Sound Discovery Programme at North Elmham Primary School



Report of the Trial Spring 2004

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The Sound Discovery Trial at North Elmham Primary School

Background

In November 2003 it was agreed by the Cognition and Learning team that a small trial should be conducted into the effectiveness and feasibility of using Sound Discovery as a Wave 3 intervention in small rural schools. North Elmham Primary was chosen because the head teacher, Robin Turner, was already aware of Sound Discovery as a possible literacy intervention and was consequently interested in participating.

What makes a successful Wave 3 intervention?

The DfES recommends that the 'main impact measure (of an intervention) should be ratio gain: the amount of progress which children make, in months of reading or spelling age, divided by the number of months over which those gains were made. A ratio gain of 1 represents the normal rate of progress of all children over time – one month of reading or spelling age per month of chronological age' (DfES: 2003). The report continues 'if identified children in a school are not, on average, achieving at least twice the normal rate of progress through the school's existing Wave 3 literacy provision, it may be appropriate to re evaluate what is being offered.'

However, it is clear that the overall feasibility of an intervention within different settings must also be taken into consideration. For example, the cost of training staff and buying resources may preclude an intervention in a small school, regardless of its proven effectiveness. These were issues that we were interested in addressing apart from the measure of ratio gain.

What is Sound Discovery?

Sound Discovery is a synthetic phonics programme developed by Dr Marlynne Grant, an Educational Psychologist in South Gloucester. It is suitable for first time, slow to start and dyslexic pupils of all ages.

It was influenced by the literacy and language programmes of Dr Jonathan Solity (ERR), Sue Lloyd (Jolly Phonics), Mona McNee (Step by Step), Ruth Miskin (rml),

The first cohort of pupils to have started with the programme when it was being piloted (as Wave 1) in Reception took their KS2 SATs in Summer 2003. 33.3% of the boys got Level 5 in writing, compared to 9.5% for the LEA and 11% nationally.

Why trial Sound Discovery in Norfolk?

- evidence based research elsewhere has shown it to be effective
- it has been shown to be very motivating particularly to boys
- the materials and methodology are non age specific
- it is very adaptable within its own frame work
- the materials are reasonably priced and accessible
- LSAs can deliver it after relatively brief training
- it uses group teaching as a preferred model
- it is being considered by other LEA's as their main Wave 3 intervention

The main aims of the trial were to evaluate

- a) What impact can Sound Discovery have on: reading skills; spelling age; phonic skills; motivation?
- b) Which pupils will benefit most from Sound Discovery?
- c) How cost / time effective is it in terms of school resources?
- d) How manageable were the materials and methodology for those delivering it?
- e) If the training / support given to the school were adequate?

Length of trial and number of sessions

The 10 week trial (with a one week break for half term) took place during the Spring term.

Each pupil had five 20 minute sessions a week in small groups of 3-5 children, taught by an LSA.

The groups

The children were taught in 5 groups, arranged according to attainment rather than year group.

Assessment and age range

As Sound Discovery can be used with any age group, and target different levels and types of literacy skills, it was decided to use it from Reception to Year 6 at North Elmham.

There was a wide range of attainment in the sample: for example between children developing pre reading skills to those whose reading was age appropriate but who needed a boost with spelling. The sample also included children with identified SpeLD, ADHD and SLD.

As there were no standardised tests available that could measure all the skills across the age range, it was decided to use the same battery of tests as those used in other trials e.g. the Phonics Based Reading trial, even though they were applied to a much narrower age range in those instances.

It was agreed that for consistency we would use all tests with all the children, although with such a difference in age/attainment, significant numbers inevitably scored either below the baseline or above the ceiling of the tests, either before or after the trial.

The diversity of the data made it hard to give meaningful overall average or ratio gains for all the tests. In order to give an idea of the effectiveness of the programs in average ratio terms we have omitted from the calculation children who were below the baseline age or above the ceiling of the tests in attainment. The Reception children were below the baseline age for the Young's spelling test. In some instances the children hit the ceiling of the test in post testing and scored 100% - this is indicated on the data.

Outcomes of the trial

Reading skills

Using the Salford Sentence Reading Test as a measure (for those whose age and attainment made it appropriate) the average ratio gain was **3.8** over a period of 11 weeks. (Appendix 1).

because it makes me feel good. When I go back to class I feel I can do it all. I feel proud'.

While there was some quite dramatic progress shown by some children (e.g. Children F, N, L and Q) there was progress shown by all children in some areas, most of them in all, according to their starting point on the trial and other underlying factors. It suggests that it was effective as a Wave 2 intervention for some and as a Wave 3 for others.

How cost / time effective was it in terms of school resources?

It is estimated by the school that £320 was spent on additional resources – this included the Sound Discovery manuals, four sets of magnetic letters and boards, and Sound Discovery 'Phonics First' reading books.

One and half days were put aside for training the four LSAs, which included the visit to observe a lesson being taught.

The ongoing costs are minimal as all the materials are photocopiable. The school has chosen to laminate these for durability and to further reduce future preparation time.

How manageable were the materials and methodology for those delivering it?

The LSAs reported that the materials and methodology are straightforward to use and rated it better than other interventions they have used. They found the manual simple and clear, useful as a base. Some felt the preparation of materials was more onerous than others. The time taken is partly because the materials were being laminated for future use and longevity. The idea of arranging them into folders according to individual 'steps' was a good one and should limit the amount of preparation time in future. The majority felt they were clear about the principles behind Sound Discovery and all found it easy to use.

Was the training / support given to the school adequate?

While this question was answered positively on the questionnaire, there were additional suggestions. One was that the visit to observe and discuss a Sound

A measure of the success of the trial at the school was their decision to continue with Sound Discovery, regardless of any statistical outcomes, which have merely confirmed what they had observed. Old Buckenham Primary, where it had been trialled for two terms on a smaller, more ad hoc scale, have been similarly convinced by their own experience and have now introduced it, after appropriate training, on a whole school basis.

It is certainly seen by North Elmham School as a cost effective intervention 'cheap and easy to introduce, economical in terms of time, all combined in a multi sensory, easy to use hands on package'.

The trial has demonstrated that Sound Discovery is economical to introduce and use, with 'user friendly' materials and methodology as well as motivating for staff and children. It has shown that the minimum requirement of doubling the normal rate of progress is achievable for most children using this programme.

Recommendations

The positive impact that the introduction of Sound Discovery has had on the children's progress at North Elmham School indicates that it merits consideration as a recommended Wave 3 literacy intervention in Norfolk pending further consideration by the strategy group.

The trial has confirmed its potential for meeting the needs for children struggling with literacy. In particular, it is

- effective
- economical
- motivating
- user friendly
- non-age specific, the methodology and materials spanning the key stages
- possible to incorporate within the NLS

Progress with reading Salford Sentence Reading test (revised)

Child	DOB	CA	NCYG	RA	RA	Ratio
Orma		0 , .	11010	9.1.04	30.3.04	Gain
加基系统人类。是由	30.6.99	4y 6 m	\mathbb{R}^{n}	No score	No score	· NA®+
/ 12 UB ASSE	7.2997	5-4y.11mm	IR -	No score	No score:	PNA -
ALC: NOTE: N	4.498	55 8m a.	10.01	No score	No∗score ∖	NA -
AND THE DISCUST.	4.98,	1.5 y 9m "	3.1.2	⊪ No score ⊬	- No score	NA
E.	3.3.97	6y 10m	2	4 y 3m	5yr	3.6
F.	9.12.96	7 yr	2	4y 10m	7 yr	10.4
G.	10.8.96	7 yr 4	3	4 yr 10m	5 yr 6m	3.2
H.	4.6.96	7yr 7m	3	5y 7m	7y 1m	7.2
l.	27.4.96	7y 8m	3	7 y 6 m	7 y 10m	1.6
J.	25.3.96	7y 9m	3	5y 2m	5y 8m	2.4
K.	10.12.95	8y	3	4 y 6 m	*4y 5	-0.4
L.	1.8.95	8y 5m	4	5y 7m	6y 7m	4.8
M.	30.8.94	9y4m	5	7y 9m	8y 4m	2.8
N.	13.3.94	9y 9m	5	7 yr	8y 1m	5.2
О.	26.4.94	9y 8m	5	4y 6 m	4y 9m	1.2
AND PARK A	6.7.94		- 5	#10y 2m ± *	L SinNA*L ≥	⊊NA:
**************************************	1.12.92		1.00 ± 10	#10y 2m ±	L ANA C	· NA
Total						42

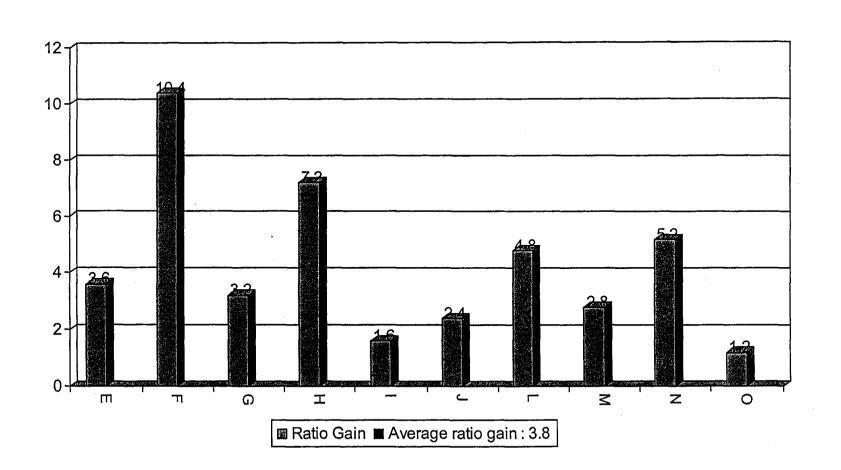
CA = chronological age

RA = reading age

RG = ratio gain

Average Ratio Gain = 3.8 (42/11 (The number between floor and ceiling of the test) = 3.8)

Reading progress (Ratio gain)



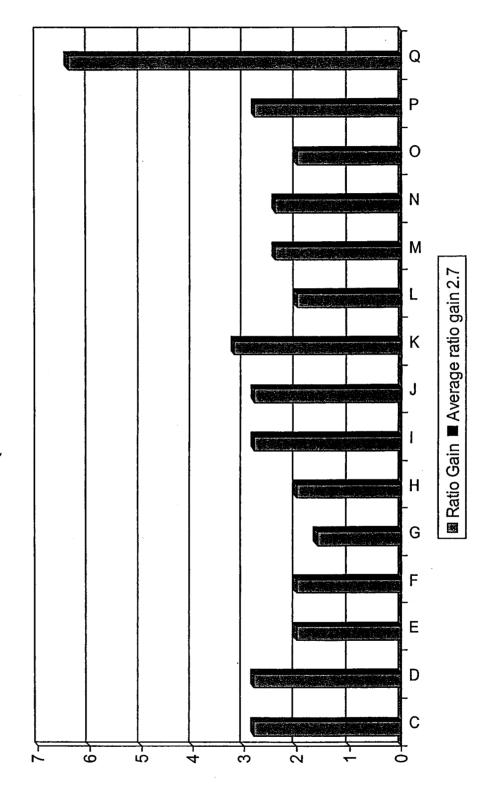
Progress with spelling Young's Parallel Spelling Test

Child	DOB	CA	NCYG	SA 9.1.04	SA 30.3.04	Ratio Gain
And the second second	30.6.99	-4v-6 m	R	5.1.04 ≤5y.9mi√	6VI	NA :
THE BUILT	7.299	4v.11m	at Rest		No score	NA
FE TOOMS	1:4:98	5y/9mi	\$ 51 E		6y.4m	B NA
D.	14.4.98	5 y 8m	1	5y 11m	6y 6m	2.8
E.	3.3.97	6y 10m	2	6y 6m	6y 11m	2
F.	9.12.96	7 yr	2	6 11m	7y 4 m	2
G.	10.8.96	7 yr 4	3	7y	7y 4m	1.6
H.	4.6.96	7yr 7m	3	6y11m	7y 4m	2
l.	27.4.96	7y 8m	3	7 y 5 m	8 yr	2.8
J.	25.3.96	7y 9m	3	7y 1m	7y 8m	2.8
K.	10.12.95	8y	3	6y 4m	7 y	3.2
L	1.8.95	8y 5m	4	7 y	7y 5m	2
M.	30.8.94	9y4m	5	7y 6m	8y	2.4
N.	13.3.94	9y 9m	5	7y 6m	8y	2.4
О.	26.4.94	9y 8m	5	6y 2m	6 y 7m	2
P.	6.7.94	9y 8m	5	8y 1m	8y 8 m	2.8
Q.	1.12.92	11.1m	6	8y 8m	10y	6.4
Total						37.2

CA = chronological age SA = spelling age RG = ratio gain

Average Ratio Gain = 2.7 (37.2 / 14)

Spelling progress (Ratio Gain)



Basic Literacy Assessment Tests 1a & b Alphabet – sound/symbol: symbol/sound

Child	NCYG	Test date: 9.1.04	Test date: 1.4.04	% known before	% known	% gain
		/52	/52		after	
Α.	R	27	45	52%	87%	35%
B.	R	7	34	13%	65%	52%
C.	1	27	50	52%	96%	44%
D.	1	43	50	83%	96%	13%
E.	2	47	52	90%	100%	10%
海岸	2	52	#### 152 g. 183	100%	100%	:NA
	3	£1 52	Viit152 1544	100%	100%	NAS
经减少	3	5 52014	Put 152 Par	h 100%	100%	NA
第 字字字字编字	300	44.452.1.1	学/526	1100%	100%	NA:
	3.555	1.52	52 m 5	100% #	100%	-NA
State a Koasaa	3.	52.	*****529.k***	10.0%	100%	WINA 1
Page 7E (S)	4.	52 H	52	41100% 41	4100%	INA.
M S	5		* 5 2 4 5 2 + 1 5 x	100%	100%	ZNA
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0	5	45	51	87%	98%	11%
36.3P	(5)	52	$\bar{5}\hat{2}$	100%	#100%°	ENA'E
Constant	6	52	MV . 52 · · · ·	100%	100%	+ NVA

^{*} These children scored at the ceiling of the test

Basic Literacy Assessment Tests 2 & 3 Consonant digraphs & blends

		Test date:	Test date:	% known	% known	
Child	NCYG	9.1.04	1.4.04	before	after	% gain
		/24	/24			70 gairt
A.	R	0	0	0%	0%	0%
B.	R	0	2	0%	8%	8%
C.	1	0	1	0%	4%	4%
D.	1	0	0	0%	0%	0%
E.	2	2	23	8%	96%	88%
	2	24 ₁ = 24 ₁ = 3	144.24 A. il.	\$400% *	100%	ENA
G.	3	11	23	46%	96%	50%
特表系列基础	33333	<u> </u>	2/1/1	1100%	100%	SENA(E)
	8:48	2/4 /2/4/11 英	24-41	100%	#100%	NA
J.	3	19	24	79%	100%	21%
K.	3	6	13	25%	54%	29%
A PP LOS &	4.4	\$ 24 ; 5 \$	11 242 Figur	图100%	400%	HE NAME
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	5.	24	24	100%	s 4000% ii	I NA III
Ο.	5	4	18	17%	75%	58%
in P	5	24 24	24年	100%	4-100% =	E NA
	644	245	14 24 25 E	3100%	100%	I IIINA III

^{*} These children scored at the ceiling of the test

Basic Literacy Assessment Tests 4a & b Segmenting and blending skills

		Took data:	Took data:	0/ 1/200	0/ (mayum	
Ohild	NOVO	Test date:	Test date:	% known	% known	
Child	NCYG	9.1.04	1.4.04	before	after	%
		/42	/42			gain
A.	R	2	21	5%	50%	48%
B.	R	8	15	19%	36%	17%
C.	1	16	36	38%	90%	52%
D.	1	33	34	78%	81%	3%
**E	2	36	42	86%	100%	14%
**F	2	40	42	95%	100%	5%
**G	3	40	42	95%	100%	5%
**H	3	40	42	95%	100%	5%
1.	3	36	40	86%	95%	9%
**J	3	38	42	90%	100%	10%
多数的人	3: 5:3	42	4244	100%	100%	· NA
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ing and Made	5.	42.	427	100%	400%	NA"
to the SALE	58	423	4,2	- 100% 14	100%	XNA
**0	5	36	42	86%	100%	14%
r de la	5	42	42:-	100%	100%	NA)
()	(f)	42	50 × 142 mis 5	w/100%	*100% +	NA.

These children scored at the ceiling of the test at pre testing These children achieved scores at the ceiling of the test at post testing

Basic Literacy Assessment Tests 5, 6, 7 Ability to decode cvc,ccvc,ccvcc words

		Test date:	Test date:	% known	% known	
Child	NCYG	9.1.04	1.4.04	before	after	%
Orma		/ 30 words	/ 30words			gain
	D			00/	00/	
Α.	R	0	0	0%	0%	0%
B.	R	0	1	0%	3%	3%
C.	1	0	5	0%	16%	16%
D.	1	0	10	0%	33%	33%
E.	2	5	24	33%	80%	47%
**F	2	27	30	90%	100%	10%
G	3	13	24	43%	80%	37%
**H	3	17	30	57%	100%	43%
**	3	23	30	76%	100%	24%
**J	3	21	30	70%	100%	30%
K	3	1	17	3%	57%	54%
	440 483	3024	37. in 30 is 11.	100%	1100%	NA:
∦ ÷ Mark	5.5	4 1 30	30. 4	# 100% B	100% (2	SNA:
**N	5	23	30	76%	100%	24%
0	5	6	19	20%	63%	43%
ESPER	5)		30. 4	100%	100%	NA:
	6.25	30	304 14	4400%	÷ 100% ±	NĀ

These children scored at the ceiling of the test at pre testing
These children achieved scores at the ceiling of the test at post testing

Basic Literacy Assessment Test 9 Sight vocabulary: reading

		Test date:	Test date:	% known	% known	
Child	NCYG	9.1.04	1.4.04	before	after	%
		/45	/45			gain
A.	R	0	6	0%	13%	13%
B.	R	0	5	0%	11%	11%
C.	1	1	15	2%	33%	31%
D.	1	1	18	2%	40%	38%
E.	2	26	38	58%	84%	26%
**F	2	41	45	91%	100%	9%
**G	3	39	45	87%	100%	13%
**H	3	44	45	98%	100%	2%
	3	45	45	100%	1100%	NA
泛语利斯 加	34	45	45	* 400%	*400%	E NA®
K	3	30	37	67%	82%	15%
**L	4	42	45	93%	100%	7%
≭ ažžM.	5	45	45	F#100%	4100%	NA
**N	5	43	45	95%	100%	5%
0	5	30	37	67%	82%	15%
	- 5	52	52°	\$1100% a.s.	100%	ENA
	(\$)	52	52,	100%	100%	NA

These children scored at the ceiling of the test
These children achieved scores at the ceiling of the test at post testing

Basic Literacy Assessment Test 10 High frequency words: spelling

		<u> </u>		· · · · · · · · · · · · · · · · · · ·		r
		Test date:	Test date:	% known	% known	
Child	NCYG	9.1.04	1.4.04	before	after	%
		/45	/45			gain
A.	R	0	13	0%	29%	29%
B.	R	0	0	0%	0%	0%
C.	1	2	19	4%	42%	38%
D.	1	8	19	18%	42%	24%
E.	2	21	31	47%	69%	22%
F.	2	31	39	69%	87%	18%
G.	3	35	43	78%	96%	18%
H.	3	34	41	76%	91%	15%
1.	3	43	43	96%	96%	0%
J.	3	36	44	80%	98%	18%
K.	3	28	36	62%	80%	18%
L.	4	38	39	84%	87%	3%
*M	5	44	45	98%	100%	2%
*N	5	43	45	96%	100%	4%
0	5	13	29	29%	64%	35%
*P	5	44	45	98%	100%	2%
*Q	6	44	45	98%	100%	2%

^{*} These children achieved at the ceiling of the test at post testing

Sound Discovery Questionnaire : Learning Sup	oport Assistants
Training	Low High
Q. Was the initial training adequate?	1 2 3 4 5
Clearly explained, easy to understand Sarah a good trainer Modelling at ORR years useful	Average : 4
Modelling at OBP very useful Yes	
Q. What would you add / take away?	
Sound Discovery Observation at Old Buckenham first, before days input	
Q. How useful was the follow up visit?	
It was reinforcing / affirming. Opportunity to talk through changes / feedback Limited access to Sarah on second visit — did increase pace post visit Very useful — opportunity to clarify and ask questions Ok - could air any problems or queries	Average : 4.5
Q. How useful was the visit to see a lesson modelled?	
Came away feeling much more confident Not useful Really useful Very helpful and discussion afterwards with the LSA at OBCP	Average 3.5
Materials	
Q. Is the manual clear and comprehensible?	
As a base it is useful Simple and clear	Average : 4.25
Sorted the sessions into folders for future use	
Q. Are the materials straightforward to use?	
Yes.	Average. 4.25
Q. Do they take long to prepare?	
No – initially yes but they are simple Better than others programs – less preparation About 35 mins per step – to copy laminate and cut up – lasts 2 weeks 20 mins per week	Average 4.5
Methodology	
Q. Are you clear about the principles behind SD?	
Yes Yes, fine We benefited from the teacher and LSA sessions. No	Average: 3.75

Sound Discovery Questionnaire: Te	achers
Learning	Low High
Q. Do you think Sound Discovery has made an impact on the children's reading/spelling?	1 2 3 4 5
More enthusiasm for reading More focused	
Helped E and B Too soon to say	Average: 3
Pride in progressing through the numbered books	Average. 3
Q. Have you noticed any transfer of skills into to other area of t	the curriculum?
More independence with reading and writing	
Seem more generally motivated	Average: 4
Q. Do you think SD is motivating?	
Children terribly keen P and Q definitely benefited M less interested	
There is enthusiasm to go to SD groups	Average: 5
Management Q. Are you clear about the principles behind SD?	
Q. Are you clear about the principles benina 3D!	
Yes definitely As much as I need to know	Average: 4
Q. Do you think it is an effective use of LSA time?	,
Provided targeted at right children	Average : 5
Q. In comparison with other programmes would you feel SD is intervention?	a robust Wave 3
Can be done without input from teacher	
Probably successful because LSAs had training/ownership	Average: 5
Practical nature/children enjoy different approach	
Any other comments: Children keen to have a go LSAs enjoy t structure No time for children to mess around Very active Like the physical nature of it. Like the simplicity Need time to talk through with teacher	leaching it - they like the
Probably successful because LSAs had training/ownership of it More focused/laid down/follows stages Practical nature/children enjoy different approach Any other comments: Children keen to have a go LSAs enjoy t structure No time for children to mess around Very active Like the physical nature of it. Like the simplicity	J

Pupil's comments on Sound Discovery

- Child Q Y6 'A lot of fun. I feel a lot better. I think it helped me a lot; it's helped me with my spellings. When I write spellings in class, it's a bit easier.'
- Child O Y5 'It learnt me new things and that, I liked it. I liked writing the best in our green books. it helped me writing and that, really good. I liked to be in the group. It's helped me in class ...'cos if you didn't know how to spell the words, now I can sound the words out with my phoneme fingers'
- Child N Yr 5 'I know how to spell everything and read everything though some bits are a quite hard and some bits are easy. Phoneme fingers is hard with some words but it is helping. I think I am getting better slowly. I like it because it makes me feel good. When I go back to class I feel I can do it all. I feel proud.'
- Child M Yr 5 'Its good and I like it. My friends are there to help me. I don't know if it has helped me but I like doing it '
- Child P Yr 5 'It has helped me with my sounds and spelling and it's fun! I would like to go on doing it next term. It definitely helps in class with my spelling. I sound out in my head and use my fingers. I think I am getting better. I could spell 'brilliant' by sounding it out'.
- Child L Yr 4 'It's alright. It may have helped me. I liked making words up on the board I don't know if it has helped me in class'
- Child J Yr 3 'I liked it its fun. I liked making words on the board and the game passing the sentence you have to read them out'
- Child H Yr 3 'Its fun. We make different words and I like spelling them as well. My favourite bit is handwriting. I am getting better at reading and hand writing'
- Child K Y3 'Its good doing it . It's helping me learn about words. My favourite bit is when we play the swap game '
- Child K Yr 3 'I don't like it . I get bored I find it easy sometimes when I am up to it. I think it has helped a little bit '
- Child I Yr 3 'I think it's very good 'cos you get to learn lots of stuff about words, sounds and handwriting. I like playing games'
- Child E Yr 2 'It's really good because you get to do really good stuff. It helps me when I write a story in class because if there's a word I don't know I can sound it out'
- Child F Yr 2 'I like it because it really gets me going. It gets me learning more about spellings and how to make words- that 2 sounds say something together. I work hard'.

Head teacher's Summary

Background

Over the last two years, analysis of internal assessments and analysis of performance data highlighted a small number of children who fall behind with literacy skills despite very good delivery of the national literacy and support strategies. This led to the search for a more effective intervention strategy.

Sound Discovery had a variety of attractions; cheap and easy to introduce, claims of good rates of progress, economical in terms of time, all combined in a multi-sensory, easy to use, hands-on package.

Implementation

After a day's training the support staff found the scheme easy to introduce. They were highly motivated by its simplicity and the enjoyment expressed by the children. Quite simply, they were sold on the idea. Their belief in its success was transmitted to the children, whose enthusiasm then drove the scheme forward.

Benefits

Long before the final retesting, the decision had been made to continue with Sound Discovery. Regardless of statistics, the conversion of the reluctant reader / writer who always said; 'No' or 'I can't' into children who say; 'I can' or 'Can we do some more during playtime?' was evidence enough that it had a very beneficial effect. There were social benefits too. The skills involved in sharing, or playing games in a constructive daily setting, met other needs.

Finally, the data from retesting validated what we knew was happening. It illustrated the substantial gains that we were looking for.

Summary

It works. When you read the children's own comments, hear their opinions round the lunch table, observe their enthusiasm and enhanced self-esteem then you know Sound Discovery works without even looking at statistical gains.

It is the cycle of pleasure: success...self-esteem...motivation ...which I find most encouraging.

Placement groups for Sound Discovery - Spring Term 2004

Y6	cup 1 Child Q Child P	Step 2.2
Y5 Y5	oup 2 Child M Child N Child L	Step 1.5
Y3 Y3 Y3	cup 3 Child I Child J Child H Child F	Step 1.3
Y5 Y3 Y3 Y2	cup 4 Child O Child G Child K Child E Child D	Step 1.1
Y1	oup 5 Child C Child A	Step 1.1

Yr Child B

Thanks to the all the staff and children at North Elmham Primary school and my colleagues
Sue Judd and Jennie Price
for their hard work and enthusiasm for the project