and learning needs and exit testing provides an objective measure of the progress that they have made.

TABLE 4.1 shows outcomes calculated by the school or approximate outcomes calculated by Edge Hill University based on raw data reported by the school.

Age	<i>A pupil's chronological age at the time of their entry and exit tests.</i>
Number Age	<i>A Number Age is the average age of pupils across the country who achieved the same test score as the pupil.</i>
Standard Score	<i>A Standard Score compare's a pupil's test score with those of other pupils of the same age across the country. A Standard Score close to 100 is 'average' and 84% of all pupils have a Standard Score of at least 85.</i>

**Table 4.1 Test outcomes  
Sample School**

	<i>Number of Pupils</i>	<b>Entry Average</b>	<b>Exit Average</b>	<b>Gain Average</b>
<b>Numbers Count 1</b>				
Age (months)	6	77.8	80.8	3.0
Number Age (months)	6	63.8	83.5	19.7
Standard Score	6	83.8	102.0	18.2
<b>Numbers Count 2</b>				
Age (months)	4	110.5	114.5	4.0
Number Age (months)	4	94.8	112.8	18.0
Standard Score	4	86.8	99.5	12.8
<b>Sample School - all pupils</b>				
Age (months)	10	90.9	94.3	3.4
Number Age (months)	10	76.2	95.2	19.0
Standard Score	10	85.0	101.0	16.0

pupils who completed a programme and for whom entry and exit scores were reported

## 5. END OF YEAR ASSESSMENTS

If pupils complete their programmes before the end of May, schools can use a follow-up test at the end of the year to measure their progress since exiting the programme and over the year as a whole.

TABLE 5.1 shows outcomes calculated by the school or approximate outcomes calculated by Edge Hill University based on raw data reported by the school.

Age	<i>A pupil's chronological age at the time of their entry and exit tests.</i>
Number Age	<i>A Number Age is the average age of pupils across the country who achieved the same test score as the pupil.</i>
Standard Score	<i>A Standard Score compares a pupil's test score with those of other pupils of the same age across the country. A Standard Score close to 100 is 'average' and 84% of all pupils have a Standard Score of at least 85.</i>

**Table 5.1 End-of-year test progress  
Sample School**

	<i>Number of Pupils</i>	<b>Progress from Entry to Exit</b>	<b>Progress from Exit to End of Year</b>	<b>Progress from Entry to End of Year</b>
<b>Numbers Count 1</b>				
Age (months)	6	3.0	4.5	7.5
Number Age (months)	6	19.7	4.8	24.5
Standard Score	6	18.2	1.2	19.3
<b>Numbers Count 2</b>				
Age (months)	2	3.0	3.0	6.0
Number Age (months)	2	19.0	2.5	21.5
Standard Score	2	16.5	-0.5	16.0
<b>Samples School - all pupils</b>				
Age (months)	8	3.0	4.1	7.1
Number Age (months)	8	19.5	4.3	23.8
Standard Score	8	17.8	0.8	18.5

pupils who completed a programme by the end of May and for whom comparable end-of-year outcomes were reported

## 6. PUPIL CHARACTERISTICS

TABLE 6.1 analyses pupils' participation and outcomes in relation to their background characteristics. It is designed to help the school to monitor the progress of relevant vulnerable groups.

**Table 6.1 Pupils' background characteristics and key data  
Sample School**

	----- Pupils -----		----- Programme -----			----- Progress -----			
	NUMBER	AGE <i>months</i>	LENGTH <i>months</i>	LESSONS 1-to-1	Total	NUMBER Entry	AGE Exit <i>months</i>	GAIN	ATTITUDE Improved <i>proportion</i>
<b>All pupils</b>	<b>10</b>	90.9	3.5	16.9	44.3	76.2	95.2	19.0	9 / 10
<b>School Year</b>									
Y5	3	117.7	4.7	32.7	40.0	101.7	117.0	15.3	3 / 3
Y3	1	89.0	2.4	32.0	40.0	74.0	100.0	26.0	1 / 1
Y2	6	77.8	3.1	6.5	47.2	63.8	83.5	19.7	5 / 6
<b>Gender</b>									
Boy	3	80.7	2.6	16.0	42.0	66.0	90.3	24.3	2 / 3
Girl	7	95.3	3.9	17.3	45.3	80.6	97.3	16.7	7 / 7
<b>Pupil Premium Entitlement</b>									
Yes	4	101.0	3.8	28.3	43.3	88.0	105.8	17.8	4 / 4
No	6	84.2	3.3	9.3	45.0	68.3	88.2	19.8	5 / 6
<b>Special Educational Need Status</b>									
Yes	3	90.7	3.4	16.3	44.7	77.7	92.7	15.0	3 / 3
No	7	91.0	3.5	17.1	44.1	75.6	96.3	20.7	6 / 7
<b>First Language</b>									
English	3	94.7	3.4	27.0	44.3	81.3	100.3	19.0	3 / 3
Other	7	89.3	3.5	12.6	44.3	74.0	93.0	19.0	6 / 7
<b>Season of Birth</b>									
Autumn	1	82.0	4.0	7.0	61.0	65.0	87.0	22.0	1 / 1
Spring	4	98.0	3.9	24.0	44.0	86.0	103.0	17.0	4 / 4
Summer	5	87.0	3.0	13.2	41.2	70.6	90.6	20.0	4 / 5

pupils who completed a programme and for whom relevant data was reported



## 7. SCHOOL SUMMARY

TABLE 7.1 summarises key data for the school and the national outcomes for all schools that have reported relevant outcomes data.

The national outcomes are presented as benchmark figures to inform evaluation:

- the First Quartile figures show the outcomes ranked 25 out of 100
- the Mean figures show the average outcomes for all schools
- the Third Quartile figures show the outcomes ranked 75 out of 100.

Benchmarks are indicative only and should be interpreted in accordance with the school's circumstances.

**Table 7.1 School summary and national benchmarks**  
**Sample School**

	----- Pupils -----		---- Programme ----			----- Progress -----			
	NUMBER	AGE	LENGTH	LESSONS		NUMBER AGE		ATTITUDE	
		<i>months</i>	<i>months</i>	1-to-1	Total	Entry	Exit	Gain	Improved
							<i>months</i>		<i>proportion</i>
Numbers Count 1	6	77.8	3.1	6.5	47.2	63.8	83.5	19.7	5 / 6
Numbers Count 2	4	110.5	4.1	32.5	40.0	94.8	112.8	18.0	4 / 4
Sample School - all pupils	10	90.9	3.5	16.9	44.3	76.2	95.2	19.0	9 / 10
<b>Benchmarks for all schools</b>									
first quartile	11	94.8	5.0	33.0	45.1	77.1	96.8	20.4	100%
<b>mean</b>	<b>7.9</b>	<b>89.2</b>	<b>4.2</b>	<b>23.0</b>	<b>42.1</b>	<b>73.7</b>	<b>91.6</b>	<b>17.9</b>	<b>96%</b>
third quartile	5	79.0	3.2	15.7	38.6	65.7	83.1	14.7	94%

## 8. PUPIL SUMMARY

TABLE 8.1 summarises key data for each pupil who completed a programme during the reporting period.

**Table 8.1 Pupil Summary  
Sample School**

PUPIL	SCHOOL YEAR	AGE	---- Programme ---			----- Exit Outcomes -----						-- End of Year --			
			DATES	PROG LENGTH	LESSONS	ATTITUDE	NUMBER AGE			STANDARD SCORE			NUMBER AGE		
		Entry	Entry		Gain	Entry	Exit	Gain	Entry	Exit	Gain	Entry	Exit	Gain	
		months	Exit	months	aspects	months	months	months	months	months	points	months	months	months	
												Test Score	Gain from... ...Entry	Gain from... ...Exit	
<b>Intervention: Numbers Count 1</b>															
<b>Teacher: [ A ]</b>															
Pupil: [ A ]	Y2	77	08 Sep 08 Dec	3.0	43	8	66	89	23	89	111	22	100	34	11
Pupil: [ B ]	Y2	82	09 Sep 08 Jan	4.0	61	6	65	87	22	82	100	18	90	25	3
Pupil: [ C ]	Y2	77	09 Sep 08 Jan	4.0	53	1	68	87	19	91	107	16	88	20	1
Pupil: [ D ]	Y2	78	04 Jan 21 Mar	2.5	42	2	63	79	16	78	97	19	85	22	6
Pupil: [ E ]	Y2	76	04 Jan 21 Mar	2.5	43	0	58	82	24	78	102	24	86	28	4
Pupil: [ F ]	Y2	77	04 Jan 21 Mar	2.5	41	3	63	77	14	85	95	10	81	18	4
<b>Intervention: Numbers Count 2</b>															
<b>Teacher: [ A ]</b>															
Pupil: [ G ]	Y5	118	06 Jan 27 Apr	3.7	40	5	102	114	12	88	95	7	115	13	1
Pupil: [ H ]	Y3	89	07 Jan 21 Mar	2.4	40	5	74	100	26	83	109	26	104	30	4
Pupil: [ I ]	Y5	115	15 Feb 21 Jul	5.1	40	7	95	115	20	85	96	11			
Pupil: [ J ]	Y5	120	15 Feb 21 Jul	5.1	40	5	108	122	14	91	98	7			

pupils who completed a programme