

# Supporting secondary students lacking foundational literacy and numeracy skills

May 2023

This document summarises key findings from research on how to better support students who enter secondary school with gaps in their foundational literacy and numeracy skills. It includes:

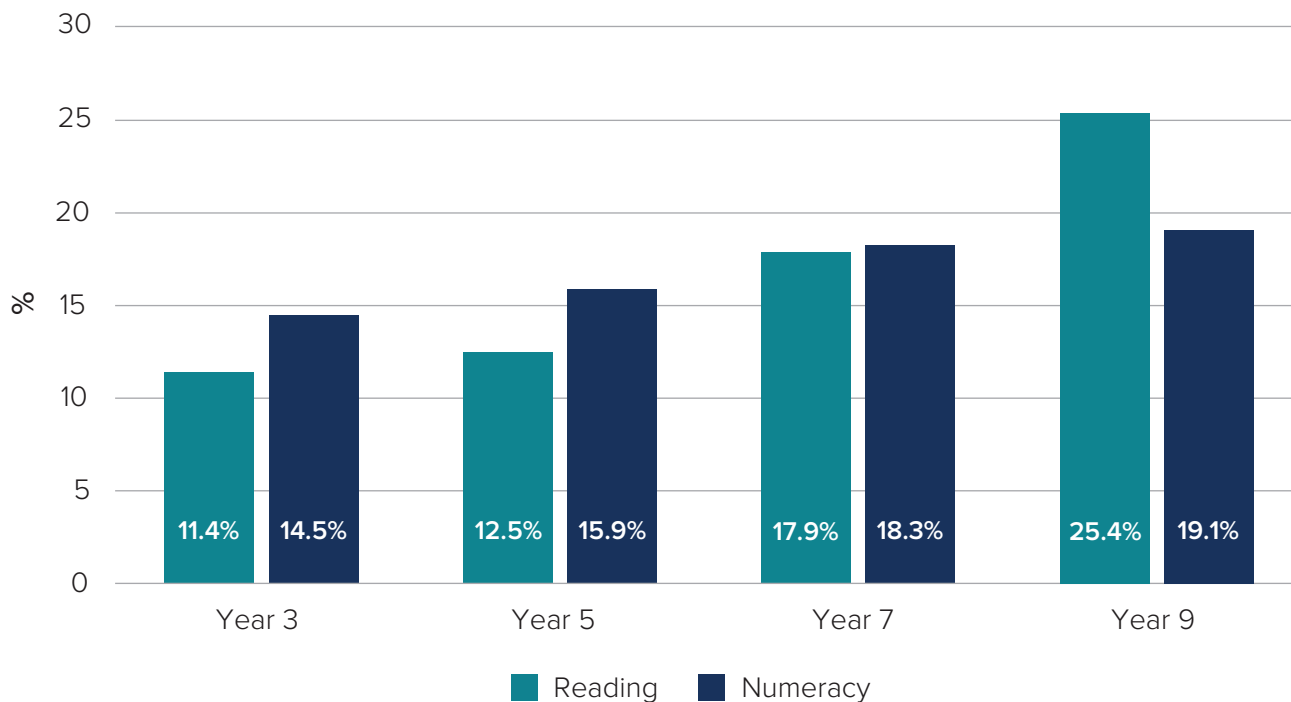
- a **national survey of secondary school staff** – accompanied by in-depth interviews – which explores the support currently offered to these students, and staff confidence in their school’s approach
- an **evidence review** on the support that most benefits these students.

## Background

Nearly 1 in 5 Australian students starts secondary school at or below minimum standards for literacy or numeracy ([Figure 1](#)). This puts them at least 3 years behind their peers. Students struggling with literacy and numeracy are more likely to:

- disengage from school
- leave before the end of Year 12
- have worse health and employment outcomes post-school.

The Australian Education Research Organisation (AERO)’s ‘Implementing effective tiered interventions in secondary schools’ project aims to use research to help schools and school systems support students struggling with literacy and numeracy. To do this, we conducted a national survey of secondary school staff and reviewed existing evidence.

**Figure 1:** Proportion of students at or below national minimum standards in 2021

## National survey of secondary school staff

In 2022, we worked with the Australian Council for Education Research (ACER) to conduct a survey of school staff, supplemented with interviews, to better understand how Australian secondary schools are supporting students who are struggling.

Our survey results show that few secondary schools are consistently providing students with support they are confident will make a difference.

### Schools face barriers to providing support

Fifty-eight per cent of staff surveyed said their school provides specific additional support (also known as intervention) for literacy beyond tailored classroom instruction. For numeracy, 51% noted their school provided this support. The rest either:

- were only able to provide support sometimes
- weren't able to provide support.

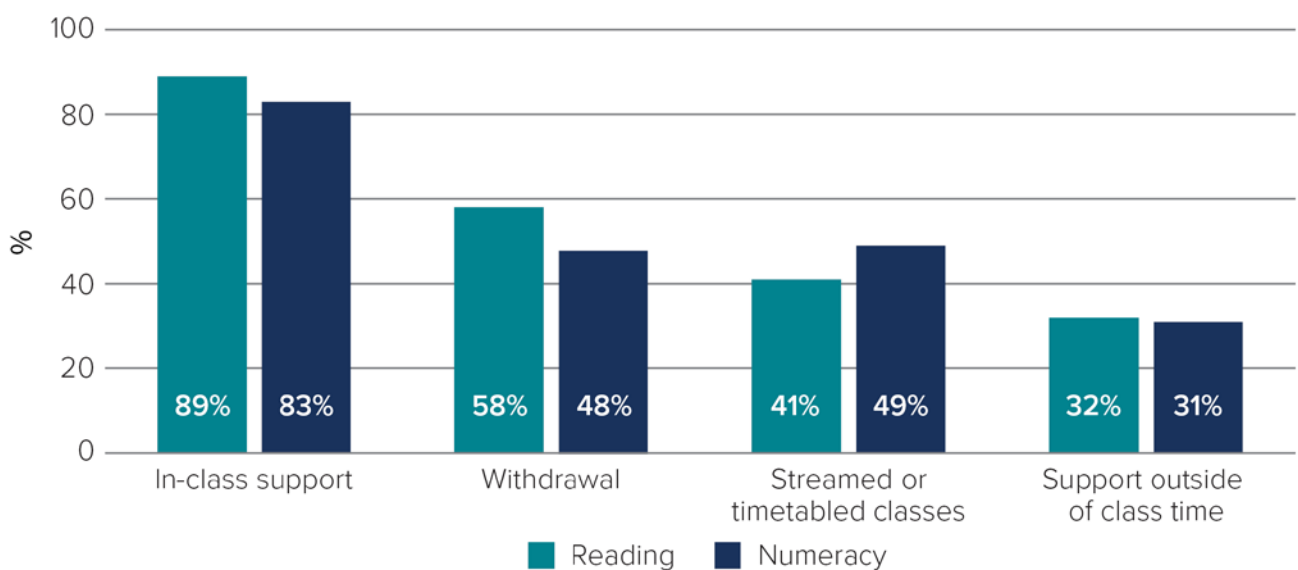
Resourcing was the biggest barrier to providing support for both literacy and numeracy, followed by recruiting (particularly finding and retaining appropriately qualified staff). Staff at government schools, as well as those in regional and remote areas, were more likely to raise these issues. Our interviews found that accessing professional learning on developing students' foundational skills was another challenge.

## Support varies considerably between schools

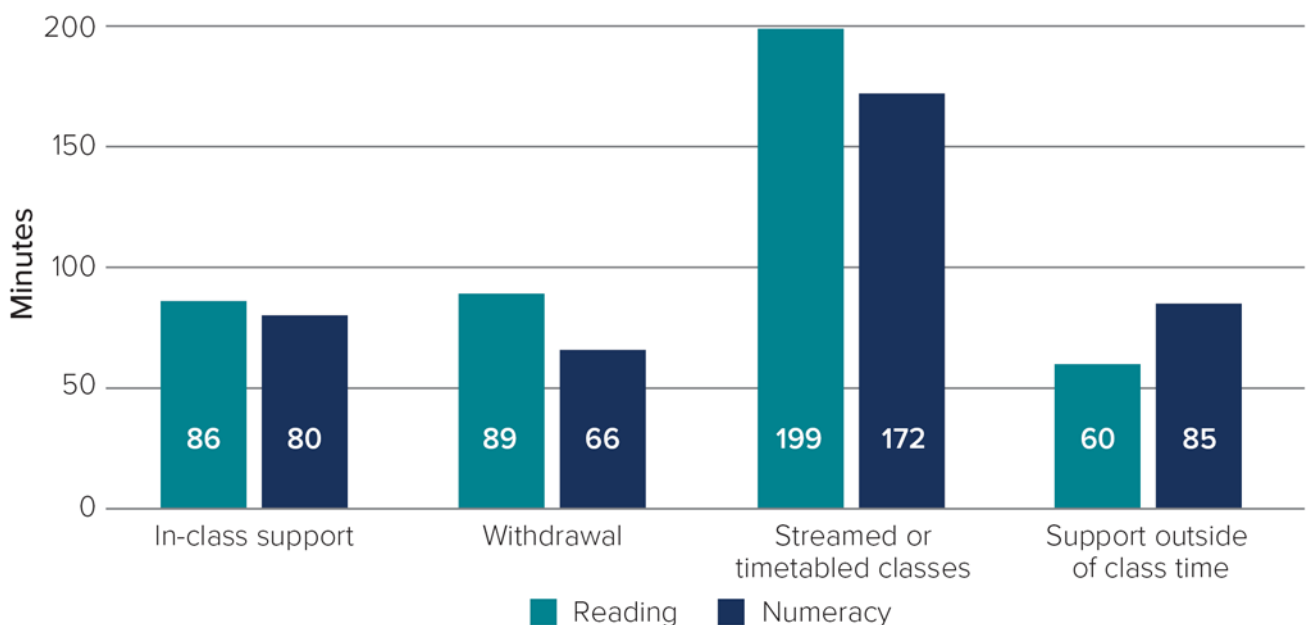
Our survey found that some schools are targeted in how they support students and have clear strategies in place. At other schools, these decisions are ad hoc, based on student preference, teacher availability and personal expertise. Competing issues such as curriculum requirements, student wellbeing and attendance in other subjects also affect the level of support provided to students.

How schools deliver support varies considerably. The most popular choice is in-class support (Figure 2), but students receive the most support time when delivery occurs in timetabled or streamed blocks (Figure 3).

**Figure 2:** Type of support offered to students



**Figure 3:** Average duration of support each week per student, by support type



## Trained secondary teachers are most likely to deliver support, followed by untrained teaching assistants

Around two-fifths of staff surveyed said secondary English or maths teachers are most likely to provide literacy and numeracy support at their school. About two-thirds of these teachers have received specific training in interventions for students who are struggling. Just under a third of respondents said support is provided by teaching assistants. Only about one-third of these teaching assistants have received any intervention training. Less commonly, some schools use other staff to deliver interventions including secondary-trained teachers from other subject areas, primary-trained teachers and speech pathologists.

## Schools lack clarity about how to identify students in need of support

Schools use a mix of assessments to identify students struggling with literacy and numeracy – most commonly NAPLAN, Year 6 grades, ACER's Progressive Achievement Tests (PAT) and teacher judgement.

However, this can be another barrier to providing support. A third of school staff said they found it difficult to identify students who are struggling. Some teachers also lack confidence in their ability to assess which students need support and which foundational skills to prioritise.

## Confidence in the effectiveness of support provided is mixed

Overall, 41% of respondents are not really or not at all confident in the approach their school is taking to helping students develop foundational literacy skills. For numeracy, this was almost half (47%).

One notable concern was that interventions are often aimed at providing access to curriculum material at the current year level, rather than developing missing foundational skills.

## Evidence review

We also worked with Monash University to conduct a review of research on effective practices for supporting students in Years 7 to 9 who are substantially behind their peers in reading, writing and maths.

Through this review, we identified a multi-tiered system of supports (MTSS) framework as a promising model for supporting secondary school students who are struggling.

## Implementing a multi-tiered framework can help secondary schools identify and support students who are struggling

Our review found strong evidence that students who are struggling benefit from high-quality support if it's delivered effectively. This shows that it's not 'Too late' or 'Too difficult' to help these students develop foundational skills that allow them to fully access the secondary curriculum.

We identified multi-tiered frameworks such as a MTSS or response to intervention (RTI) as the best way to organise school support for these students. Both MTSS and RTI are widely used in the United States and are increasing in popularity internationally. MTSS evolved from the RTI model to include additional elements such as behavioural support.

An MTSS model emphasises:

1. using proven teaching methods for all students
2. regular testing of all students to identify gaps in learning
3. delivering frequent small group or 1:1 interventions with a focus on these learning gaps, and with the amount of time dedicated determined by student need
4. continuous, data-based tracking of student progress to ensure interventions deliver real gains.

Our review found that tiered frameworks deliver positive results across a range of student and school-level outcomes including learning. For example, a tiered intervention approach has been associated with a two-thirds reduction in the number of students being referred to special education services and schools. This means this approach can be effective for helping students with significant learning difficulties.

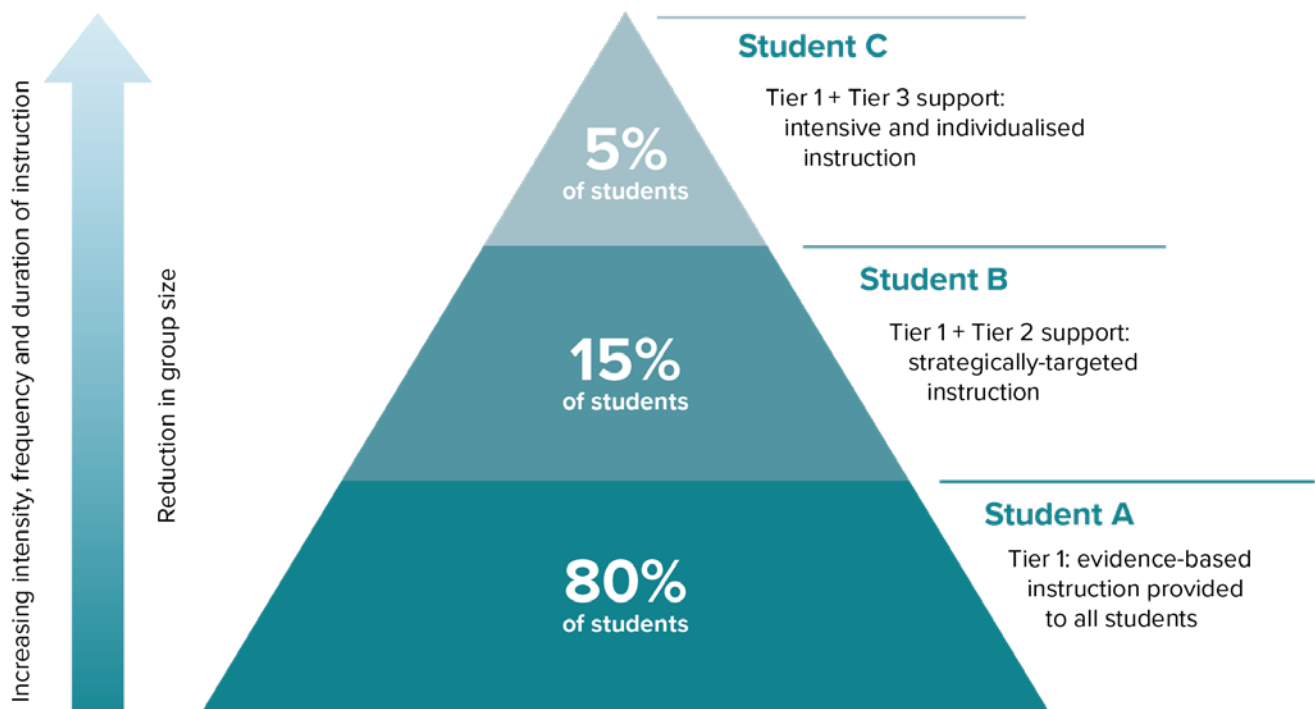
## Implementing MTSS effectively is key

MTSS gives schools a structure for planning how they'll identify and support students who are struggling and making informed decisions based on progress data.

Instructional 'tiers' with increasing levels of support for students who need it are central to MTSS.

Figure 4 shows that most students' learning needs are met through evidence-based teaching practices alone. The remaining 20% are likely to require additional support, with a quarter of this group requiring intensive support, even 1:1 intervention.

**Figure 4:** How tiers of support work in a MTSS



## There are gaps in the evidence base that need to be filled

Our review found that few studies have focused on MTSS implementation, including:

- who is best placed to deliver interventions
- when in the school day these should occur
- the ideal number of support hours per week.

There is also a lack of research on the use of MTSS in secondary schools, including factors that may require adjustments to the model (for example, the school timetable, social pressures and parent engagement).

## Some secondary schools are already using a tiered intervention framework

Como Secondary College in Western Australia is one of the Australian secondary schools using an MTSS-style framework to support students who are struggling. Principal Digby Mercer has been the driving force behind the initiative, which he began more than a decade ago. He explains how the school delivers the program:

‘Our Intensive Learning Team tests all students on entry to understand their skill level. When students are identified as needing additional support, we dive deeper with further testing to identify specific gaps in skills. We then provide additional support to those students in small group settings.

‘The additional classes are part of the school timetable in Years 7, 8 and 9. They are delivered by specialist teachers and are supported by teaching assistants who can help provide additional one on one support where needed. These teachers and teaching assistants receive professional development training on supporting struggling students.

‘We use scripted direct instruction programs to ensure that students learn skills quickly, but also to ensure that teacher workloads stay manageable.

‘Importantly, our team uses assessment data to continually measure student progress to ensure the interventions are working and identify where the student may need more support.

‘Up to a third of our Year 7 students enter the intensive program and after 2 years, up to 75% are fully engaging in the grade-level secondary curriculum.

‘I can’t overstate how transformative this has been for students. Those students that faced an uphill battle to stay engaged in school have had their learning transformed and with it, their life opportunities.’

## Key recommendations

There are 3 key recommendations arising from this research:

1. Secondary schools should be provided with guidance on how to support students who are struggling (including assessment and intervention selection) to enable them to implement an MTSS model.
2. School systems should work with schools to help them identify and overcome barriers that prevent them from adopting a high-quality MTSS model.
3. Further research should be conducted to understand how MTSS can be implemented effectively in a secondary school context.

## Next steps

We will conduct further research and produce additional practical resources to help schools effectively implement a tiered intervention framework, such as MTSS.

This will build on the foundational resources we've already developed for school leaders:

- [Introduction to multi-tiered system of supports](#)
- [Multi-tiered system of supports: Tier 2 and 3 interventions.](#)

## More information

- [Implementing effective tiered interventions in secondary schools: survey of school and support staff](#)
- [Supporting students significantly behind in literacy and numeracy: a review of evidence-based approaches.](#)

To provide feedback on this guide or view further information, including full references and additional resources, visit [AERO's website](#).