TICKLING A SLEEPING DRAGON
How adjusting and aligning testing and curriculum can maximise success in Mathematics
Aligning the Curriculum

Using the Data

Aligning the Testing

Streaming the Students
Aligning the Curriculum

Using the Data

Streaming the Students

Aligning the Testing
ALIGNING THE CURRICULUM

EXAMINING WHAT WE TEACH AND WHEN WE TEACH IT
### Place Value
- Use spacing in place of commas
- Place Value to 6-digits: 0 to 999,999
- Model large numbers - bead frame etc
- Read/write in words, digits
- Expand/contract large numbers
  - 671,203 = 600,000 + 70,000 + 1,000 + 200 + 5
- Value of underlined digit: e.g. 7 in 127,685
- How many thousands (etc) in...
- Write a number with 45 tens/hundreds/thousands etc.
- Compare/order numbers - ascending/descending order
  - 1 more than / 1 less than: e.g. 99,999 + 1
  - 10 more than / 10 less than: 100 more than / 100 less than etc
- Round off to the nearest ten, nearest hundred, thousand
- Estimation strategies

Make use of number lines for plotting
Discuss the infinite nature of our number system

---

### Place Value
- Use spacing in place of commas
- Place Value to 9-digits: 0 to 999,999,999
- Model large numbers - bead frame etc
- Read/write in words, digits
- Expand/contract large numbers
  - 3,671,205 = 3,000,000 + 600,000 + 70,000 + 1,000 + 200 + 5
- Expand / contract using powers of ten
  - 3,671,205 = (3 \times 10^6) + (6 \times 10^5) + (7 \times 10^4) + (1 \times 10^3) + (2 \times 10^2) + (5 \times 10^0)
- Value of underlined digit: e.g. 7 in 4,127,685
- How many thousands (etc) in...
- Write a number with 45 tens/hundreds/thousands etc.
- Compare/order numbers - ascending/descending order
  - 1 more than / 1 less than: e.g. 999,999 + 1
  - 10 more than / 10 less than: 100 more than / 100 less than etc
- Round off to the nearest ten, nearest hundred, thousand
- Estimation strategies

Make use of number lines for plotting
Discuss the infinite nature of our number system
Aligning the Curriculum

Using the Data

Streaming the Students

Aligning the Testing
STREAMING
THE STUDENTS
EXAMINING WHO WE TEACH
& HOW WE CAN BEST CATER FOR THEIR NEEDS
Personal qualities not measured by tests

- Sense of wonder
- Resourcefulness
- Motivation
- Creativity
- Critical thinking
- Self-discipline
- Resilience
- Endurance
- Grit
- Persistence
- Determination
- Curiosity
- Humor
- Question asking
- Courage
- Civic mindedness
- Leadership

Skills: Reliability, Empathy, Compassion, Self-awareness, Spontaneity, Enthusiasm, Humility
ALIGNING THE TESTING

EXAMINING HOW WE ASSESS
Example Common Test

Section D  Problem Solving

Please show all your working out and put your answers in sentences.

1. A sack of rice weighs 102 kg, containing 20 bags of rice each weighing 8 kg, and eight bags of potatoes each weighing 10 kg. What is the total mass of the sack and its contents?

2. If it takes four hours to play one game of polo, how long does he spend playing polo during a season of 6 games?
Aligning the Curriculum

Using the Data

Aligning the Testing

Streaming the Students
USING THE DATA
INFORMING TEACHING AND LEARNING
“Assessment is regarded as more than the task or method used to collect data about students. It includes the process of drawing inferences from the data collected and acting on those judgements in effective ways.”

(Callingham, 2010, p. 39)
“All right, nobody move! I’m a teacher on the cutting edge! I’ve got an assessment idea and I’m not afraid to try it!”
Thanks!

Any questions?

You can contact me at sharris@plc.vic.edu.au

You might also see me around for the rest of the conference. Cups of coffee happily accepted.
REFERENCES


Special thanks to SlidesCarnival who made and released this presentation template.

‘Personal Qualities not measured by tests’ Image by @SylviaDuckworth