

BEROWRA PS

TERM 2, 2022

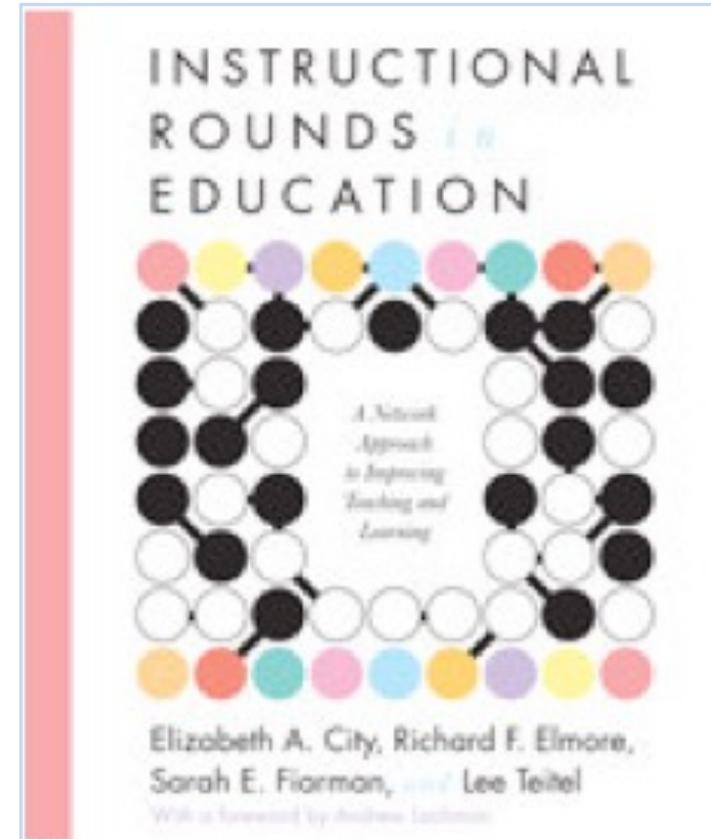
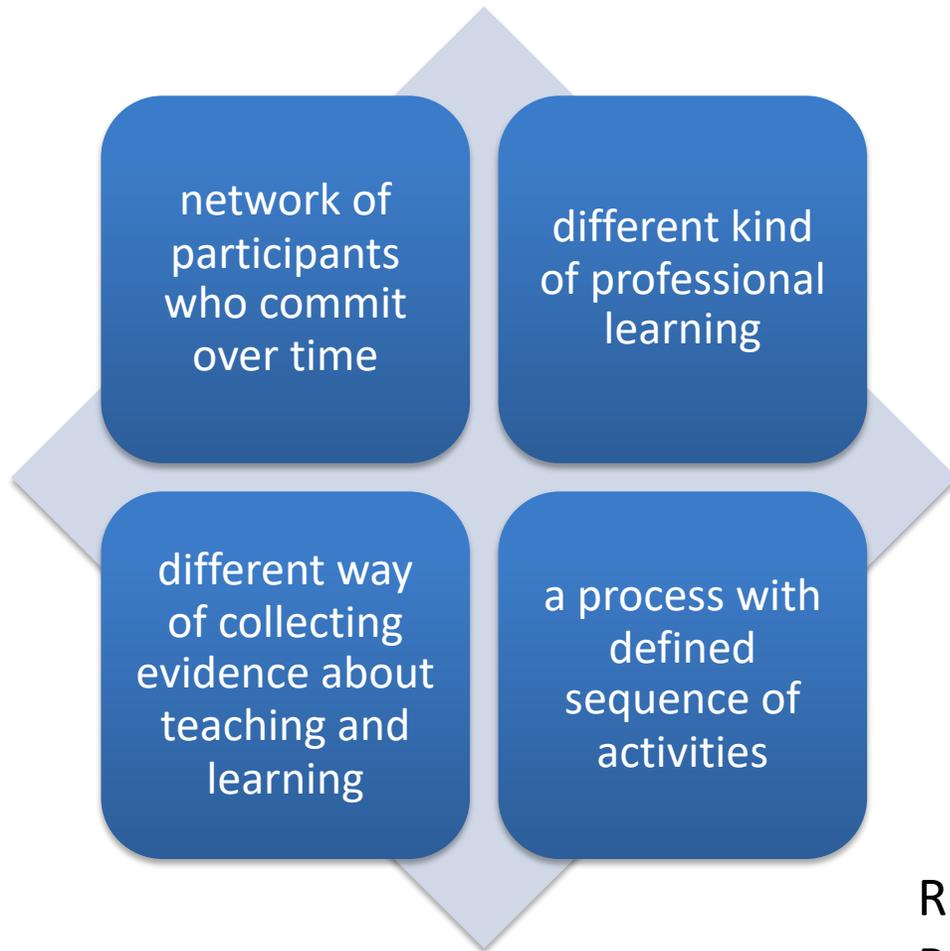
CCG INSTRUCTIONAL ROUNDS NETWORK



Berowra_Equipment2

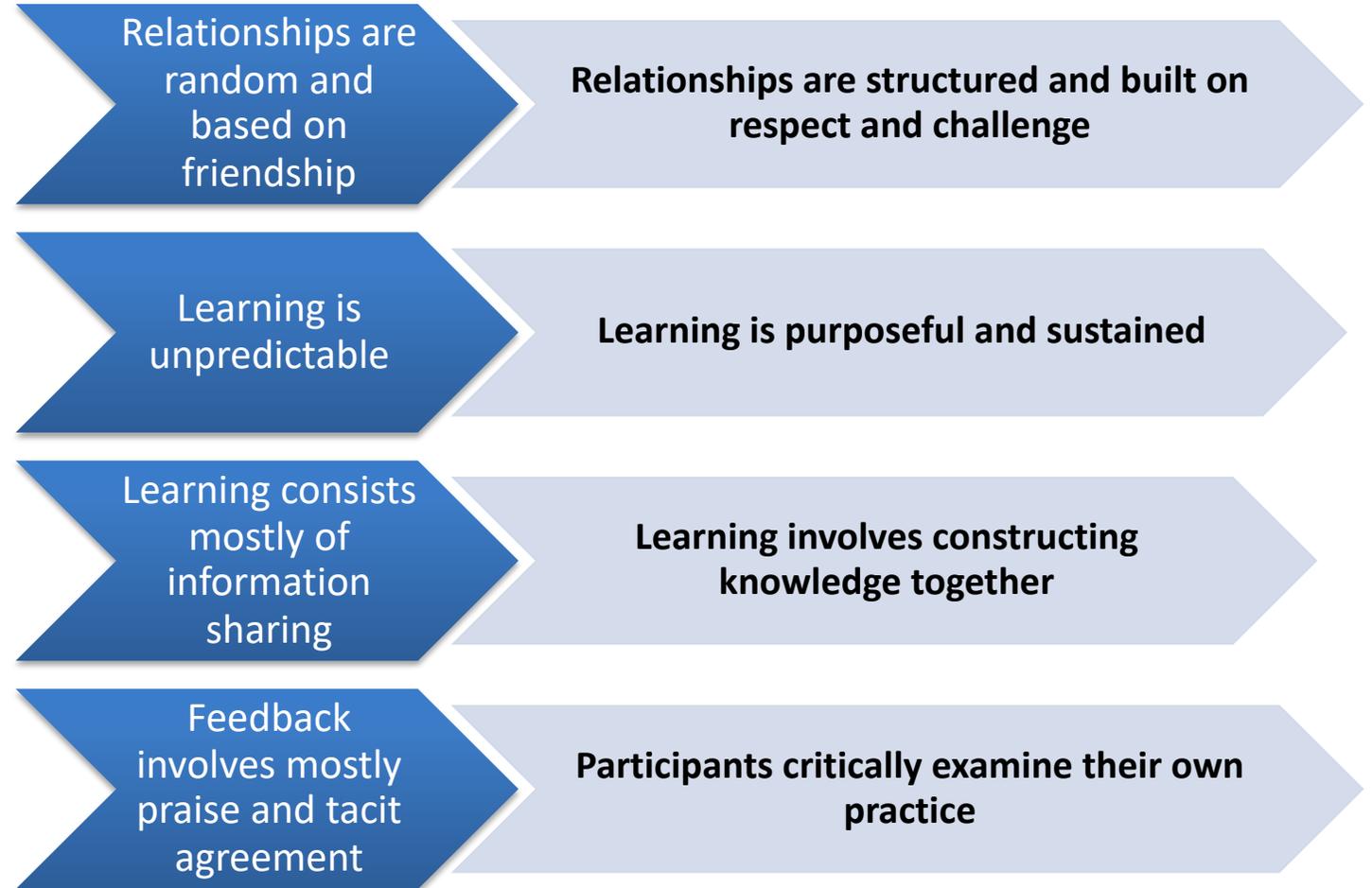
What is Instructional Rounds?

A network approach to improving teaching and learning



Richard Elmore, Harvard Graduate School of Education
Published 2009 – generated much interest

From Networking to Networked Learning



Instructional Rounds

The idea behind instructional rounds is that everyone is involved in working on their practice, everyone is obliged to be knowledgeable about a common task of instructional improvement, and everyone's practice should be subject to scrutiny, critique and improvement.

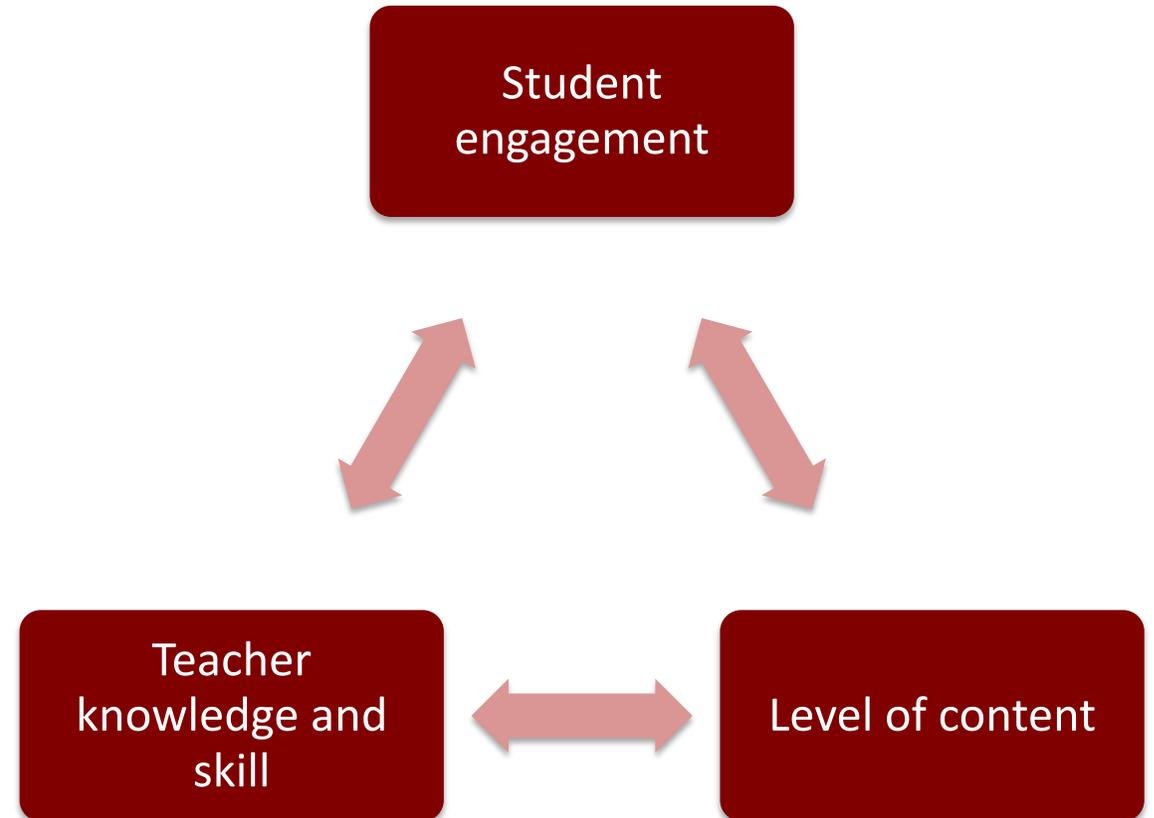


You don't improve schools by giving them bad news about their performance. You improve them by using information about student learning from multiple sources, to find the most promising instructional problems to work on.

Underpinned by Beliefs

- *Increases in student learning occur only as a consequence of improvements in the level of content, teachers' knowledge and skill, and student engagement.*
- *If you change any single element of the instructional core you change the other two.*
- *If you can't see it in the core, it's not there.*

The Instructional Core



Each round follows a set format

1. Host school identifies a problem of practice



2. Network explores best practice in that aspect of teaching



3. Observation in classrooms and description without judgement



4. Observational debrief



5. Network proposes next level of work

1. PROBLEM OF PRACTICE

Are we developing students' conceptual understandings and skills in number?

- Do students know what they're learning in number and its importance?*
- Do tasks provide opportunities to explore mathematical concepts and language?*
- Are we providing opportunities for students to reason, communicate and share their mathematical understanding?*

2. Network explores the best practice in that aspect of teaching

Our knowledge of instruction builds over time



- In IR we build a common language of instructional practice. Our knowledge and understanding builds over time.
- Within and between schools we build a culture of inquiring and learning at a deep level.
- As a network we support leaders and teachers develop their practice by focusing attention on the knowledge and skill needed for both teaching and leading.

436,859

Place Value Sort

4	40	400	4,000
34	844	9,472	4,074
8,944	4,146	411	4,639
3,104	1,347	8,435	4,485
2,214	42	3,420	4,971
6,164	7,149	1,459	4,811
514	5,045	491	RR MERRY 100 1000

Learning Intention

You will EXPAND YOUR UNDERSTANDING OF THE CONCEPTS UNDERPINNING THE PROBLEM OF PRACTICE including

- The worthwhile lesson
- Conceptual understanding
- Reasoning & Communicating

436,859

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514	5,045	491	

Performance of
Understanding

**CREATE A CONCEPT MAP OF THE PROBLEM
OF PRACTICE**

436,859

**YOU WILL KNOW YOU'RE
SUCCESSFUL IF YOU HAVE:**

**IDENTIFIED THE MAIN IDEAS AND PLACED
THEM AT THE CENTRE OF YOUR CONCEPT
MAP**

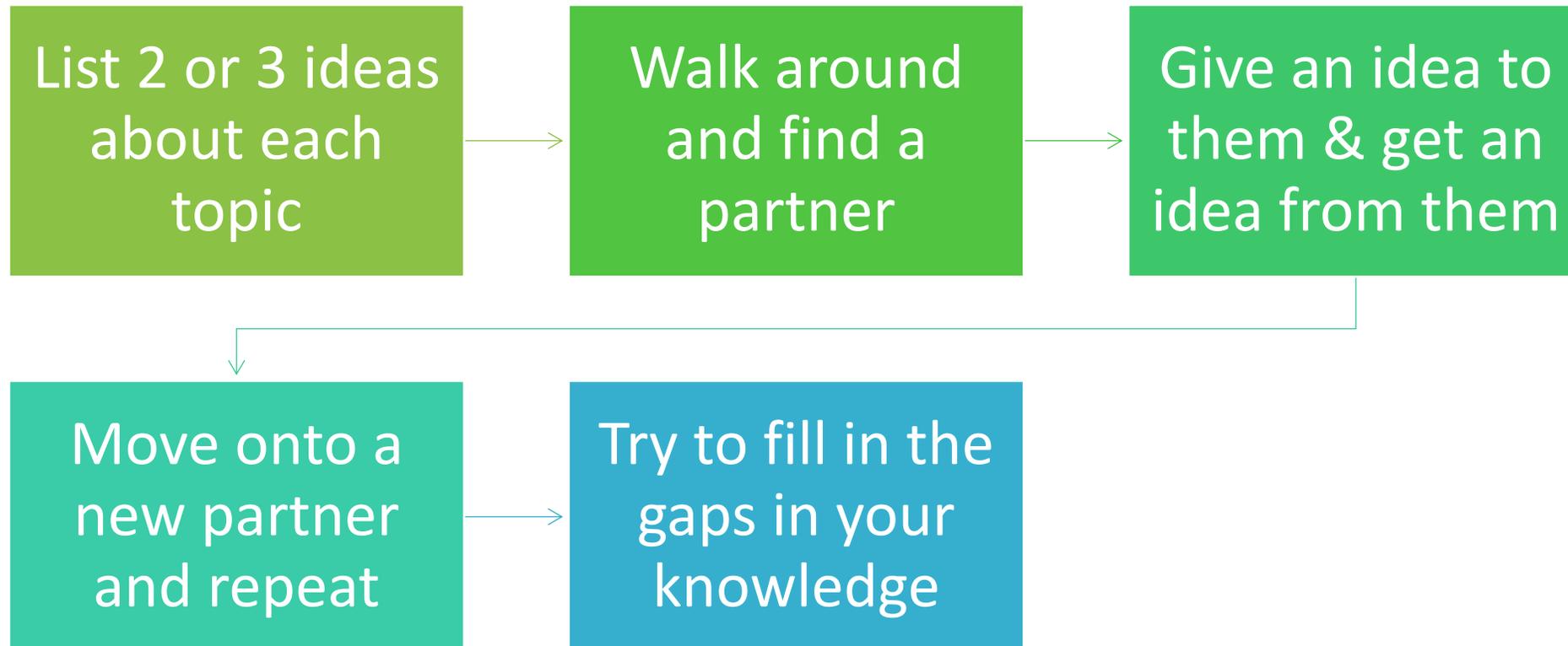
**SHOWN THE WHERE THERE ARE
CONNECTIONS BETWEEN THE IDEAS &
DESCRIBED THESE CONNECTIONS**

**ELABORATED ON YOUR IDEAS BY GIVING
CONCRETE EXAMPLES OF WHAT WE
SHOULD SEE IN CLASSROOMS**

Place Value Sort

4	40	400	4,000
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GO GO MO (Give One; Get One; Move On)



The **Three** Sources OF A WORTHWHILE LESSON

Brookhart & Moss

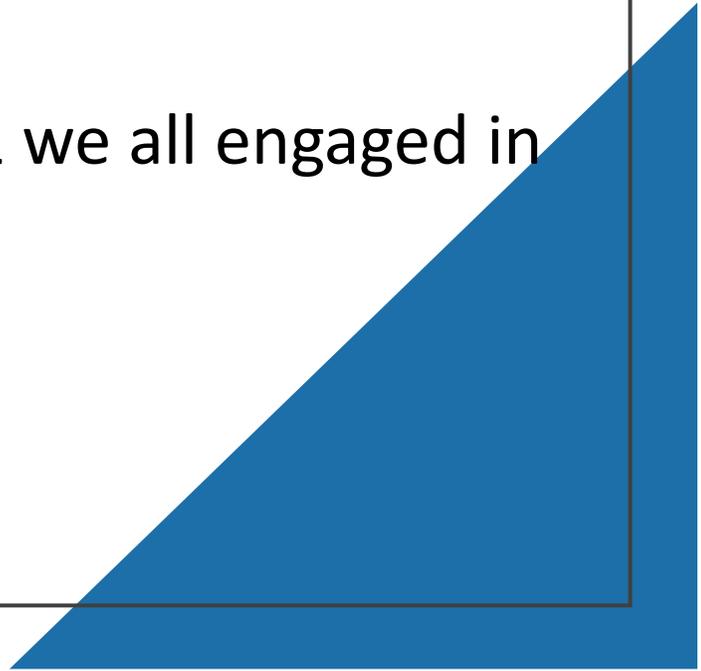
1. national/state standards and curriculum goals
2. Important concepts and/or skills for the specific lesson
3. The specific needs of students



Oakhill Drive PS 2015

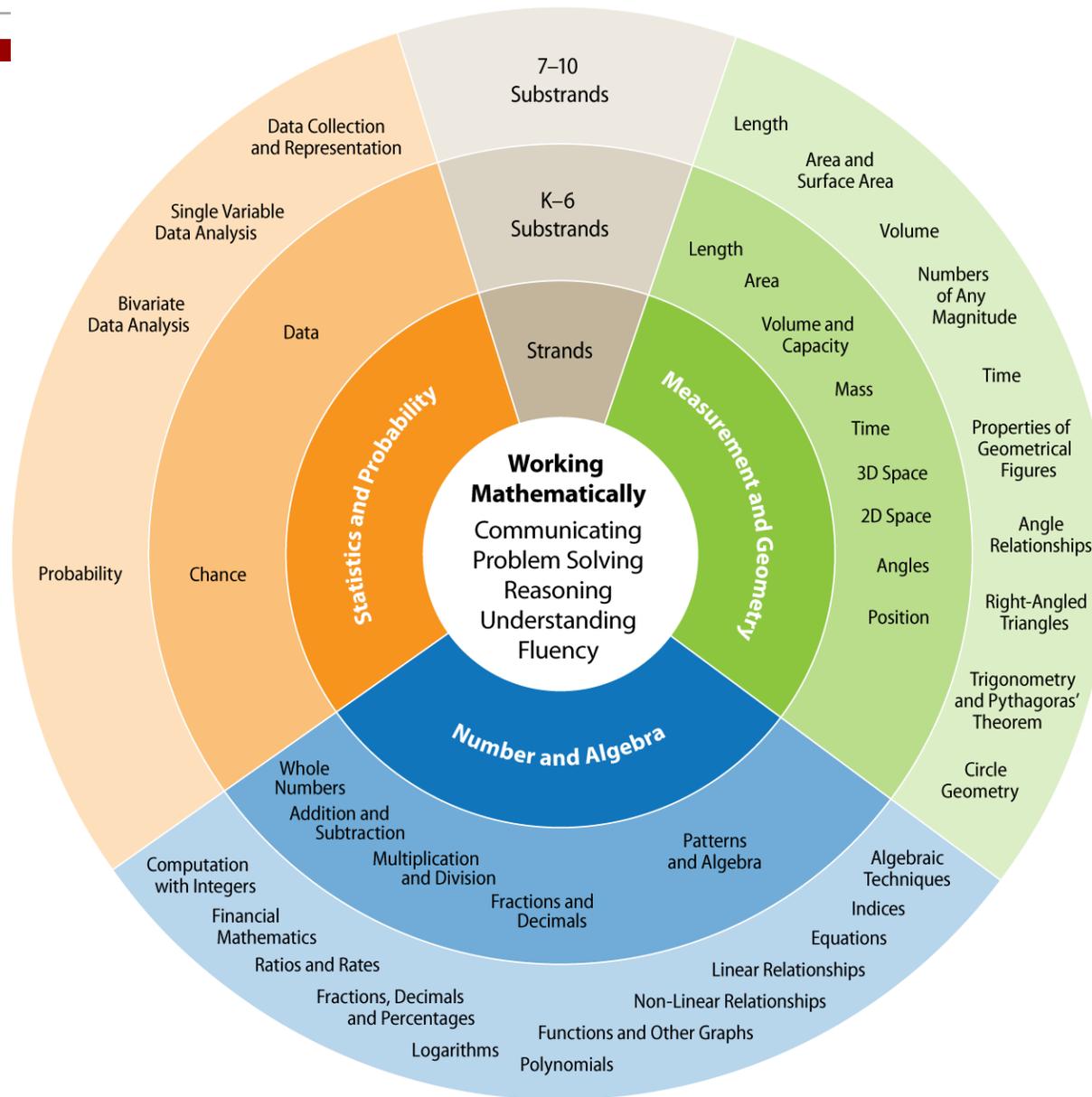
Are our students using the
Mathematical Proficiencies of
communicating, reasoning and problem
solving

Schools took one aspect & we all engaged in
mathematical tasks



The aims of Mathematics K-10 is for students to

- *be confident, creative users and communicators of mathematics, able to investigate, represent and interpret situations in their personal and work lives and as active citizens;*
- *develop an increasingly sophisticated understanding of mathematical concepts and fluency with mathematical processes, and be able to solve problems and reason in Number and Algebra, Measurement and Geometry , and Statistics and Probability*
- *recognise connections between areas of mathematics and other disciplines and appreciate mathematics as an accessible, enjoyable discipline to study, and an important aspect of lifelong learning.*



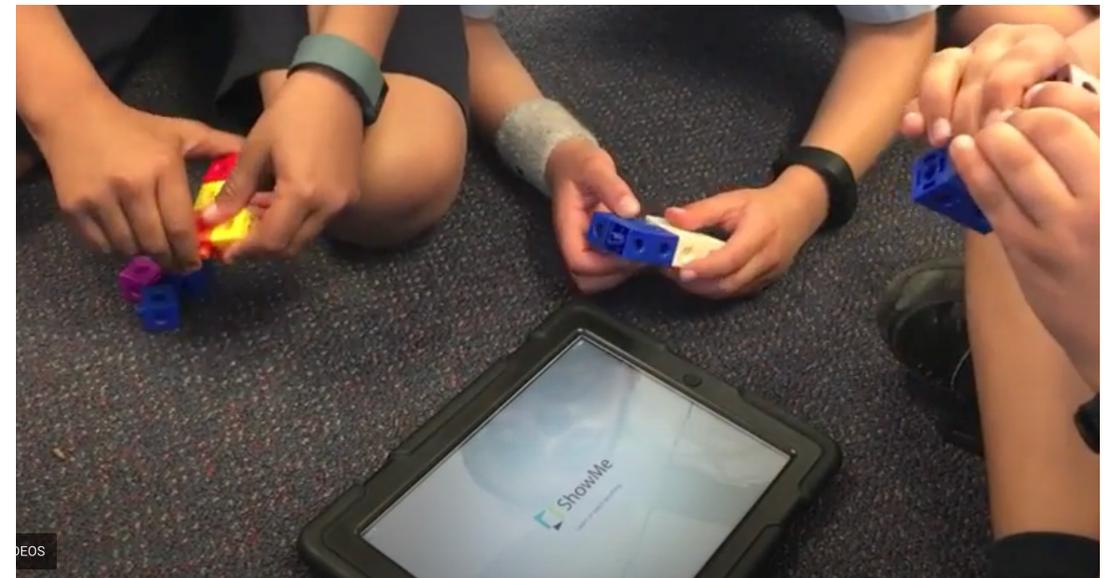
The diagram represents the relationships between the strands and substrands only.
 It is not intended to indicate the amount of time spent studying each strand or substrand.

Use of Aps to record student thinking

Educreations



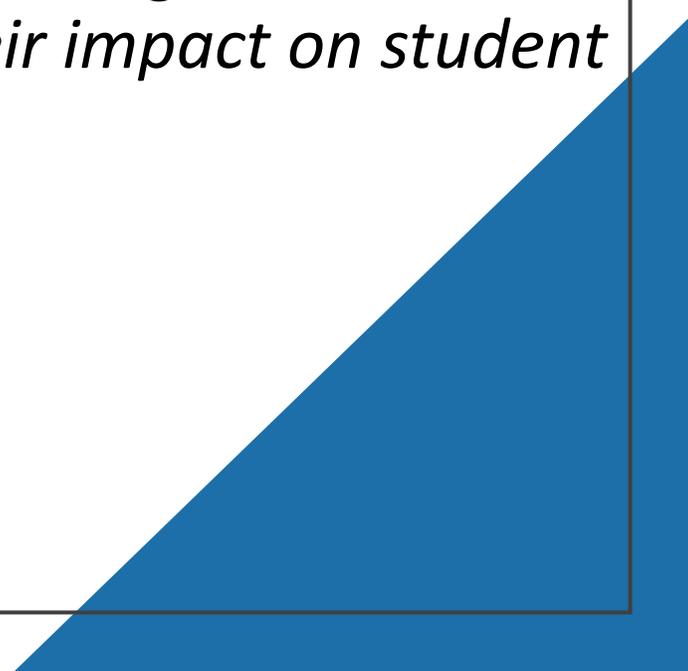
Show Me



West Pennant Hills 2017

PROBLEM OF PRACTICE:

How are teachers differentiating their pedagogy to maximize their impact on student learning in maths?



Oakhill Drive Talk in Mathematics

Asking Questions & Listening to Answers

Questions That Hook: **How do we get more lollies with our dollar?**

- asked to interest learners about topic
- spark curiosity, questions or debate
- framed in engaging kid language
- asked once or twice but not revisited

Questions That Lead: **What is 7×6 ? What is true of all four sided shapes?**

- asked to be answered
- have a correct answer
- support recall and information finding
- asked once until answer is given
- require minimal support

Questions That Guide: **Why must the answer be less than zero?**

- to encourage and guide exploration of topic
- point toward desired knowledge and skill (but not to a single answer)
- may be asked over time
- require explanation and support

Essential Questions **When and why should we estimate? How does what we measure influence how we measure?**

- asked to stimulate ongoing thinking and inquiry
- raise more questions
- spark discussion and debate
- asked and re asked
- demand justification and support
- answers may change as understanding deepens

John Purchase PS. Rhonda Bondie



It's about **adjustable
common instruction!**

Differentiation is **not** a set
of activities.



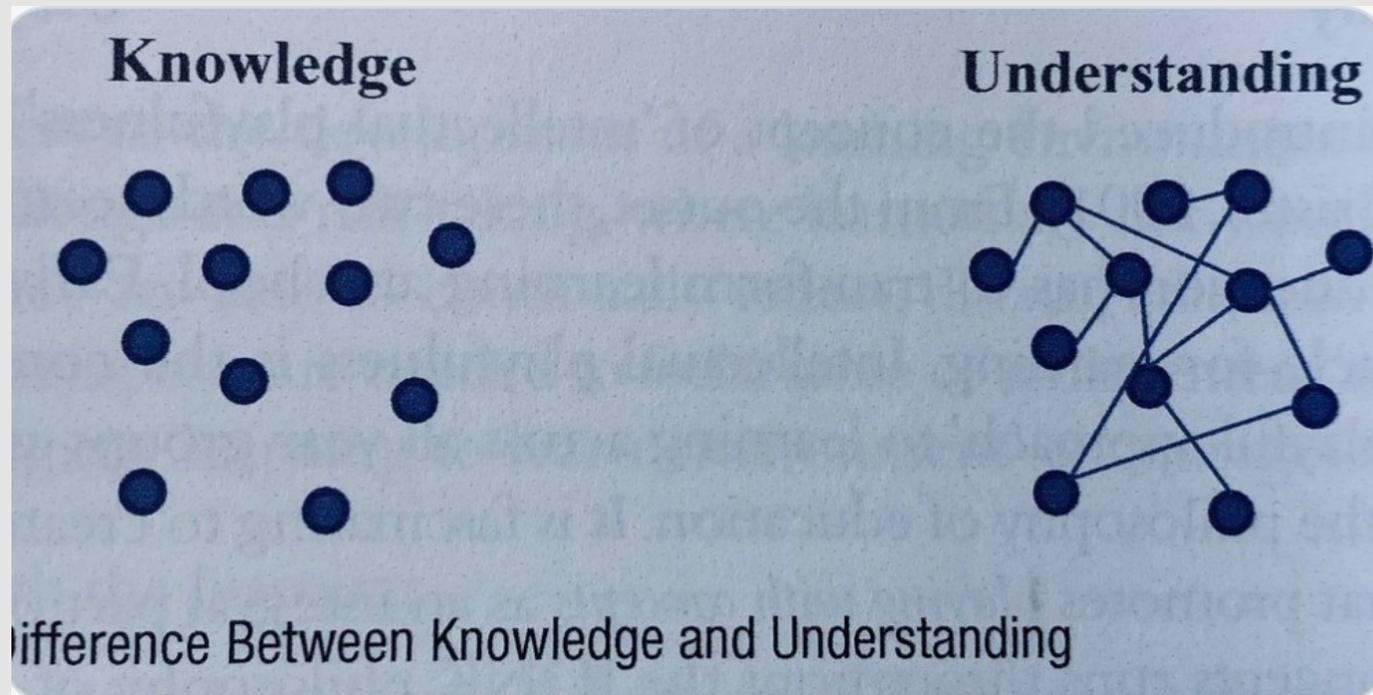
Worthwhile Lesson

IS THE CONTENT WORTHWHILE?: Does the lesson develop essential knowledge, skills and reasoning processes that students need for future learning in this discipline?

DOES THE LESSON MEET STUDENTS' NEEDS?: Does the lesson present an appropriately increased level of challenge or sophistication – does not simply repeat yesterday's lesson – to meet both the content requirements and the students' needs?

IS THERE A PERFORMANCE OF UNDERSTANDING? Does the lesson require students to do, make, say or write something that they clearly see develops their understanding whilst giving evidence of it?

CONCEPTUAL UNDERSTANDING



- *Conceptual understanding refers to an integrated and functional grasp of mathematical ideas. Students with conceptual understanding know more than isolated facts and methods. They understand why a mathematical idea is important and the kinds of contexts in which it is useful. They have organized their knowledge into a coherent whole, which enables them to learn new ideas by connecting those ideas to what they already know*

REASONING

- Reasoning is the way that mathematicians think
- It involves logical thoughts and actions such as analysing, proving, justifying and generalizing
- Students are reasoning mathematically when they explain their thinking, adapt the known to the unknown, prove something is true or false and explain their choices

COMMUNICATING

- Students develop the ability to use a variety of representations, in written, oral or graphical form to formulate and express mathematical ideas.
- They are communicating mathematically when they describe and explain mathematical concepts; use appropriate language and terminology
- Use tables, diagrams, graphs, symbols, notations and conventions

POU # 1

HEADLINES (VISIBLE THINKING ROUTINE)

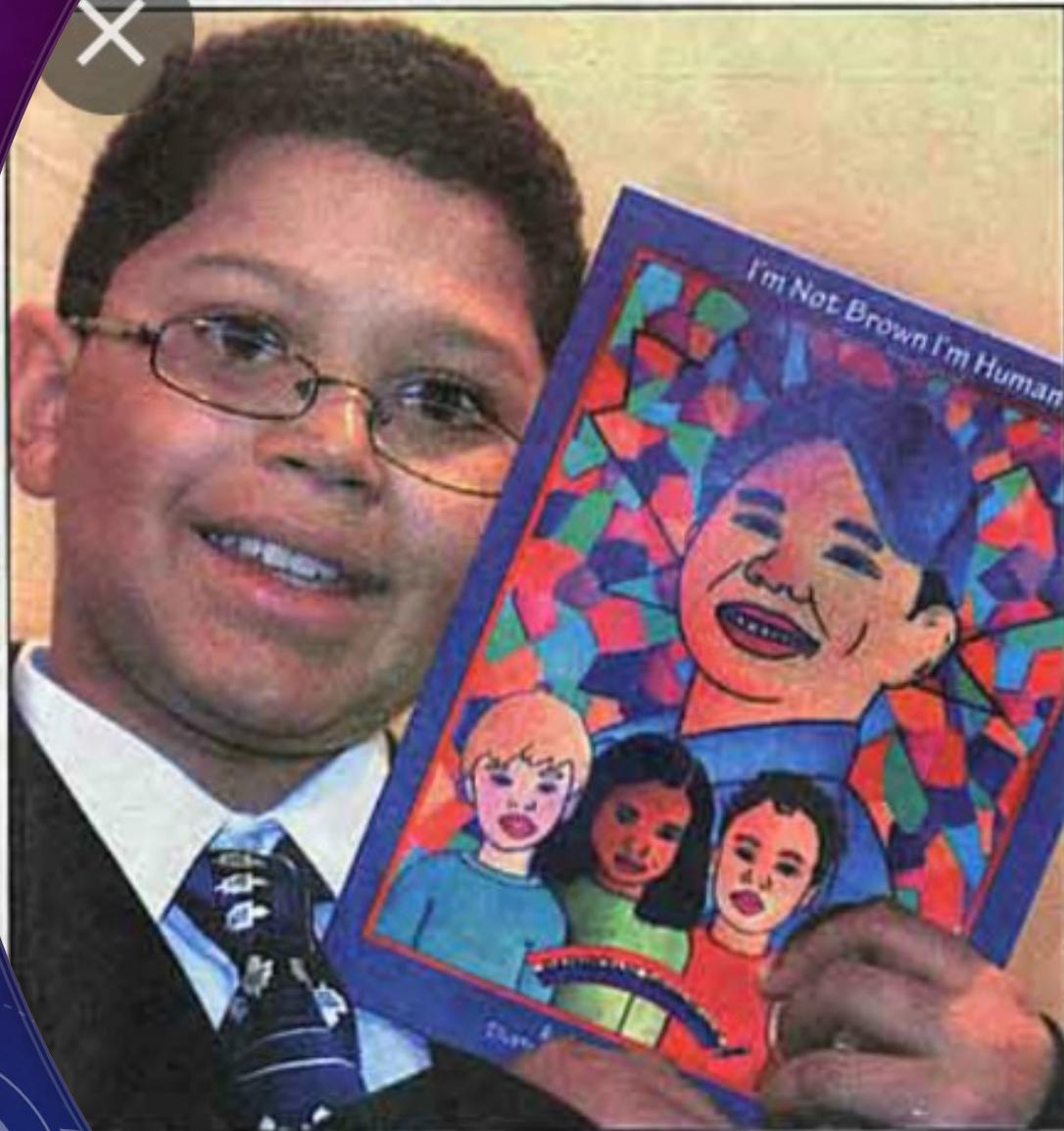
LEARNING INTENTION

You will EXPAND YOUR UNDERSTANDING OF THE CONCEPTS UNDERPINNING THE PROBLEM OF PRACTICE focusing on

- The worthwhile lesson
- Conceptual understanding
- Reasoning & Communicating

STEPS IN THE PROCESS

1. Individually read one of the 3 the short readings about mathematics teaching
2. Highlight the main ideas as you read
3. Working with a partner, create a headline that captures the essence of your reading
4. Collaborate and create a by-line
5. Write 3-4 sentences for the main body of your news article detailing how this reading extended your thinking about the concept of a “performance of understanding?”



VERONICA MENDELSON

Student James Valitchka's new book, *I'm Not Brown I'm Human*, details how to learn to overcome racism. This is the 11-year-old Toronto boy's sixth book.

A good heart is colour-blind

11-year-old author teaches how to overcome racism

MICHELE HENRY
Toronto Sun

James Valitchka is no stranger to the soul-piercing sting of racist remarks.

One of only two black kids attending an affluent elementary school in a predominantly white Ottawa neighbourhood, the 11-year-old was often teased, beaten up and belittled because of his skin colour.

"I had to leave that school," said the pre-teen, who moved to Toronto with his mother last year. "It made me feel really bad about myself."

Sensing there were other kids grappling with the same stresses, the Grade 5 student put pen to paper and wrote his sixth book, which is titled *I'm Not Brown I'm Human*

and details how children can learn to overcome racism. Released in a limited number of local bookstores this week, the young author waved it proudly about the Dominion ballroom at the Sheraton Centre yesterday during the Toronto kickoff of Black History Month in Canada.

'Just bullying'

"Racism is just bullying because of skin colour," he said.

Rosemary Sadlier, president of the Ontario Black History Society, addressed the crowd yesterday and told local politicians and community members alike that celebrating black history and culture is paramount to defeating hatred.

"Where we see so much negativity we lose sight of the

contribution that people of African origin have made since the very beginning of this country," she said. "To have Black History Month in Toronto right now is of critical importance because it's one of the pro-active things to address some of the issues that affect us all right now, such as gun violence."

Among the books by black authors and illustrations by black artists that filled the entrance to the ballroom, was demonstration of the Black History Canada website.

Developed by History Canada, blackhistorycanada.ca launched at the event as a resource for teachers and parents, providing information about black history in Canada.

michele.henry@torontosun.com

Leonard Nimoy's stellar enterprise

■ "Star Trek VI" gave actor last, best chance to fully develop character of Mr. Spock.

By BOB STRAUSS
Los Angeles Daily News

LOS ANGELES — You'd think that Leonard Nimoy would be the "Star Trek" actor most eager to say goodbye to the whole, as well as the specific, Enterprise.

After all, Mr. Spock, his half-alien character, was the science fiction series' most indelible icon. And, of course, there were those ears.

272 x 302 Even though Nimoy is the most insistent of the seven



Leonard Nimoy
'I'm not sick of it.'

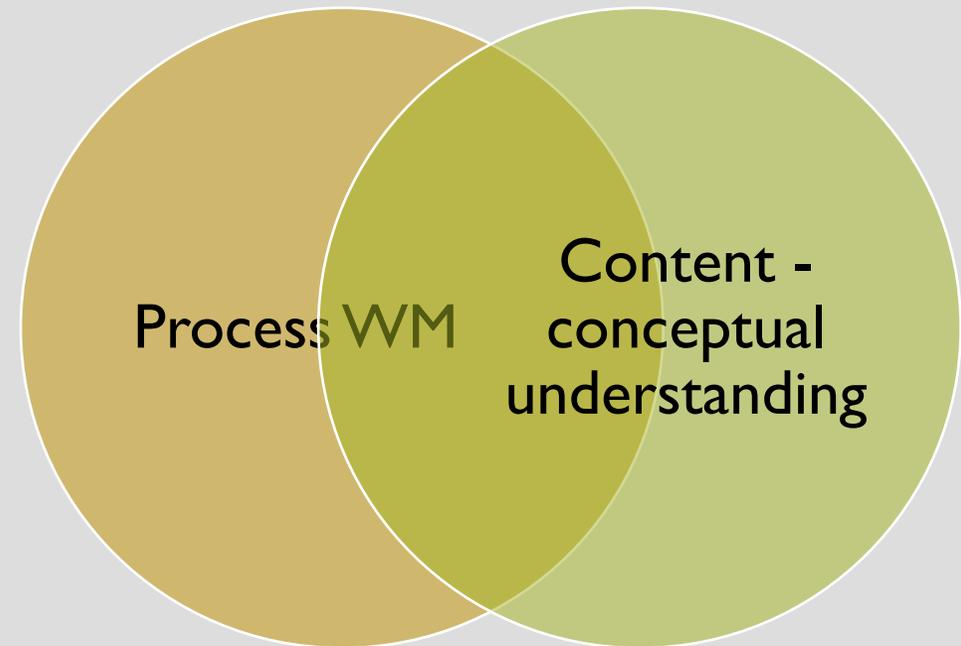
DI SIMON
BIG IDEAS IN MATHS



THE IMPORTANCE OF CONCEPTUAL UNDERSTANDING

Think of it like a garden trellis, your subject gives you structure while you grow. Without the trellis you're just groundcover, sprawling out in all directions, no matter how good the soil is or how much love your parents pour in.

Alan Finkel, Australia's Chief Scientist



DI SIEMON: WHAT'S NON-NEGOTIABLE

- <https://www.youtube.com/watch?v=nPLWAzK0QSQ&t=270s>

“Without an understanding of the big ideas it’s difficult for teachers to know what they should be focusing on.”

What is a ‘big idea’?

- An idea, strategy, or way of thinking about some key aspect of mathematics, **without which students’ progress in mathematics will be seriously impacted**
- Encompasses and **connects many other ideas** and strategies
- Provides an **organising structure** or a frame of reference that supports further learning and generalisations
- Cannot be clearly defined but can be **observed in activity** ... (Siemon, 2006)

VIDEO GEPS STUDENTS

https://youtube.com/shorts/h2xQ3_Mj-Aw

<https://youtu.be/UR3KogF3dUI>

<https://youtu.be/RpZfT8DGQLo>

The big ideas in Number F-10

By the end of:

First 18 months	Trusting the count - developing flexible mental objects for the numbers 0 to 10, part-part-whole knowledge
Year 2	Place-value - the importance of moving beyond counting by ones, the structure of the base ten numeration system
Year 4	Multiplicative thinking (initial ideas) - the key to understanding rational number and developing efficient mental and written computation strategies in later years
Year 6	Partitioning (equal parts) - the missing link in building common fraction and decimal knowledge and confidence
Year 8	Proportional reasoning - extending what is known beyond rule-based procedures to represent and solve problems involving fractions, decimals, percent, ratio, rate and proportion
Year 10	Generalising/Formalising - skills and strategies to support equivalence, recognition of number properties and patterns, and the use of algebraic text

(Siemon, 2006; 2011)

The 'BIG IDEAS' in Number



Trusting the Count ...

Trusting the count has two meanings:

- initially, children believe that if they counted the same collection again, they would get the same result and they recognise that counting is a strategy to determine how many*
- Ultimately, it is about having access to a range of **mental objects** for each of the numbers to ten, which can be used flexibly without having to make, count or see these collections physically.

* WA Department of Education, *First Steps in Mathematics* (2004)

What could they tell us about 8?

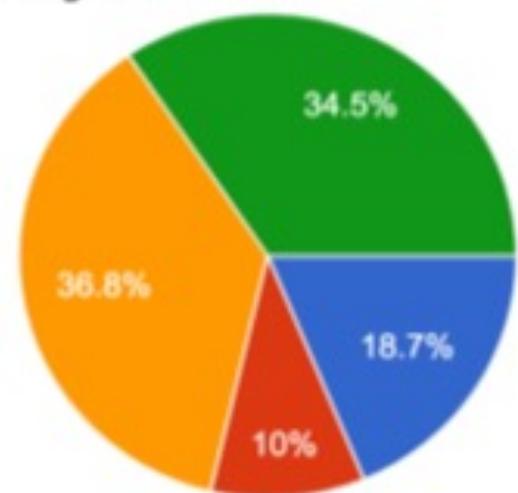
	WITHOUT prompting	WITH prompting
Mathematical ideas	<p>STAGE 1</p> <ul style="list-style-type: none">● 41.6% children offered nothing mathematical*<ul style="list-style-type: none">● 48% of these children are currently in Year 2● 58.4% children offered at least 1 mathematical idea about 8<ul style="list-style-type: none">● 27% shared one idea● 23% shared two ideas● 50% shared three or more ideas<ul style="list-style-type: none">○ Of these, most spoke about 8 in parts (6 and 2; 5 and 3, 7 and 1, etc.)	<p>STAGE 1</p> <ul style="list-style-type: none">● 15.4% of children still couldn't share mathematical ideas about 8 after prompting/support by the teacher

RESULTS OF EAFS STUDENT INTERVIEWS

What else did they reveal about their understanding of the relationships between numbers?:

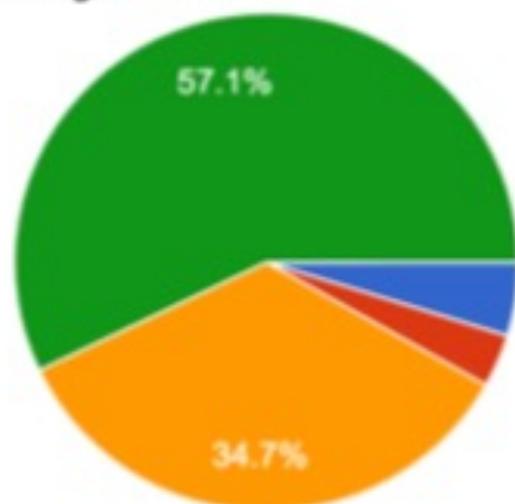
- We asked students across Stages 1, 2 and 3 to order some numbers between 0 and 100 and place them on a rope (which was acting as an empty number line):

Stage 1: N = 589



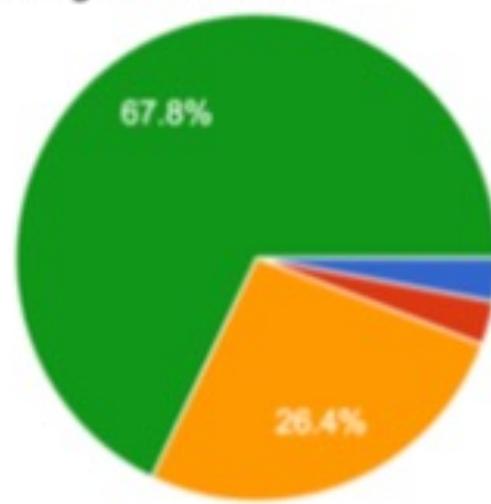
* 34.5% of students show an awareness of the relationship between numbers and to benchmark numbers

Stage 2: N = 378



* 57.1% of students show an awareness of the relationship between numbers and to benchmark numbers

Stage 3 N = 311



* 67.8% of students show an awareness of the relationship between numbers and to benchmark numbers

Key:

- 0 - Cannot sequence numbers.
- 1 - Sequences numbers. Can locate 48 as it is close to half. Cannot locate the other numbers on the number line.
- 2 - Sequences numbers but has difficulty locating them on the number line. Shows little awareness of relationships between numbers.
- 3 - Sequences numbers and places all numbers on the number line with reasonable accuracy, explaining why.

Many students do place value activities correctly without really understanding.

Can they locate numbers on an open number line eg 48 is about half way?

The second dot point is the really important one.

Need to extend from 8 tens, 9 tens etc to 16 tens and 17 tens

*Litmus test by the end of Year 2.
How many tens in 364?*

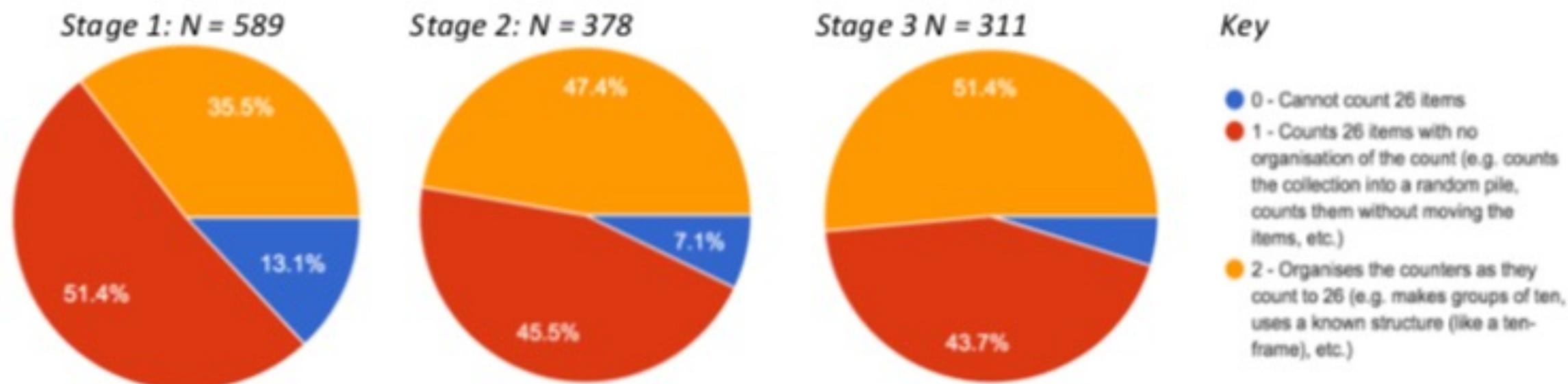
Place-Value ...

By the end of Year 2, children need to

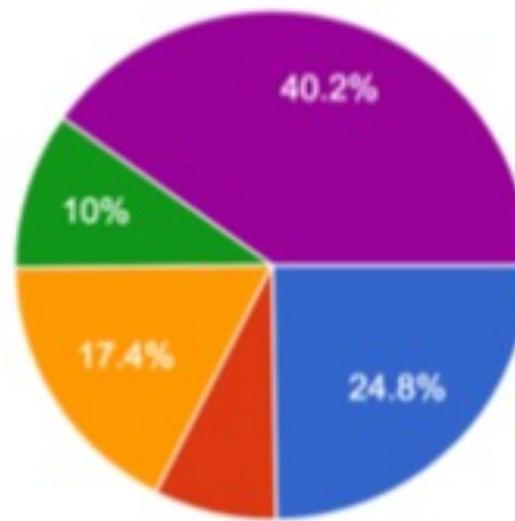
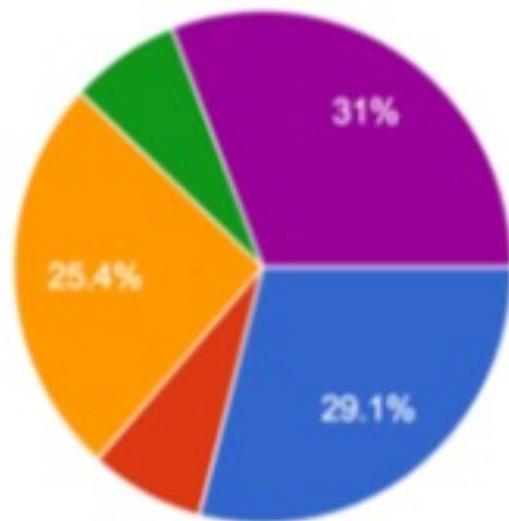
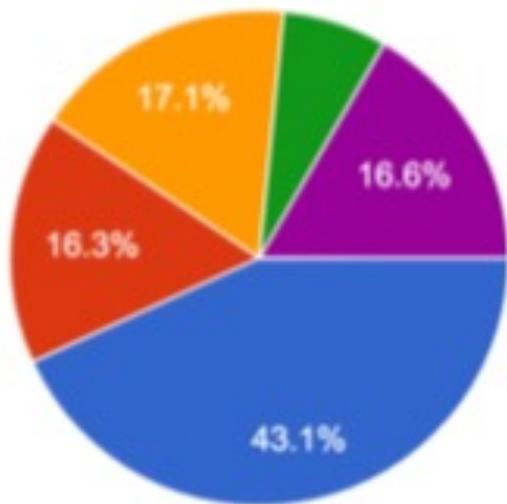
- be able to make/model, name, and record numbers to 1000 (i.e., 2- and 3-digit numeration) using a range of materials
- recognise underlying pattern *10 of these is 1 of those*
- compare and order numbers to 1000, locate numbers to 1000 on a number line based on benchmarks (e.g., it's about halfway)
- count large collections efficiently using hundreds, tens and ones as appropriate
- count forwards and backwards in place-value parts
- rename (partition) numbers to 1000 in multiple ways (e.g., say how many tens in 364, rename 63 as 5 tens and 13 ones to support subtraction)

Stages 1, 2 and 3

- We asked students to count 26 counters. We observed how they counted. We found:



STAGES 1, 2 & 3 WHAT DOES 26 MEAN?



- 0 - Number recorded incorrectly and/ or does not know what the 6 or the...
- 1 - Explains 6 means 'six' or '6 ones'. Explains 2 means 'two' or '2 ones'
- 2 - Explains 6 means 'six' and the 2 means 'twenty'
- 3 - Explains 6 means 'six' and 2 means '2 tens'
- 4 - Explains 6 means '6 ones' and 2 means '2 tens'

Teachers are working like circus managers – managing many activities and events, moving kids from one station to another and not taking the time to engage in student learning.

We're burning teachers out by asking them to attend to data that's not particularly relevant.

We need to develop challenging tasks for mixed ability groups so that students can learn from each other.



Ability
Groups

Over
Scaffolding

Rotation
Groups

Teachers are
working too hard on
things that do not
necessarily
progress students'
mathematics
learning

Data
walls



Frequent Pre-tests
& Post-Tests

POI # 2

CONCEPT MAPS

STEPS IN THE PROCESS

1. With a partner, take turn to discuss the main ideas from your pre-reading & pre-round task
2. In your group, use a large piece of butchers paper. Take turns to share and **generate** the main ideas. As you place each main idea on the paper explain it to the group.
3. When all ideas are down, **sort** the ideas according to how central they are to the POP. Are there other key ideas that need to be added?
4. **Connect** your ideas by drawing connecting lines. Write on the line in a short sentence to explain how the ideas are connected
5. **Elaborate** on the ideas by adding details eg specific strategies that teachers might use.

Each round follows a set format

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3. Observation in classrooms and description without judgement



4. Observational debrief



5. Network proposes next level of work



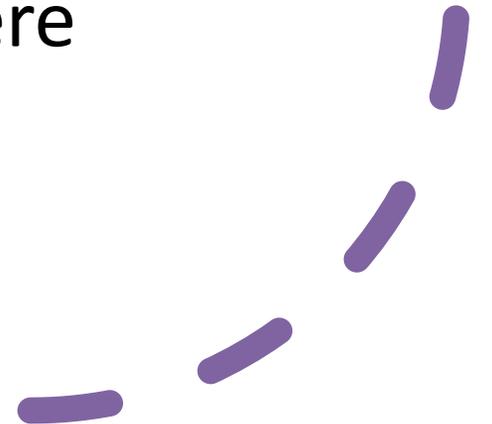
“Descriptive
Observation”
is at the heart
of rounds



Learning to See
Learning to
Unjudge

Learning to
See:
Unlearning
to Judge

- Description – the evidence about what you see – not what you think about what you see
- Judgement - a value statement: about how things are or how they should be e.g. “great lesson” teacher had high expectations”, “students were confused”



Learning to See: Learning to Unjudge



- What are the students doing and saying?
- What is the teacher doing and saying?
- What is the task?

Examples - Learning to See, Unlearning to Unjudge

Description with Judgement

- Fast-paced
- Too much time on discussion, not enough time on individual work
- Excellent classroom management
- Teacher read from a book that was not at an appropriate level for the class

Description without Judgement

- Teacher asks, “How did you figure out this problem?” Student explains
- Students followed the directions in the text to make a prism
- Student 1 asks student 2, “What are we supposed to write down?” Student 2 answers, “I don’t know”.

Fine Grained rather than Large Grained

General

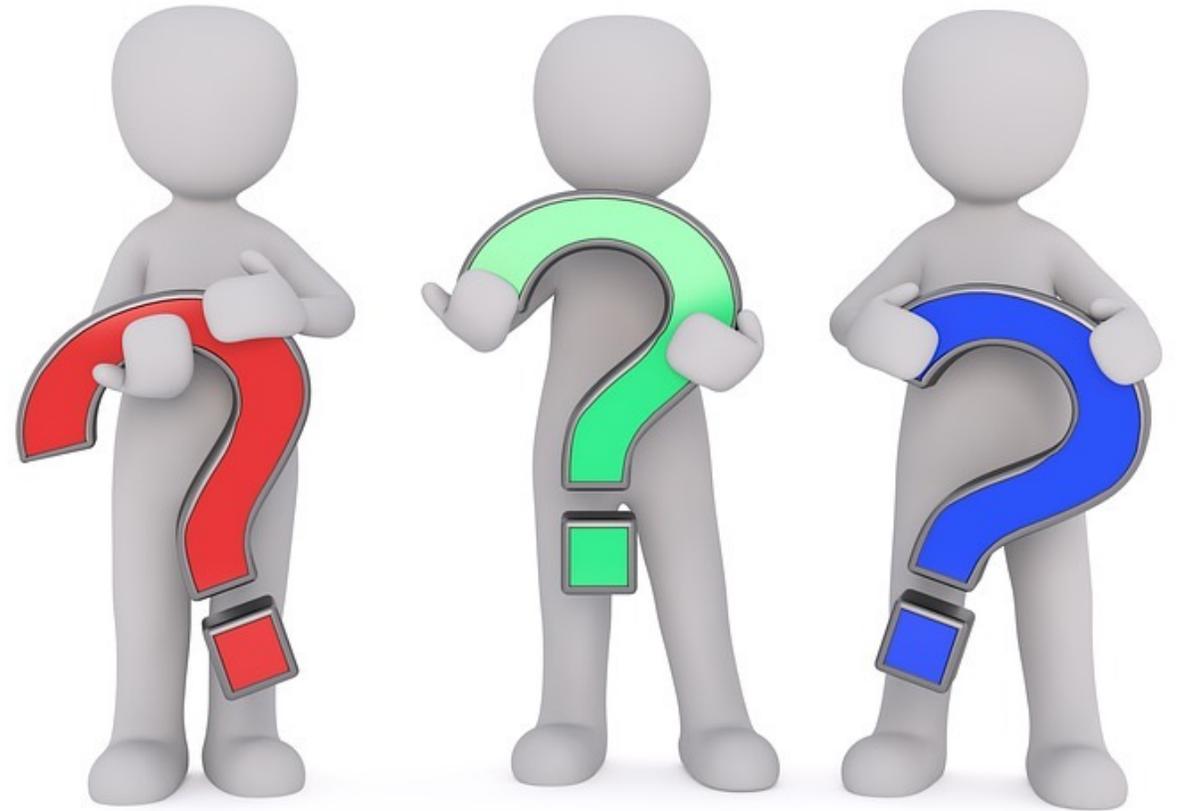
- The Learning Intention & Success Criteria were on display
- The teacher asked questions about a fairy tale.
- The teacher walked around the room giving feedback to students
- Students gave feedback to one another

Specific

- The LI required students to categorize mammals according to their features
- T: Can anyone tell me why Humpty Dumpty might have fallen off the wall?
- T: How could you make your opening paragraph more interesting for the reader?
- S: I like the way you described the goblin. It made me feel scared.



STUDENT QUESTIONS



Judgmental



Objectivity



Descriptive

<p>Specific and judgmental</p> <p>“The teacher read from the book, <u>Oliver Twist</u>, which was not at the appropriate level for the class.”</p>	<p>General and judgmental</p> <p>“There was too much time on discussion, not enough time on individual work.”</p>
<p>Specific and descriptive</p> <p>“Student 1 asked student 2: ‘What are we supposed to write down?’ Student 2 said, ‘I don’t know.’”</p>	<p>General and descriptive</p> <p>“Teacher introduced a writing prompt to students.”</p>

Specific



Specificity



General

CELEBRATION WALL- WHAT MADE YOU THINK "WOW!"

Detailed & specific

- learning
- teaching,
- environment,
- relationships,
- routines,
- scaffolds,
- tasks



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5. Network proposes next level of work

DATA

“Give me any data from your school and I’ll tell you five different stories about it. Just tell me which ones you want to hear.”

Don’t be data driven. Be driven to find the data that actually matters.

Changing our practice hinges on changing our lens.”

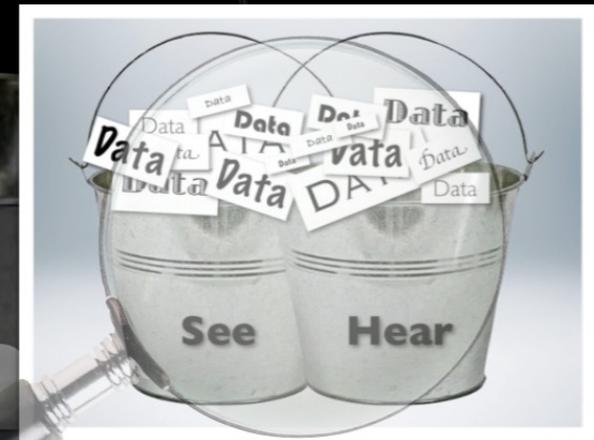
- Jeff Duncan Andrade

Levels of Data

1. Satellite data – helps illuminate patterns of student achievement over time, points us in a direction for further investigation eg NAPLAN
2. Map data – points to a slightly more focused direction eg reading levels, student perception surveys.
3. Street level data – fine-grained & unambiguous – points to specific directions for improvement.

OBSERVATIONS

*It's in the data we can **see** and **hear** that we'll come to understand the story of the learning of our classrooms.*



Coun

DATA THAT MATTERS

“Raising student achievement doesn’t happen one test at a time, whether that test is standardized or teacher made. Test results are always an incomplete picture of what’s happening in a classroom. Yet we continue to tweak instructional methods to raise test scores so that we can build and marvel at data sets that allow us to claim ”data-driven decision making”.

It is a logic model that ignores the most critical source of evidence – what students are actually learning. Gathering information about that learning should be everyone’s role, and turning that data into evidence by using it to improve student learning should be everyone’s most important work”.

Connie Moss and Susan Brookhart, Formative Classroom Walkthroughs, p99



OBSERVATION DEBRIEF

- 1. Asterix 6 observations that are **representative** of the lesson observed.
- 2. Make sure you have covered:
 - The qualities of the task
 - Teacher doing and saying
 - Student doing and saying
- 3. Share with group
- 4. Challenge any that are judgmental or are not specific
- 5. Write each one on a separate post-it (10-12 per class)

Quantifying our findings

- What one change would have made the lesson more effective?
- If you were a student in this lesson what would you now know and be able to do?

(Google doc)



CELEBRATION WALL- WHAT MADE YOU THINK "WOW!"

Detailed & specific

- learning
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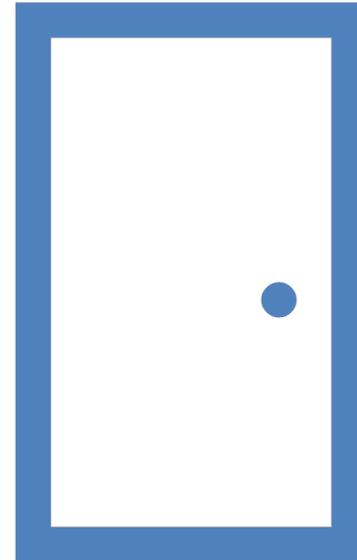


3,2,1 EXIT/ ENTRY PASS

Three things that really resonated including any AGGH! moments

Two questions or wonders

One thing you want to learn more about, practice or develop



WHAT WERE
YOU
THINKING?

DISCUSSION
OF THE EXIT
PASSES



PART 2
DI SIEMON
WHAT TEACHING
SHOULD BE LIKE?



**WHAT DO WE NEED
TO DO TO RAISE
STUDENT
ACHIEVEMENT IN
MATHS?**

“As teachers we have a well-honed language for talking about literacy – we need to develop the same for numeracy.”

It's not rocket science

An unrelenting focus on learning requires that we recognise and act on three key processes in learning:

1. Where the learner is right now
2. Where the learner needs to be
3. How to get there

Wiliam, D. (2013). Assessment: The bridge between teaching and learning. *Voices from the Middle*, 21(2), 15 – 20

But **where** in relation to what?

Year level curriculum expectations or what research suggests is most likely to make a difference?

So what do we know about growing 'good' teachers?

In 2007, Dylan Wiliam introduced his inaugural professorial address by saying:

I want to convince you that raising achievements is important; that investing in teachers is the solution; that formative assessment should be the focus of that investment, and that teacher learning communities should be the mechanism
(p. 1)

William, D. (2007). *Assessment for learning: why, what and how*. Available from:
http://www.assessnet.org.uk/e-learning/file.php/1/Resources/Excellence_in_Assessment/Excellence_in_Assessment_-_Issue_1.pdf

Every child has the right to access the curriculum at stage level.

Equally every child has the right to develop fundamental understandings that enable them to access maths through targeted teaching.



TARGETED TEACHING

Targeted teaching is a form of differentiation that is focused on addressing students' specific learning needs in relation to a small number of really 'big ideas' in Number, **without which students' progress in school mathematics will be seriously impacted** (Siemon, 2006).

Take Away: Not everything needs to be differentiated

Targeted teaching requires:

- a grounded **knowledge of the big ideas** in number that underpin student progress;
- **assessment tools/techniques** that expose students' thinking and provide valid and reliable information about where students are 'at' in relation to an important big idea;
- an **interpretation of what different student responses** might mean and **teaching advice** that provides some practical ideas to address and progress student learning (i.e., where to go to next);
- an **expanded repertoire of teaching approaches** that accommodates and nurtures discourse, helps uncover and explore student ideas, and ensures all students can participate in and contribute to the enterprise;
- time with students to develop **trust and supportive relationships**; and
- the flexibility to spend **time with the students who need it the most** (Siemon, Virgona & Corneille, 2001).

For teachers and school leaders this requires:

- a **commitment to undertake and act on the evidence** to inform both in-the-moment and future teaching to better target the learning needs of all students;
- an **expanded repertoire of teaching approaches** that accommodate and nurture discourse, help uncover and explore student's ideas, and ensure all students can participate in the enterprise;
- **sufficient time** with students to develop trust and supportive relationships; and
- **flexibility** to spend time with those who need it most (Siemon & Virgona, 2001)

SHARING CONCEPT MAPS

What would you expect to see if the problem of practice were met?

In Rounds we
don't live in the
land of nice!



Each round follows a set format

1. Host school identifies a problem of practice



2. Network explores best practice in that aspect of teaching



3. Observation in classrooms and description without judgement



4. Observational debrief



5. Network proposes next level of work

"A VITAL QUESTION, A CREATIVE QUESTION, RIVETS OUR ATTENTION. ALL THE CREATIVE POWER OF OUR MINDS IS FOCUSED ON THE QUESTION. KNOWLEDGE EMERGES IN RESPONSE TO THESE COMPELLING QUESTIONS. THEY OPEN US TO NEW WORLDS."

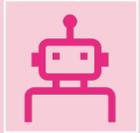
Verna Alley, *The Knowledge Revolution*



The First Thing to Consider

What “work” do I want this question to do? That is, what kind of conversation, meanings, and feelings do I imagine this question will evoke in those who will be exploring it?

OTHER THINGS TO CONSIDER



Is this question relevant to the real life and real work of the people who will be exploring it?



Is this a genuine question—a question to which I/we really don't know the answer?



Is this question likely to invite fresh thinking/ feeling?

OTHER THINGS TO CONSIDER



What assumptions or beliefs are embedded in the way this question is constructed?

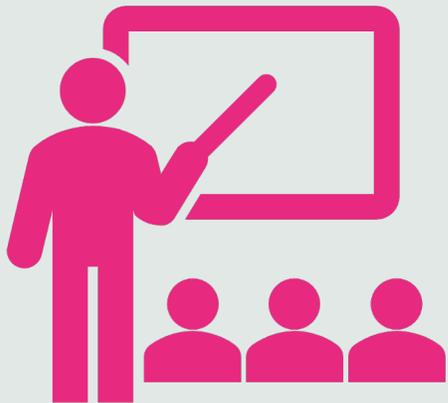


Is this question likely to generate hope, imagination, engagement, creative action, and new possibilities or is it likely to increase a focus on past problems and obstacles?

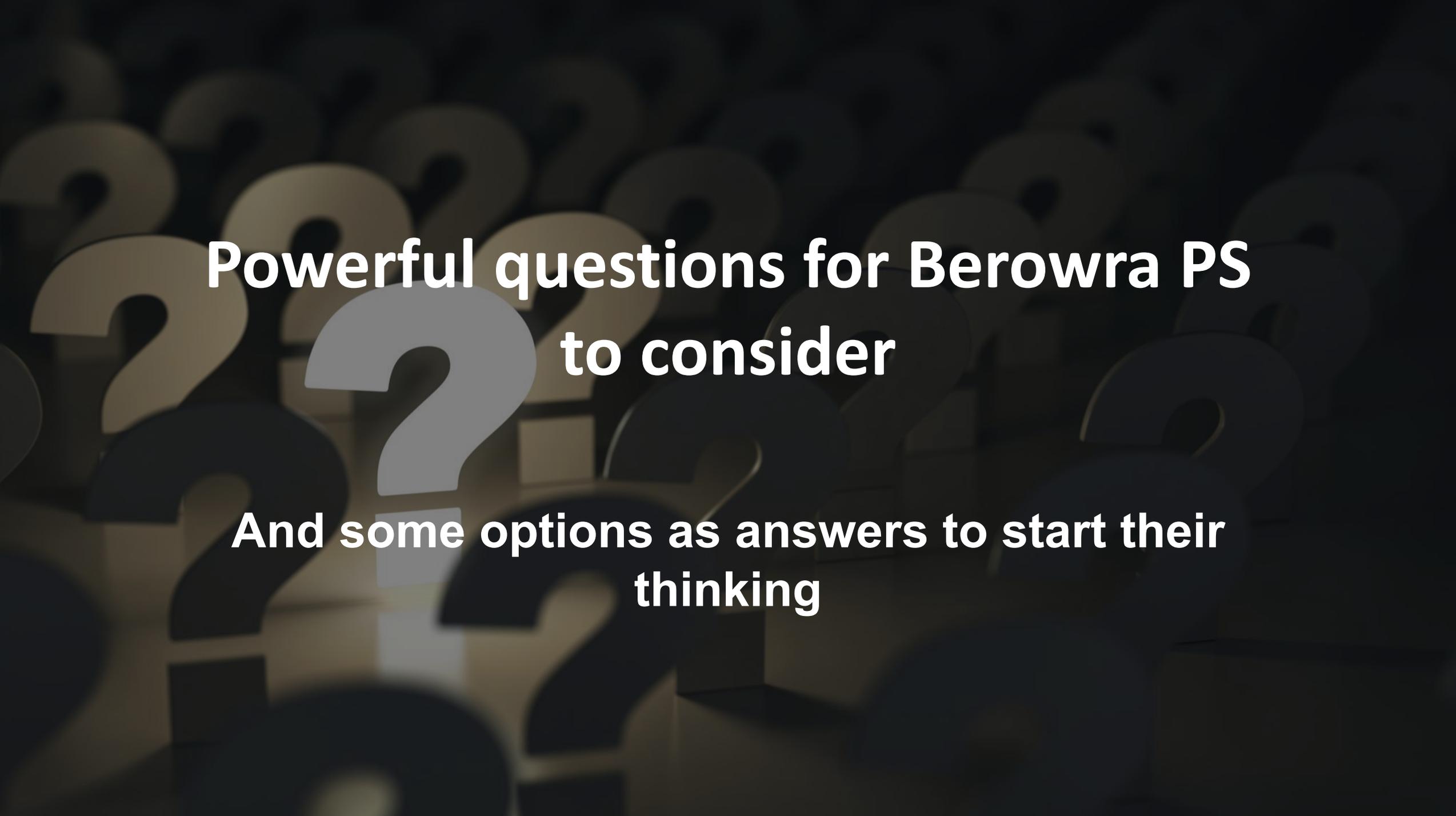


Does this question leave room for new and different questions to be raised as the initial question is explored?

EXAMPLES OF POWERFUL QUESTIONS FROM A RECENT ROUND



- ***How do we ensure professional learning translates into sustained change of classroom practice?***
- ***Do teachers and students understand the purpose of the SC and how this is used to give feedback to allow students to be self-directed learners?***
- ***How can we take the whole school community on the journey towards rigorous learning?***
- ***How active are our students in their learning? How do we know?***
- ***Are our assumptions about our students and parents preventing us from taking important initiatives? How could we explore this?***

The background of the slide is dark with a pattern of question marks in various shades of brown and grey. A large, light grey question mark is centered behind the text.

**Powerful questions for Berowra PS
to consider**

**And some options as answers to start their
thinking**