



## Volume 39, Issue 6

In this issue:

**A vision for mathematical expertise and excellence** **2**

Dr Christine Mae, Education Officer for Mathematics in Sydney Catholic Schools, presents findings from a current research project that focuses on the effective teaching of mathematics to all students K-12

**SPaRK – The Blue Bench: Encouraging mindfulness** **12**

Abby Jansen is a teacher librarian at Harbord Public School. In this Shared Practice and Resource Kit (SPaRK), Abby links the reading of a captivating picture book to mindfulness practices for Stage 3 students.

**Picture perfect: The role of picture books in a secondary classroom** **17**

Trisha Templeton, teacher librarian at Daramalan College, considers the value of examining sophisticated picture books in secondary classrooms.

---

**Scan** is a leading refereed journal that focuses on the interaction between information in a digital age and effective student learning. Scan offers engaging professional support for all educators.

**Copyright** The material in this publication is subject to copyright under the Copyright Act 1968 (Cth), and is owned by or licenced to the State of New South Wales through the Department of Education (the Department). Material published in 'Scan' Covers and other third party content in 'Scan' are reproduced with permission, where applicable. Apart from the rights granted in the restricted waiver of copyright (below) all other rights are reserved. For all other uses you must contact [editor.scan@det.nsw.edu.au](mailto:editor.scan@det.nsw.edu.au) for permission.

**Restricted waiver of copyright** The published material in 'Scan' is subject to a restricted waiver of copyright to allow the subscriber to print or download copies of the material contained in the publication for use within a subscribed school, subject to the conditions below: 1. All printed material shall be made without alteration or abridgment and must retain acknowledgment of the copyright. 2. The school or college shall not sell, hire or otherwise derive revenue from copies of the material, nor distribute copies of the material for any other purpose. 3. Institutional subscriptions only permit sharing within the subscribed school or institution. 4. Individual subscriptions are for personal use only and are non-transferrable. 5. The restricted waiver of copyright is not transferable and may be withdrawn in the case of breach of any of these conditions.

© 2020 State of New South Wales (Department of Education) ISSN 2202-4557 SCIS 1547886



## A vision for mathematical expertise and excellence

**Dr Christine Mae is the Education Officer for Mathematics in Sydney Catholic Schools. Her research article focuses on the effective teaching of mathematics.**

Mathematics is a fundamental aspect of student learning. It stimulates students' capacity for logical thought and action and teaches them to reason and make sound judgments (NSW BOS, 2012). Feedback from universities has heightened awareness that students who study higher levels of mathematics are more likely to persist in tertiary courses and gain employment in related fields. By contrast, low levels of numeracy are associated with lower levels of social, emotional, financial and physical well-being in life beyond schooling (Bynner & Parsons, 2006). While mathematics is a discipline, and numeracy involves recognising the role of mathematics in the world and having the capacity to use mathematical knowledge and skills purposefully (ACARA, 2010), effective mathematics teaching is essential for increasing both levels of numeracy and participation in higher levels of mathematics.

It is time to go beyond recognising the need to improve mathematics education, to developing and implementing strategies that maximise student engagement, achievement and aspiration. Changing the curriculum, articulating teacher standards and implementing national testing make expectations clear, but they do not of themselves improve mathematics education or students' levels of numeracy. Teachers and quality teaching make the difference.

This article presents insights into the Mathematical Expertise and Excellence (MEE) project, which commenced in 2018 to improve mathematics education across a system of schools. First, a brief overview of the aims and structure of the project is presented. Then, early impacts from deepening the mathematical knowledge for teaching of over 600 primary teachers who completed the MEE Proficient Course during the first two years of the project, are shared. During the COVID-19 crisis, many teachers have expressed that knowledge gained through the course has assisted them in sustaining their students'

interest in learning mathematics via remote learning. However, as a large-scale, eight year project, currently in its third year of implementation, the longer-term impacts of the project are unknown at this point.

## The Mathematical Expertise and Excellence Project

The MEE project was designed and implemented in response to a seven year research study into relationships between teachers' understandings of mathematics, the tasks they provide for student learning and the ways in which they respond to students' thinking (Mae, 2019). The findings of the research regarding how teachers' understandings of the mathematics they teach influence the nature of the tasks they provide for student learning and the ways in which they interpret students' thinking, led to the design of the project. The variability of teachers' subject matter and pedagogical knowledge and its implications for equity in mathematics education, were key findings of the research. Hence, realisation of the following two long-term outcomes of the MEE project is reliant upon every teacher, rather than some teachers, developing the expertise to teach mathematics effectively

1. maximising the levels of numeracy attained by all students, and
2. increasing the proportion of students studying, and aspiring to study, higher levels of mathematics and mathematics-related subjects.

Improving the mathematics education available to all students is a substantial undertaking. It requires a sustained, strategic effort towards a coherent vision for quality learning and teaching, a systematic approach to sustain interest, motivation and improvement, and well-considered support and resourcing. Yet, if we truly believe in the goals of equity and excellence, the question we must ask is not **whether** we need to improve mathematics education, but **how, when** and in **what** ways will improvement take place?

Global research has identified the need for Australia to work strategically to maintain a base of mathematical knowledge and skill through increased opportunities for students to solve more complex, unfamiliar, non-routine problems, higher expectations for communicating and reasoning and greater exposure to alternative solution approaches (Thomson, Hillman & Wernert, 2016). While concerns regarding Australia's falling rankings in PISA were raised more recently in 2019, recommendations regarding what we need to do to improve mathematics education have been reasonably clear and consistent for some years. It is time to implement the recommendations!

The MEE project is founded on recommendations for teaching and learning mathematics in all schools in Australia. The design and implementation of rich, cognitively challenging tasks, and the ways in which teachers respond to students' thinking as they engage in them, are examples of important, practical, recommendations for mathematics teaching and learning.

## Rich, cognitively challenging tasks

The selection, design and implementation of rich tasks with appropriate levels of cognitive demand is crucial for effective mathematics instruction, because tasks form the basis of the lessons that students experience. However, teachers' expectations influence the tasks they provide for students. To shift teaching beyond exercises that focus on learning procedures, teachers need a repertoire of powerful examples, problems, analogies and illustrations through which their students can explore and understand concepts.

## Noticing student thinking

To maximise student learning, teachers need to be able to interpret and respond to students' mathematical thinking. Teacher noticing provides the connection between students, learning tasks and the content (National Council of Teachers of Mathematics [NCTM], 2014). This requires skilful perception of **how**, rather than **whether**, students respond, make calculations, or reason when solving problems. To 'scrutinize, interpret, correct, and extend' (Ball, Hill & Bass, 2005, p 17) students' mathematical thinking, teachers need to be able to represent ideas in multiple ways and 'carry out and understand multi-step problems' (Ball, Hill & Bass, 2005, p 21).

For these reasons, effective mathematics teaching is affected by teachers' proficiency with the subject matter, inclusive of conceptual understanding, procedural fluency, strategic competence, adaptive reasoning and productive disposition (Kilpatrick, Swafford & Findell, 2001). In the research study that led to the development of the project, analysis of relationships between teachers' subject matter and pedagogical knowledge revealed that teachers' understandings of the content were highly significantly predictive of the levels of cognitive challenge in the tasks they designed and significantly predictive of their noticing of students' thinking (Mae, 2019). While many teachers know about mathematics, not all teachers possess the knowledge and confidence to design cognitively challenging tasks, solve unfamiliar problems and interpret students' thinking.

It is with this background that the MEE project was developed and implemented following the findings of the research study, the evaluation of a pilot project to trial and refine professional learning, support and resourcing, and an extensive review of Australian and international literature. The project sets out to deepen teachers' understandings of mathematics, the [NSW Mathematics K-10 Syllabus](#) and mathematics pedagogy. It involves a four-year commitment from each school to strategically develop, embed and sustain expertise and excellence in the teaching of mathematics, with each year pertaining to a project phase (Phase 1, Phase 2, Phase 3 or Phase 4). As each school identifies the year in which to commence the project, the duration of the project is greater than the time commitment of any individual school.

To develop the mathematical expertise and excellence of all teachers, Phase 1 focuses on ensuring the knowledge of the leaders and teachers who will lead mathematics and the project in their school through completion of the proficient professional learning course. In Phase 2, participants who have successfully completed all workshop and in-situ components of the Proficient Course are invited to engage in the Highly Accomplished Course to deepen



their knowledge of mathematics and learn how to support colleagues commencing the Proficient Course. This course includes learning how to support colleagues through effective in-class modelling, co-teaching, observation, analysis of practice and feedback. In Phase 3, teachers who have completed the Highly Accomplished Course can engage in a Lead Course in which they further deepen knowledge of mathematics and develop the skills and confidence to lead mathematics, including professional learning, across the school. By the end of Phase 3, all teachers of mathematics in the school should have completed the proficient level course and the ratio of teachers who have completed the Highly Accomplished Course should be sufficient to provide in-class modelling, co-teaching, observation and feedback for all teachers in the school. Phase 4, the final year of the project for each school, is a crucial period of the project during which schools embed and sustain mathematical expertise and excellence across the school.

### Phase 1 – Professional learning: Proficient mathematics teaching

The proficient professional learning course blends workshop-style learning that introduces theoretical elements and makes them tangible through personalised in-situ learning. In-situ components involve Leaders of Learning and Numeracy Coaches working alongside each course participant to model, co-teach and observe mathematics teaching in their classroom. Each session commences with a pre conversation about the design of the lesson, the learning task and the anticipation of pedagogical decisions to maximise learning in the lesson. Following each lesson, participants engage in a professional conversation that provides the time and space for them to reflect on and analyse teaching practice and its impact on student learning. Translating theory into practice in each teacher’s classroom is an important feature of the project that complements the deepening of content, syllabus and pedagogical knowledge gained in workshops. The graphic that follows communicates the pedagogical and content focus of each workshop in the Proficient Course.

#### PHASE 1: 36 HOURS of ACCREDITED PL

Workshop 1	Workshop 2	Workshop 3	Workshop 4
Designing Tasks	Noticing Student Thinking	Setting Goals for Practice and Mastery	Sequencing Learning and Assessment
Addition & Subtraction Number and Algebra	Area Measurement	3-D Space Geometry	Chance Statistics & Probability

Teachers continuously practise applying the knowledge and skills that are the focus of each workshop. Support is provided to leaders and teachers involved in the Proficient course by colleagues in their school, Leaders of Learning or Cluster Coaches through:

*Modelling      Co-Teaching      Observation      Guided reflection      Feedback      Goal-setting*

Leaders and teachers participating in the course must complete all elements of the course to receive course hours. This means attending the full duration of each workshop and in-situ learning sessions. Completion of Phase 1 releases funding for the school in Phase 2.

As a consequence of the Proficient Course, teachers deepen their knowledge of syllabus content for teaching four syllabus sub-strands K-8, and develop pedagogical knowledge to:

- articulate clear learning intentions, design rich, cognitively challenging tasks and develop differentiated success criteria to provide challenging yet inclusive learning for all students;
- select and use a variety of strategies to attend to, interpret and respond to students' mathematical thinking and engage them in productive mathematical discussion;
- balance opportunities and time for students to learn new concepts with opportunities to practise, master and apply their learning; and,
- use deep knowledge of the syllabus to sequence learning effectively across the year and within program units.

The image that follows offers an example of a task as it might appear in a classroom when applied to Stage 3 content introducing the language of increase and decrease. Elements of the task, such as the learning intention, task and success criteria, are animated so that they can be introduced as needed and in ways that focus students' attention on concepts and meaning. This task is posed as a 'challenge' supported by differentiated success criteria. The first criteria are written so that any student with a low starting point can start independently. By contrast, the last criteria are designed so that the most capable student in the class needs to exert significant cognitive effort to succeed. Teachers learn to articulate learning intentions, design these types of tasks and develop success criteria with the scope to facilitate learning for the full range of students in their class: they design low entry – high ceiling learning tasks.

**WE ARE LEARNING TO CALCULATE INCREASES AND DECREASES**

**CHALLENGE**

Tom started with more money in savings than Christine. Together they had \$2030.

Then, Christine increased her savings.

Tom said, "If I decrease my savings by the same amount that you increased yours, our savings will be equal".

- ***By how much might Tom need to decrease his savings?***

**SUCCESS CRITERIA**

**List** pairs of numbers with a sum of 2030

**Calculate** one solution and **describe** the increase and decrease in words

**Record** the solution as an equivalent number sentence and on a number line

**Identify** multiple solutions, organise the information into a table and describe any patterns

**Write** a procedure that generalises how you could find any solution

**Identify** multiple solutions, organise the information into a table and describe any patterns

Image: Example of classroom task

Once teachers are confident in designing these types of tasks, they focus on implementing tasks using an array of strategies to support and empower students with different starting

points for the learning on any given day. We refer to these strategies as ‘pedagogical moves’. They are teaching and learning strategies that can be selected to maximise mathematical learning by maintaining classroom environments that focus on improvement, challenge and support. Pedagogical moves are practical adaptations of the three noticing skills of **attending**, **interpreting** and **responding** to student thinking (Jacobs, 2010) and the five practices of **anticipating**, **monitoring**, **selecting**, **sequencing** and **connecting** described by Smith & Stein (2011).

Examples of strategies that teachers have reported as being effective for increasing students’ interest, confidence, communication, reasoning and effort include the Fishbowl, Gallery walk and Showcase space.

**The Fishbowl** is an ideal strategy for addressing misconceptions, taking learning to the next level or explicitly teaching important points based on students’ current responses to a task. By monitoring the class and posing questions, teachers identify students who can model or explain an idea in ways that will contribute to the learning of other students in the class. The class form a circle around the student who is sharing so that they can clearly see and hear the mathematical thinking being highlighted. Then, the teacher uses the student’s thinking as a starting point for explicitly teaching or clarifying an important point. In the words of a Year 3 student:

“When I am the person in the middle of the Fishbowl I feel excited, like I’m a teacher. The teacher is like the fish food that feeds the fish to make them grow. When another student steals one of my ideas I feel great because it means that they are learning something from me.”

**A Gallery walk** is a useful way for teachers to clarify expectations in relation to a task or success criteria, encourage students to consider other possibilities and show students what good work could look like and how they might improve their work. The teacher invites students leave their work displayed and move quietly around the room viewing the work of others in relation to the task and the success criteria. The role of students is to identify examples of work that are interesting or that they can learn from. Then, the class discuss their observations of different responses to clarify ideas and increase their understanding of what the teacher is looking for. They are encouraged to use their observations to improve their own work. Teachers and students refer to a variation on the Gallery walk as a Spy walk, where the teacher invites one or more students to move around the room to find examples of work that they can learn from while the rest of the class continue working.

**A Showcase space** is a great strategy for preparing students to share their insights into the mathematics or the task they are working on. Early in the lesson, some students are selected to work in special spaces that will be ideal for sharing with the class. For example, two students might work on a large whiteboard to record written strategies or a diagram in response to a task while another student might build a model in a central location that will make viewing possible for all members of the class. Together, their responses provide the class with multiple representations of the same idea that can connect all students to the goal of the lesson.

The art and purpose of selecting pedagogical moves provides substantial opportunities for teachers to know their students as learners of mathematics – not just the correctness of their answers, but their communication, reasoning, problem solving, understanding and fluency, together with their interest and effort. The strategies also aim to increase students’ metacognitive awareness. By selecting and using strategies effectively, teachers teach students to reflect on their learning and set goals to improve their work. Teachers also set time aside for students to engage in the type of purposeful practise required to develop fluency and mastery in mathematics.

### Early impacts of the project

Upon commencing the Proficient Course, teachers complete a mathematics teacher efficacy survey to provide baseline data. They then complete a survey each term regarding their confidence in relation to different aspects of teacher knowledge that have been addressed through the professional learning at that point in time. We now have the data from teachers in the first two cohorts completing the Proficient Course, observations of over 600 teachers in action in classrooms and survey data from the students in these classrooms.

When examining teachers’ ratings for the survey items that are repeated each term, there are notable shifts in teachers’ confidence in articulating clear learning goals, designing cognitively challenging tasks with a low entry point and high ceiling and writing differentiated success criteria. The chart that follows illustrates changes in teachers’ ratings for designing tasks across the four terms of professional learning in the Proficient Course across 2018 and 2019. All items use a rating scale from **1** (I cannot do this) to **10** (I am 100% confident in doing this). The chart highlights the variability in teachers’ confidence for designing tasks at the start of the course (ratings from 2 to 10), as well as increased confidence in designing tasks by the end of the course, with 83% of teachers rating their confidence as 8, 9 or 10 out of 10.

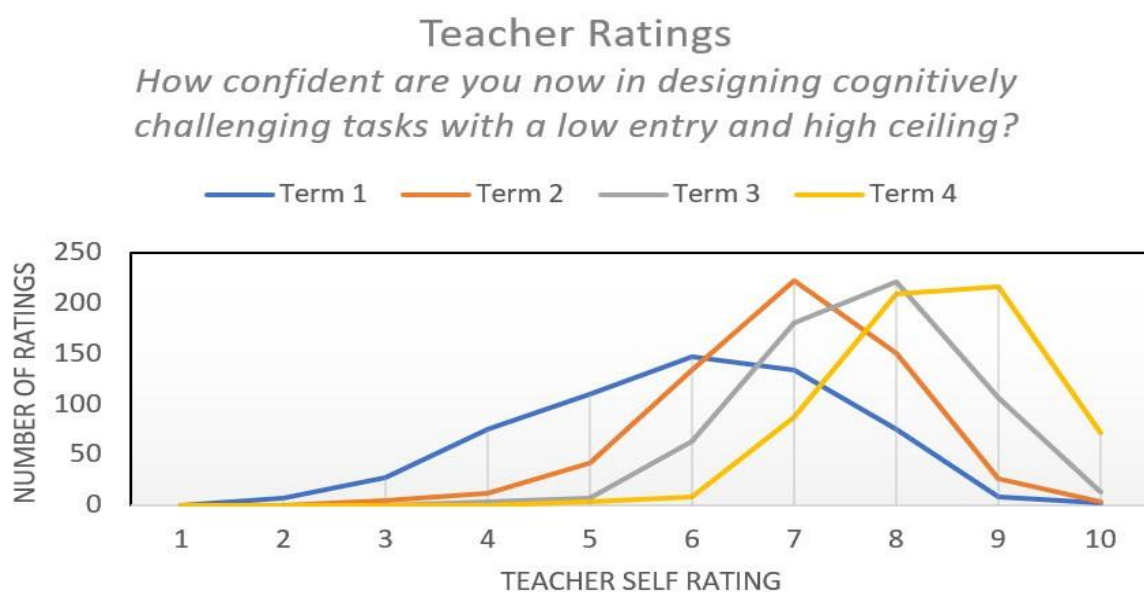


Image: Growth in teacher confidence



Student surveys reveal that most students in the classrooms of the teachers completing the Proficient Course perceive themselves as successful and capable in mathematics. Most students in the classrooms of teachers who have had one or more years of professional learning as part of this project, enjoy learning mathematics and look forward to it each day. Students' perceptions are supported by other sources of data, including NAPLAN numeracy and standardised assessments such as the ACER Progressive Achievement Tests (PAT-M).

In the Learning mathematics student survey, designed for the purposes of the project, the final question is an open response item asking students to describe how they learn mathematics in their school. In the pre project survey, the average number of words per student response is just four words, with the most common responses being generic ones such as, 'I don't know'. By comparison, students' responses to the same survey after their teacher has completed the Proficient Course demonstrate confidence and preparedness to articulate how they learn mathematics in their class, with most students writing a short paragraph of around 4 to 5 lines. The following response from a Year 6 student in 2019 captures many of the sentiments commonly expressed by students of the same age:

"In my class we learn maths very openly, like we are a team. Our teacher will sit and explain the goal for the lesson. We read through the task together and talk to the person next to us to share what we are thinking and get some ideas. After this we go and do our work. Some students choose to work on the whiteboard and others like to work in their books. Some students prefer to work alone, and others like to work in a group. Sometimes we get to go on a gallery walk and share our work with others. When we are stuck, this helps us to see what others might do to solve the same problem. After we finish the lesson, we talk about what we did well and what we need to work on. I love learning like this so much better than the other way in maths. I would love to learn this way in high school."

The shift in students' enjoyment of mathematics is paralleled by increases in teachers' knowledge for teaching it. In 2019, the mean rating of around 400 teachers in the Proficient Course regarding the extent to which their knowledge for teaching mathematics had increased, was 9.2 on a scale from 1 to 10. In open response items, teachers report that they have never previously understood the syllabus, or the progression articulated by it, as well as they do now. Increases in knowledge are helping teachers to design and implement effective, engaging lessons that respond to where each student is in relation to syllabus outcomes. Importantly, mathematics teaching practice has become a shared endeavour, characterised by reflective, collaborative teachers and leaders who openly model, observe, and give and receive feedback to improve the teaching and learning of mathematics for all. The learning culture among teachers is mirrored in classrooms where we are realising the belief that it is possible for every student to struggle, grow, succeed and contribute to the learning of the others, even though their starting points for learning on any given day or topic may vary.

Perhaps the most important early impact of the project has been changes in teachers' dispositions to mathematics. Initially, many teachers were anxious about 'doing mathematics' as part of the course because their own education had led them to fear mistakes. Through professional learning, teachers see themselves as problem solvers who

can solve mathematics problems, as well as teaching problems, making the work of the project positive and productive. We know this because we gather baseline data prior to teachers commencing the professional learning and then monitor changes in teachers' efficacy ratings throughout the project. The following comment, reflects sentiments commonly expressed by teachers as a consequence of the Proficient Course, regardless of their teaching experience:

"I am teaching mathematics with a fresh pair of eyes. When my class fist pumps and cheers when it is maths time, I definitely know that my teaching practice has improved for the better. The tasks we use to stimulate learning are challenging yet fun, and every single child in my class is able to experience success at their own level and pace. I feel much more confident with the content and even more so now that I can make those seemingly obvious, but previously unnoticed, connections between the content strands. This is because I am no longer afraid of the mathematics and because of this I can respond flexibly and creatively to each student."

The primary project is comprehensive. Yet, it is only a starting point for increasing the proportion of students studying higher levels of mathematics and maximising the levels of numeracy attained by all students. Ultimately, these aims will be achieved when every student experiences mathematical expertise and excellence in each successive year of their educational journey. With a critical mass of students impacted by the primary project now moving into secondary schools, we need to sustain their enthusiasm, success and readiness to engage in challenge, practice and mastery.

### References and further reading

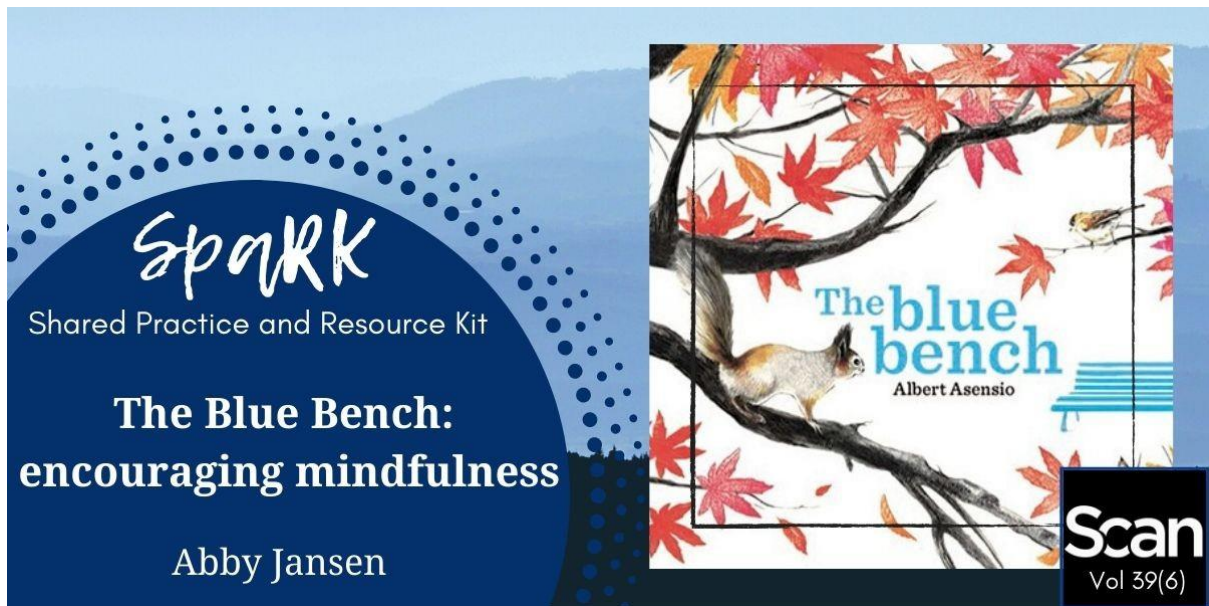
- Australian Institute for Teaching and School Leadership (AITSL). (2014). [Australian Professional Standards for Teachers](#) 1<sup>st</sup> ed. Melbourne: AITSL.
- Ball, D. L., Hill, H.C, & Bass, H. (2005) [Knowing mathematics for teaching: Who knows mathematics well enough to teach third grade, and how can we decide?](#) *American Educator* 29(1).
- Bynner, J. & Parsons, S. (2006). *New light on literacy and numeracy*. London: National Research Development Centre for Adult Literacy and Numeracy.
- Kilpatrick, J., Swafford, J., Findell, B. (Eds) (2001). *Adding It Up: Helping Children Learn Mathematics*. Washington DC: National Academies Press.
- Mae, C. (2019). In G. Hine, S. Blackley, & A. Cooke (Eds.). *Mathematics Education Research: Impacting Practice* (Proceedings of the 42nd annual conference of the Mathematics Education Research Group of Australasia) pp 476-483. Perth: MERGA.
- National Council of Teachers of Mathematics (NCTM). (2014). *Principles to Actions: Ensuring Mathematical Success for All*. Reston, VA: NCTM, National Council of Teachers of Mathematics.
- NSW Education Standards Authority (NESA) for and on behalf of the Crown in right of the State of New South Wales. (2012). [Mathematics K-10 syllabus](#)

Sullivan, P., & Australian Council for Educational Research. (2011). *Teaching Mathematics: Using Research-Informed Strategies*. Camberwell, Vic: ACER Press.

Sullivan, P., Borcek, C., Walker, N. & Rennie, M. (2016). Exploring a structure for mathematics lessons that initiate learning by activating cognition on challenging tasks. *The Journal of Mathematical Behaviour*. 41, 159-170.

Thomson, S., Hillman, K., Wernert, N. (2012). *Monitoring Australian Year 8 Student Achievement Internationally: TIMSS 2011*. Melbourne: Australian Council for Educational Research (ACER).

How to cite this article – Mae, C. (2020). 'A vision for mathematical expertise and excellence', *Scan*, 39(6).



## SPARK – The Blue Bench: encouraging mindfulness

**Abby Jansen is a teacher librarian at Harbord Public School. In this Shared Practice and Resource Kit (SPARK), Abby links the reading of a captivating picture book to mindfulness practices for Stage 3 students.**

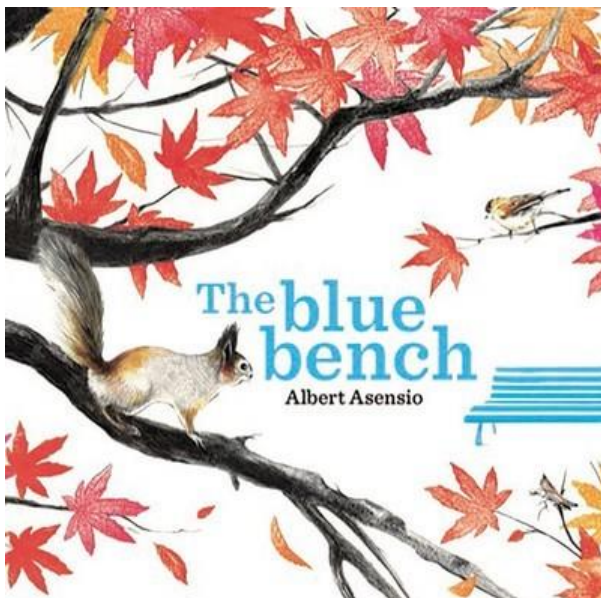


Image: The Blue Bench by Albert Asensio

### Resource overview

‘The Blue Bench’, written and illustrated by Albert Asensio, inspires students to discover how a simple object like a blue park bench can offer so much joy and happiness. A blue bench is the focal point in the lives of those who are able to pause from their busy lives and take a seat in the park. This narrative sends a powerful message to readers to simply open their eyes, look around and take in their surroundings through all their senses, and to enjoy present time awareness. For teacher librarians, you can make a lasting impact by authoring an article that opens a window on contemporary school libraries.

Through your article, you can report and explain current professional practices, highlight positive outcomes, debate challenges, and perhaps influence further innovation (Buzzeo, 2011; Hibner & Kelly, 2017). You can demonstrate how teacher librarians are energetic, forward looking, thoughtful and socially minded professionals. (And help banish the tired stereotypes!)

## Educational significance

It seems children today are far busier than past generations. Possibly, this is due to the vast range of extra-curricular activities on offer, a packed school curriculum, and the integration of technological advancements, bringing with it a world of devices and apps. It can be argued that these 'busy' activities are necessary for allowing children to discover their talents and interests, and become manipulators of technology, thus setting them up for a world in which they will study, work and live. However, it also raises the question of whether children of today are too busy? Perhaps there is also a place for teaching, encouraging and allowing children to stop, listen and observe the world around them and identify many simple pleasures we often take for granted.

The growth in mindfulness understanding and practice has expanded rapidly in recent years, due to the positive effects it has on mental and physical wellbeing (Weare, 2012). Studies indicate that individuals who practice mindful techniques are emotionally more positive, have stronger friendships, less anxiety and experience greater wellbeing in everyday life (Weare, 2012). It is also argued that mindfulness enhances mental concentration and attentiveness, ignites critical thinking skills, develops emotional maturity, and enables skill development and the retention of information (Laland, 2015).

'The Blue Bench' is a resource that centres on paying attention to the present moment and being mindfully aware of one's actions and surroundings. As habits form early in life, the integration of mindful practice can assist students to live a life well connected to their surroundings, allowing them to form a strong sense of belonging and self-awareness as well as encouraging present moment awareness.

## Suggestions for using this resource

Before reading this text with stage 3 students, I asked if they had heard of the term 'mindfulness' before, and if so, what it means to them. Some were able to elaborate and give an example of a mindfulness technique they practise, or are aware of, such as meditation. After determining a shared understanding of mindfulness, we discussed the difference between the terms 'mindful' and 'mind full'. Writing the words on the board next to each other helped students to clarify the difference in meaning between them. Students were able to recognise that 'mind full' refers to thinking about a lot of things at once and having a 'busy' mindset. In contrast students identified 'mindful' as being careful about and understanding what you are doing as well as recognising the impact on self and others.

With these ideas in mind we approached a study of 'The Blue Bench'. Initially, after looking at the book's classification, as fiction, and reading the blurb on the back, predictions about the story were gathered from students. Following a reading of the book together, we discussed how the notion of mindfulness was represented in the text and its importance. Students were able to grasp the message of being able to feel present in a particular place at a point in time and to open one's senses to objects and people nearby. They understood how this practice can bring joy to our lives. Students also commented on how relationships



can grow and blossom over time and that these experiences play an important part in who we are.

### Syllabus links

'The Blue Bench' is a text that has relevance to cross curriculum learning and teaching. As the following activities indicate, links can be made to outcomes in both the [English K-10 syllabus](#) and the [PDHPE K-10 syllabus](#). It is also pertinent to the cross-curriculum priority of Personal and social capability corresponding to these KLAs.

### Teaching activities

#### Senses walk and poem

Students can be taken on a 'senses walk' in their school outdoor environment. They should be asked to notice all the beautiful and simple things in the natural world around them. Encourage students to not only notice the season, but to use all their senses to discover their surroundings. For instance: to look at the ground they walk on, to observe the clouds above, to focus on how tree limbs stretch or intertwine, to notice the different scents of the nature surrounding them and to take in the various sounds they hear. It may be a good idea to do a seated or lying meditation with some deep abdominal breathing in an outdoor area before commencing the walk. This will assist students to become relaxed and achieve a more mindful state.

Students could be provided with a graphic organiser that has segments pertaining to each of the senses: touch, hearing, smell, taste, and sight. While on their walk, students could record specific sensory experiences. Teachers may choose to give more explicit directions by providing students with sentence starters, such as: 'As I walk through the bush I can hear \_\_\_\_\_ which makes me imagine or reminds me of \_\_\_\_\_.'

After the senses walk, students could be asked to write a poem using their recorded responses. They should be encouraged to use adjectives, similes and metaphors to show the kind of sensory input they experienced on the walk.

Upon completion of a draft copy, students should have their poem reviewed by a peer. Peer reviewers can be asked to tick sections where they see descriptive writing. Using the feedback, students may rework their poem 'for publishing', so they can be shared with a larger audience.

Syllabus links:

Stage 3 – English

A student:

- EN3-2A composes, edits and presents well-structured and coherent texts.
- EN3-6B uses knowledge of sentence structure, grammar, punctuation and vocabulary to respond to and compose clear and cohesive texts in different media and technologies.

Stage 3 – PDHPE

A student:

- PD3-7 proposes and implements actions and protective strategies that promote health, safety, wellbeing and physically active spaces.

### Reflection on our relationships

In 'The Blue Bench' there is a strong message about how positive relationships can play an important part in our lives. Seasonal changes throughout the book suggest that relationships can also grow and change over time. Have students think about and reflect on a relationship with a friend at school. Ask them to consider if their activities with their friend, during recess and lunchtime breaks, change with the different seasons throughout the year. Students could illustrate their friendship in four quadrants, depicting the seasons of the year, and show how the relationship changes or develops over time. A poem that uses similes and metaphors or a brief descriptive narrative capturing the essence of their illustrations can be an optional extension task.

Syllabus links:

Stage 3 – English

A student:

- EN3-2A composes, edits and presents well-structured and coherent texts

Stage 3 – PDHPE

A student:

- PD3-2 evaluates the impact of empathy, inclusion and respect on themselves and others.

### Mindfulness reading

Megan Daley's mindfulness activity outlined in her book 'Raising Readers' (2019) was well received by students in years 3-6 at my school. As Daley notes, the school library is an important space that allows all students to develop a sense of belonging. There is often a section of the library individuals will be drawn to, where they feel familiar with and connected to the texts in that section, such as the graphic novel section or the dinosaur non-fiction section.

To develop the mindfulness activity suggested by Daley, I asked students to close their eyes and picture where they go when entering the library. Next they were asked to consider which section they feel connects with them and their interests, whether it be a shelf of a certain series or a non-fiction category. Once they are at this section in their imagination, they are to picture themselves selecting a book to borrow. Then they envision where they take this book to read, that is where do they feel most relaxed and

calm when reading this book? After opening their eyes, students are provided with a piece of paper to illustrate this reading place.

Some students drew themselves reading in a library space at school, others at home in places such as in the garden on the grass in the sun, or in their bed with their dog sleeping next to them. Students then wrote about this place on the back of the paper, describing what the place looks like and how it makes them feel. The sheet of paper was then folded and used as a bookmark, allowing students to open the paper when they needed to be reminded of their calm and tranquil place. Although this activity was done last year, I still find students using these bookmarks this year. It appears to have been a very successful activity.

Teachers will be aware of several texts that encourage mindfulness and can adapt the activities outlined above to other source texts and different learning and teaching stages.

Additional narrative texts that have a message of mindfulness and present moment awareness:

- Harrison, P. & Wilson, K. (2020) *Extraordinary!* NSW: New Frontier.
- Kendell, S. (2010) *The bushwalk*. Vic: Windy Hollow Books.
- Muir, Aunty Fay & Lawson, S. & Kennedy, L. (2000) *Respect*. WA: Magabala Books.
- Perkins, G. (2017) *A walk in the bush*. AU: Affirm Press.
- Thurston, J. (2017) *Kindness: The little thing that matters most*. UK: Harper Thorsons.
- Wheatley, N. & Searle, K. (2006) *Going bush*. NSW: Allen & Unwin.

### References and further reading

Asensio, A. (2019) *The blue bench*. Victoria: Berbay Publishing.

Daley, M. (2019). Raising readers. Queensland: University of Queensland Press.

Laland, M. (2015). Mindfulness and student success. *Journal of Adult Education*, 44(1).

NSW Education Standards Authority (NESA) for and on behalf of the Crown in right of the State of New South Wales. (2012). [English K-10 syllabus](#)

NSW Education Standards Authority (NESA) for and on behalf of the Crown in right of the State of New South Wales. [Learning across the curriculum](#)

NSW Education Standards Authority (NESA) for and on behalf of the Crown in right of the State of New South Wales. (2018). [PDHPE K-10 syllabus](#)

Weare, K. (2012). [Evidence for the impact of mindfulness on children and young people](#). *The Mindfulness in Schools Project*.

How to cite this article – Jansen, A. (2020). 'SPaRK – The Blue Bench: Encouraging mindfulness'. *Scan*, 39(6).



## Picture perfect: the role of picture books in a secondary classroom

Trisha Templeton

### [Picture perfect: The role of picture books in a secondary classroom](#)

**Trisha Templeton, a teacher librarian at Daramalan College, considers the value of examining sophisticated picture books in secondary classrooms.**

Picture books are frequently used in learning and teaching for young children. However, this style of narrative is pushing the boundaries in educational practice. Research has shown that picture books can be used to teach multiliteracies and other curriculum content to older students. Picture books can also operate as a means of broaching sensitive subjects (Marsh, 2010).

Unlike 'illustrated books', where images are usually decorative, picture books require images to be the central feature working concurrently with the written text (Barone, 2011). As Dawn Marsh (2010) suggests, both images and written text are required for decoding the story. Titles such as Mem Fox's 'Where is the Green Sheep?' and Alison Lester's 'Are We There Yet?' are fine examples of traditional picture books. Their format is ideal for younger children as the illustrations assist the reader in decoding the written text.

Recent decades have seen a sub-genre emerge in the form of 'postmodern' picture books. These are designed to provoke and stimulate the reader with absent or contradictory text (Aitken, 2007). The classification 'postmodern' generally applies to picture books which employ techniques that operate to subvert the traditional picture book. Devices and techniques used by authors and illustrators of postmodern picture books can include: a non-traditional plot structure, intertextuality, parody, pastiche, metafictional devices, unusual design layout, pictorial fonts, or surprising perspectives. Sometimes they even omit the written text altogether.

The absence of written text encourages a reader to 'self-author' and fill in the dialogue (Aitken, 2007), as is the case with *Flotsam* by David Wiesner. In *Flotsam*, the reader is required to apply prior knowledge and understanding of the beach to decode the

illustrations (Pantaleo, 2018). Older readers may perceive the overt message of escapism and fantastical stories as well as the underlying message of tradition and conservation. Another example in the postmodern vein is Wiesner's book 'The Three Pigs'. This retelling of a well-known tale has several contradictions between words and images, compelling readers to re-read the page and search for details previously missed (Aitken, 2007).

Compared to traditional picture books, where the author's voice is strong, postmodern picture books allow for a change in narration and perspective (Aitken, 2007). In 'Flotsam', the reader is required to bring their own knowledge and experiences to the narrative. The lack of written text encourages a reader to engage more deeply with the storyline and characters, and the visual text is more likely to activate the experience of different emotional responses or cognitive thought processes.

More sophisticated picture books, that is those which provide various levels of meaning, integrate multiple narratives, deal with complex issues or emotions, use rich literary devices, and/or include intertextual references, are aimed towards older readers. These books are particularly useful in secondary school classrooms. They have great capability to provide learning and teaching experiences and can be used as a vehicle to teach content, multiple literacies, and to influence social and emotional development (Pantaleo, 2014). John Marsden and Shaun Tan's 'The Rabbits' (1998), Shaun Tan's 'The Red Tree' (2001), Bruce Whatley's 'Ruben' (2018) and Margaret Wild and Freya Blackwood's 'The Feather' (2018) are all excellent examples of sophisticated picture books. Such texts often integrate postmodern elements, encouraging readers to question both the content and the format in greater detail.

The ability to decode and make cognitive connections is not inherent. Children and young adults often need to re-read such books multiple times and have discussions with others in order to understand the various nuances (McDonald, 2013). Such subtleties will manifest differently with different readers. Interpretations will depend upon personal cognition and experience. This means that sophisticated picture books are ideal for classrooms with diverse needs, as the book itself may be an aid to differentiating learning.

There are many advantages to using picture books in a secondary classroom. The obvious advantage is their brevity. These concise books can be useful for introducing engaging thematic units of work. They also provide an alternative as class texts for reluctant readers, students struggling with literacy or those who do not speak English at home. Another advantage is the apparent innocence that surrounds picture books (Marsh, 2010). Their familiar structure can be reassuring for students as many remember them from their own childhood and early schooling. Consequently, such books are often seen as non-threatening, and student resistance is reduced.

Of further significance is the fact that the 'image' has become essential to daily communication and, in some instances, has supplanted the alphabet in terms of importance (Short, 2018; Ross-Johnston, 2014). Rosemary Ross-Johnston (2014, p 619) is adamant that students need to be competent in image analysis across various contexts. But in order for adolescents to be able to make successful connections between literacy and



comprehension, they need to learn the skills to decode language and symbols. This can be achieved through the use of challenging picture books as a focus for learning and teaching.

Picture books often connect with popular culture and the new texts, technologies and literacies that accompany it (Flores-Koulish & Smith- D'Arezzo, 2016). Kendall Haven (2007) reminds us that storytelling is the most fundamental way humans have sought to understand the complexities of life. Therefore narratives operate at the base level of understanding and are within everyone's capability. Traditional stories with clear demarcations of beginning, middle and end, allow children to organise information in a logical manner (Haven, 2007). More complex picture books, with contrary and/or absent text, force the reader to make their own connections, which promotes critical thinking (Short, 2018).

Considering these predominantly visual texts from another perspective, it has been well established that emotional regulation is important for social development and is the basis of human interactions (Harper, 2016). Laurie Harper (2016) believes that picture books provide an excellent framework to convey messages about empathy and tolerance. Emotional literacy, is the ability to regulate one's emotions in social situations. Conflict resolution, common in playgrounds, sports grounds, canteens, boardrooms and bedrooms, all require competence in social and emotional literacy. In fact any positive social interaction needs parties to be emotionally literate. Reading and the analysis of literature involves a reader in connecting with characters, which often generates increased levels of sensitivity and empathy.

The strength of literary works lies in the assumption that readers are able to vicariously experience a character's conflict and thus develop an understanding of their feelings. Sophisticated picture books use illustrations and text to elicit an emotional response in the reader. For instance, in 'Ruben' Bruce Whatley uses monochromatic images to show the harsh dystopian world in which the protagonist has to survive. Margaret Wild and Freya Blackwood employ various points of view in 'The Feather' to draw the reader into the images. In 'The Rabbits' John Marsden and Shaun Tan portray the invaders as pompous, barrel shaped creatures who are oblivious to the presence of the original inhabitants. This allegorical tale uses satire to point out the devastation the colonisers inflicted on indigenous peoples and forces the reader to re-evaluate historical versions of such events. Shaun Tan's story of a forlorn child in 'The Red Tree' offers the reader a visual representation of what depression may feel like. The vivid imagery of a monstrous fish, the sketching's of endless days, and the depiction of being close to drowning gives readers a chance to understand how depression affects people. It also gives students who suffer mental health issues a means to describe their feelings.

Short (2018) reiterates literature's ultimate purpose in identifying the inner humanity of individuals and ensuring fundamental experiences of life are accessible to all. Sophisticated picture books can be a valuable tool for addressing various cognitive, behavioural and developmental needs of the reader. Given the tendency of images to dominate written text in the modern age, it is important that visual literacy is a focus in the curriculum. Like other narrative texts, picture books have literary merit because they are able to affect the reader

significantly (Ross-Johnston, 2014). Picture books are multimodal in nature and provide a means of addressing issues of a sensitive nature. Such publications should be an important part of a high school library collection.

### References and further reading

- Aiken, A. (2015) [Postmodernism and children's literature](#) *ICCTE*. 2(2).
- Barone, D. M. (2010). *Children's literature in the classroom: Engaging lifelong readers*. New York: Guilford Publications.
- Cornett, C. E. (2014). *Creating meaning through literature and the arts: An integration resource for classroom teachers* (5th ed.). USA: Pearson.
- Flores-Koulish, S. & Smith-D'Arezzo, W. (2016). [The three pigs: can they blow us into critical media literacy old school style?](#) *Journal of Research in Childhood Education*. 30(3). 349-360.
- Haven, K. F. (2007). *Story proof: The science behind the startling power of story*. Westport, USA: Greenwood Publishing.
- Harper, L. (2016). [Using picture books to promote social emotional literacy](#) *YC Young Children*, 71(3), 80-86.
- Hateley, E. (2013). [Reading from turning the page to touching the screen](#) In Wu, Y., Mallan, K. & McGillis, R. (Eds.) *(Re)imagining the world: Children's literature response to the changing times*. Germany: Springer.
- Marsh, D. (2010). The case for picture books in secondary schools. *LIANZA*, 51(4), 237-247.
- NSW Education Standards Authority (NESA) for and on behalf of the Crown in right of the State of New South Wales. (2012). [English K-10 syllabus](#)
- Pantaleo, So (2014). [The metafictional nature of postmodern picture books](#) *Reading Teacher*, 67(5), 324-332.
- Ross-Johnston, R. (2014). (Fifth edition). *Children's literature in the Australian context*. In G. Winch, R. Ross-Johnston, P. March, L. Ljungdahl & M. Holliday (Eds.) [Literacy: Reading, writing and children's literature](#). 557-581.
- Short, K. (2018). What's trending in children's literature and why it matters. *Language Arts*, 95(5), 287-298.
- Turner, C. (2014). [Opening the portal: An exploration of the use of postmodern picture books to develop critical literacy and contribute to learning in the Australia Curriculum English](#). *Literacy Learning: Middle Years*, (1), 52-61.
- Wolfe, S. (2014). [Children's literature on the digital move](#) *Reading Teacher*, 67(6), 413-417.

How to cite this article – Templeton, T. (2020). Picture perfect: The role of picture books in a secondary classroom. *Scan*, 39(6).