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THE MATHEMATICAL
ASSOCIATION OF VICTORIA

Being A Professional Maths Teacher

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Number Chant (warm up)

8	9	6	7	8	3	4	7	1	7
6	2	9	5	0	2	5	8	3	8
3	8	5	9	1	8	4	9	2	7
2	7	4	8	9	4	9	4	5	7
1	4	4	7	8	0	4	6	7	9
4	6	8	3	9	5	1	8	4	7
3	3	8	3	8	5	9	2	8	9
3	6	9	5	7	4	8	5	8	5
4	5	6	3	7	8	7	8	9	0

Being A Professional Maths Teacher: pedagogy, planning and practice

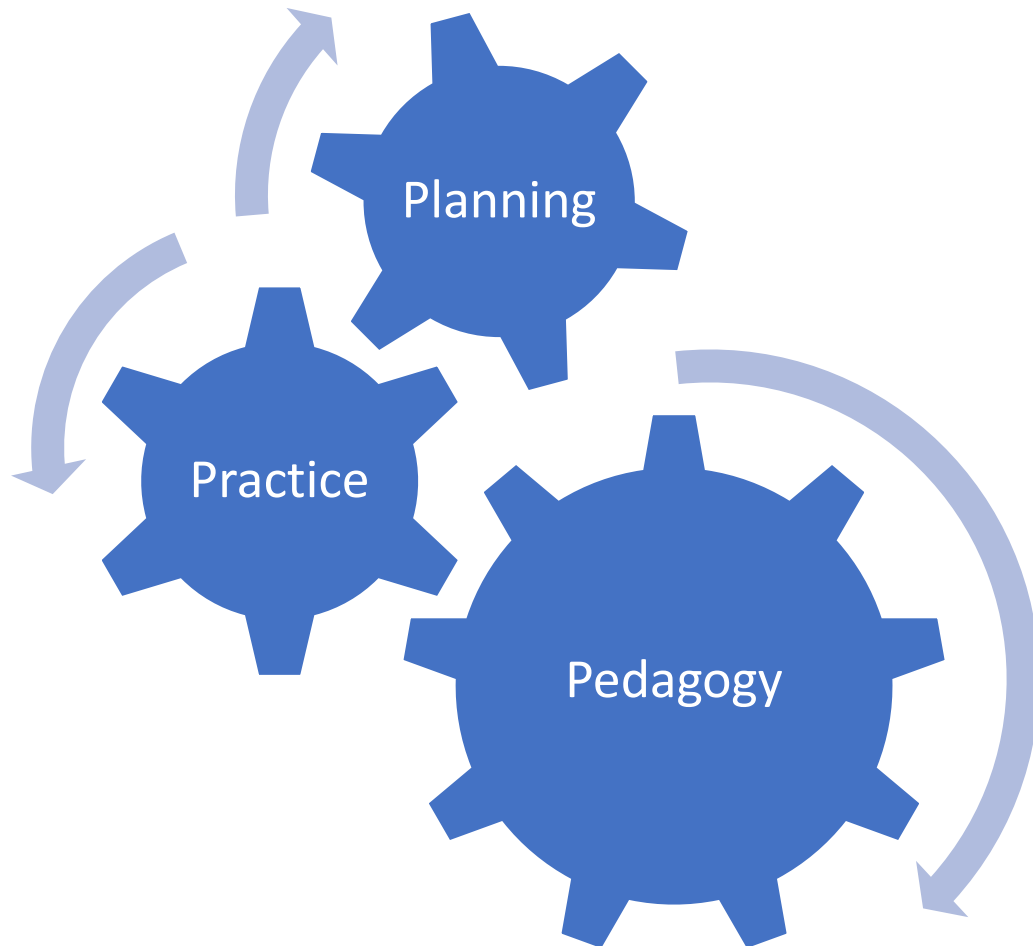


Launch

- What does it mean to be a professional maths teacher?
- How can we juggle pedagogy, planning and practice?
- How can you be a proficient ring master in the circus that is a school?



Personal Professional Experience



Through our professional experiences we have found that most calls for assistance come down to knowing, developing and understanding these three elements.

Visualising a circus



Draw what you see...

- How is it held up? What supports do you see? What materials are being used?
- What else can you see around? Ticket booths? Popcorn stands?
- What would you see when the show starts? Whose involved? What are they doing?

Explore



What shapes can you identify and label?

Enabling prompt

- Find all of the squares that you drew

Extending prompt

- Classify the shapes that you found.

What elements of your drawing could be related to

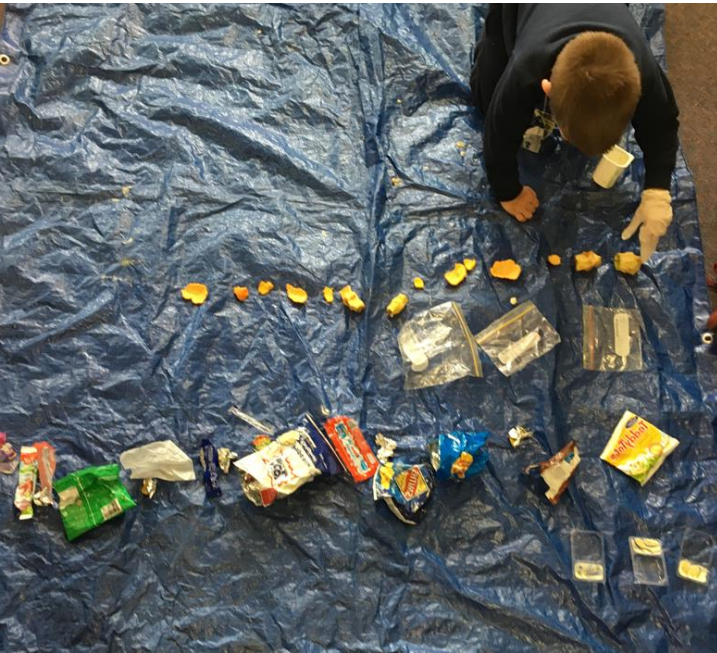
- Pedagogy,
- Planning and or,
- Practice.





What is best?

- “Ongoing debate about what makes good mathematics instructions” (Hattie 2016).



Peter Sullivan

- Use research informed strategies

John Hattie

- Research based principals

Stephen Dinham

- ‘critical consumers of research’

- Be a professional learner!

Our tips



- Develop whole school approaches
- Try something, stick to it and measure the outcome
- Don't jump around introducing new concepts/approaches every two minutes
- Get all teachers on board with change
- Osmosis
- Teachers to take responsibility

Planning

- The things you don't see



- Scaffolding and threading lessons
- Collecting and analysing data
- Data informing judgements
- Quality resources
- Teacher discourse
- Professional reading

Our tips



- Structure timing so that it happens
- Focus on student based data
- Time management in meetings
- Focus on the important stuff
- Share responsibilities
- Know your strengths
- Be flexible
- Record your planning in a centralised location
- Build a culture of trust collective responsibility

Practice

- What do you see happening?



- Lesson structure
 - Launch, Explore, Summarise
- Hook – engaging students
- Teacher and student interacting
- Student discussions
- Questioning and testing
- Peer learning
- Differentiation
- Teacher as a facilitator

Our tips

- Enjoy teaching
 - Share your passion (even if you have to fake it!)
 - Share the load
 - Take photos and videos to record
 - Be organised with assessment
 - Woke smarter not harder
- Celebrate all achievements that you, your students or team make



Practice being professional

Professional beyond your school

- Community and parent partnerships
- Professional networks
- Presenting at conferences
- Writing in journals
- Share your story
- Association membership
- ATISL Standards



Pedagogy

- Forming the structure of the tent



- Knowing how students learn
- Developmental sequences
- Whole school approaches
- Shared knowledge
- Collaborative learners

Summary

- <https://www.youtube.com/watch?v=C6c-bCSSKMo>



Review



Questions & Celebrations

