

Pilot Study Report for Pathway to Phonics



Ann Sullivan May 2024

This is a report on a preliminary, small-scale study of the impact of a new programme, Pathway to Phonics, for learners with the most complex needs and significant barriers to learning. It includes statistical analysis of the data gathered during the study so that conclusions can be drawn about the effectiveness of the programme.

Key Questions

How can we teach literacy to children with complex needs who are not able to respond to formal instruction?

Some children who have a complex profile of needs are unable to access formal or semi-formal instruction for any aspect of the curriculum and are taught a pre-formal, sensory curriculum. This study examines the effectiveness of a programme which integrates key aspects of literacy instruction into this type of curriculum.

What can we do to prepare these children for potential structured phonics instruction in future?

Pathway to Phonics aims to provide children with the most complex profiles of need with:

- an awareness of print,
- a basic understanding of the alphabetic principle,
- knowledge of some key sounds and their relationship to letters, and
- phonemic awareness in the context of letters and words.

This study examines whether this has been achieved for a group of children working through the Pathway to Phonics programme.

The Pathway to Phonics Study

Pupils in the study received two terms of Pathway to Phonics, delivered by teachers and teaching assistants who had received training in its rationale, structure, specific activities, and delivery. All basic resources and planning materials were provided, although teachers had to plan how to incorporate the activities into their curriculum offer.

The Study



3 special schools



5 classes



60 pupils*



Reception to Post-16

** 1 pupil was excluded from the final data analysis as they were ill during the final term 2 testing period*

Pupils' Needs

The pupils in the study have a range of needs. They have been identified by the school as requiring access to a pre-formal, sensory curriculum, which suggests that their needs are 'severe / profound' and 'complex'.

The Department for Education defines types of special educational need (SEN) and using this classification the pupils' primary need are as follows: 14 severe learning difficulties (SLD), 3 profound and multiple learning difficulties (PMLD), 1 multisensory impairment (MSI), 41 autistic spectrum disorder (ASD).

In some cases, a secondary need was specified with a broader classification than the DfE's. This included 4 Down's Syndrome, 2 attention deficit hyperactivity disorder (ADHD), 9 ASD, 1 hearing impairment.

All pupils had previously experienced a language-rich, pre-formal, sensory curriculum but no explicit teaching of literacy or literacy skills.

Testing

All pupils were tested prior to starting the pathway and at the end of the second term. The tests used were two criterion-referenced tests of code knowledge, requiring the pupil to:

1. look at a letter and say/identify the matching sound and
2. hear a sound and identify the matching letter from a choice offered.

These tests were chosen as indicators of a pupil's understanding of how sounds and letters are related and how far they are recalling knowledge of the alphabetic code.

Alternative access versions of both tests were available for non-speaking pupils / pupils with fine motor skill difficulties and those who use eye-gaze.

The Sensory Curriculum and the Pathway to Phonics Progression

Within a pre-formal curriculum, the child is provided with rich sensory experiences and opportunities to explore and interact with their surroundings in meaningful ways. A thematic approach is taken to cover a range of curriculum aspects including, communication, cognition, physical/sensory and social and emotional development. A sensory curriculum is appropriate for the most complex learners who are often described as having profound needs, requiring a high level of support.

Pathway to Phonics is not a systematic, synthetic phonics (SSP) programme but has a structured progression that enables key aspects of literacy instruction to be incorporated into a pre-formal, sensory curriculum via a small number of simple activities.



The approach taken changes as the child works through the pathway, working on different aspects of literacy and phonics.

Table 1 The Pathway to Phonics progression

Step	Approach	Focus	Number of Activities
1	Observe	Print carries meaning Text relates to spoken words	2
2	Observe	Sounds in spoken words are represented by letters in written words	3
3	Observe	Specific relationships between the sounds and the letters	3
4	Experience	Blending sounds for reading - modelled	4
5	Experience	Segmenting words for spelling - modelled	4
6	Participate	Reading and spelling words - scaffolded	3

The programme is divided into six steps that begin with the pupil’s attention being drawn to print in books and the environment, moving on to how letters represent sounds (initial sounds), how adults decode words by blending sounds, how adults segment words and spell them and finally, with heavy scaffolding, they begin to read and spell themselves.

The Results and Analysis

The results divide the 59 children who took part in the study into two groups.

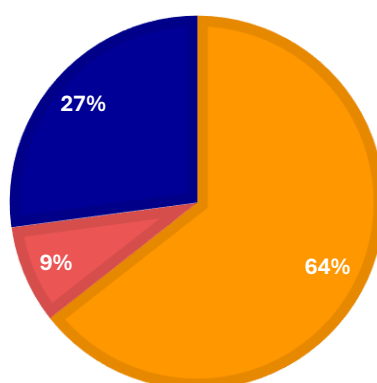
Group 1 is made up of the 38 children who were able to access the tests. The progress of these pupils is measured by improvements in aggregated test scores from the baseline tests (prior to intervention) and the tests at the end of term two, in other words comparing what they could do before and after accessing the programme.

Group 2 is made up of the 21 children who were unable to access the tests (including the alternative access tests) so, progress could not be determined this way. For children in this group, progression from one step to the next is taken as an indication of progress, with teachers making professional judgements about whether to move a child should on.

Figure 1 shows the percentage of pupils making progress, as described by the above two measures.

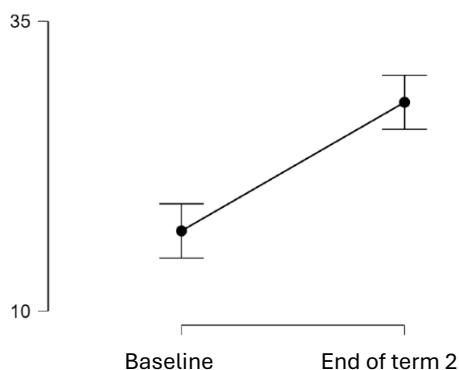
Figure 1: Percentage of pupils making progress or otherwise

■ Pupil progress indicated by gains in test score
 ■ Pupil progress indicated by step progression
■ No progress



Group 1

All 38 children in Group 1 made progress over the two terms of Pathway to Phonics (the orange section on the pie chart). The Wilcoxon Signed-Rank test was applied to the data gathered on these pupils. The improvement in test scores from baseline to end of term two was significant ($p < 0.001$), indicating that the children benefited from Pathway to Phonics.



The median (middle value or 50th percentile) score at the start of the study was 7.5 but by the end of the study was 22.5 out of 50.

Figure 2 plots the median values and 95% confidence intervals. Note that the confidence intervals do not overlap. The difference between scores at these two time points is bigger than we would expect by chance, even allowing for random variation, indicating that the impact of accessing Pathway to Phonics was significant.

It is worth noting that 12 children in this group achieved the maximum score on the second set of tests.

Figure 2. Median test scores with 95% Confidence Intervals

Group 2

5 of the children in group 2 made progress as indicated by their moving on from step 1 to step 2 (the pink section on the pie chart).

16 of this group of children made no measurable progress on the programme (the blue section on the pie chart).

Discussion

All children who took part in this pilot have severe and complex needs, indeed these could be described as 'profound', although there is much debate about the use of these terms amongst parents and professionals.

Prior to inclusion in the project, the children had not received any form of structured literacy instruction, although they had been taught a pre-formal, sensory curriculum in the context of a rich language environment that included rhymes and oral stories. 16 of the children were Year 7 and above which highlights a historical trend that this group of children are not offered literacy instruction.

Group 1

Overall teacher and teaching assistant feedback on this group of children were expressions of surprise that the pupils responded as they did and made progress beyond expectations. Some of these children have subsequently gone on to access the Phonics for SEN main programme in the context of semi-formal instruction.

The results tell us that:

- some children with complex needs can learn some key aspects of literacy: an awareness of the nature of print, a basic understanding of the alphabetic principle, knowledge of some key sounds and their relationship to letters, and phonemic awareness in the context of letters and words, if instruction is made accessible for them;
- this can be achieved by incorporating simple activities into a pre-formal sensory curriculum;
- more children can access key aspects of the foundations of literacy than perhaps previously thought.

“After a few weeks some children began to run their fingers across the words during story time which has led to pointing to each word as it is read. This is amazing progress, and it is lovely to see that some children are making the connections – printed words carry meaning, and the letters represent something.” *Teacher feedback*

Pathway to Phonics can be viewed as a stepping stone to phonics for those who are not yet able to access semi-formal instruction.

Group 2

Of the 21 children in group 2, 5 made some progress, moving from Step 1 to Step 2 of the programme, with progression based on teacher’s professional judgments.

That some children made no measurable progress is something that could be anticipated if we are being realistic about the pupils’ profiles of need in this group. Teachers had identified these as the children with the greatest need, functioning at a very early stage in development, earlier than when we might consider initial instruction for typically developing pupils.

That 5 of these children made some progress shows that we should not make assumptions about children, without giving them the opportunity to engage and respond if they can.

The step 1 activities are low-key and can easily be incorporated into practice.

“Pointing to words in the book was a change in practice for us. A very important one. One child (pre-verbal) would always point to pictures in books and ask for an adult verbal response, e.g. in ‘The Gruffalo’. Now he is pointing to words as well as pictures – showing a clear interest in text. Wow!” *Teacher feedback*

Step 1 can, in essence, be ‘running in the background’ for the time when a child might be ready to respond, as we continue to surround them with a language rich environment filled with stories and rhymes.

What might this mean for the literacy landscape for these children?

Absolutely all children in these pre-formal classes were included in this study and given the opportunity to learn, should they be able to do so. The pathway offers the potential for children whose complex profile of needs mask their cognitive abilities, to be identified and put on a pathway to learning how to read, spell and write.

Nearly three quarters of the pupils made progress and for those who accessed the tests, this progress was statistically significant.

We might not be able to truly achieve literacy for all but there is no reason why we cannot offer literacy *opportunities* for all; opportunities for all children start the path to literacy if they are able. Pathway to Phonics potentially widens the offer to include all our learners with SEN, however complex their needs. It is a hope that this study and report will stimulate more research in this area.

Case Studies

Case Study A: Year 3 pupil
Needs: Autistic Spectrum Disorder (ASD) ‘profound’

January 2023-July 2023
Steps: Step 1 > Step 3

Prior to being introduced to ‘Pathway to Phonics,’ **A** made little meaningful engagement with books and reading. He would sometimes be observed in solitary roleplay, acting out images from the pages of a book, but he was reluctant to participate in shared focus with support staff and demonstrated very little awareness of letter sounds.

Since being introduced to the programme in January 2023, **A** has gradually exhibited a growing enjoyment for reading and books, which is evident throughout his learning.

A will now willingly engage in reading a book with support staff and is even beginning to initiate these activities. He is now able to follow the story with support and displays a growing level of comprehension. **A** will participate in tactile and sensory activities linked to the books he is reading and has shown very good focus and understanding of these.

A engages in pathway sessions four times per week. There are also many opportunities for **A** to develop skills embedded throughout his curriculum. He is beginning to recognise specified letter sounds, linked to the book he is reading, with more confidence and consistency.

**Case Study B: Post 16
Needs: Autism**

**January 2023-July 2023
Step 3 > Step 5**

At the start of last year (September 2022), **B** was not particularly engaging in reading and at times would struggle to maintain focus on a story. He would sometimes listen to a story being read to him by staff but was very focused on books with people in, rather than listening to a full story.

Since **B** has started 'Pathway to Phonics', he has become much more engaged in not only listening to stories but focussing on the words from the books as well. He has been developing his knowledge and range of reading material, such as fairytales and some non-fiction reading around topics such as Kings and Queens.

He has further developed his skills in blending and segmenting through looking at his CVC words. He has become more confident in using post it notes to identify each sound in the word and then break down into individual sounds before blending the word together, as modelled by staff.

The impact on **B**'s learning is visible as he is more engaged in reading and has been enjoying going to the library to pick a book to read outside of school. He is more actively involved in pathway sessions and is doing brilliantly trying to read and sound out unfamiliar words from a range of contexts. **B** is very close to the next step in his reading journey, moving on to the school's formal phonics pathway.

Further Comments

The study was carried out by Phonics for SEN, in collaboration with three special schools. Not being part of a large academic institution meant that plans did not go through a formal ethics procedure and panel, but ethics were an important consideration during the development and planning stage of the project.

This concluded that:

- the children would not experience literacy instruction if they did not take part in the project,
- if the programme were to prove effective, this would be of great benefit to the children,
- the curriculum time taken up by Pathway to Phonics activities is comparatively small and is incorporated into the existing curriculum,
- in the event of the programme being shown to be ineffective, then participation would not detract from the rest of the curriculum.

All schools signed a consent agreement to take part in the project, including permission to access and use data gathered anonymously. No pupil names or details were supplied, and all information was anonymised. All data is stored in accordance with GDPR.

Specific parental permission was granted to use the case studies in this document.

With thanks to:

- The pupils, staff and parents at the schools who took part in the study:
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