The Progress and Consistency Tool (PaCT)

Supporting professional judgments in reading, writing and mathematics
From NZ Curriculum to the PaCT

Outcomes

Sign posts

Progress and Consistency Tool
Supporting Professional Judgments in Reading, Writing and Mathematics.
What is the PaCT?

The PaCT has two parts:

**Learning Progression Frameworks** that break down and illustrate aspects of mathematics, reading and writing;

**An online tool** that captures a series of teacher judgments and generates an overall judgment which the teacher can change or confirm as their OTJ.
The frameworks

- Define and illustrate aspects of mathematics, reading and writing

- Illustrates the significant steps that learners take as they progress in mathematics reading and writing

- Prompt teachers to notice what students know and can do in mathematics, reading and writing
How does PaCT support teachers?

› Clarifies what it means to progress as a learner in mathematics, reading and writing
› Helps identify groups of students who need extra support
› Informs teaching programmes
› Informs moderation discussions
› Helps to monitor students and class progress
› Gives teachers confidence that their OTJs are consistent and dependable
## PaCT frameworks

### Reading
- Making sense of text: processing system.
- Making sense of text: text structure.
- Making sense of text: vocabulary knowledge.
- Making sense of text: reading critically.
- Reading to organise ideas and information for learning.
- Acquiring and using information and ideas in informational texts.
- Reading for literary experience.

### Writing
- Writing meaningful text: encoding.
- Writing meaningful text: text features.
- Writing meaningful text: vocabulary knowledge.
- Using writing to think and organise learning.
- Creating texts to communicate knowledge and understanding.
- Creating texts for literary purposes.
- Creating texts to influence others.

### Mathematics
- Additive thinking
- Multiplicative thinking
- Patterns and relationships
- Using symbols and expressions to think mathematically
- Geometric thinking
- Measurement sense
- Statistical investigations
- Interpreting statistical and chance situations
A model of the online tool
The mathematic framework showing the aspect lines and the steps of learning
Illustrations
Mathematics – Additive thinking

Teddy bears and cards

Annotation
Mona responds to references to quantity by selecting known counting words in sequence. She is unable to quantify specific amounts.

Problems: Teddy bears and cards
The teacher places in front of the student a selection of numbered cards to 9, and some plastic bears. The teacher poses this problem:
Find any numbers that you know and show how many bears that is.

Student response
Mona is able to recite the counting sequence to ten, starting from one. She is unable to form sets of objects of a specific size.

How many spots?

Annotation
Tahu responds to differences in amounts. He uses some informal language of quantity appropriately, demonstrating a sense of the comparative size of groups.

Problem: How many spots?
The teacher shows the student cards with ladybirds, each with a different number of black dots: 2, 8, 1, 0, and 6. Showing the student one card at a time, the teacher poses this problem:
How many spots does this ladybird have?

Student response
Tahu responds to 0 as “not any,” and to both 1 and 2 as “a little bit” and “a few.” He responds to 6 as “some” and to 8 as “that’s more.”

Dice

Annotation
Kate instantly recognises (subitises) 1, 2, and 3 dots. She cannot say how many for 4, 5 and 6 dots but uses the unspecified amount “some” appropriately and recognises these are more than 1, 2, 3.

Problem: Dice
The teacher gives the student a dice with dots to roll. The teacher asks:
How many dots?

Student response
Kate instantly says how many dots for rolls which show 1, 2, and 3. For 4, 5, and 6 Kate says, “That’s some more.”

Card matching

Annotation
Andy can instantly say (subitise) how many for 0, 1, 2, 3 and is able to recognise the symbols 1, 2, and 4, but is unable to match these with amounts.

Problem: Card matching
The teacher places picture and numeral cards, from 0 to 5, in front of the student. Neither set of cards is in order. The teacher points to the picture cards, one at a time, and asks the student to say how many items are on the cards. This is repeated with the numeral cards. The student is then asked to match the picture cards with the numeral cards.

Student response
Andy quickly and correctly says how many items are on the picture cards showing 1, 2, and 4 items. For the picture cards showing 0 and 5 items, he says “that’s too much.”

Andy selects the numeral cards for 1, 2, and 4 and correctly reads these numerals. He makes no attempt to match the numeral cards with the amounts depicted on the picture cards.
How does this all work?
PaCT reports:

› The PaCT produces a range of reports

› School leaders can choose to see reports for all students

› Teachers can track progress of:
  – Individual students
  – Class or other groups
A school report – all students
A mathematics class report

The Progress and Consistency Tool (PaCT)
An individual student report

The Progress and Consistency Tool (PaCT)

The PaCT range indicates that Danielle Elizabeth is working at the Mathematics National Standard for after one year at school.

Overall Teacher Judgment (OTJ)

Danielle Elizabeth is working at the Mathematics National Standard for after one year at school.

Comments for teachers

No comments

Comments for parents

No comments

*Only comments for parents are included when printed.
Teacher comments

The Progress and Consistency Tool (PaCT)

PaCT judgment for mathematics for Danielle Elizabeth

The PaCT range indicates that Danielle Elizabeth is working at the Mathematics National Standard for after one year at school

Overall Teacher Judgment (OTJ)

This judgment will not count towards a reporting cycle.

Danielle Elizabeth is at the Mathematics National Standard for after one year at school

Comments, evidence and references (optional).
Add information for other teachers or parents.

Comments for teachers

Comments for parents

*Only comments for parents are included when printed or saved as PDF.*
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