



National Traveller and Roma Inclusion Strategy (NTRIS, 2017-2021)

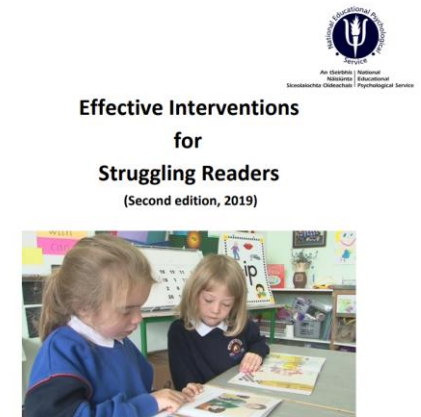
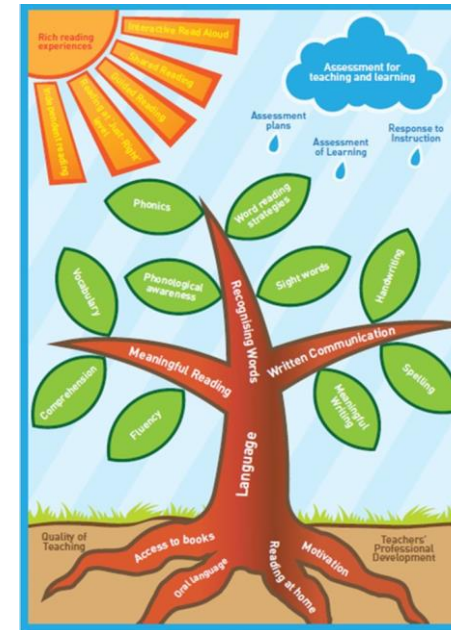
NEPS Literacy Action Research Projects 2020 -2023



Project Format

Training was offered to all pilot project schools on a range of evidence-based literacy interventions and assessment-informed intervention, based on the two key NEPS literacy documents:

- ✓ *A Balanced Approach to Literacy Development in the Early Years* (NEPS; 2016)
- ✓ *Effective Interventions for Struggling Readers* (NEPS; 2019)
- Trainings were followed by an invitation to participate in the action research phase of the project.



A Good Practice Guide for Teachers

This NEPS Good Practice Guide was developed by educational psychologists. It is based on current knowledge in this area. It is intended as a guide only. Not all the suggestions here will apply to any one student or situation.



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Department of Education

Pilot site 1 – Wexford Project



Project format for Wexford site

- 2 literacy action research projects – Phase One (2021-22) and Phase Two (2022-23)
- Training in assessment and evidence-based literacy intervention
- Implementation of a range of evidence-based interventions with target students over a period of 3 months
- Collection by teachers of quantitative and qualitative data, including pre and post intervention data using a standardised literacy test
- Meetings to set-up, monitor and evaluate the project and to facilitate the sharing of information and experiences.



Wexford Phase One 2021-2022: Participants

- Involved 15 teachers
- 5 primary, 2 post-primary schools
- 25 student participants (18 male, 7 female)
- Age range 6-16 years (mean age 10 years, 10 months)
- 20 Traveller students, 4 Roma students, 1 EAL student
- Some attrition, due to absenteeism at post-intervention stage
- **21 full data sets** at end of project (only Roma & Traveller data included)



Wexford Phase One 2021-2022: Methodology

➤ Jan – April 2022:

- 12 week intervention period
- Implementation of evidence-based literacy interventions
- NEPS Psychologists supported schools with interpretation of test results and with matching of appropriate evidence-based literacy interventions based on assessment findings.
- Pre and post intervention data (quantitative & qualitative)



Interventions Trialled: Phase One

- SNIP
- Toe by Toe
- Reading Recovery
- Literacy Lift Off
- Sound Linkage
- Accelerated Reader
- Teaching Comprehension Strategies
- Guided Reading using Graded Readers (PM Readers)
- Some combinations of above strategies (Mixed Methods approach)





Information regarding intervention sessions

- Mean number of intervention sessions: 38 (range of 18 to 71 sessions)
- Mean length of intervention sessions: 29 mins. (range 10-50 mins).
- Mean number of students each group: 3
- Teacher: pupil ratio varied from 1:1 to 1:6
- Average participant received just over 8 hours of literacy intervention over the 12 week period.
- Average teacher time spent teaching per student was 8.45 hours (teaching time divided by the number of students in the group).



Wexford Project Findings Phase One

Mean standard scores pre and post intervention

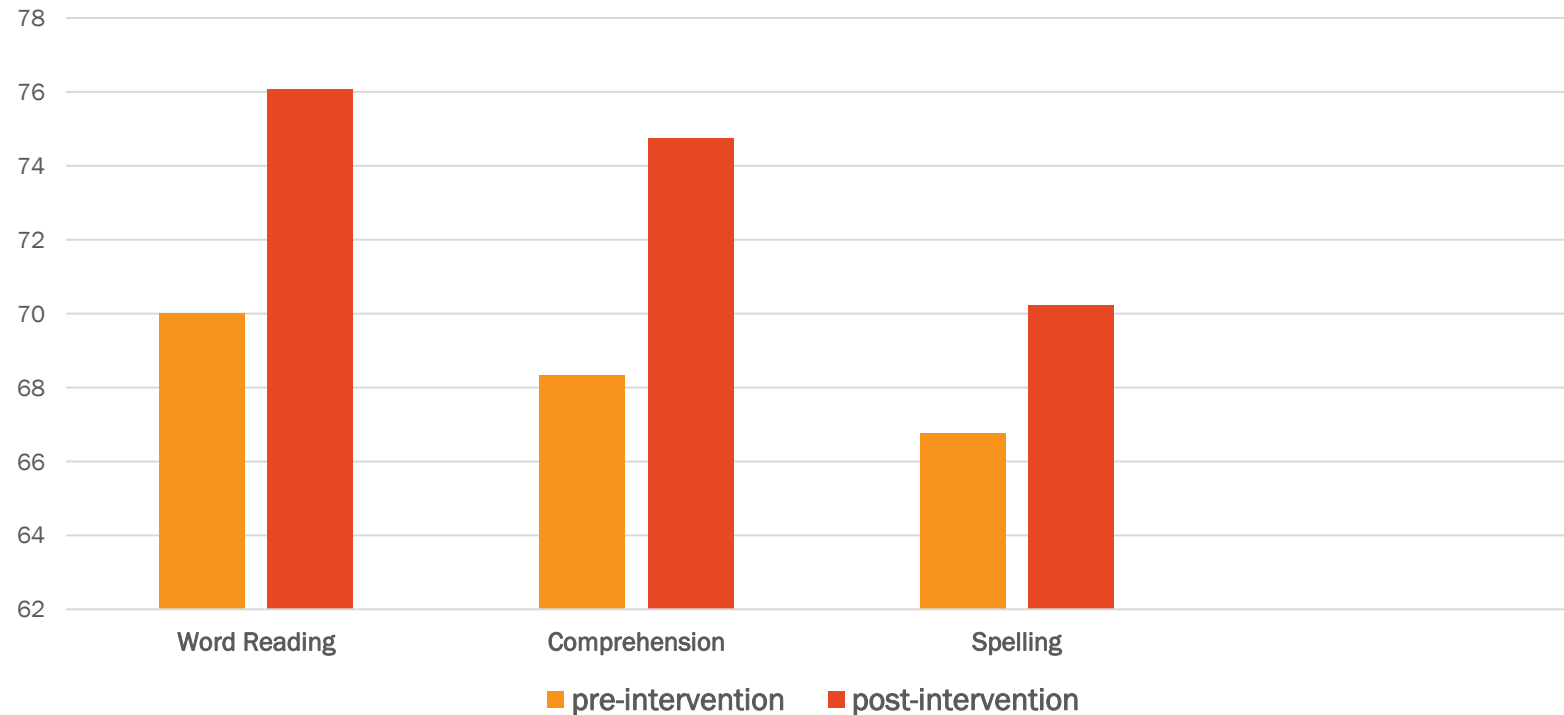
Word-Reading		Comprehension		Spelling	
Pre	Post	Pre	Post	Pre	Post
71.3	77.6	68.3	74.8	67.9	71.6
6.3 mean increase		6.5 mean increase		3.7 mean increase	
Statistically sig. ($p < .001$)		Statistically sig. ($p = .009$)		Statistically sig. ($p = .029$)	
Large effect size Cohen's d (1.10)		Medium effect size Cohen's d (.64)		Medium effect size Cohen's d (.52)	

- statistically significant increases in scores from pre to post intervention in **all three areas of literacy** (medium – large effect sizes)



Wexford Project Phase 1: Mean standard score gains from pre- to post-intervention.

Phase 1: Mean standard scores pre and post intervention





Wexford Phase Two 2022-2023: Participants

- Involved 14 teachers
- 3 primary, 3 post-primary schools
- 23 student participants
- Age range 8-15 years (mean age 12 years, 4 months)
- Some attrition, due to absenteeism at post-intervention stage and incomplete data returned by some schools.
- Gender ratio: 13 female and 5 male participants
- 14 Traveller students & 4 Roma students



Interventions Trialled: Phase Two

- SNIP/Precision Teaching
 - Toe by Toe
 - Accelerated Reader
 - Guided Reading
 - Some combinations of above strategies (Mixed Methods approach)
- 





Information regarding intervention sessions

- Mean number of intervention sessions: 19 (range of 3 to 38 sessions)
- Mean length of intervention sessions: 28 mins. (range 10-60 mins).
- Mean number of students each group: 3
- Teacher: pupil ratio varied from 1:1 to 1:7
- Average participant received 9 hours of literacy intervention over the 12 week period.
- Average teacher time spent teaching per student was 5.3 hours (teaching time divided by the number of students in the group).



Wexford Project Findings: Phase Two

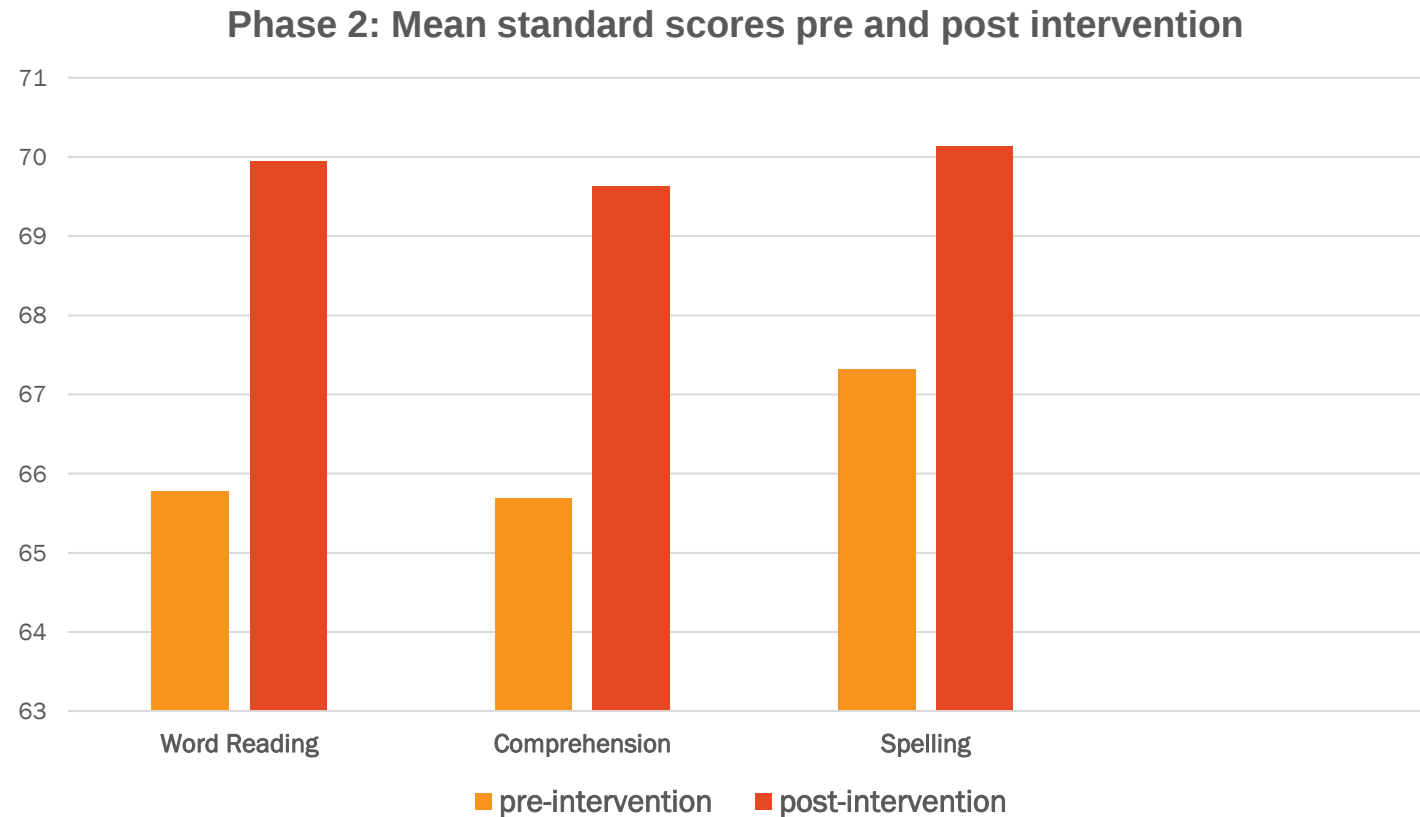
Mean standard scores pre and post intervention

Word-Reading		Comprehension		Spelling	
Pre	Post	Pre	Post	Pre	Post
65.78	69.94	65.69	69.63	67.31	70.13
*4.16 mean increase		**3.94 mean increase		***2.82 mean increase	
Statistically sig. (p .003)		Statistically sig. (p =.008)		Not Statistically significant	
Large effect size Cohen's d (.8)		Medium effect size Cohen's d (.77)			

- There were statistically significant increases in scores from pre to post intervention in **word reading and comprehension** (medium – large effect sizes)



Wexford Project Phase 2: Mean standard score gains from pre- to post-intervention.





QUALITATIVE FINDINGS

Impact on student literacy skills

Impact on affective dimensions of learning

Teacher Professional Development

Challenges

Facilitators



Impact on affective dimensions of learning

*'I believe that the children's **attitude to reading** has improved. They look forward to the reading sessions and they experience success because they are reading books at a level that they can confidently read'*

*'More than the gains evident on the WRAT 5 is the improvement in their **confidence, oral skills and integration into the class**'*

*'Am amazed at how they have improved this year, **confidence, oral skills and starting to make friends**. This is not reflected in the WRAT 5 test'*

*'Strengthened **pupil-teacher rapport, increased pupil self-esteem, better attitude to learning, increased attendance** and small amount of progress in most areas of literacy'*

*'**Thrived in small group setting**...they began to talk about their cultures and we learned a lot from them'. The project also facilitated **social mixing and understanding** between the Traveller and Roma students'*



Challenges

‘Poor attendance on part of students’

‘Teacher absenteeism due to Covid 19’

Frequent disruptions – communion, confirmation and communion practice....

‘Lack of reinforcement from home....no literacy practiced’

‘Cultural background did not lend itself to some PM book topics’

‘Took a lot of time scoring tests’



Key Learnings from Wexford Project

- Through targeted, evidence-based literacy intervention, it is possible to raise literacy levels of students from Traveller and Roma communities.
- The project demonstrated that progress can be achieved, even in the context of poor attendance rates.
- Importance of the management buy-in.
- Importance of qualitative data to identify progress in areas difficult to capture using quantitative measures, such as self-esteem, confidence, attitude towards school etc.
- Professional Learning Communities: Teachers valued the opportunity to meet and share ideas and learning with each other.



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Pilot site 2 – Cork



Project format for Cork site

- 2022-23 School Year
- Replicated the action research project format utilised in Pilot Site 2 with some minor adaptations.
- Teachers delivered interventions over 8 rather than 12 weeks.
- Participating schools supported by assigned NEPS Psychologist rather than through project meetings.
- A central review session took place at the end of the intervention period, to facilitate sharing of learning and experiences.



Cork Project: Participants

- 6 out of 15 STAR schools opted to participate
- Involved 12 teachers
- 5 primary, 1 post-primary school
- 18 student participants (11 male, 7 female)
- Age range 8-13 years (mean age 10 years, 6 months)
- 14 Traveller students, 4 Roma students



Cork Project: Methodology

➤ February – June 2023:

- 8 week intervention during this period.
- Implementation of evidence-based literacy interventions
- NEPS Psychologists supported schools with interpretation of test results and with matching of appropriate evidence-based literacy interventions based on assessment findings.
- Pre and post intervention data (quantitative & qualitative)
- **Quantitative Data:** testing using WRAT-5 (Wide Range Achievement Test) – word-reading, comprehension and spelling attainment scores
- **Qualitative Data:** Logs and post-intervention questionnaires completed by teachers



Information regarding intervention sessions

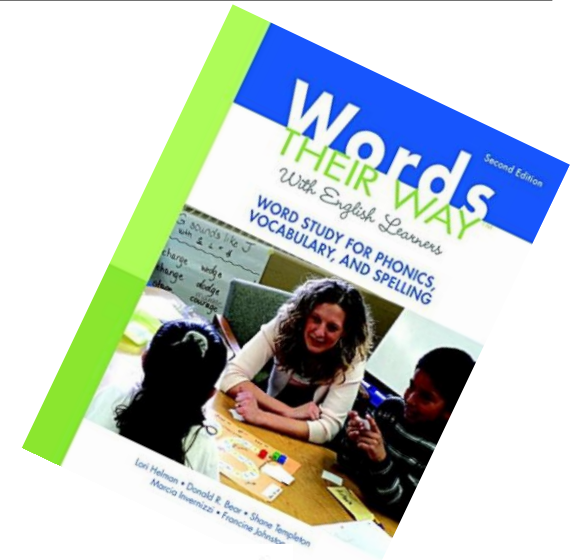
- Mean number of intervention sessions: 21 (range of 5 to 40 sessions)
- Mean length of intervention sessions: 18 mins. (range 10-40 mins).
- Mean number of students each group: 2
- Average participant received 6 hours, 20 mins. of literacy intervention over the 8 week period.
- Average teacher time spent teaching per student was 5 hours, 15 mins. (teaching time divided by the number of students in the group).



Interventions Trialled: Cork Project

- Toe by Toe
- Words Their Way
- SNIP
- Florida Centre for Reading Research Comprehension Intervention

Some combinations of above strategies (Mixed Methods approach)



SNIP Literacy Programme Part 3

SNIP Literacy Programme Part 3	1
SNIP Literacy Programme Part 3	2
SNIP Literacy Programme Part 3	3
SNIP Literacy Programme Part 3	4
SNIP Literacy Programme Part 3	5
SNIP Literacy Programme Part 3	6
SNIP Literacy Programme Part 3	7
SNIP Literacy Programme Part 3	8
SNIP Literacy Programme Part 3	9
SNIP Literacy Programme Part 3	10
SNIP Literacy Programme Part 3	11
SNIP Literacy Programme Part 3	12
SNIP Literacy Programme Part 3	13
SNIP Literacy Programme Part 3	14
SNIP Literacy Programme Part 3	15
SNIP Literacy Programme Part 3	16
SNIP Literacy Programme Part 3	17
SNIP Literacy Programme Part 3	18
SNIP Literacy Programme Part 3	19
SNIP Literacy Programme Part 3	20



TOE BY TOE®



Cork Project Findings

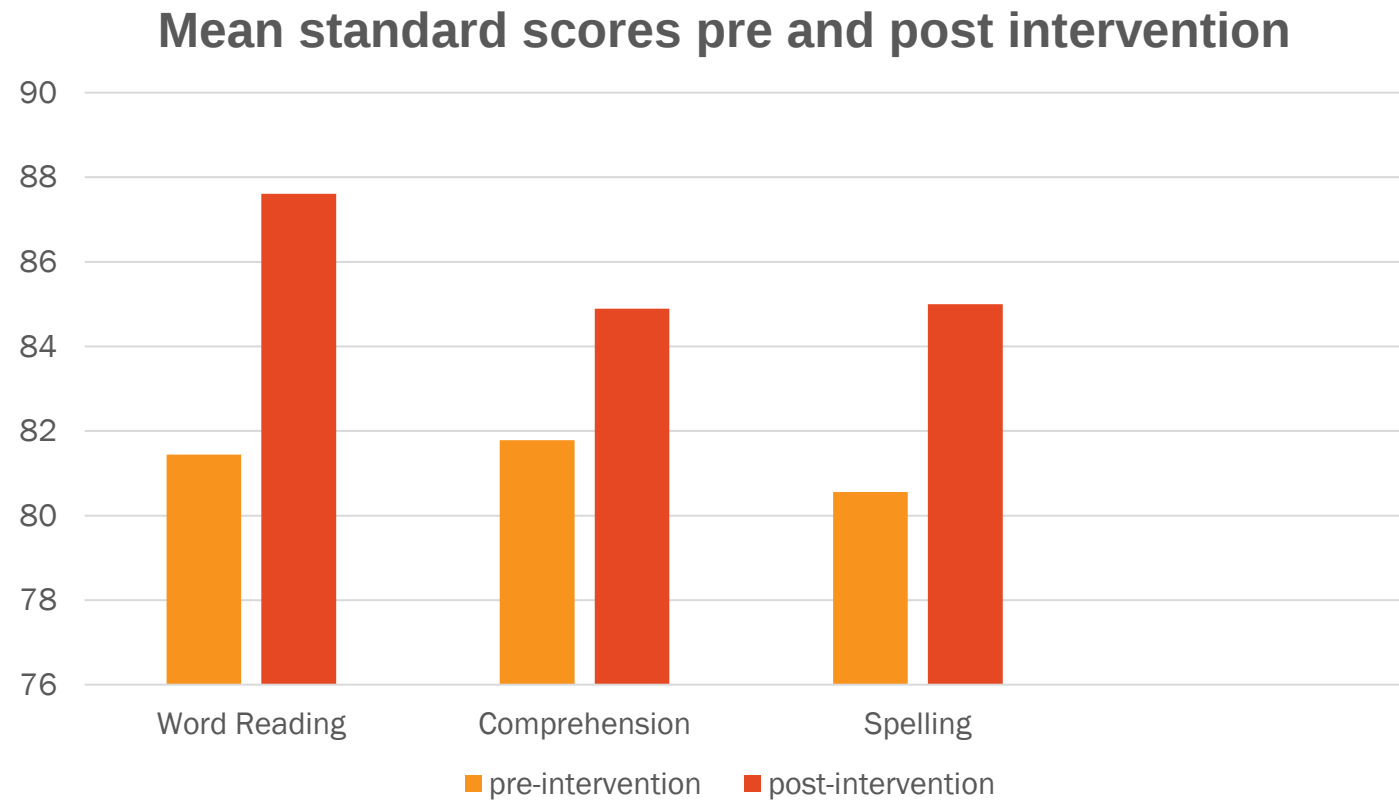
Mean standard scores pre and post intervention

Word-Reading		Spelling		Comprehension	
Pre	Post	Pre	Post	Pre	Post
81.44	87.61	80.56	85.00	81.78	84.89
*6.17 mean increase		**4.44 mean increase		***3.11 mean increase	
Statistically sig. ($p = .003$)		Statistically sig. ($p = .04$)		Not Statistically significant	
Large effect size Cohen's d (.83)		Medium effect size. Cohen's d (.53)			

- There were statistically significant increases in scores from pre to post intervention in **word reading and spelling** (medium – large effect sizes)



Cork Project: Mean standard score gains from pre- to post-intervention.





Qualitative Findings: Teacher Feedback

- Participation had a motivational effect on many teachers; both in terms of trying new interventions and developing systematic structures for whole school literacy support
- Teachers reported that they liked the systematic approach – *‘it was good to see where children are at and using this information to inform the selection of an intervention’*.
- Teachers found the process to be motivating and reassuring. *‘It was encouraging to observe the progress which they made..... I was surprised by the jump they made’*.
- Teacher report indicated that students appeared to enjoy the additional adult attention associated with small group and individual interventions, and that this had a positive relational effect. *‘T was so eager and delighted to participate daily in the STAR literacy project. She asked why her SET sessions were changing but was so happy that it was related to STAR as she views the overall project very positively’*.
- Other comments related to particular approaches which worked well for individual students. *Some children responded very well to positive declarations e.g. ‘I’m going to do well in this’.....The girls were motivated by completing the ‘3 ticks’ in the Toe by Toe programme.*



Key Learnings from Cork Project

- The project demonstrated the potential of using a hybrid model where STAR schools attended online training in 'Effective Interventions for Struggling Readers', and subsequently transitioned to support from their assigned NEPS psychologists.
- The involvement of the assigned NEPS psychologist for each participating school was positively associated with participation and implementation. This encouraged 'buy in' and facilitated a collaborative process where psychologists had 'hands on' involvement in the process.
- Some psychologists described how participating teachers made greater reference to key principles such as; 'matching interventions to identified need' when discussing literacy support for *all* students who are experiencing challenges.
- Teachers were eager to share their learning and experiences; this encouraged reflective practice and also set a seed in the development of a community of practice.



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Pilot site 3 – North Dublin



Project format for North Dublin site

- 2022-23 School Year
- Replicated the action research project format utilised in Pilot Site 2
- Teachers delivered evidence-based interventions over 12 weeks.
- Standardised pre and post testing using the *Wide Range Achievement Test* (WRAT-5)
- Schools provided anonymised data and feedback sheets from students and teachers.



North Dublin Project: Participants

- Involved 11 teachers
- 7 primary, 1 post-primary school
- 17 student participants (5 male, 12 female)
- Age range 7-13 years (mean age 10 years, 3 months)
- 16 Traveller students, 1 Roma student
- Some attrition occurred due to participant discontinuing.
- 17 full data sets included in the data analysis.



Dublin Project: Methodology

➤ March – June 2023:

- 12 week intervention period.
- Implementation of evidence-based literacy interventions
- NEPS Psychologists supported schools with interpretation of test results and with matching of appropriate evidence-based literacy interventions based on assessment findings.
- Pre and post intervention data (quantitative & qualitative)
- **Quantitative Data:** testing using WRAT-5 (Wide Range Achievement Test) – word-reading, comprehension and spelling attainment scores
- **Qualitative Data:** Logs and post-intervention questionnaires completed by teachers. The voice of the child was captured in a *Student's Thoughts and Reflections* questionnaire post-intervention.



Interventions Trialled: Dublin Project

- Toe by Toe
- Paired Reading
- Precision Teaching/SNIP
- Guided Reading using Graded Readers (PM Readers)
- Some combinations of above strategies (Mixed Methods approach)



TOE BY TOE®



Information regarding intervention sessions

- Mean number of intervention sessions: 33 (range of 8 to 50 sessions)
- Mean length of intervention sessions: 21 mins. (range 15-60 mins).
- Mean number of students each group: 2
- Teacher: pupil ratio varied from 1:1 to 1:4
- Average participant received 6.7 hours of literacy intervention over the 12 week period.
- Average teacher time spent teaching per student was 8.45 hours (teaching time divided by the number of students in the group).



North Dublin Project Findings

Mean standard scores pre and post intervention

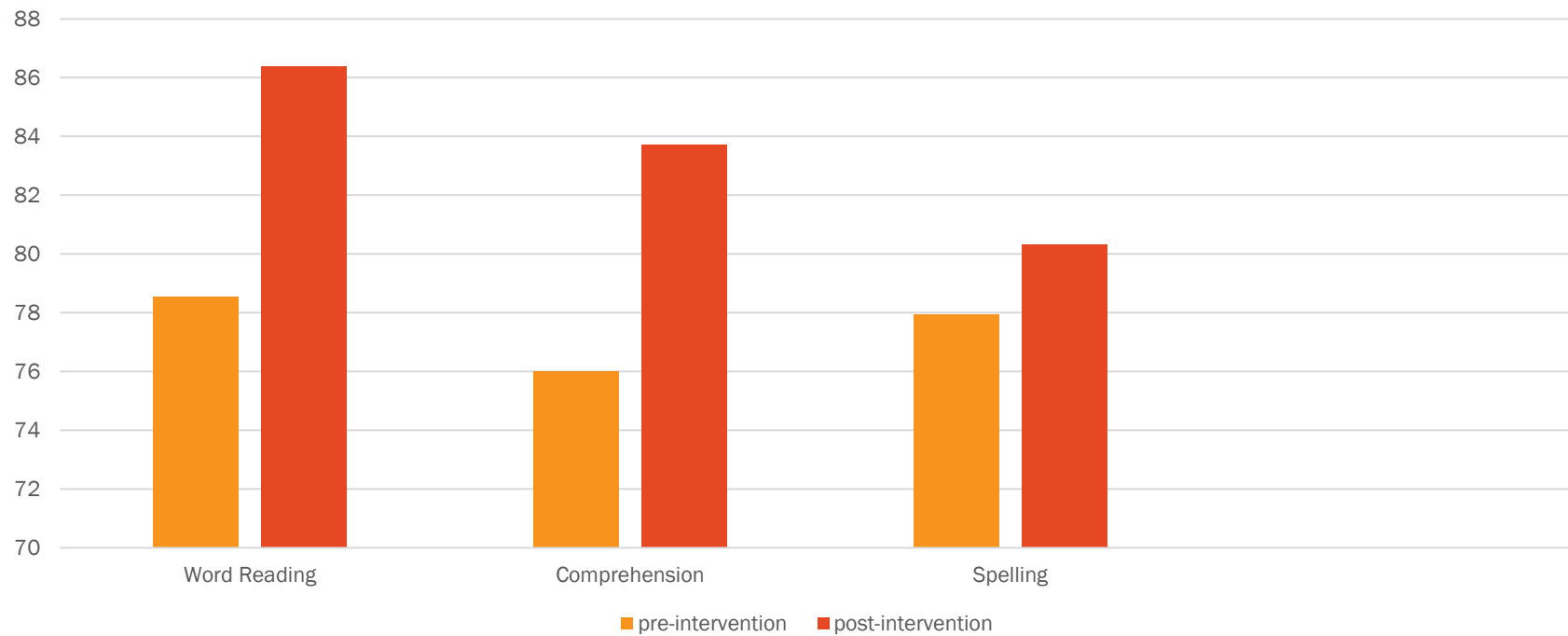
Word-Reading		Comprehension		Spelling	
Pre	Post	Pre	Post	Pre	Post
78.56	86.38	76.00	83.73	77.93	80.33
7.81 mean increase		7.73 mean increase		2.40 mean increase	
Statistically sig. ($p < .002$)		Statistically sig. ($p = .002$)		Not Statistically significant	
Large effect size Cohen's d (.92)		Large effect size. Cohen's d (1.25)			

- There were statistically significant increases in scores from pre to post intervention in **word reading and comprehension** (large effect sizes)



Dublin Project: Mean standard score gains from pre- to post-intervention.

Mean standard scores pre and post intervention





Qualitative Findings: Teacher Feedback

➤ Feedback in relation to the overall project

Teachers had the opportunity to try new interventions and to promote a greater level of consistency when providing support for literacy. They also found the process motivating and encouraging.

- *We were very satisfied with the results of our programme. We plan to keep doing this intervention until the end of the year.*
- *I enjoyed the programme as did the children involved, their improvement was quite evident from further testing and analysis*
- *I have learnt that a regular regime of precision teaching for short sessions can be very beneficial..*
- *I am happy with the programme as it was simple but effective. Some of the time it was challenging for the children but they still enjoyed it. It was interesting to see the progression that the children made and they were always happy to come out each day.*



Qualitative Findings: Teacher Feedback

➤ Feedback in relation to impact on literacy skills:

- *The children who participated in this intervention have made a huge improvement especially when it comes to phonological awareness, decoding words and the ability to recognise their sight words in their reading and other curricular areas... by the end of the programme the children felt more confident in themselves as a reader.*
- *The child developed solid letter – sound knowledge and can now blend sounds to read simple words. The child's confidence with blending and reading is much increased and he is more willing to read and continue reading even when a text is perceived as more difficult. He is no longer over reliant on contextual clues and sight vocabulary to try to decode texts as he has developed additional word attack strategies.*



Qualitative Findings: Teacher Feedback

➤ Feedback related to the experiences of participating students

- *Children that participated in the intervention have become more confident in their reading and have a greater interest in reading.*
- *The participant has notably improved academically not only in the area of literacy but throughout the whole school day too. In the beginning of the intervention the participant was reading level 5 Guided Reading books. Now reading at 15!*
- *The child has very good attendance. The willingness of the child to participate each day, particularly once he began to see the gains and experience success for his efforts.*
- *The children loved reading with others and looked forward to it daily. All children developed greater confidence in themselves during the intervention and their reading gradually improved.*



Key Learnings from Dublin Project

- Positive impact of involvement of assigned NEPS Psychologist was again highlighted.
- Teachers valued the opportunity to build teacher and school capacity in their use of effective interventions with struggling readers with Traveller and Roma students.
- Teachers who volunteered to participate in the project expressed an interest in being part of a STAR Cluster Group, to build a community of learning in order to share learnings and good teacher practice



Pilot site 4 – Tuam (Galway)



Project format for Tuam site

- Consultation with local STAR team.
- Literacy Action research project implemented with the staff and students in a very large DEIS Urban Band 1 school, with a high number of students from the Traveller community enrolled in the school.
- *Word Study* was selected as the evidence-based literacy intervention of choice following a meeting with school staff
- The purpose of the project was to evaluate if a *Word Study* approach would have a significant impact on the Word Reading and Spelling scores of the Traveller children involved.



Word Study

- The Word Study approach moves away from a traditional method of teaching spelling, i.e., the weekly spelling test.
- This approach teaches students' processes and strategies for examining and thinking about the words they spell, read and write.
- It is a differentiated spelling programme, where the children are grouped from the outset according to their developmental spelling stage.
- The *Words Their Way* intervention programme adopts a word study approach.



Project Timeline & Methodology

- Teaching staff trained in *Word Study/Words Their Way*, via online webinars delivered by NEPS LWG in 2020 and 2021.
- **Phase 1** - 12 week Action Research Project (September to December, 2021)
- **Phase 2** - 9 month Action Research Project (October, 2022 to June, 2023)
- Standardised testing was completed pre- and post intervention during both phases by teachers using the *Wechsler Individual Achievement Test for Teachers – Third UK edition (WIAT-III)* to assess students' **Word Reading and Spelling attainments**. Data collection was supported and overseen by the Project Lead from NEPS.
- Both Class and Special Education teachers delivered the evidence-based intervention daily, for a period of approximately 30 minutes, over the two phases of the project.

Qualitative feedback from the students participating in Phase 2 of the pilot project was collected at the end of the project using a post-intervention questionnaire designed for the specific purpose of this action research project.



Tuam Project: Participants

- In Phase 1 participants were 4th class students in the selected primary school.
- In Phase 2, the extended project included participants completing 2nd, 4th and 5th classes. This included students from the Traveller community, students for whom English is an additional language (EAL) and students from the general population.

Phase 1 - 17 Traveller children (86 children in total, participated over a 12 week period (19.8% of full cohort from the Traveller community)

Phase 2 – 66 Traveller children (264 children in total) participated over a 9 month period (31% of the full cohort were from the Traveller community)



Tuam Project Findings: Phase One

Mean standard scores pre- and post-intervention: Traveller population

Spelling		Word Reading	
Pre	Post	Pre	Post
81.33	80.80	81.00	81.80
*0.43 mean decrease		**0.80 mean increase	

- Results did not indicate a significant gain in the Word Reading or Spelling scores for Traveller students following the 12 week intervention period using *Words Their Way*.



Tuam Project Findings: Phase Two

Mean standard scores pre- and post-intervention: Traveller population

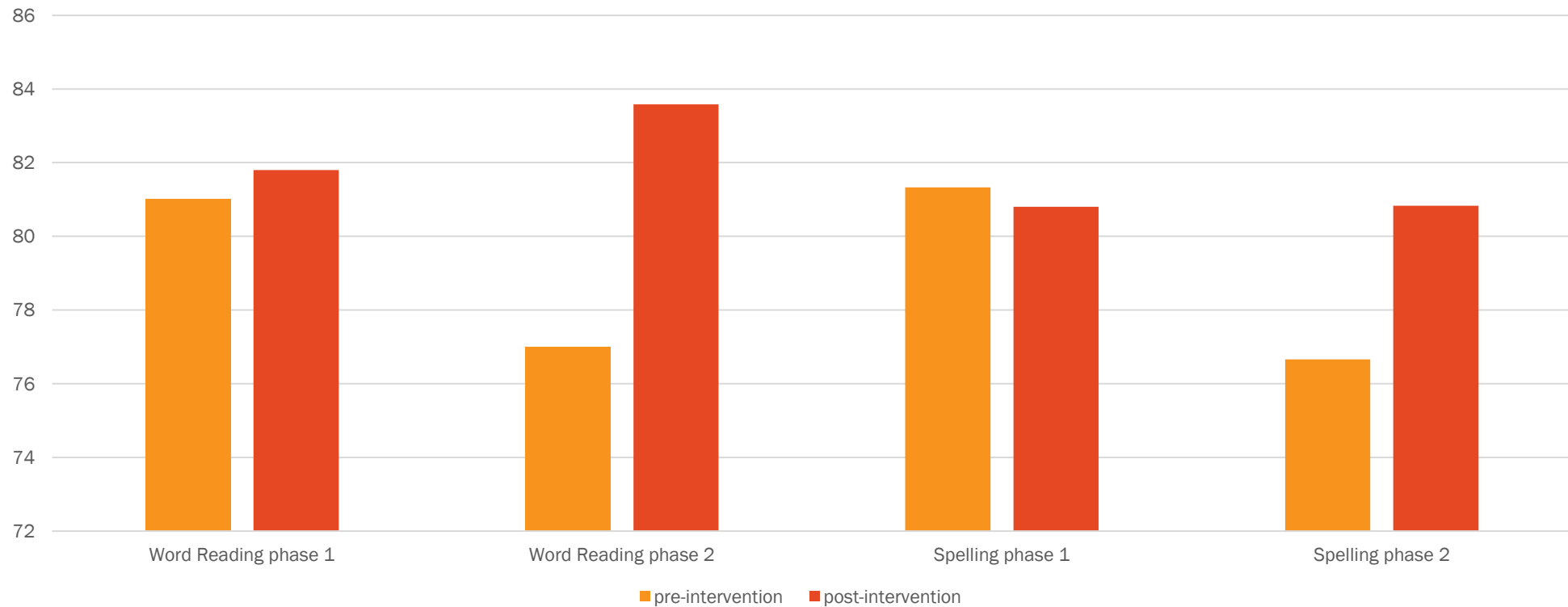
Spelling		Word Reading	
Pre	Post	Pre	Post
76.66	80.83	77.00	83.58
*2.31 mean increase		**4.7 mean increase	
Statistically sig. ($p < .001$)		Statistically sig. ($p < .001$)	
Small effect size Cohen's d (.23)		Medium effect size. Cohen's d (.51)	

- There were statistically significant increases in scores from pre to post intervention in **Spelling and Word Reading**, following the 9 month intervention, i.e. once intervention was targeted *over an entire school year*.



Tuam Project: Results for Phase 1 and 2

*Mean standard scores for phase 1 and 2 pre- and post-intervention for Word
Reading and Spelling*





Qualitative feedback from students post-intervention

I feel like i can spell better now and i can read things easier now.

I think i improved in my spelling and reading

I'm really happy that i can spell better 😊

I know more words and their meaning now.

Student Thoughts on Words Their Way



What class are you in?

What did you like about doing Words Their Way every day?

Who helped you with Words Their Way? (Teacher, Friends, SNA)

Was there something you did not like about doing Words Their Way?

How do you feel about reading and spelling now?



Key Learnings from Tuam Project

- Pre-intervention literacy scores for the students from the Traveller community were much lower when compared to the scores for EAL students and students in the general population. The results of Phase 2 of the action project reinforced the importance of **sustained evidence-based literacy interventions** for Traveller students over the course of a full academic school year.
- *Words Their Way* is a **low cost, easily accessible and effective literacy intervention** for all students. The students, regardless of their cultural background, proficiency in the English language and/or additional educational needs, worked collaboratively on *Words Their Way* alongside their peers providing a sense of belonging.
- Ensuring that Traveller students have access to high-quality literacy interventions is essential to **closing the literacy gap and promoting equity in education**. *Words Their Way* allowed for the participation of Traveller students within a whole class situation alongside their peers and therefore destigmatising literacy difficulties.
- The project helped to **build teacher confidence and capacity** in the delivery of evidence-based literacy interventions.



Overall Key Findings

- ✓ Through targeted, evidence-based literacy intervention, it is possible to raise literacy levels and improve the learner experience of CYP from Traveller and Roma communities.
- ✓ Ensuring that Traveller and Roma students have access to high-quality literacy interventions is essential to closing the literacy gap and promoting equity in education.
- ✓ The project has also demonstrated that progress can be achieved, even in the context of poor attendance rates.
- ✓ The project has demonstrated the importance of qualitative data to identify progress in areas difficult to capture using quantitative measures, such as self-esteem, confidence, attitude towards school etc.



Overall Key Findings

- ✓ The involvement of assigned NEPS psychologists for participating schools was positively associated with participation and implementation.
- ✓ Targeted and evidence-based literacy support for Traveller and Roma students needs to involve systemic change at a whole-school level which can be facilitated and supported by NEPS Psychologists.
- ✓ Teachers valued the opportunity to meet and share ideas and learning with each other, and expressed a desire to participate in Professional Learning Communities of those working with Traveller and Roma CYP.
- ✓ Overall, the project demonstrated the positive impact of building teacher capacity regarding the selection, implementation and evaluation of evidence-based literacy intervention using a response-to-intervention model for this cohort of students and their teachers.



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Department of Education

Any Questions....





References

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