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Explainer

Introduction to a multi-tiered system of supports

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The Australian Education Research Organisation (AERO) recommends the use of a multi-tiered system of supports (MTSS) to better assist Years 7 to 9 students struggling with foundational literacy and numeracy skills. Foundational literacy and numeracy skills include those expected to be developed through primary school as per the Australian Curriculum. **This explainer provides an introduction to MTSS for secondary school leaders and teachers looking to support students in improving these skills.**

In this explainer, we draw on a review of evidence-based approaches for supporting students who are struggling which was conducted by Monash University, as well as guidance developed in partnership with the Dyslexia-SPELD Foundation (DSF). With the support of experts, including teachers and leaders, we have collated and extrapolated from the most rigorous and relevant evidence available, to identify the best strategies for supporting secondary school students struggling with foundational literacy and numeracy skills.

Supporting students struggling with literacy and numeracy

Students arriving in secondary school who have not developed foundational literacy and numeracy skills will, without significant support, struggle to participate in classes that require them to engage with more complex materials and topics. Students can present in Year 7 with foundational knowledge gaps for a variety of reasons, including receiving instruction using practices that aren't supported by strong evidence, or experiencing disruptions through primary school.

Identifying these students early and providing targeted intervention using evidence-based instructional practices can reduce the risk of continuing or widening gaps in achievement. The evidence is clear that targeted literacy and numeracy interventions in secondary schools can help these students acquire the requisite skills they will need to complete their schooling and set them up for future success (de Bruin et al., 2023).

'A multi-tiered system helps schools identify struggling students early and allows them to intervene quickly so that within a cohort, the gaps don't become any larger than what they might already be. By providing them with the support that they need, we're reducing, if not removing, barriers to learning.'

— Stasha Demosthenous, Literacy Lead Teacher, Parafield Gardens High School (SA)

The multi-tiered system of supports

Recent research commissioned by AERO identified the MTSS framework (an expansion of the response to intervention model) as the best way to organise support for students who are struggling. The MTSS framework supports educators in implementing evidence-based instructional practices across all learning environments and identifying students requiring more targeted supports, while monitoring the impact of instruction and intervention. It also involves supporting student wellbeing and engagement, and often requires parental or caregiver support in effective implementation. This explainer focuses on its application in secondary schools to address gaps in literacy and numeracy.

The specific descriptions of MTSS provided in this explainer may not be applicable to all schools' unique contexts. Professional judgment should be used to ensure MTSS implementation aligns with the needs and resources of the school community (American Institutes for Research, 2023b). To help get you started, find out how 7 schools across Australia use MTSS.

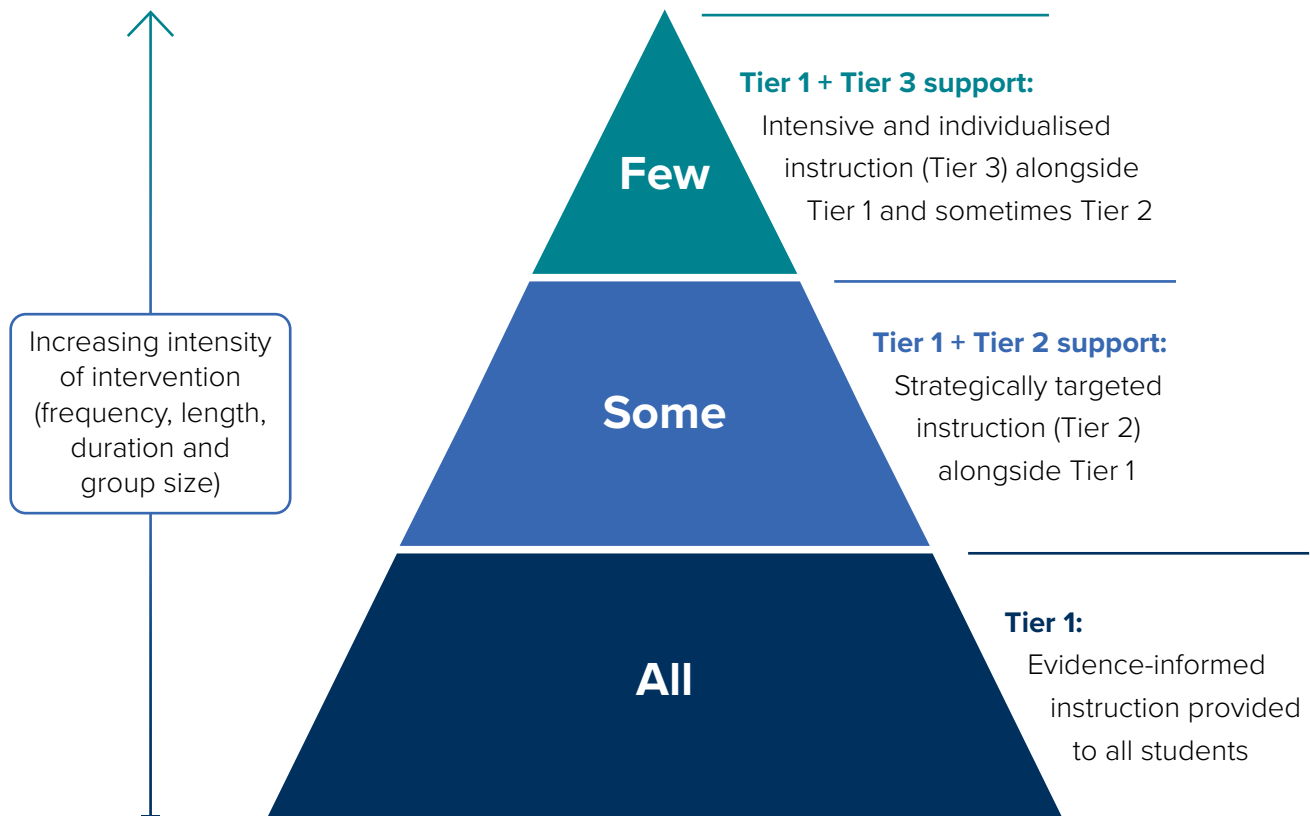# Characteristics of a multi-tiered system of supports

There are 5 general characteristics of MTSS for addressing gaps in literacy and numeracy:

1. a coordinated system of supports across a sliding scale of increasingly intensive tiers

2. delivery of high-quality, evidence-based instruction across all tiers of intervention, carried out by highly qualified staff

3. early administration of universal screening assessments to identify students who need additional support, followed by diagnostic assessments for these students to align intervention to the skill gaps identified

4. data-based decision-making to determine the levels of support required

5. use of monitoring tools to track progress, ensuring that interventions are having the intended impact (American Institutes for Research, 2023a; Australian Government Department of Education, 2023).

Tiers of intervention

MTSS offers a continuum of literacy and numeracy support for students, from Tiers 1 to 3, as illustrated in Figure 1.

Figure 1: How tiers of support work in MTSS

Tier 1 + Tier 3 support:
Intensive and individualised instruction (Tier 3) alongside Tier 1 and sometimes Tier 2

Few

Tier 1 + Tier 2 support:
Strategically targeted instruction (Tier 2) alongside Tier 1

Some

Tier 1:
Evidence-informed instruction provided to all students

All

Increasing intensity of intervention (frequency, length, duration and group size)

Effective delivery of tiered interventions starts with Tier 1, which is high-quality instruction of the curriculum for all students.

Tier 1 refers to evidence-based instructional practices and supports delivered to all students in general education classrooms that facilitate achievement of learning defined in the curriculum. High-quality evidence-based instructional practices and supports are outlined in AERO's Teaching for How Students Learn learning and teaching model. These practices align with how students learn, and include:

- fostering the conditions of a learning-focused environment
- developing a teaching and learning plan for the knowledge and skills students will acquire that recognises the need for prerequisite knowledge
- managing the cognitive load of learning tasks by teaching explicitly, scaffolding practice and monitoring progress
- maximising retention, consolidation and application of learning.

At Tier 1, teachers respond to diverse learning needs with additional guidance, scaffolding or instruction. For example, multiple worked examples of increasing complexity may be provided to students during the <u>explicit instruction phase of the lesson</u>.

Teachers communicate and support high expectations for themselves and their students. They also monitor student progress, respond to student need, and support all students to work towards <u>mastery</u>. Teachers and other school staff monitor student progress to identify students who may need additional access to evidence-based interventions that address significant gaps or needs that can't be sustainably and fully addressed within whole-class instruction.

Tier 2 interventions are generally provided to small groups in addition to the high-quality instruction received by all students at Tier 1. Tier 2 instruction comprises the same evidence-based, high-quality instructional practices previously described in this explainer and supplements Tier 1 – it does not replace it. Tier 2 instruction includes:

- additional support through evidence-based interventions, which may:
  - be aligned in content to the curriculum taught in Tier 1
  - address specific prerequisite knowledge and skills gaps, along the same progression of learning as Tier 1 content
- greater intensity through increased frequency (number of intervention sessions per week), length (how long each intervention session goes for) and duration (total time span of intervention), as well as smaller instructional group size
- closer monitoring of progress.

At Tier 2, closer monitoring means students not making progress can be quickly provided with Tier 3 support. In addition, students who have met learning goals can have Tier 2 supports faded out. Regular progress monitoring should continue so supports are reintroduced if students fall behind again.

Tier 3 interventions are further intensified and targeted to meet specific individual learning needs. The evidence-based interventions at Tier 3 are <u>informed by data</u> such as results from universal screening assessments. Like Tier 2, Tier 3 occurs in addition to the high-quality instruction received by all students at Tier 1 and Tier 2.

The high-quality explicit instruction and evidence-based interventions at Tier 3 are further intensified over and above those provided at Tier 2. This is achieved by increasing the frequency and/or length of each session, duration of the intervention, and/or lowering group size (to either very small groups, or one-to-one). There is also greater frequency of progress monitoring.

Both Tier 2 and 3 interventions should have clear, specific goals and measurable entry and exit criteria that indicate when students will no longer need support in the specific skill or knowledge targeted. Some students will require support in both Tier 2 and Tier 3, depending on identified knowledge and skill gaps.

More information

AERO's MTSS resources provide further information about using MTSS to support students:

- Using Assessments to Support an MTSS Framework
- Supporting Student Wellbeing and Engagement in MTSS
- Designing an Intervention Approach: Making Staffing and Timetabling Decisions
- Why Some Secondary Students Struggle with Reading
- Multi-Tiered System of Supports Decision Tree
- Choosing Reading Assessments in MTSS
- Choosing, Monitoring and Modifying Reading Interventions in MTSS.

References

American Institutes for Research. (2023a). *Essential components of MTSS*. https://mtss4success.org/essential-components

American Institutes for Research. (2023b). *Implementation*. https://mtss4success.org/implementation

Australian Government Department of Education. (2023). *Improving outcomes for all: The report of the independent Expert Panel's Review to Inform a Bettdeer and Fairer Education System*. https://www.education.gov.au/review-inform-better-and-fairer-education-system/resources/expert-panels-report

de Bruin, K., Kestel, E., Francis, M., Forgasz, H., & Fries, R. (2023). *Supporting students significantly behind in literacy and numeracy*. Australian Education Research Organisation. https://www.edresearch.edu.au/research/research-reports/supporting-students-significantly-behind-literacy-numeracy

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