

A Correlational Study of the Impact of All Aboard Phonics in UK Schools

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Abstract

Over recent years there has been a concerted push back towards a science of reading approach to literacy instruction, based on systematic synthetic phonics. The All Aboard Learning team has been researching reading impairment for 15 years, by helping over 15,000 struggling readers directly. Following that research, the All Aboard Learning team have published All Aboard Phonics, a curriculum which combines the latest science of reading methodology with their specialist knowledge of the different causes of reading difficulty. This correlational study is designed to test the null hypothesis that there has been no significant impact in the results seen by schools implementing the All Aboard Phonics program. The results seem to disprove that null hypothesis, by showing a 39% drop in failure rates. The paper debates the potential causes of that change and lays out the resulting plans for the future of All Aboard Phonics.

Keywords: phonics instruction, elementary education, literacy, science of reading, reading difficulty

1. Introduction

Over recent years there has been a substantial movement in school systems back towards a systematic synthetic phonics methodology for the early teaching of reading. This is the third time in the past 100 years that the pendulum has swung back from a “real books” or “whole word” methodology to a phonics methodology (Mathews, 1976).

The reason that this pattern keeps repeating itself is that historically neither approach has proved able to

provide a way for all young children to learn to read. A study of the reading abilities of the population by age cohort gives confirmation of this (OECD, 2000). Over 40% of the US population has weak reading skills in any age group shown.

Therefore, as schools move back to a science of reading approach for the third time since 1900, it cannot be presumed that better results will be seen. However, it is vital that the new resources being given to schools can finally allow them to achieve substantially better results than have ever been seen in the past. It is only at that point that the pendulum can stop swinging and the “Reading Wars” can finally be called over (Castles et al, 2018; Solity, 2020).

If a new level of success is not seen over the coming years, it can be presumed that the same arguments against phonics will begin to be heard again and the pendulum will begin its next swing. The proponents of whole word teaching have very convincing arguments (Smith, 1978; Goodman, 1976). Those arguments always prevailed in the past in this situation. Despite the new switch to a science of reading methodology, the argument is not yet finally won (Petscher et al, 2020).

The challenge to achieve these improved results is huge. In 2022, 37% of fourth-graders in US schools performed below NAEP Basic level in reading. Performance in reading has also remained static or declined in every state in the USA since 2019 (NAEP, 2022). The COVID pandemic will have had a strong influence on the 2022 cohort, but this still leaves a big hill to climb.

The Importance of Success

Succeeding with this challenge could not be more important for the children, for our schools and for society at large.

The impacts of poor literacy are always strong and usually very negative for any struggling reader, from their earliest days at school onwards (Lesnick et al, 2010). Mastering reading early in a school career is usually a necessary foundation for a good school career and for success as an adult (Blanchard, 2023; Marks, 2007).

The broad impact on schools and school staff are also substantial. Poor literacy correlates strongly with behavioral problems (Miles and Stipek, 2006). This impacts every student and staff member in the school.

It can be debated what the costs are across society in general, but by any measure they are going to be substantial (Feister, 2010). Tax revenues are reduced and social costs increased. In addition, the justice system has a very high population of convicted criminals who are functionally illiterate (Patterson, 2018). Most of those individuals will have been convicted of a crime that has impacted other members of society.

For all the reasons above, complacency is not warranted. There needs to be a focused surge of effort to finally overcome this huge challenge through innovation. Business as usual is not good enough.

Therefore, the courage to evolve school practices in ways that show evidence of potential paths of improvement is not just desirable, but essential.

Background to All Aboard Phonics

The team at All Aboard Learning have been researching reading impairment since 2008. The team's research has brought together evidence of nine potential causes of reading difficulty (Morgan and Forrest, 2018). Solutions have been developed to each of those and tested with over 15,000 struggling readers.

As a result of this exploratory research, the team at All Aboard Learning has published a new program for teaching reading for schools around the world. It is called All Aboard Phonics.

This study is a review of the early impact that is being seen by schools which have switched from a standard synthetic phonics approach to All Aboard Phonics in the period 2021-2023.

All Aboard Phonics is a systematic synthetic phonics literacy curriculum. It is based on a science of reading methodology (Petscher et al, 2018). The core curriculum used is based on the Letters and Sounds curriculum (DFES, 2007) that has been tested for 15 years by a wide range of schools across the UK.

The UK government published new guidelines for best practice in systematic synthetic phonics for

reading development (DFE, 2023; Solity, 2022). These guidelines were followed for the creation of All Aboard Phonics. The program was validated by the UK Department for Education in 2022 (DFE, 2022).

The materials also include resources designed to help the learners showing signs of being at risk of difficulty. It is in this area of the design of All Aboard Phonics that it is substantially different to other curricula.

Almost all phonics curricula will achieve 75-85% successful outcomes, leaving around 15-25% of the children still struggling. The aim of All Aboard Phonics has been to move from that level failure down to 5% or below.

The research at All Aboard Phonics has indicated that there are nine main causes of reading difficulty for children (Morgan and Forrest, 2018). By incorporating solutions to each of those nine main issues into the materials, the program is designed to achieve this aim.

The efficacy of these techniques has been tested in a randomized control trial in six London schools (Messer and Nash, 2017). The impact was shown to be substantial, with the 90 struggling readers catching up two years of reading age in around 120 sessions on average (four-six months).

Therefore, the All Aboard Learning team is confident that the knowledge of how to help individual children to read has been developed. The challenge is how to generate suitable resources and training for teachers, so that this level of outcome can be achieved in the real life situation of a busy classroom, with a cohort of 30 children who get mixed levels of support in their home environments.

2. Method

This is a correlational study, comparing the results in June 2023 of public (state) schools using All Aboard Phonics to their historical data while using other synthetic phonics programs. Two of these schools are in urban higher-poverty settings. The other three are suburban.

The UK government mandates the running of a phonics screening check for all children reaching the end of their second year of phonics education at the age of 6 (DFE, 2023). This is a reading test based around single word reading. The maximum score is 40 and the pass mark is 32. It has been shown that the test correlates well with the development of reading ability (Duff et al, 2015).

The test includes a mix of real words and decodable nonsense words, in order to test for a decoding ability

based on the grapheme to phoneme correspondences that are taught during those first two years.

The data for this study was collected from the schools who had been using All Aboard Phonics for at least a year. They were asked to share their results from June 2023 and also from their last year of their previous phonics program.

All of the public (or state) schools in England have been using synthetic phonics as their main methodology for teaching reading for several years. So this is a comparison of All Aboard Phonics and the other phonics curricula used by the subject public primary schools, that had previously been validated by the UK Department for Education in 2014.

3. Potential Biases

School Responsiveness

Schools were asked for their phonics screening check results in July 2023. Only 50% of All Aboard schools complied with that request. Those schools were contacted a second time for their historical data and even fewer complied with this second request in time for this paper. There could be bias in either direction in the response to both requests.

Those who responded to the second request were in the normal range for the results they shared from June 2023. So, any bias incorporated in the second response would be driven by their results in previous years.

School Selection of All Aboard Phonics

There could be some factor that means the schools which have chosen to use All Aboard Phonics are different in some way to the average, which could be affecting the results then achieved with the program, independently of the quality of the program.

There has been a relatively high take-up of All Aboard Phonics from special needs schools, but those schools have been excluded from this study data.

There are no known differentiating factors for the five schools that supplied their data and no data sets were excluded from the study.

Limited Time for Training and Implementation

All of the schools surveyed had switched to All Aboard Phonics within two years and in some classes the implementation of some of the techniques recommended had not been mastered.

Single Year of Implementation

School SP was in their first year of All Aboard Phonics during 22-23. So the children taking the test in June had switched mid-program from another system.

This would tend to have a suppressing effect on any gains seen through All Aboard Phonics.

Return from COVID Lockdowns

A potentially very significant factor could be the return to full time schooling after lockdown. This might be leading to a general lift of results, irrespective of the program being used.

The indications from data collected by the UK Government and other organisations is that there was a 16% national improvement across the school estate between 2022 and 2023 (FFT, 2023; GOV, 2023), potentially reflecting both a COVID bounceback and the impact of the new programs being implemented in every school, following the 2021/22 validation process (DFE, 2023).

4. Results

The two tables that follow allow a comparison of results before implementation of All Aboard Phonics and after implementation.

Figure 1 shows the headline data of the reduction in phonics failures through implementation of all Aboard Phonics.

Figure 2 shows the data breakdown for each school in their last full year of their previous program. All the schools were using phonics programs that had been validated by the UK government in 2014.

Figure 3 shows the results at the same schools once All Aboard Phonics had been introduced.

The overall reduction of failure was 39% in the first year of implementation, with a P-value of 0.013. So, while the data set is small, we can confidently disprove the null hypothesis.

The national failure rate was 25% in 2022 and 21% in 2023, suggesting a 16% improvement (GOV, 2023). If we compare the All Aboard figure for 2023 with the national average for 2023, we still see a statistically significant reduction of failure of 20% with a P-value of 0.027.

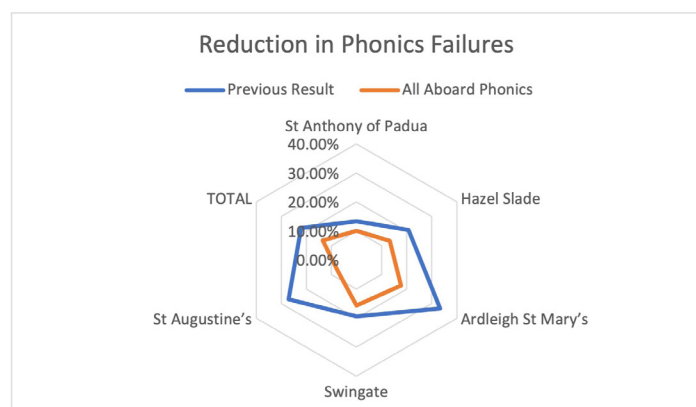


Figure 1. All Aboard Phonics Failure Reduction

SCHOOL	COHORT SIZE	FAILS	PERCENTAGE FAILURE
AP	30	7	23.3%
HS	29	6	20.7%
AM	12	4	33.3%
SP	93	18	19.4%
SA	26	7	26.9%
TOTAL	190	42	22.1%

Figure 2. Last Results with Previous Curriculum

SCHOOL	COHORT SIZE	FAILS	PERCENTAGE FAILURE
AP	30	3	10.0%
HS	30	4	13.3%
AM	17	3	17.7%
SP	83	13	15.7%
SA	27	2	7.4%
TOTAL	187	25	13.4%

Figure 3. 2023 Results with All Aboard Phonics Implemented

5. Conclusions

The results from the first year of All Aboard Phonics results in the UK are clearly very encouraging, especially when the following factors are considered:

1. First Cohort

This was the first cohort of students using All Aboard Phonics and the results were compared with those of very established programs that had the advantage of many years of implementation and feedback from schools. These were all new implementations of All Aboard Phonics and the All Aboard team has already improved the teacher training systems used by the schools since these results were collected.

2. Incomplete Experience

In several schools the tested students had started

on a different program and switched to All Aboard mid-curriculum. It can be expected that the students who have done the full two years of All Aboard Phonics will do better than those that had to switch.

3. School Team Development

Within a school team it is quite normal for there to be some staff resistance to the adjustment process to a new set of best practices with a new program. But this tends to get broken down if the new program is clearly delivering improved results for the students.

6. Lessons for Future Development

For the above reasons, the All Aboard Learning team fully expect a further significant improvement in the June 2024 results, leading to an even larger differential from the national average. The team mission is 100%

and the goal for 2024 is to drop the failure rate substantially below the 10%.

The reasons for this improvement can only be surmised from this correlational data set, but the expectation is that the focus of the All Aboard Phonics resources on success for the weakest learners is the key factor.

The All Aboard Learning team are seeing three clear groups in the 2023 failures to target for improvement:

1. EAL students

Resources are being developed and tested for accelerating the development of the key English vocabulary for these students synchronously with the phonics curriculum.

2. SEN students

These students have broad learning difficulties and some are non-verbal. The All Aboard Learning team are deepening the training resources for the teachers so that they understand how to interpret the patterns they are seeing and deliver the suitable intervention for each struggling reader.

3. Non-Attendees

It is hoped that as All Aboard Phonics gets more deeply embedded, both in each primary school and in the preschool environments as well, that these students and their parents will be less likely to choose absenteeism, since they will be seeing more success in their daily school experience.

The All Aboard Learning team will review the impact of the current changes in June 2024 and will continue to innovate and share new practices until every child is learning to read.

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