ISRCTN91164066 https://doi.org/10.1186/ISRCTN91164066

Getting it right from the start: an early-years school intervention to equitably improve student oral language and reading outcomes

Submission date
12/01/2022

Recruitment status
No longer recruiting

Registration date
25/01/2022

Overall study status
Completed

Last Edited
30/12/2025

Condition category
Other

[X] Prospectively registered
[X] Protocol
[X] Statistical analysis plan
[_] Results
[_] Individual participant data
[X] Record updated in last year

Plain English summary of protocol

Background and study aims
Educational attainment is recognised as the most influential social determinant of life-long health. Oral language development in the early years of school is a developmental measure that is strongly linked to a broad range of outcomes including literacy, social skills, friendships, prosocial problem-solving and conflict resolution skills, self-esteem, school attachment and subsequently mental health. In addition, students who do not master the basics of literacy in the early years of school struggle academically and may face a range of behavioural, social, vocational, and social-emotional difficulties into adolescence and adulthood. Focused efforts to improve oral language skills in the early years of school should lead to gains in literacy skills, social and emotional wellbeing, and academic trajectories.
The single most important 'in-school' factor impacting student outcomes is the quality of teaching. Therefore, to improve oral language skills for children and confer the benefits for child social development and mental health, there needs to be a paralleled improved quality of teaching. Response to intervention (RTI) is a model that provides universal access to high-quality classroom instruction in language and literacy for all students while providing intensive intervention for those students identified as at-risk.
The aim of this study is to evaluate whether a specifically designed Response to Intervention (RTI) approach for oral language and reading instruction targeted to the early years of school can improve children's language and reading when compared with usual teaching practice. By improving oral language and reading it Is expected that children remain on a positive trajectory of social and emotional development and educational attainment.

Who can participate?
Schools are invited to participate if they have at least 200 students, the Grade 1 cohort in 2021 is at least 35 students, the school ICSEA value is 1070 or less, and if the 2018 AEDC results language and cognitive domain vulnerability rate is =10%

What does the study involve?
During implementation years, Foundation and Grade 1 teachers will go through a specific professional learning course that teaches evidence-based approaches to oral language and

reading so that they can implement this in the classroom. Teachers also have a dedicated support partner (speech pathologist or literacy support teacher) to support the implementation of an RTI approach, including screening and identification of at-risk students who would benefit from small group specific targeted teaching.

What are the possible benefits and risks of participating?
It is expected that students benefit by receiving evidence-based high-quality instruction and early identification and support if they experience oral language or reading difficulties. They are more likely to have better oral language and reading skills, particularly at-risk students. Teachers benefit by receiving professional learning courses and dedicated support throughout the implementation year. The researchers do not anticipate that participation in this study will involve any significant risk beyond that associated with everyday life for any participants. Targeted teaching with small groups (Tier 2 intervention) is common practice in schools. It is expected that students will regard the small group work involved in this study as similar to the small group work that they are commonly involved in during their normal schooling.

Where is the study starting and how long is it expected to run for?
October 2019 to December 2025

Who is funding the study?
1. The Eureka Benevolent Foundation (EBF) (Australia)
2. Victorian Government Department of Education and Training (Australia)
3. Melbourne Archdiocese Catholic Schools (Australia)

Who is the main contact?
Prof. Sharon Goldfeld
sharon.goldfeld@rch.org.au

Contact information

Type(s)
Principal investigator

Contact name
Prof Sharon Goldfeld

ORCID ID
https://orcid.org/0000-0001-6520-7094

Contact details
Royal Children's Hospital
50 Flemington Rd
Parkville
Australia
3052
+61 (0)393456408
sharon.goldfeld@rch.org.au

Additional identifiers

Australian New Zealand Clinical Trials Registry (ANZCTR)
ACTRN12622000146796

Study information

Scientific Title
Using a response to intervention approach to teaching to improve student oral language and reading outcomes in Grade 1 primary school students

Acronym
GIRFTS

Study objectives
Rationale:
Educational attainment is recognised as the most influential social determinant of life-long health. And oral language development in the early years of school is a developmental measure that is strongly linked to a broad range of outcomes including literacy, social skills, friendships, prosocial problem solving and conflict resolution skills, self-esteem, school attachment and subsequently mental health. In addition, students who do not master the basics of literacy in the early years of school struggle academically and may face a range of behavioural, social, vocational, and social-emotional difficulties into adolescence and adulthood. Focused efforts to improve oral language skills in the early years of school should lead to gains in literacy skills, social and emotional wellbeing, and academic trajectories.

The single most important 'in-school' factor impacting student outcomes is the quality of teaching. Therefore, to improve oral language skills for children and confer the benefits for child social development and mental health, there needs to be a paralleled improved quality of teaching. Response to intervention (RTI) is a model that provides universal access to high-quality classroom instruction in language and reading for all students while providing intensive intervention for those students identified as at-risk.

Hypothesis:
A response to intervention approach to teach oral language and reading improves young children's oral language and reading skills.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Approved 07/01/2020, Royal Children's Hospital Melbourne Human Research Ethics Committee (HREC, Research Ethics and Governance, The Royal Children's Hospital, 50 Flemington Road, Parkville, 3052, VIC, Australia; +61 (0)393455044; Rch.Ethics@rch.org.au), ref: 2019.277

Primary study design
Interventional

Study design
Single-site interventional stepped-wedge double-blinded randomized control trial

Study type(s)

Other

Health condition(s) or problem(s) studied
Poor oral language and reading ability

Interventions
Dose and duration:
This will be 12 months (repeated) of a response to intervention (RTI) approach to improve oral language and reading for Grade 1 primary school students.

Control will be 'business as usual' (no change to teaching or support).

Randomisation:
Schools will be randomly assigned to either Cohort 1 or Cohort 2. Cohort 1 commences the RTI implementation in the first year of the main study (2022). Cohort 2 will act as the control group, conducting ‘business as usual’, in the first year and then commences RTI in the second year of the study (2023).

A statistician independent from the trial will prepare the randomisation schedule using block randomisation to maintain balance between cohorts. Randomisation will then be stratified by school sector and Department of Education and Training (DET) region with variable block sizes (CEM schools, Victorian DET North East region schools, Victorian DET North West region schools). Schools to be randomised will be ordered alphabetically by school name within each education sector.

Administration:
In each school that begins RTI implementation, Foundation and Grade 1 teachers will be given specific professional learning about evidence-based approaches to oral language and reading instruction, and a dedicated support partner (speech pathologist or literacy support teacher) to support fidelity of RTI implementation.

The RTI framework involves universal high-quality instruction for 12 months (Tier 1) that teachers will learn during the professional learning course. Students will be screened early in the year to identify those at risk for language and reading difficulties and are most likely to benefit from Tier 2 intervention.

Tier 2 interventions will be targeted to small groups of these students and provide ability-based opportunities for them to learn and consolidate specific oral language and/or reading skills. A systematic review of the literature has been completed to identify effective school-based Tier 2 interventions shown to improve oral language and/or reading outcomes for students during pre-school or early primary school (Goldfeld, S., et al. (in press). Tier 2 Oral Language and Early Reading Interventions for Preschool to Grade 2 Children: A Restricted Systematic Review. Australian Journal of Learning Difficulties).

Schools will choose a Tier 2 intervention based on the needs of the students as demonstrated through the screening results. The screening tool will be re-administered in that year to the recipients of the Tier 2 intervention, to monitor student progress at regular intervals to determine whether students continue, or whether they discontinue and return to whole-of-class instruction.

Intervention Type
Behavioural

Primary outcome(s)
Student reading ability assessed using The Reading Progress Test (RPT) pre-intervention and after 12 months of intervention (start of Grade 2)

Key secondary outcome(s)
1. Student oral language ability assessed using The Clinical Evaluation of Language Fundamentals – Australian and New Zealand standardised Fifth Edition 1 x Subtest: Following Directions, pre-intervention and after 12 months of intervention (start of Grade 2)
2. Student oral language ability assessed using CUBED: Narrative Language Measures (NLM) listening subtest pre-intervention and after 12 months of intervention (start of Grade 2)
3. Student reading ability assessed using Test of Word Reading Efficiency–Second Edition (TOWRE 2) pre-intervention and after 12 months of intervention (start of Grade 2).
4. Student reading ability assessed using Sutherland Phonological Awareness Test (SPAT): phonemic awareness subtests pre-intervention and after 12 months of intervention (start of Grade 2)
5. Teacher knowledge of language & reading constructs assessed using teacher knowledge survey pre-intervention, after Tier 1 intervention and at the end of each subsequent year.
6. Fidelity of RTI implementation assessed using schools PDSA Cycle data, qualitative focus groups and interviews pre, during and post intervention
7. Cost-consequence analysis 24 months after intervention commencement

Completion date
31/12/2025

Eligibility

Key inclusion criteria
Current inclusion criteria as of 30/10/2024:
Schools to be involved in the study will be randomly assigned to a cohort only if they meet all of the inclusion criteria:
1. School ICSEA value is 1100 or less
2. Schools 2018 AEDC results – language and cognitive domain vulnerability rate of = or above 10%

First-round Expression of Interest offers will be sent to schools that meet the above criteria.

Previous inclusion criteria:
Schools to be involved in the study will be randomly assigned to a cohort only if they meet all of the inclusion criteria:
1. School population is at least 200 students
2. Grade 1 cohort in 2021 is at least 35 students
3. School ICSEA value is 1070 or less
4. Schools 2018 AEDC results – language and cognitive domain vulnerability rate of =10%

First-round Expression of Interest offers will be sent to schools that meet the above criteria.

Participant type(s)
Learner/student

Healthy volunteers allowed

No

Age group
Child

Sex
All

Total final enrolment
3307

Key exclusion criteria
Does not meet the inclusion criteria

Date of first enrolment
31/01/2022

Date of final enrolment
19/09/2025

Locations

Countries of recruitment
Australia

Study participating centre
Murdoch Children Research Institute
Royal Childrens Hospital
50 Flemington Rd
Parkville
Australia
3052

Sponsor information

Organisation
Murdoch Children's Research Institute

ROR
https://ror.org/048fyec77

Funder(s)

Funder type
Charity

Funder Name
Eureka Benevolent Foundation (EBF)

Funder Name
Victorian Government Department of Education and Training

Funder Name
Melbourne Archdiocese Catholic Schools

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Not expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol article		02/11/2024	04/11/2024	Yes	No
Statistical Analysis Plan	version 1.0	04/04/2024	31/10/2024	No	No
Study website	Study website	11/11/2025	11/11/2025	No	Yes