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## **FFT Reciprocal Reading Train the Trainer pilot: report on pre and post intervention reading test**

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**FFT Reciprocal Reading Train the Trainer pilot**  
**Report on pre and post intervention reading test**

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FFT provided funding for pre and post intervention implementation pupil reading tests to explore reading outcomes of pupils engaged in the pilot.

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## **1. Introduction**

This report presents findings from a reading test undertaken pre and post intervention implementation by pupils in Years 5 and 6 who received reciprocal reading targeted instruction during the Autumn and Spring terms of academic year 2022-2023 as part of a Train the Trainer Pilot project of the FFT Reciprocal Reading programme.

Sixteen schools from four regions in England participated in this Train the Trainer Pilot, where school staff were trained and supported by ‘new trainers’ from FFT during implementation, and delivered the intervention to eligible pupils in Years 5 and 6. While the training of ‘new trainers’ is not itself a component of the FFT Reciprocal Reading intervention programme for schools, it was a necessary activity undertaken by FFT to enable scale-up of the programme in the future. Therefore, during the pilot 16 school staff teams received training and online support from ‘new trainers’. The training received by schools formed part of the ‘new trainer’ *Take Over* phase of their training, and was overseen by an existing expert FFT Reciprocal Reading trainer, following which the ‘new trainers’ were certified.

Trained school staff implemented the FFT Reciprocal Reading intervention to eligible pupils in Years 5 and 6 in their school. Staff were provided with implementation guidance for using the delivery method of 20-30 minutes, twice weekly, over a minimum of 12 weeks, with pupils working in small groups facilitated by an adult (usually a teaching assistant). Using guidance provided by the developer, school staff selected eligible pupils who then completed an online test (pre-test) in September-October 2022 prior to receiving the intervention. The same pupils, having completed the intervention, then completed a post test in March 2023 using the same instrument (NGRT by GL-Assessment).

## **2. The New Group Reading Test (NGRT) used for the Train the Trainer Pilot**

Pre and post tests were completed by participating pupils from the 16 schools engaged in the pilot. The New Group Reading Test (NGRT digital version) from GL-Assessment is an adaptive test, including sentence completion and passage comprehension sub-scales. Performance on each of these sub-scales is combined to report an assessment of reading comprehension ability (overall reading scale). The NGRT overall test score for the digital

version ranges between 0 and 500 points. The test has 47 items, although the total number depends on pupil performance, and a high reliability with a Cronbach's alpha above 0.9.

The NGRT was selected for the pilot as it was the test used successfully in previous trials of the reciprocal reading targeted intervention, when delivered in primary schools with pupils in Years 5-6 and in secondary schools with pupils in Years 7-8. In both these trials it was possible to detect effect sizes using this test (O'Hare, Stark & Cockerill, *et al.*, 2019; Thurston, Cockerill & Chiang, *et al.*, 2020).

### 3. Descriptive statistics and Effect Sizes for the Train the Trainer Pilot

Data presented in Table 1 report descriptive statistics for pre and posttest NGRT scores for the Train the Trainer Pilot. This pilot project was conducted with no control group. For the purposes of comparison data for NGRT scores from a previous control group from a sample of similar age is presented in Table 2. This comparison group has pre and posttest NGRT taken within a similar timeframe to the Train the Trainer Pilot group, but data was collected three years prior to the Train the Trainer Pilot.

**Table 1: Descriptive Statistics for Train the Trainer Pilot**

	N	Minimum	Maximum	Mean	Std. Deviation
SC Scale Pretest	234	104	412	288.15	41.874
SC Scale Posttest	217	116	456	313.86	49.296
PC Scale Pretest	233	52	396	275.18	50.681
PC Scale Posttest	216	60	424	293.02	50.666
Overall Reading Scale Pretest	234	104	388	279.78	42.962
Overall Reading Scale Posttest	217	116	412	300.50	45.895
Valid N (listwise)	210				

**Table 2: Descriptive Statistics from a previous control sample for comparison purpose**

	N	Minimum	Maximum	Mean	Std. Deviation
SC Scale Pretest	53	92	376	254.79	54.319
SC Scale Posttest	53	116	404	275.40	54.566
PC Scale Pretest	50	108	396	255.36	60.103
PC Scale Posttest	51	88	380	270.35	60.680
Overall Reading Scale Pretest	53	92	380	250.79	56.680
Overall Reading Scale Posttest	53	116	368	269.96	53.480
Valid N (listwise)	49				

**Effect sizes**

Comparing gain scores to calculate Effect Sizes (Cohen's *d*) indicated that there were small positive Effect Sizes in favour of the Train the Trainer Pilot group on the NGRT Sentence Completion sub-scale of +0.09, on the Passage Comprehension sub-scale of +0.05, and in terms of Overall Reading Score of +0.03.

Previous studies (O'Hare, Stark & Cockerill, et al, 2019) indicated gains as a targeted intervention in similarly aged pupils of +0.14 on Overall Reading Score, and +0.18 in terms of the Passage Comprehension sub-scale. For slightly older pupils (secondary school age) gains were reported in the magnitude of NGRT Sentence Completion sub-scale of +0.25, on the Passage Comprehension sub-scale of +0.13, and in terms of Overall Reading Score of +0.19 (Thurston, Cockerill & Chiang, *et al.*, 2020).

Although positive, the results were of lower magnitude here. However, caution must be taken in terms of interpreting this data. The Train the Trainer Pilot group and comparison group were of uneven sample size. Standard deviations differ in the Train the Trainer Pilot and comparison group (showing significant wider variability in the comparison group, and possibly pointing towards some potential issues in sampling, with a small group of pupils performing better, and a small group performing worse in the comparison group). Schools were not paired and so there was not randomisation to ensure that there were no pretest differences (which were evident). Finally, the comparison group, came from a pre-Covid 19

sample and these pupils had not had the disrupted educational experiences of the Train the Trainer Pilot group. Therefore, it is not possible to make definitive conclusions from comparison. In terms of the Train the Trainer Pilot, then pupils made gains in reading on the NGRT Sentence Completion sub-scale, on the Passage Comprehension sub-scale, and in terms of Overall Reading Score. This model now needs to be tested against a properly matched control group to determine the effects of the Train the Trainer model of FFT Reciprocal Reading.

#### **4. Conclusion**

Smaller effect sizes than those found in a previous trial of Reciprocal Reading in primary schools including 98 schools who were trained by the programme developer (O'Hare et al, 2019) would be expected from a scaled-up intervention which included a Train the Trainer model. This is owing to training being delivered by the programme developer in the former trial including 98 schools compared to training delivered by 'new trainers' as was the case in this pilot. In addition, there was the added element of the 'new trainers' undergoing training themselves during delivery to schools during the pilot. It is not surprising therefore that positive results of a lower magnitude than in previous studies were detected in this pilot.

Despite these differences between training delivered by programme developer versus by a Train the Trainer model, caution must be taken in terms of interpreting the data here and it is not possible to make definitive conclusions from the comparison between the Train the Trainer Pilot group and the comparison group. Nevertheless, pupils in the Train the Trainer Pilot made gains in reading on the NGRT Sentence Completion sub-scale, on the Passage Comprehension sub-scale, and in terms of Overall Reading Score, suggesting this model now needs to be tested, this time with the certified trainers against a properly matched control group to determine the effects of the Train the Trainer model of FFT Reciprocal Reading.



## References

O'Hare, L., Stark, P., Cockerill, M. *et al.*, (2019). Reciprocal Reading evaluation report.

Available at:

[https://educationendowmentfoundation.org.uk/public/files/Projects/Evaluation\\_Reports/Reciprocal\\_Reading.pdf](https://educationendowmentfoundation.org.uk/public/files/Projects/Evaluation_Reports/Reciprocal_Reading.pdf)

Thurston, A., Cockerill, M., Chiang, T.H. *et al.*, (2020). An efficacy randomized trial of Reciprocal Reading in secondary schools. *International Journal of Educational Research*, 104, 101626. Available at:

<https://www.sciencedirect.com/science/article/abs/pii/S0883035520304274>