

Year 7 Transition Project

In association with the Dyslexia SpLD Trust



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Summary

A quasi-experimental matched-groups study investigating the effectiveness of support for pupils with mild literacy difficulties on transition to secondary school.

The study illustrated the positive impact that a short course of individual support can have on the attainment and self-confidence of pupils with weak literacy skills, on transition to secondary school.

A decline in attainment in literacy skills was seen in the comparison group, but the taught group improved in both reading and spelling.

Pupils in the taught group displayed average gains in standard scores for single word reading, single word spelling, sight word reading efficiency, reading comprehension and free writing speed.

Pupils' self-confidence improved and attainment in more subjective qualities of attainment, such as writing skills, also rose.

School assessment of pupils' progress reflected gains in reading and spelling skills, with 50% of results showing learners moving from below average to average reading attainment.

Background of Study

- Empirical evidence suggests that the performance of year 7 pupils can remain static or even decline.

In a 2003 review of evidence Galton et al suggested 50% of pupils make no progress in English and science while approximately 30% of pupils make no progress between yr 6 and 7 in mathematics. The National Strategy 'Strengthening Transfers and Transitions' DCSF 2008, reported 2 out of 5 pupils failed to make progress during year 7. This strategy suggested one of the key factors in successful transfer was pupils' motivation and self-confidence: *'Pupils need the confidence, understanding and skills to advance their own progress across transfer or transition. Effective transfers and transitions happen inside the minds of pupils. Their ability to engage with and take comparison of their learning remains a critical element'*.

Evidence of a dip in prose reading accuracy for pupils in year 7 can be found in the data gathered by the Diagnostic Reading Analysis. This shows a drop in the mean number of words correctly read at ages 12:00-12:05.

- The transition to secondary school is associated with a range of well recognised educational and emotional challenges.

Learners lose the consistent pastoral and academic overview of their progress by a class teacher.

Learners must shoulder the additional stresses of new social groups, new physical environments and organisational demands.

Learners must deal with a broader curriculum and range of teaching styles.

Basic literacy skills are no longer a focus of teaching, unless pupils have very weak literacy skills and receive additional support.

- It is suggested that pupils with below average to low average literacy skills, who do not qualify for support, are likely to be particularly vulnerable to a drop in attainment and self-confidence.
- Reviews of a range of interventions designed to help children with dyslexia and other reading difficulties have suggested that it is hard to improve children's standard scores in literacy (Fawcett 2002). The US National Reading Panel (2001) highlighted the fact that improvements in phonological skills do not always generalise into more accurate or fluent reading and spelling is particularly difficult to remediate.

Aims

To discover whether a two term, individualised teaching programme aimed at pupils who do not receive structured additional support in school, could:

- Reverse the reported dip in measurable literacy attainment.
- Improve measurable literacy attainment.
- Improve qualitatively analysed literacy attainment.
- Improve self-confidence and motivation.
- Extend improvements into mainstream performance across the curriculum.

To investigate the most effective support strategies for improving spelling, writing and reading skills.

The study incorporated 3 permutations of length and intensity of teaching programme in order to evaluate the most time/cost effective intervention.

Structure

A quasi-experimental matched-groups study matching for single word reading attainment, spelling attainment, age and gender.

Group Matching

Groups were matched for gender as far as possible. Some pupils left during the study. This impacted on male/female ratios, see appendix 1 for details of gender in each group.

Pupils in taught and comparison groups had displayed average CAT/MIDYIS scores on entry to the schools in year 7.

Pupils did not have EBD.

Pupils for both groups in the main study were selected by the school as they displayed weak literacy skills, highlighted by assessment on entry to year 7.

No pupils were receiving regular individual support. Students in both groups at C school had received some group spelling support at approximately 3 week intervals. Students in all 3 schools in both the taught and comparison groups had access to shared support in class from LSAs.

Assignment to Groups

Pupils were assigned to the taught or comparison groups by the schools. Assignment to the groups was based on ease of timetabling for the schools.

Assessment

All participants were assessed for attainment at the beginning of the teaching period and again at the end using parallel form tests.

The taught group was also given a full diagnostic assessment at the beginning of the teaching period. This was used to help plan the teaching programme.

Support Schedule – Pilot Study

Pilot Project 1 (No Comparisons)	Lesson Schedule	Number of lessons	Timing of Lessons	Number of Pupils
W School	2 x 50 minute lessons per week	53	Half way through autumn term '09 – half way summer term '10	6 pupils
C School	2 x 50 minute lessons	20	Summer term '10	5 pupils

Support Schedule – Main Study

Main Study (Comparison group also assessed)	Lesson Schedule	Number of Lessons	Timings of lessons	Number of Pupils per group
W School	2 x 50 minute lessons per week	43	End of autumn term '10 to end of summer term '11	5 Taught 5 Comparison
C School	2 x 50 minute lessons per week	33	End of autumn term '10 to half term summer '11	6 Taught 6 Comparison
H School	1 x 60 minute lesson per week	22	Beginning of summer term '11 to end of autumn term '11	5 Taught 5 Comparison

Total Number of Pupils Taught, including Pilot Study = 27

Ethical Considerations

The parents of the pupils in both the taught and comparison groups were contacted by letter via the schools. The project was explained to them and they were invited to give permission for their child to be included in the study. All those parents contacted agreed to the participation of their child. Each pupil in both the comparison and the taught groups was informed about the purposes and the nature of the project during the first assessment. They were given broad positive feedback about their progress, where possible, during the follow-up assessment.

Confidentiality was maintained by deleting all names and addresses from test forms, reports and correspondence.

Parents of pupils in the taught groups were provided with reports detailing their child's progress at the end of the teaching period.

Teaching

Specialist teachers, trained at the Helen Arkell Centre, carried out the teaching in the main study. One teacher, who trained elsewhere, partly used the Units of Sound Programme in one school for the pilot study.

The structure of the teaching programme was informed by individual diagnostic assessment reports and the wishes of the pupils. A formal intervention programme was not employed. Teachers designed the intervention around the specific needs of each pupil. Some focused more on language skills, some on writing skills, some on reading skills and some on spelling.

Specific guidance was provided to help teachers provide speech and language support where necessary.

Emphasis was placed on transfer of skills outside the 1-1 teaching situation and on improving independent learning and self-confidence. Teaching was based on the following principles:

- Teaching should aim to improve the pupils' ability to access the curriculum across a range of subjects but particularly those with a heavy literacy component, e.g. history, geography, science.
- Consolidation activities should be based on the current curriculum where possible.
- Teaching should aim to improve pupils' ability to be independent learners by encouraging them to recognise and develop a range of strategies appropriate for different situations.
- Teaching should aim to help develop skills needed in year 7 such as developing research and study skills, e.g. reading for meaning, summarizing, answering questions from a text, interpreting information and putting it into their own words, reading and following instructions, using dictionaries.
- Teaching should provide the pupils with opportunities for success and encourage them to take risks in order to make progress with their learning and develop their self-confidence.
- Where necessary teaching should address language and listening skills such as vocabulary development, identification and communication of main ideas, listening for detail, oral story telling.

Pilot Study Results

Results were analysed separately for the two schools.

W school used a Helen Arkell trained teacher who individualised the teaching programme to match the needs of each pupil. The teacher in C school used the Units of Sound Programme for a proportion of every lesson.

Results are provided as mean standard scores for each school, before and after the teaching period.

It should be noted that the pupils in W school had more than double the number of lessons (53) compared to the pupils in C school (20).

There were 6 pupils in W school and 5 pupils in C school.

Pilot Study – Mean Standard Scores Before and After Teaching Period

	W School Before Teaching	W School After Teaching		C School Before Teaching	C School After Teaching
WRAT 4 Spelling	83.17	87.67		86.2	86.6
WRAT 4 Single Word Reading	84.33	88.33		87.4	88.6
TOWRE Sight Word Reading Efficiency	85	89.5		93.8	89.8

- Pupils increased their mean standard scores across all measures in W school.
- Pupils slightly increased their mean standard scores for single word reading and single word spelling in C school. Scores for Sight Word Reading Efficiency decreased.

- There were two variables, number of lessons and teaching content. W school pupils received more than double the amount of teaching compared to the C school pupils.

C School

- C school pupils received a proportion of support, which included a highly structured phonics programme.
- 4 of the 5 pupils in C school felt that teaching went too far back to basics. They reported that teaching covered too much that they felt they already knew, e.g. sounds and the alphabet.
- 1 pupil would have liked more help with essay planning.
- 1 pupil found all elements of the teaching helpful, especially work on nouns and verbs. 2 pupils felt that working on sounds for spelling was helpful.

W Schools

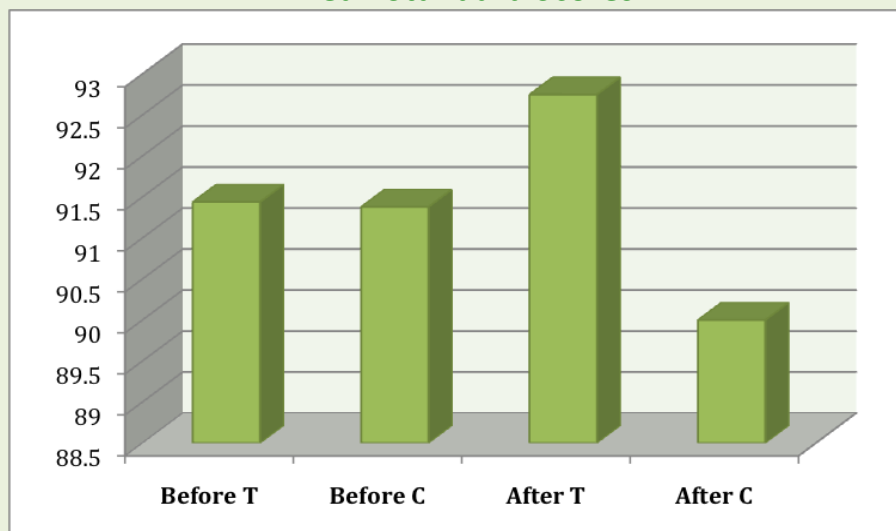
- Pupils in W school all spoke very positively about the teaching and felt their performance in class had improved as a result. All of them were immediately able to tell me about strategies that they now used for attacking difficult words when reading and spelling and these strategies were evident in the assessment.
- School assessment reflected the results of the study. W school assessment showed gains in standard scores for reading for 5 of the 6 pupils. 3 pupils moved from the below average to the average range during the period of support.
- School assessment showed all pupils in W school improved their spelling ages over the period of support.

Main Study - Quantitative Results

- Standard scores for single word reading accuracy, sight word reading fluency and single word spelling were analysed. Mean scores for the comparison group and the taught group were compared before and after the teaching period. Alternative forms from parallel form tests were administered.
- Mean scores for the comparison group dropped over the teaching period, confirmation that the literacy skills of this vulnerable group of pupils are likely to decline or remain static during year 7.
- Mean scores for the taught group increased over the teaching period, confirmation that the literacy skills of this group can be improved with a short period of individualised tuition.
- Effect sizes were calculated to analyse the difference between the mean gains for the taught group compared with the means for the comparison group. See appendix 2 for an explanation of the formula used. Effect sizes were as follows:

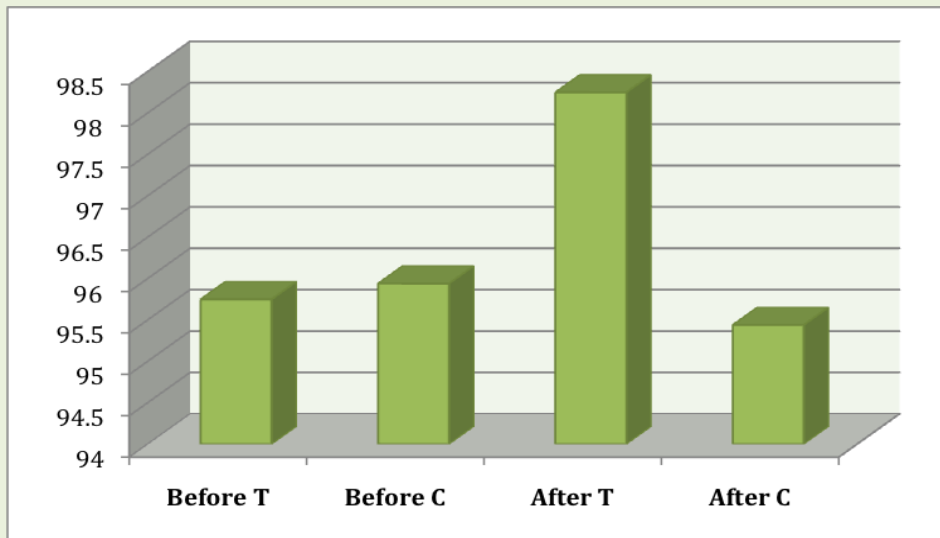
Test	Effect Size
WRAT 4 Single Word Reading	0.52
WRAT 4 Spelling	0.61
TOWRE Sight Word Reading	0.36

Single Word Reading (WRAT 4) Mean Standard Scores



↑ Average Standard Scores increased by 1.32 for the taught group
 ↓ Average Standard Scores decreased by 1.38 for the comparison group
 = An improvement of 2.7 for the taught group over comparison group
Effect Size = 0.52

Sight Word Reading Fluency (TOWRE) Mean Standard Scores



↑ Average Standard Scores increased by 2.50 for the taught group
↓ Average Standard Scores decreased by 0.50 for the comparison group
= An improvement of 3.00 for the taught group over comparison group
Effect Size = 0.36

Single Word Spelling (WRAT 4) Mean Standard Scores



↑ Average Standard Scores increased by 0.51 for the taught group
↓ Average Standard Scores decreased by 2.19 for the comparison group
= An improvement of 2.7 for the taught group over comparison group
Effect Size = 0.61

Free Writing – Detailed Assessment of Handwriting Speed

- In H School all pupils focused on writing to a large extent. Here standard scores for free writing speed increased from an average of 80 to an average of 88.
- Standard scores for free writing speed across all 3 schools increased from an average of 89.7 to an average of 91.

Reading Comprehension – DRA/YARC

- The York Analysis of Reading Comprehension was used to assess pupils at W and C Schools. This has an upper age limit of 12. It was chosen primarily as a diagnostic tool to help inform teaching. However, this meant that a number of pupils were just above the upper age limit at post teaching assessment. The results should therefore be interpreted as a guide to attainment. Pupils mean standard score for reading comprehension was 93.4 before teaching and 102.6 after teaching. Even allowing for the fact that some pupils were slightly above the age limit, it can be seen that pupils reading comprehension skills improved during the teaching period.
- The Diagnostic Reading Analysis was used to assess prose reading comprehension skills for pupils at H School. This was chosen to ensure that some reading comprehension scores were available within the age range of the pupils. The DRA gives a broad guide to comprehension attainment. Two pupils were assessed as 'below average' before teaching. These pupils moved into the 'average' band at post teaching assessment. Three pupils obtained scores of average or above average at the start of the teaching period. These pupils remained in this band at post teaching assessment.

Sentence Reading Comprehension – WRAT 4

- Assessment of sentence comprehension before and after the teaching period was restricted to 5 pupils due to time constraints. 2 pupils improved, 2 pupils displayed lower scores and there was no change in one case. Overall there was no improvement or decline for sentence comprehension.

Prose Reading Accuracy - DRA

- Assessment of prose reading accuracy before and after the teaching period was restricted to 5 pupils due to time constraints.
- Taught group average standard scores for prose reading accuracy rose from 104.6 to 109. An increase of 4.4. Comparison group average standard scores for prose reading rose from 100 to 101.16. An increase of 1.16.

Main Study - Qualitative Results

Free Writing – Content and Technical Writing Skills

- The DASH free writing task was administered to assess the content and technical writing skills of the taught group at the beginning and end of the teaching period. Pupils were asked to write for ten minutes on the subject of 'My Life'. They were given an opportunity to plan their work using a 'mind-map' style prompt sheet.
- The improvement in writing skills was noteworthy. The quality of free writing improved in most learners with particular improvements in paragraph use, punctuation use and sentence structure. Improvements were also noted in the use of planning, the development of ideas, presentation and grammar.

Pupils' Views

- Pupils were interviewed post teaching and asked for their opinions on the effectiveness of the teaching. It was emphasised that the interviewer was not connected to the teacher and that pupils' honest opinions would be helpful and appreciated, so that that other pupils may be helped most appropriately in the future.
- 13 of the 16 pupils felt that the teaching had been extremely helpful, that it had been a positive experience and had made a difference to their literacy skills. Comments included:
 - I put my hand up when I am asked to read in class. I wouldn't have before.*
 - I find it easier to write up science experiments now because I don't have to concentrate so much on spelling, I can think about the content more.*
 - I feel more confident in class.*
 - I am better at writing paragraphs and planning. I plan much more now.*
 - Practising breaking up words has helped my reading.*
 - The lessons helped my reading and spelling and they were fun.*
 - I think I use vowels in my spelling better now.*
 - I am better at knowing when to use paragraphs in class now.*
 - I have got better with my planning so my writing has improved.*
 - It was good learning about suffixes and prefixes.*
 - I am a bit more confident in writing.*
 - It was useful being given ideas for spelling to take away.*
 - I have learnt to break up words for reading and spelling.*
- 3 of the 16 pupils did not think that the lessons had been helpful. They felt that they would have learnt just as much staying in class. All 3 pupils actually improved their performance in both reading and writing and two pupils also improved in spelling.

- 50% of pupils did not like missing mainstream lessons.
- Although not part of the main teaching project, pupils in the pilot project who received a short course of lessons, including elements of the phonics based programme Units of Sound, were also interviewed post teaching. The majority of these pupils felt that the phonics part of the teaching was not helpful and went 'too far back to basics'. They said they would prefer more general help with spelling and more support for areas such as essay planning.

Parents' Views

- The parents of one pupil wrote to the school, unprompted, to say how much improved they felt their child's work was following the teaching.
- Parent questionnaires were sent out before and after teaching. Unfortunately the response was very poor and no before and after questionnaires were available for comparison.

Teachers' Views

- Tutor questionnaires were sent out before and after teaching. Again the response was poor. However, in the few responses that were available for comparison slight improvements in organisation, note-taking and language skills were noted.

Self-Esteem

- Pupils' anecdotal evidence suggested a rise in self-confidence related specifically to literacy performance.
- The Burden self-esteem questionnaire was used to assess pupils' general academic self-esteem. There was no difference for comparison and taught groups. Self-esteem rose in both groups and may have partly been linked to feeling more settled in secondary school.

Effects of Length and Intensity of Programme

- The longest programme performed best at increasing word spelling and reading. However the second longest programme performed worst at word reading and spelling.
- The success of the programme appeared to be related more to teaching style than length of programme.
- The programme which included 1 x weekly lesson was just as successful as the 2 which included 2 x weekly lessons.

Features of Successful Teaching

Key features of teaching styles resulting in significant improvements in self-confidence and attainment were analysed.

Meta-cognitive skills

- Pupils were frequently asked to review their own progress and articulate which strategies they found more or less helpful.
- Pupils were often required to vocalise teaching points in initial teaching and consolidation activities.

Self-confidence

- Support which helped learners cope with the routines of secondary school helped improve their self-confidence and their willingness to take risk with their learning. Strategies such as providing keycards with important daily reminders such as homework club and PE kit were reported as very helpful by relevant pupils.
- Improving pupils' confidence to show their understanding through a written format was important. For example scribing for pupils initially, to illustrate the breadth of their vocabulary and knowledge, helped encourage pupils to record their ideas on paper, despite poor spelling.

Communication

- In some schools teachers were able to discuss on-going progress with class teachers and SENCOs. This helped improve understanding of pupils' difficulties within the classroom and in one case allowed the class teacher a better understanding of the capabilities of the pupil.

Cumulative teaching

- Teaching was delivered in cumulative, small achievable chunks, with lots of opportunities for consolidation at each stage. For example, mind-maps to support structured writing activities were initially introduced by discussing examples linked to different genres of writing. Simple mind-maps were modelled and then produced by the learners. Branches were then linked to paragraph outlines. A single branch was developed into one paragraph, with and then without support. Finally a mind-map was used to independently plan and write a piece of writing incorporating several paragraphs.

Language skills

- Analysis of pupils' speech and language skills from the initial assessment and on-going observation, led to targeted support. For example strategies to help learners recognise the 'main idea' in oral and then written language. Improving inferential understanding by learning to read 'on the lines' and 'between the lines', teaching specific groups of subject specific vocabulary. This support for speech and

language skills was then built on during reading comprehension and writing activities.

Reading

- Improvements in self-confidence, accuracy and fluency in reading were supported by opportunities for the pupils to read a variety of genres of text aloud, in the privacy of a one to one teaching situation.
- Support for reading accuracy focused on syllable division and analysis of the morphology of words.

Spelling

- Teaching of rules, in particular spelling rules, was linked to what was 'probably right', for example of all possibilities for the 'sh' sound in the middle of a word 'ti' is usually correct.
- The importance of using the morphology of words to help spelling was illustrated and practised. Many learners mentioned this approach as something they found particularly useful. Not only does it give them the ability to independently spell many of the longer words required at secondary level, but they may also have perceived it as a more 'mature' approach to spelling, appropriate for them as secondary learners.
- Teaching focused on individual errors produced in the course of class work. These errors were analysed by both learner and teacher and strategies to help eliminate these in the future were discussed, e.g. a spelling error *swining (swinging)* was discussed in relation to ensuring the root word was correct initially and then adding suffixes.

Implications for Further Studies/Remediation

A number of factors emerged which should be considered when planning further studies and remediation programmes.

- It was extremely difficult to communicate effectively with busy teachers/tutors through intermediaries, usually the SENCO. This made assessment of the impact of teaching in other areas very difficult. It would have been better to have sought direct contact with teachers/tutors.
- It was extremely difficult to communicate effectively with parents through intermediaries. It would have been helpful to have sought direct access to parents via post.

- Time-tabling considerations meant that many pupils were missing subjects that they particularly enjoyed in order to attend support lessons. This was felt to have impacted on motivation.
- Fifty per cent of pupils disliked missing mainstream lessons. This appeared to be more of a problem for those pupils receiving two lessons a week. This may have reduced motivation. There was no difference in the improvement in attainment for pupils receiving one or two lessons a week.
- Time-tabling considerations and difficulties with pupils remembering to turn up impacted on the amount of reassessment that could be conducted in certain schools.

Discussion of Results

This was a small scale study and the results should be interpreted with this in mind.

The study illustrates the positive impact that a short course of individual support can have on the attainment and self-confidence of 'at risk' pupils on transition to secondary school. A decline in attainment in literacy skills was seen in the comparison group, but the taught group improved in both reading and spelling.

Pupils in the taught group displayed gains in standard scores for single word reading, single word spelling, sight word reading efficiency, reading comprehension and free writing speed.

Pupils' self-confidence improved and attainment in more subjective qualities of attainment, such as writing skills, also rose.

Improvements were noted in single word skills. These have been highlighted as being particularly difficult areas to remediate in learners with literacy difficulties. This was significant, as teaching was not aimed primarily at improving single word skills, although this was part of the programme for many pupils. It is suggested that the opportunity to work one to one on literacy related activities in a supportive environment helped develop their skills for a number of reasons.

- Pupils were given a sense of responsibility for their own learning. They gave input into the direction they wanted the lessons to go, they provided feedback on what they found helpful. They were given strategies and materials to take home to support their learning.
- Pupils continually articulated their understanding, improving memory and proficiency.
- Pupils felt secure enough to confront their difficulties and take the risks necessary to progress their learning.
- Pupils were immersed in a text rich environment.

How Well Did The Study Meet Its Aims?

Aims of Study

To discover whether a two term, individualised teaching programme aimed at pupils who do not receive structured additional support could reverse the reported dip in measurable literacy attainment and improve measurable literacy attainment?

✓ *The study highlighted dips in attainment in both word reading and spelling for the comparison group during the 6 months of the project. The taught group not only did not show this decline but improved average single word reading, sight word reading efficiency, prose reading accuracy, reading comprehension, single word spelling and free writing speeds over the 6 month period.*

Could intervention improve more qualitatively analysed literacy attainment?

✓ *The study showed improvements in quality of free writing including planning techniques, paragraph use, punctuation, sentence structure and development of ideas.*

Could intervention improve self-confidence and motivation?

✓ *The study showed improvements in pupils' self-confidence in their literacy attainment. E.g. "I put my hand up when I am asked to read in class. I wouldn't have before."*

Could the study highlight particularly successful support strategies for year 7 pupils?

✓ *A number of factors emerged as key in the promotion of pupils' self-confidence and literacy attainment.*

Could the study provide evidence for which of 3 permutations of length and intensity of teaching programme were most effective?

✓ *The success of the intervention appeared to be related to teaching style rather than number of lessons. Twice weekly intervention appeared no more effective than weekly intervention.*

Could the study provide evidence of improvements extended into mainstream performance across the curriculum?

The study was unable to link improvements in literacy skills gained during the teaching programme with wider improvements in performance in the classroom due to communication difficulties with busy tutors and teachers.

The Future

It would be informative to assess attainment again, a year after the end of the teaching period. This would allow monitoring of any 'wash-out' effects and provide evidence for the possible long-term validity of this type of intervention.

The study provided evidence for a dip in attainment among learners with low average to below average literacy skills, on transfer to secondary school. This highlights how challenging and disruptive this phase of their education can be to academic progress.

It is suggested that the months immediately following transfer to secondary school should ideally include weekly small group or individual support in literacy skills for vulnerable pupils, based on the teaching principles outlined in the report. Preferably, the support would be embedded in the time-table so that all pupils were receiving either whole class study skills or small group/individual support at the same time. This would help reverse a possible decline in progress and help them catch up with their peers, improving self-confidence in their literacy skills and better access to the broader curriculum on offer.

All subject teachers of year 7 pupils should be aware of the difficulties likely to be faced by pupils with weak literacy skills during their transition year. Subject teachers should try and incorporate support for core literacy skills in their individual feedback where appropriate and possible.

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Appendix 1

Gender of Participants

Pilot Project

School	Female	Male
W	0	6
C	3 *	2
<i>Total</i>	3	8

Main study

School	Taught Groups		Comparison Groups	
	Female	Male	Female	Male
W	4	1*	3*	2
C	2	4	3	3
H	5*	0	4	1*
<i>Total</i>	11	5	10	6

* Groups from which one participant dropped out during the study.

Appendix 2

Effect Sizes

Effect sizes in the transition project were calculated as follows:

$$\frac{\text{average gain of taught group} - \text{average gain of comparison group}}{s}$$

s = the pooled post-test standard deviation, which was calculated as follows, where n_1 and n_2 are the sample sizes of the intervention and comparison groups respectively, and s_1 and s_2 are their post-test s.d's:

$$s = \sqrt{\frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2}},$$

(Hartung et al., 2008)

For the main study, this formula gives the following results:

Test	effect size
WRAT4 reading	0.52
WRAT4 spelling	0.61
TOWRE	0.36