Designing, implementing, and evaluating the Response to Intervention framework in literacy



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What is it?



Response to Intervention is "a practice of providing high-quality instruction and interventions matched to student need, monitoring progress frequently to make decisions about changes in instruction or goals, and applying [student] response data to important educational decisions" (NASDE, 2006, p.3).

- The primary goal is improved outcomes for all students.
- The secondary goal is to provide data to identify learning difficulties in a timely manner.
- It is a research-based instructional framework that replaced the IQ-performance or cognitive discrepancy model.
- It (Rtl) has now been replaced with the term Multi-Tiered System of Supports (MTSS)
- "Progressively intense instruction" (Hughes & Dexter, 2011, p.4)

The three tiers



1. Core instruction

2. Universal screening

3. Progress monitoring

4. Differentiation

Tier1

70-90% of students

1. Supplemental instruction

2. Small group

3. More frequent progress monitoring (3-5 weeks)

Tier 2

10-25% of students

1. Intensive intervention

2. Individualised program

3. More frequent progress monitoring (1-2 weeks)

Tier 3

2-10% of students

The three tiers



Tier 1: whole class best-practice instruction (primary prevention/proactive)

High quality curriculum and evidence-informed instructional methods for all students

Differentiation of support not task

The overwhelming majority should succeed (high expectations)

Tier 2: small group additional instruction (secondary prevention)

3-5 students per group (homogenous)

3 x 30 minute sessions per week (20-40 mins 3-5 x per week)

Increased dose of Tier 1 instruction*

Time limited (10-20 weeks)

Tier 3: specialist support (tertiary prevention)

1-3 students per group

Increased frequency (45-60 minutes daily)

Highly individualised/targeted

Extended duration

Intensity is increased by:

- Using more teacher-led systematic and explicit instruction
- 2. Conducting it more frequently
- 3. Adding to its duration
- Creating smaller, more homogenous groups
- Relying on educators with greater expertise





Students will struggle for many reasons (e.g., socioeconomic disadvantage, language difficulties, social/emotional/behaviour difficulties, inadequate instruction).

It is the best framework to use if you want to be a school that:

- is research-informed
- identifies struggling students early (no waiting to fail)
- develops high quality assessment, instruction, and intervention practices school-wide
- develops data literacy in all staff
- is data driven

What's the evidence?



- Good evidence to support the use of universal screening
- Good evidence to support the use of progress monitoring
- Good evidence to support the use of explicit and systematic instruction in reading and writing
- Good evidence to support the use of evidence-informed core curricula/programs
- BUT good evidence for individual components of Rtl does not mean consistently strong evidence for the model itself or model scalability in schools/across schools
- Issues arise due to inadequate professional learning, administrative support, coordination, meeting and planning time, staffing, and staff buy-in, to name a few
- Rtl studies to date demonstrate achievement or performance improvement
- Studies have tended to focus on early reading and maths skills but that's changing (?)
- OVERALL there is emerging evidence for a range of Rtl models
- MORE research is needed on how to be most effective in developing and sustaining Rtl in schools

The three key areas to get right



- Assessment
- Curriculum
- Instruction

Select and administer assessments



Select screening tasks that:

- will yield meaningful data
- reflect the knowledge/skills that you are going to be teaching
- are tied to expectations for learning
- are technically adequate (valid and reliable measures)

Ensure:

- teachers are trained to administer correctly and consistently
- you provide scripted instructions
- observation/coaching occurs during initial administration/scoring
- you cross check a % of assessments for scoring reliability

Our school: Assessment



- Benchmarking (DIBELS 3 x per year)
- Universal screening in Year 1 (Phonics Check)
- Additional progress monitoring for students who struggle (every 2-3 weeks for students receiving intensive support and every 3-5 weeks for students receiving strategic support in Tier 1/2)
- In the early years we prioritise the fundamentals of language and reading
- We continue to monitor reading skills throughout primary school
- Formative assessment including frequent Checking For Understanding (CFU)
- Review
- Professional learning on administration, interpretation, and goal setting

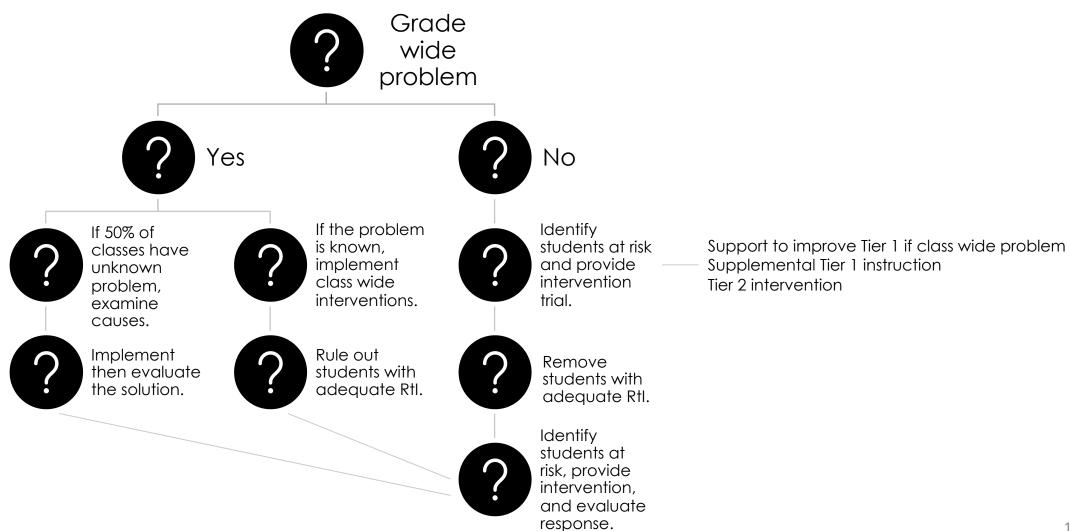
Our school: Assessment



DIBELS	CUBED	MOTiF and CoST	CJ & writing moderation	PAT Reading	Phonics Screening Check	PAT Grammar & Punctuation
Letter naming fluency	Listening comprehension	DiST-s DiST-n	Writing to dictation	Comprehension		
Word reading fluency	Story retell Story grammar	DiST-i	Writing to prompts			
Nonword reading fluency	Vocabulary	Phonology				
Phoneme segmentation fluency	Coordinating and subordinating	Orthography Morphology				
Oral reading fluency	conjunctions					
Comprehension		F-2; 1x				
F-6; 3x	F-2; 3x	3-6; 1x	F-6; 2x	1-6; 1x	1; 1x	3-6; 1x

Evaluate screening data





Identify patterns in the data



If class-wide learning problems are detected, then the grade level team should examine grade wide data to determine whether a grade wide problem is apparent. If the screening tasks were appropriate and administered correctly, we then need to ask:

- 1. Is a research-based core curriculum in place?
- 2. Is that curriculum being followed with sufficient instructional time and/or with effective techniques?
- 3. Is there a scope and sequence detailing when skills will be targeted/mastered across each year? Is it being followed?
- 4. Have students mastered the prerequisite skills?
- 5. Is the instructional environment one in which students are actively engaged, non-instructional time is kept to a minimum, and most students are responding accurately? Are students receiving corrective feedback?
- 6. Is the gradewide problem isolated to one grade level or is it pervasive?
- 7. Are there shared features between classes with class wide learning problems? (e.g., veteran or graduate teachers; only lower or higher grades with gradewide problems)





If class wide learning problems are detected, that are localised to a particular class, and **if the screening** tasks were appropriate and administered correctly, we then need to ask:

- 1. Is the teacher adhering to the curriculum?
- Is the teacher adhering to the scope and sequence?
- 3. Is the teacher allowing sufficient instructional minutes?
- 4. Did students in this class master the pre-requisite skills?
- 5. Are there common features among low performing students in this class?
- 6. Is the instructional environment one in which students are actively engaged, non-instructional time is kept to a minimum, and most students are responding accurately? If students make mistakes, do they receive immediate corrective feedback?

Plan core solutions



- Core solutions depend on the answers to grade wide and class wide questions on the previous two slides
- Class wide and grade wide problems suggest more frequent monitoring is required
- The problem drives the solution (e.g. if students are collectively struggling to segment phonemes, the solution is to increase instruction/feedback in that area, but if the problem is the teacher not adhering to the curriculum, that requires an entirely different approach)

Common solutions:

- Develop a research-informed core curriculum
- Develop detailed scope and sequences
- Develop highly effective teaching techniques/practices in all staff
- Invest in high quality professional learning in target areas
- Ongoing, targeted implementation support/coaching cycles

Plan supplemental solutions



After establishing and delivering evidence based, core instruction:

- Identify students below benchmark
- Group students by area of need
- Plan and provide intervention at Tier 1 and 2
- Embed regular progress monitoring (every 2-5 weeks in Tiers 1 and 2; every 1-2 weeks in Tier 3)
- Review intervention if students do not make progress on four consecutive progress monitoring measures

Nb: Class wide interventions should be a supplement to core instruction.

Evidence informed curriculum and instruction



"Evidence-based Tier 1 instruction effectively eliminates inappropriate instruction as a reason for inadequate progress." (Hughes & Dexter, 2011, p.5)

Checklist:

- Are all components of effective reading instruction present and prominent?
- Are all components of effective writing instruction present and prominent?
- Are all components of effective instruction generally present and prominent (e.g., explicit and systematic)?
- Is the curriculum aligned/coordinated/cumulative/mapped/sequential?

Three important features of any effective core literacy program are 1) based on/informed by research, 2) explicit instructional strategies, and 3) consistent organisational and instructional routines (Hughes & Dexter, 2011).





- Word-level reading and spelling: Sounds~Write (F-2) and Spelling Mastery (3-6) for 25-30 minutes daily
- Reading fluency: 10-15 minutes of daily practice
- Handwriting: 10-15 minutes of explicit instruction daily
- English, History, Geography, and Science knowledge/text units: explicit reading comprehension, vocabulary, and writing instruction are embedded (5 hour of English; 5 hours History/Geography/Science per week)*
- Grammar and punctuation instruction are embedded in writing instruction which follows
 The Writing Revolution scope and sequence/pacing guides
- Detailed reading and writing scope and sequences which make it clear what students should develop mastery in each term/semester/year.





- Explicit Direct Instruction model
- Consistent slide decks and slide structure to support instruction
- Weekly professional learning (whole staff)
- Formal training in programs (e.g., Sounds~Write, The Writing Revolution)





- Review benchmark data (3 times per year)
- Review progress monitoring data (every 2-5 weeks)
- Leadership meetings at the end of each term to evaluate data, determine progress, and move students in and out of intervention (Tier 2 interventions are 10 weeks)
- Formal observation and instructional coaching program (Tier 1 and 2)
- Learning Walks twice per term (Tier 1)

Problem solving v. standard protocol



Problem solving	Standard protocol
Problem solving = collective brainstorming as	 Standard = consistent/the same for all
a team	students
The team makes instructional decisions	 Protocol = preselected
based on individual student needs	delivery/format/program
Students who struggle are provided a variety	 The interventionist/leader makes
of interventions based on	instructional decisions that follow the
need/performance data	standard protocol
Interventions are tailored to individual or	 A single consistent intervention is used (pre-
specific needs	selected, evidence-informed)
	 A variety of staff can deliver the intervention,
	if well trained and supported.





- Less evidence
- Universal screening/sound assessment practices are less common
- Less of a focus on identifying problems in secondary
- The focus is now on remediation rather than prevention
- This often means moving students directly into Tier 2 or Tier 3 based on assessment data rather than testing a response to intervention (instruction) first

Our school: Staffing and resources in 2021



- Leadership team (Principal, Assistant Principal, English Leader, Year 1 Leader/Intervention Coordinator)
- English Leader overseeing assessment, curriculum, instruction, intervention, professional learning, and practice development
- Teacher employed as interventionist (formal training/PL provided)
- Final year Master of Speech Pathology students (volunteers)

- Sounds-Write (word-level reading and spelling)
- Story Champs (oral language)



Our school: Tier 2 in 2022 plan

Tier 2 interventions:

- Sounds-Write
- Spelling through Morphographs and Spelling Mastery
- Oral reading fluency
- Corrective Reading (Comprehension)*
- Expressive Writing* and The Writing Revolution

Staffing:

- Leadership team (Principal, Assistant Principal, English Leader, Year 1 Leader)
- English Leader overseeing assessment, curriculum, instruction, intervention, professional learning, and practice development
- Education Support staff (trained) 20 intervention hours per week
- Speech Pathologist (intervention coordinator) 1-2 days per week

Take-aways



- Getting core instruction right (Tier 1) is the most important work. This can reduce the number of students at risk by up to 25% (Fletcher & Vaughn, 2009).
- Develop an evidence informed assessment schedule alongside this work.
- See how students respond to high-quality Tier 1, then identify students for Tier 2 support.
- If too many students continue to struggle in Tier 1, review and refine Tier 1.
- Invest heavily in staff knowledge and practice development through formal training, in-house professional learning, and coaching cycles.
- Develop a culture of practice improvement.
- Develop data literacy and ensure assessment fidelity.
- Develop expert educators/interventionists.





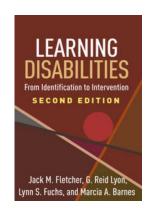
Fletcher, J. M., & Vaughn, S. (2009). Response to intervention: Preventing and remediating academic difficulties. *Child Development Perspectives*, 3(1), 30-37.

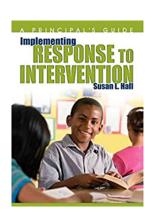
Fuchs, D., & Fuchs, L. S. (2006). Introduction to response to intervention: What, why, and how valid is it? Reading Research Quarterly, 41(1), 93-99.

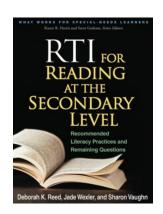
Fuchs, L. S., Fuchs, D., & Compton, D. L. (2010). Rethinking response to intervention at middle and high school. School Psychology Review, 39(1), 22-28.

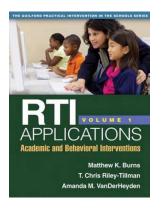
Hughes, C. A., & Dexter, D. D. (2011). Response to intervention: A research-based summary. *Theory into Practice*, 50(1), 4-11.

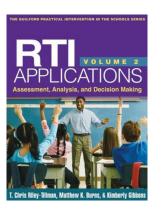
Sailor, W., Skrtic, T. M., Cohn, M., & Olmstead, C. (2021). Preparing teacher educators for statewide scale-up of multi-tiered system of support (MTSS). *Teacher Education and Special Education*, 44(1), 24-41.











Stay in touch



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