VISIBLE LEARNING FOR *Mathematics*

/ M P A C T

Use the Right Approach at the Right Time to Accelerate Student Learning

Rich tasks, collaborative work, number talks, problem-based learning, direct instruction… with so many possible approaches, how do we know which ones work the best?

In *Visible Learning for Mathematics,* acclaimed educators assert it's not about which one—it's knowing WHEN these practices are best leveraged to maximise impact on EVERY student's progress.

This Series is *Designed* to:

- Provide clarity of the three phases of learning- surface, deep and transfer

- Develop skills in selecting key mathematics strategies that work best at each phase of learning

- Demonstrate practical ways of implementing mathematical tasks and talk

- Build knowledge and confidence to use multiple mathematics strategies

- Deepen mathematical understanding and practice to maximise impact on every student's progress and achievement

After engaging with the Visible Learning for Mathematics professional learning I felt inspired to immediately implement the strategies and ideas into my mathematics lesson. It made me question my current learning strategies and look deeper into how beneficial they were. Are they having the impact I intended? The workshop challenged me to use a range of strategies that best support learning. It has given me a new toolbox of ideas that I can begin to test, trial and refine.

Sam Hickman, Upper Primary Teacher

My understanding of effectively applying surface, deep and transfer learning to mathematical experiences was enriched throughout the workshops as I was able to take part in opportunities to reflect on my own practice, connect my practice to the three phases of learning and also identify new learning in case studies. I have been equipped with a wider range of strategies which I can employ at the right time in my teaching practices. I have left inspired, encouraged and also challenged to implement effective visible learning in the classroom.

Kealy Byass, Junior Primary Teacher

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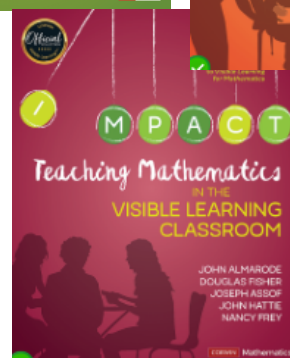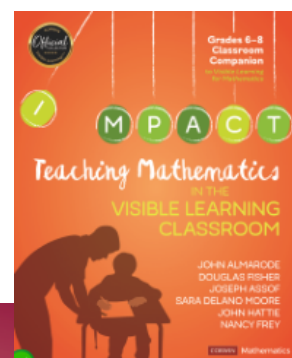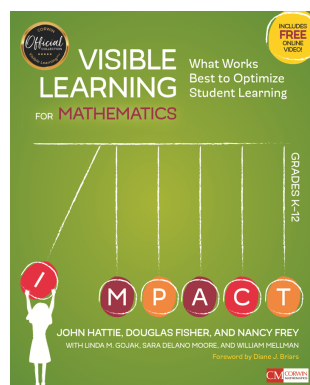
VISIBLE LEARNING
FOR *Mathematics*

This Series includes the *Learning Experiences* below:

VL4M 1

INTENTIONAL INSTRUCTION & MEANINGFUL TASKS

This learning experience focuses on how using the right approach at the right time helps you more intentionally design classroom experiences that address the surface, deep, and transfer phases of learning.

Participants will:
- Make connections between the phases of learning and the Australian Curriculum to strengthen clarity for teachers and students.

- Explore the role of mathematical tasks that purposefully foster deeper and more sophisticated types of thinking in mathematics.

- Investigate different approaches and participate in strategies most appropriate to each phase of learning.

VL4M 2

RIGOUR, COLLABORATION & PURPOSEFUL TALK

This learning experience focuses on practical approaches for rich mathematical talk and the role of collaboration in mathematics learning.

Participants will consider the Australian Curriculum Mathematics Proficiencies through the lens of surface, deep and transfer learning.

Mathematical tasks and formative assessment techniques are built on from VL4M 1.

Language and social learning intentions, and co-construction of success criteria to support deep learning, are explored. Practical strategies for mathematical talk and collaboration are experienced.

Participants will use instructional strategies that have the most impact at each phase of learning throughout the workshop.

VL4M 3 & 4

STRENGTHENING YOUR MATHEMATICS PRACTICES

These next two learning experiences are designed to provide experiences that can be adapted to your context and preferences.

Their purpose is to deepen understanding, knowledge and skills and support educators to further embed the key components of VL4M into their practice.

Schools will determine these next steps based on evaluation of findings and feedback incorporated in VL4M 1 and 2.

Focus areas could include:
Precision planning: Planning series of lessons for clarity and ensuring that strategies are implemented for maximum impact.
Assessment: Enhancing prior knowledge and formative assessment practices that can be embedded in instruction.
Feedback: Analysing and developing feedback practices, for the teacher and student, to adjust instruction and learning.

Evaluation tools are embedded in this series to measure progress and determine impact.

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This Series is *Facilitated* through:

FACE TO FACE

EACH VL4M learning experience can be delivered through TWO options:

OPTION 1: School or Community of Schools Learning Experience
Timing: 1 day
Participants: Includes leaders, teachers and staff who support mathematics

OPTION 2: Small Group Learning Experience
Timing: Each small group learning experience is a minimum of 2.5 hours. This option requires two consecutive days
Participants:
• You decide on how you would like to group your participants, for example, Junior Primary or Year 6/7
• Content can be customised according to learning needs of the small group

This option includes:
• 45 minutes staff meeting
• 30 minutes leadership planning session
• 60 minutes parent session

VIRTUAL COACHING & CONSULTING

• One hour virtual session each term
• Dialogue in small groups personalised to your questions and next steps
• Facilitated by an experienced consultant to support further learning and implementation
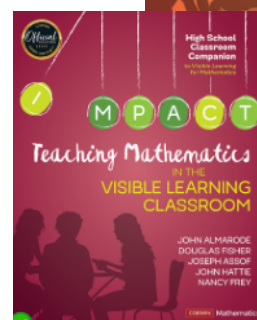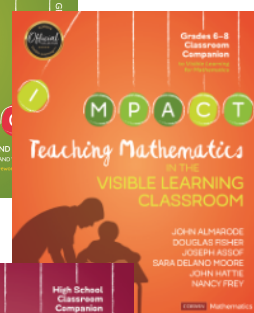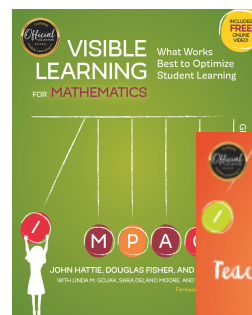
> Since incorporating surface, deep and transfer thinking into my practice, in particular the creation of differentiated success criteria, both myself and the students are clearer about what progress looks like and feedback has become more specific and effective. The professional learning caused me to reflect on the balance of student and teacher talk in our classroom. I have since made a more conscious effort to facilitate discussion and cooperative learning so that learners are learning from each other. I have had a focus on explicitly teaching vocabulary, and talking prompts and routines, which has positively impacted the quality of talk in my mathematics lessons.
>
> **Belinda Ryan, Middle Primary Teacher**

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Use the Right Literacy Approach at the Right Time and Accelerate Student Learning

Discover the literacy practices that ensure students demonstrate more than a year's worth of growth for every year spent in school.

Partner with us to bring the Visible Learning for Literacy professional learning series to your school. Visit the website *au.corwin.com/visiblelearning* to find out more.

3 Ways to get started with Visible Learning plus

Professional learning is successful if—and only if—it has a measurable impact on student learning. **Corwin's Visible Learning plus School Impact Process** approaches professional learning with a focus on evidence-based practices and implementation support for long-term success for all learners.

1 Understand what works

Build a common understanding and language of learning across school around what works (and what doesn't) to accelerate learning and monitor progress.

2 Collect and analyse your evidence

Understand where you are now in implementing high-impact practices so you can chart where you want to go and how to get there.

3 Develop your PD plan with experts

Bring in the leading minds to help you formulate a PD plan for long-term, measurable growth and collaboration amongst team members.

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