



Improving Learning

Australian Council *for* Educational Research

PAT Overview

Progressive Achievement

VIC DET

1st March 2021

About the Australian Council for Educational Research (ACER)



- Independent, not-for-profit research organisation
- Established in 1930
- 400+ staff in Australia and around the world
- In 2014, the ACER Foundation was established.

Mission

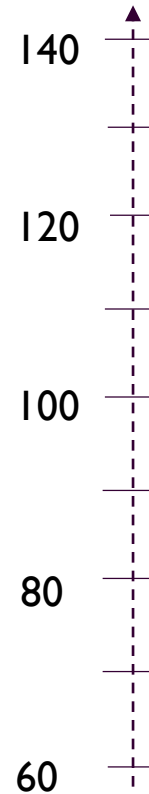
To create and promote research-based knowledge, products and services that can be used to improve learning across the lifespan.



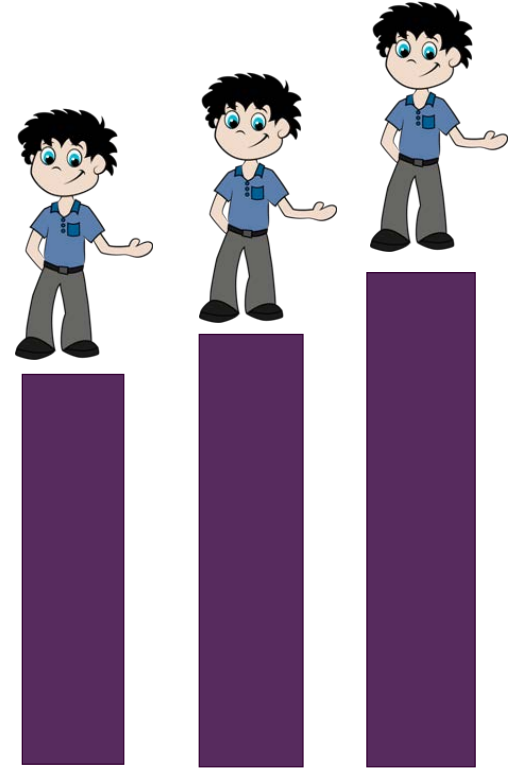
How can PAT be used to monitor and increase student achievement?

PAT online assessments offer schools

- A reliable and valid method of measuring attainment at a **specific point of time**, and **measuring progress over time**
- flexible administration
- automated scoring and reporting online.



- are developed to:
 - provide evidence to support teaching and learning
 - measure growth in learning
- emphasise that all students can demonstrate progress.



Year level achievement approach

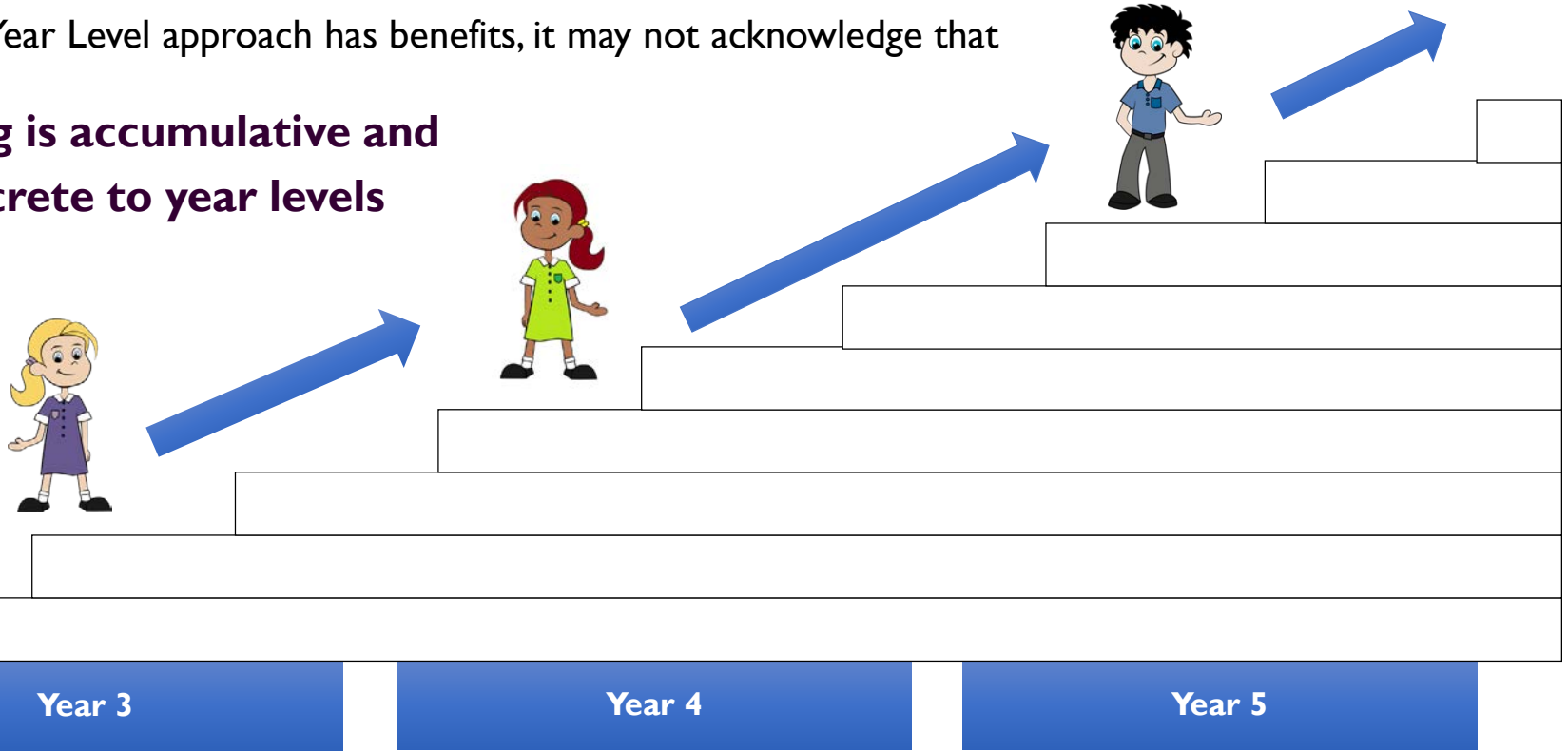
- Focus is on curriculum expectations and normative comparisons
- Communication of learning progress tends to be discrete to year level.

How much of the curriculum has the student attained in a learning area?
Is the student 'falling behind' her classmates' attainment?

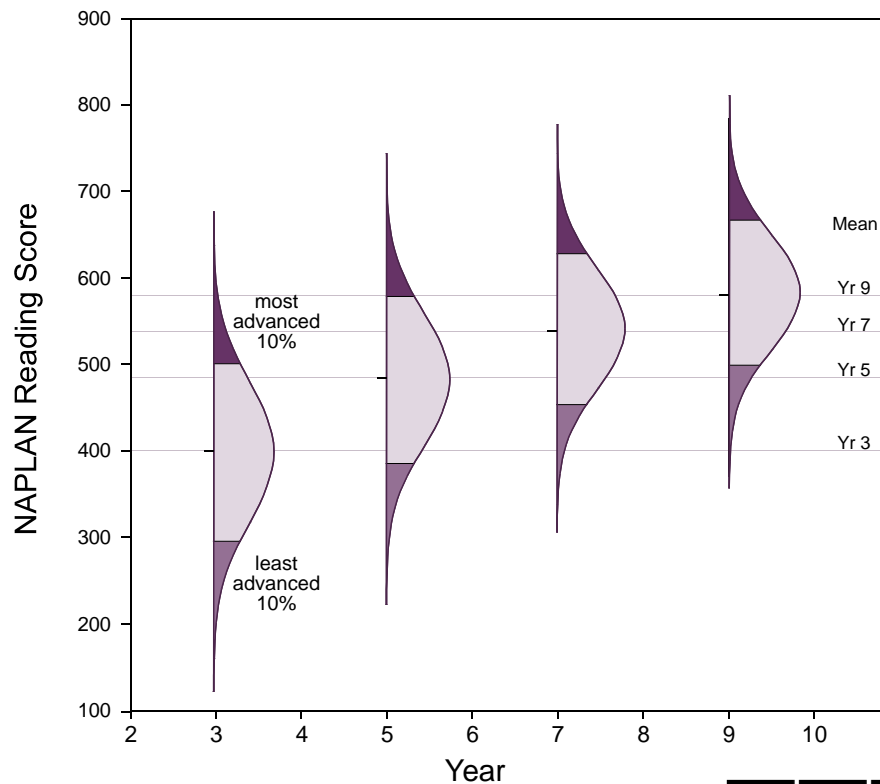


Whilst a Year Level approach has benefits, it may not acknowledge that

**learning is accumulative and
not discrete to year levels**



Establishing how far individuals have progressed in their learning is essential because learners of the same age are often at very different points in their learning.



Towards a growth mindset in assessment

‘Rather than expecting all students of the same age to be at the same point in their learning at the same time, this approach expects every student to make excellent learning progress over the course of a school year, regardless of their starting point. In other words, this approach sets high expectations for every student’s “growth”.’

Masters (2013).

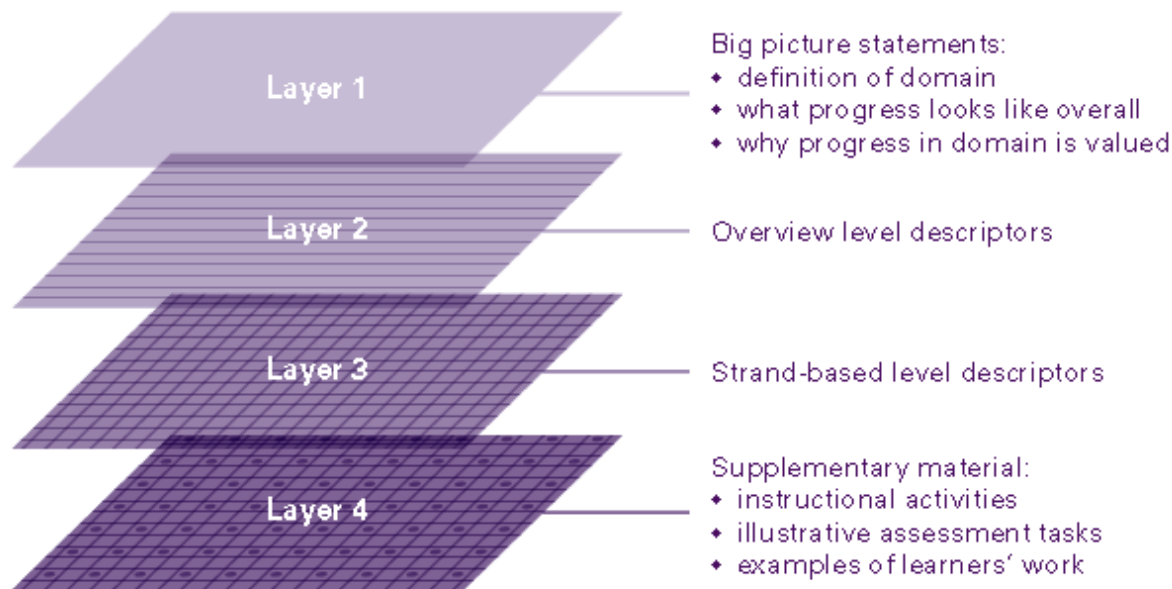
Towards a growth mindset in assessment.

https://research.acer.edu.au/ar_misc/17/



Learning Progressions

ACER Learning Progressions have **four** different layers that describe learning in different degrees of detail.



ACER's Progressive Achievement approach



PAT Progressive Achievement approach

c. acer 2019



Evidence

Using data to understand where students are in their learning



Supporting the next steps

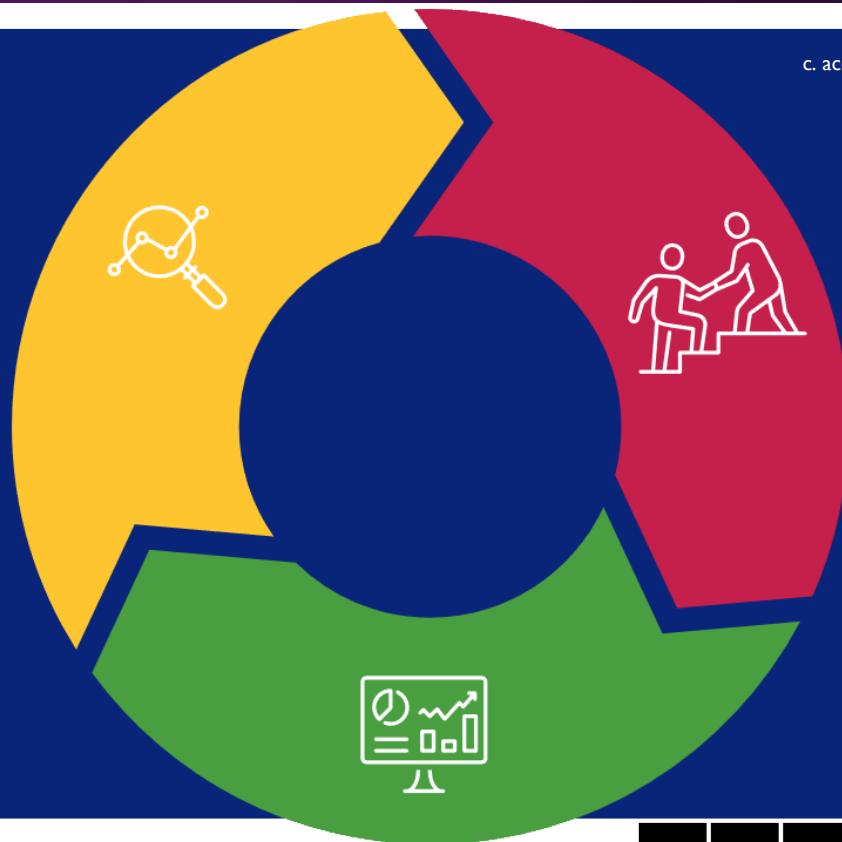
Informing teaching and learning through:

- Setting personal stretch targets
- Development of teachers' capabilities
- The use of learning resources



Tracking progress

Monitoring growth of student achievement over time

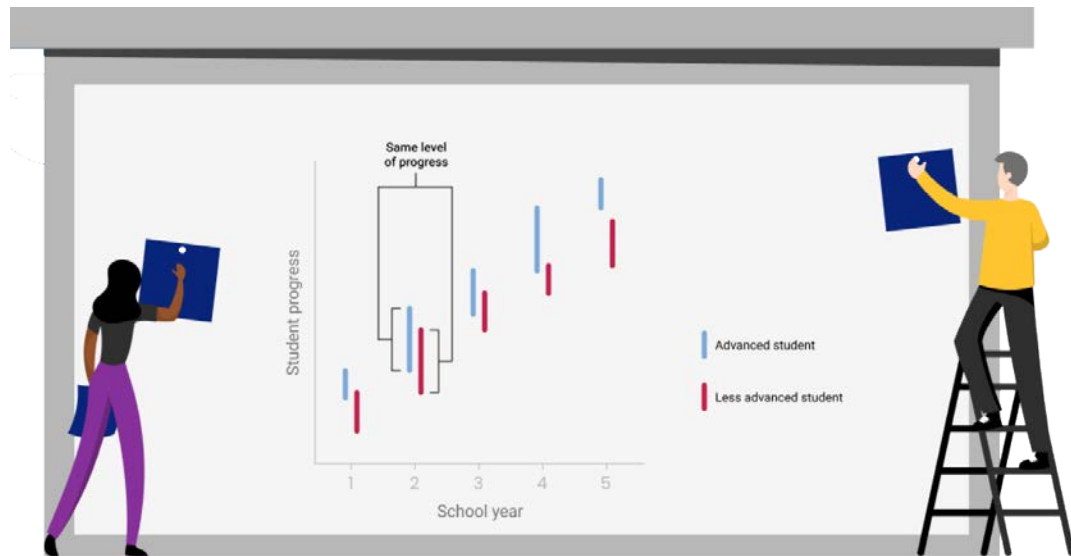


Gathering evidence



Using data to understand where students are in their learning

- Through the use of PAT scale scores, achievement bands and described scales
- Detailed item level information including ability to view items, item information, skill descriptions and Australian Curriculum references.



Band descriptions	
150 and above	
140 - 149	
130 - 139	
120 - 129	Decoding and concepts of print (DC) Decoding is not described at this band, or higher bands, as students have already developed sufficient fluency (automatic and accurate decoding) to focus on comprehension of the text. Retrieving directly stated information (RI) Students in this achievement band are expanding their vocabulary and beginning to recognise rewordings of the same idea that use less familiar words and phrases. They are developing their ability to scan and locate information when there is some strongly competing information or other complexities, such as unfamiliar ideas or displays of statistical data. They are learning to read closely to differentiate between similar ideas in short, dense sections of text.
110 - 119	
100 - 109	
90 - 99	
80 - 89	Interpreting explicit information (IE) Students in this achievement band are consolidating their skills in interpreting explicitly stated information when there is some complex language and conflicting arguments. They are learning to interpret ideas and information when texts coincide, differ and diverge from each other and have different styles and tone. They are becoming increasingly skilled at making links where the information is not prominent or is given in a context that is unexpected or difficult to interpret, such as tables and graphs. Students are learning to interpret complex sentences, informal and unfamiliar language, and ambiguous phrases when making links across a text. They are beginning to recognise rephrasing of difficult ideas and to identify when one idea is an unreasonable, exaggerated or misinterpreted account of another idea. Backtracking is also a more developed skill at this level, as students backtrack two or three times across paragraphs to account for specific pieces of information that may be indirectly stated. They are also identifying the way in which paragraphs help to organise ideas in more difficult texts.
70 - 79	
60 - 69	
50 - 59	
40 - 49	
30 and below	

Supporting next steps



To inform teaching and learning

- Through the use of instant reporting of results which include PAT described scales and item information for targeting teaching and learning to the specific needs of students
- Accessing PAT teaching resources that support teachers to teach specific skills and concepts
- PAT professional learning courses, webinars and programs.



Using data for differentiation



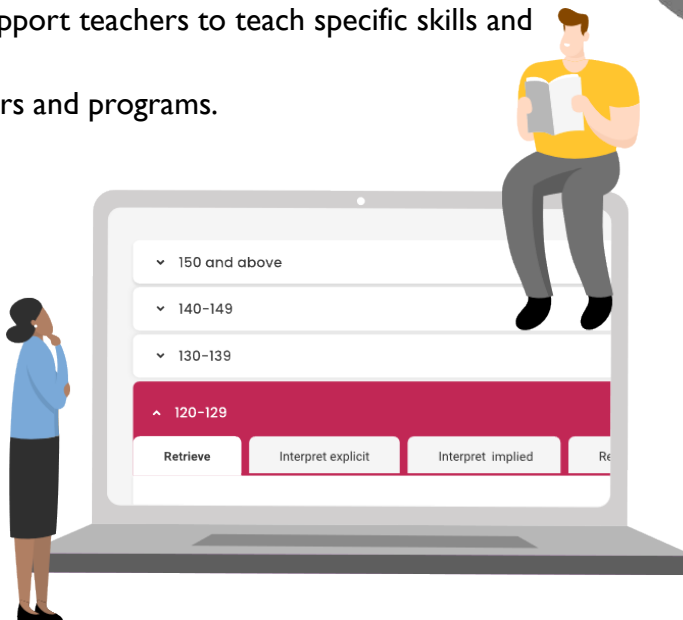
Targeting resources to students' needs



Extending high-achieving students



Immediate post-test analysis and

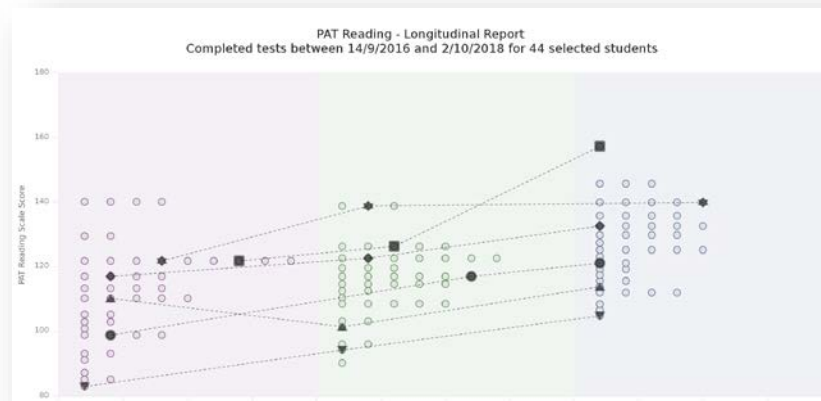
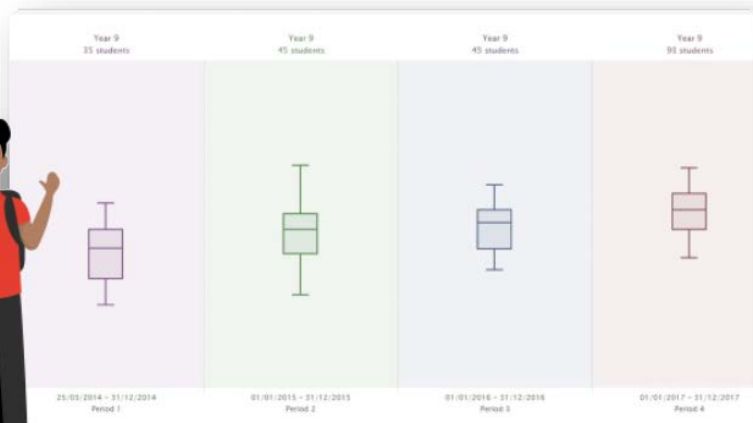


Tracking progress



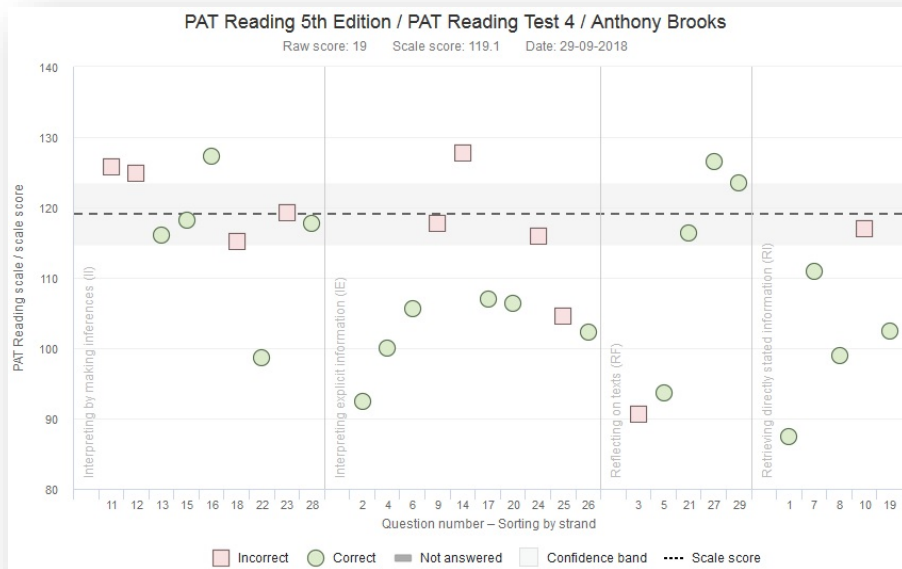
Monitoring growth of student achievement over time

- Instant reporting of results including the PAT Longitudinal report which provides easy to understand information on cohort and student progress
- Progress information can be easily exported by teachers.



Progress is not just about numbers...

Student item performance



Item information

BOOK REVIEW

Here are two reviews of *The Disappearing TV Star*:

Joshua Ryan: ★☆☆☆☆

This book sounded as if it would be a thrilling mystery, with a kidnapping and a twist, but the story takes no unexpected turns.

The main character, Richelle, was interesting – she was a real drama queen – but the other characters were boring and predictable. This made the mystery easy to solve.

I have enjoyed some other books written by Emily Rodda, but this one was too simple to hold my attention. Maybe younger readers would enjoy it.

Bethany Grace: ★★★★★

I enjoyed this book. I thought the main character was clever. Richelle likes to be the centre of attention and she often is, because the rest of the characters can't keep up with her.

The story is really exciting and I was kept guessing until the very end. I think this is Emily Rodda's best book yet!

The stars at the top of each review act as

☐ a story.

☐ a judgement.

☐ a decoration.

☐ a description.

A: 4students - 9%
a story.

B: 37students - 84% ☒ Correct
a judgement.

C: 0students - 0%
a decoration.

D: 3students - 7%
a description.

Question difficulty: 116.4

Strand: Reflecting on texts

Description: Interprets a symbol used to rate a book in a persuasive text

Australian Curriculum references © ACARA 2014

English / Year 4 / Literacy / Interpreting, analysing, evaluating / ACELY1692 / Use comprehension strategies to build literal and inferred meaning to expand content knowledge, integrating and linking ideas and analysing and evaluating texts

Administration practices and recommendations

When should you administer PAT?

- To monitor student progress, a gap of **9 to 12 months** between testing sessions is recommended by ACER. Learning progress may not be reflected in a student's PAT scale scores over a shorter period of time.
- If schools assess students towards the end of the calendar year, the administration will correspond with the time of year that the national norms were collected (October and November 2012–14).
- This will provide a more direct comparison between the achievement of the school cohort and the achievement of students nationally.
- When comparing achievement with the national norms at other times of the year, teachers should keep in mind that their students will not have had the same amount of schooling as the reflected in the norm.

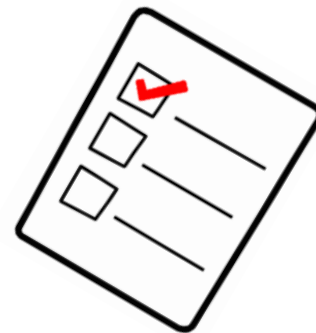
Recommendations

Before administration of tests

- Become familiar with the content of tests and test administration
- Use professional judgement gained from the classroom when choosing a test for students
- Preview and select the most suitable test form, and then assign tests

During administration of tests

- Monitor test conditions and observe student behaviour
- Keep administration instructions and student login details on hand
- Understand testing policies
 - Read questions to students guidelines
 - Calculator usage
- Record observations of student behaviour e.g. fast, slow, not reading the questions
- Know how to re-start tests



Thinking about assessment within the school

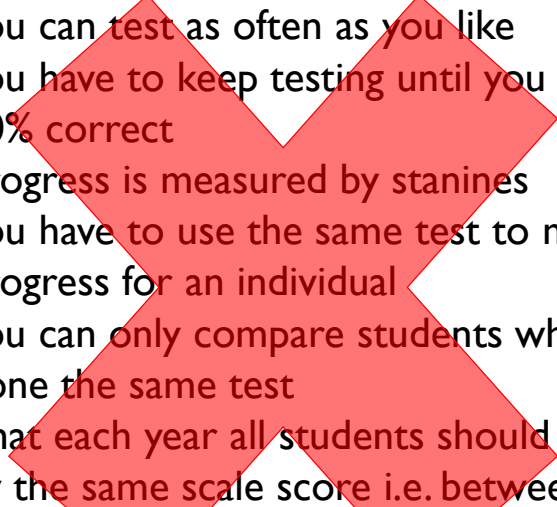
School policies regarding assessment

- Consistency
- Special conditions
- IT requirements or restrictions
- Frequency of testing
- Environment factors
- Communication with parents and students



Addressing PAT Misconceptions

Misconceptions

- 
- You can test as often as you like
 - You have to keep testing until you reach 50% correct
 - Progress is measured by stanines
 - You have to use the same test to measure progress for an individual
 - You can only compare students who have done the same test
 - That each year all students should improve by the same scale score i.e. between 5 -10

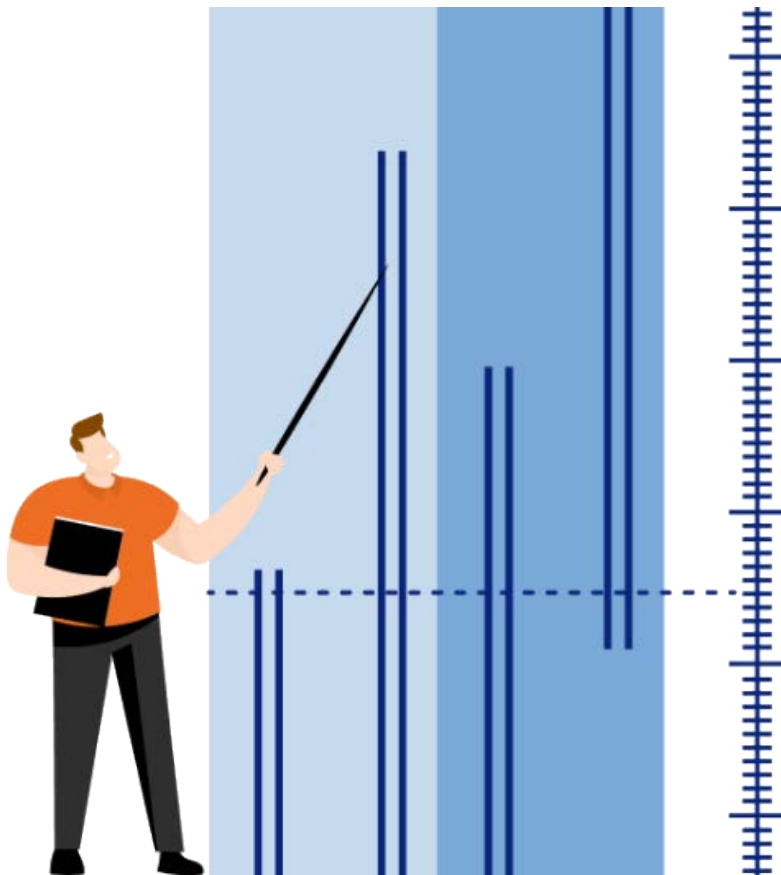
Recommendations

- Test every 9 – 12 months
- Only re-test in rare circumstances that no data is gained to inform teaching and learning
- Progress is measured by scale scores
- Student's should sit the most suitable PAT test form for where they are at
- Students can be compared using scale score from any test form within a PAT domain
- All students are different and will grow at different rates

PAT Scale Score

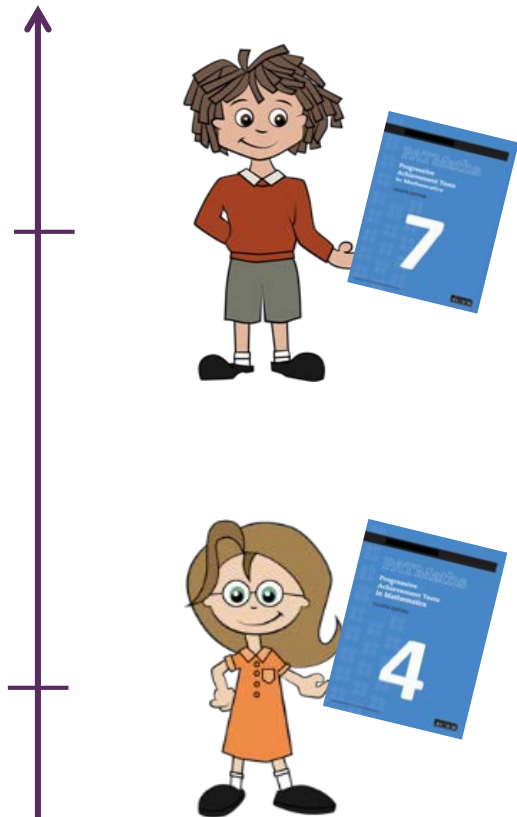
Understanding where students are at in
their learning using scale scores

Understanding PAT scale scores



- PAT Scales are ‘interval scales’ which report numeric scores for each student
- The numeric scores are a representation of each student’s performance on the PAT assessment and infers their level of attainment in that specific domain or learning area.
- Mean scale scores may also be used to represent the average performance of a group of students.

Understanding PAT Scale Scores



Compare performance
between different students
taking different test forms

Understanding PAT Scale Scores



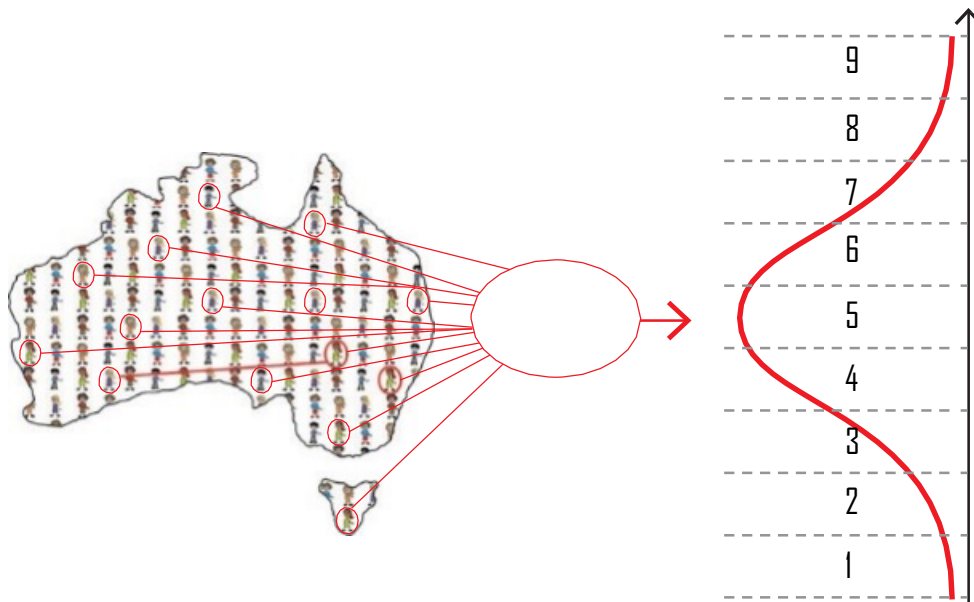
Compare performance
of the same student
over different years

Understanding PAT Scale Scores

Stanine

Stanines are broad ranks comparing achievement to the population at a particular year level.

Stanines have the value 1 to 9 (standard 9)

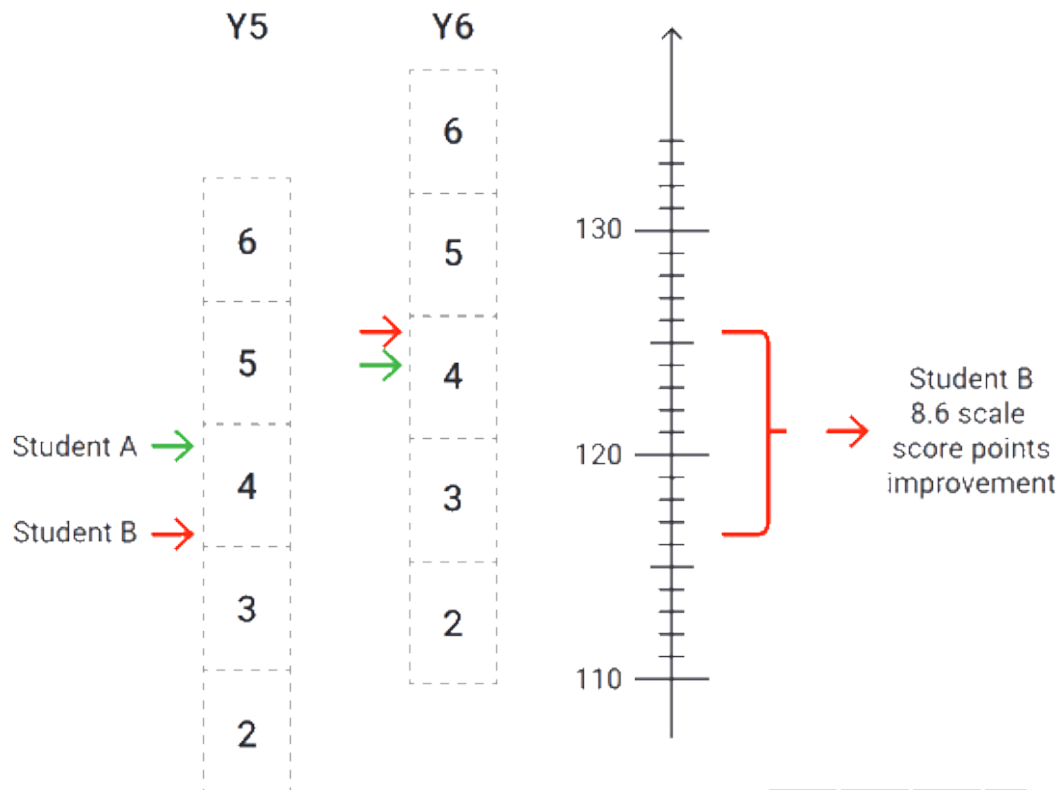


Understanding PAT Scale Scores

Stanine

An improvement in achievement measured in scale scores is not necessarily reflected in a higher stanine rank.

	Year 5			Year 6			Progress
	Scale score	Percentile	Stanine	Scale score	Percentile	Stanine	
Student A	120.4	37	4	124.0	34	4	3.6 scale score points
Student B	116.8	27	4	125.4	38	4	8.6 scale score points



PAT Achievement Bands

Understanding where students are at in
their learning using achievement bands

Understanding PAT Achievement Bands



155 and above

145 – 154

135 – 144

125 – 134

115 – 124

105 – 114

95 – 104

85 – 94

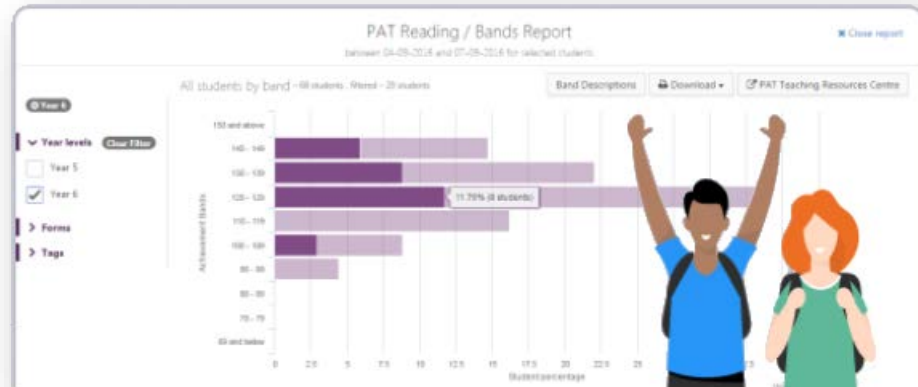
75 – 84

65 – 74

64 and below

In PAT, these scales are divided into achievement bands.

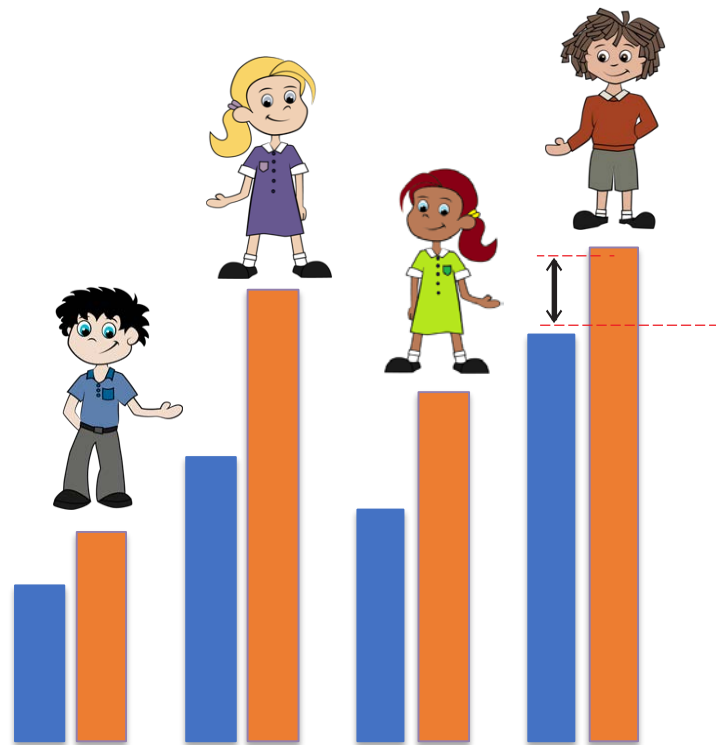
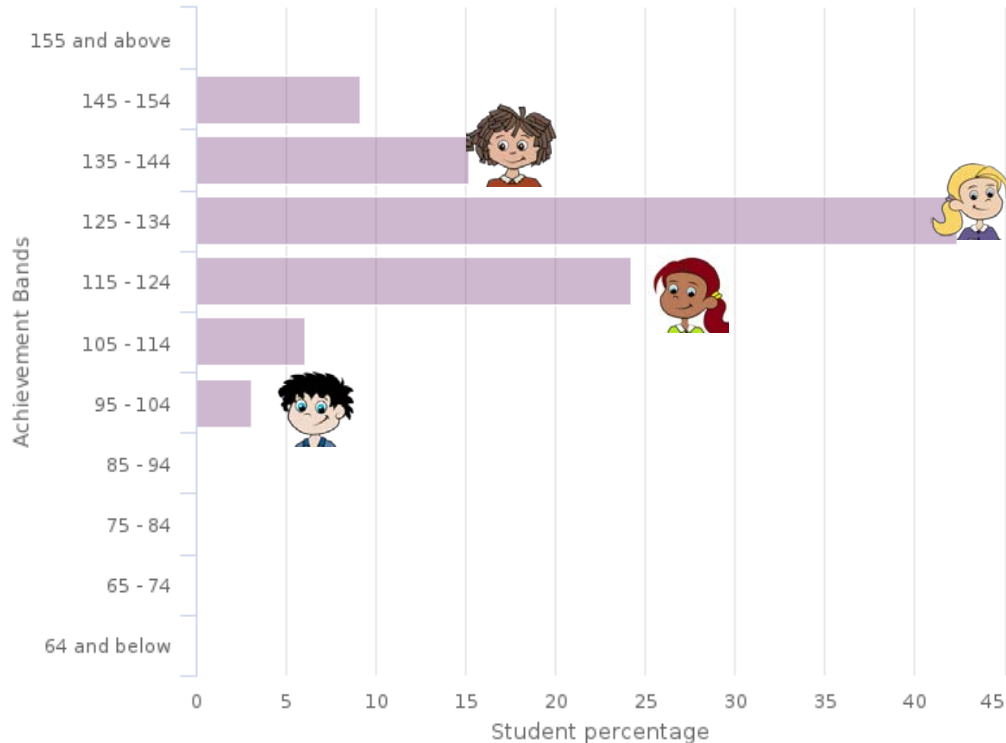
When accompanied by ‘band descriptors’ (PAT Maths and PAT Reading), the PAT Bands assist to contextualise the attainment of students by describing the skills, knowledge and abilities of ‘typical’ students achieving each band



Identifying next steps across the class

PAT Maths / Bands Report

between 25-06-2017 and 07-09-2017 for selected students





140 - 149

130 - 139

120 - 129

110 - 119 Demonstrated most of these skills

100 - 109 and these skills

90 - 99 and these skills

80 - 89 and these skills

70 - 79 and these skills

60 - 69 and these skills

50 - 59 and these skills

40 - 49 and these skills



140 - 149	
130 - 139	
120 - 129	
110 - 119	
100 - 109	
90 - 99	Student can do half of these skills
80 - 89	and most of these skills
70 - 79	and these skills
60 - 69	and these skills
50 - 59	and these skills
40 - 49	and these skills

Understanding PAT Achievement Bands - Reading



150 and above

140 – 149

130 – 139

120 – 129

110 – 119

100 – 109

90 – 99

80 – 89

70 – 79

60 – 69

50 – 59

40 – 49

39 and below



ACHIEVEMENT BAND 90–99

Interpreting implied information (II)

Students in this achievement band are consolidating their skills in making simple inferences about familiar situations when clues are prominent. They are learning to infer the connection between adjacent events and to use their everyday knowledge to infer simple explanations for familiar events and predict likely outcomes.

Understanding PAT Achievement Bands - Reading



150 and above

140 – 149

130 – 139

120 – 129

110 – 119

100 – 109

90 – 99

80 – 89

70 – 79

60 – 69

50 – 59

40 – 49

39 and below



ACHIEVEMENT BAND 100–109

Interpreting implied information (II)

Students in this achievement band are consolidating their skills in using multiple, scattered clues to infer the connection between events that are separated by one or two sentences. They are learning to infer attitudes based on a character's actions alone and to infer main ideas when clues are scattered and there is some competing information. They are developing their ability to make plausible predictions based on clues in the text and their everyday knowledge.

Understanding PAT Achievement Bands - Reading



150 and above
140 – 149
130 – 139
120 – 129
110 – 119
100 – 109
90 – 99
80 – 89
70 – 79
60 – 69
50 – 59
40 – 49
39 and below



ACHIEVEMENT BAND 110–119

Interpreting implied information (II)

Students in this achievement band are consolidating their skills in making inferences when they have to deal with some competing information. They are learning to select relevant clues or evidence and to recognise when they need to read closely and carefully. They are beginning to distinguish between implied overarching ideas and explicit details. They are learning how to recognise tone as a source of evidence for inferences and to reason carefully in selecting the most likely prediction.

Account and Report Demonstration



Staff Permissions

Client Administrators have the rights to:

- Complete purchases in the Store
- Edit aspects of the school's Account details
- Create, edit and view student information
- Assign tests
- Create, edit and view all staff accounts
- Run reports

Candidate Managers have the rights to:

- Create, edit and view student information
- Assign tests

Report Generators have the rights to:

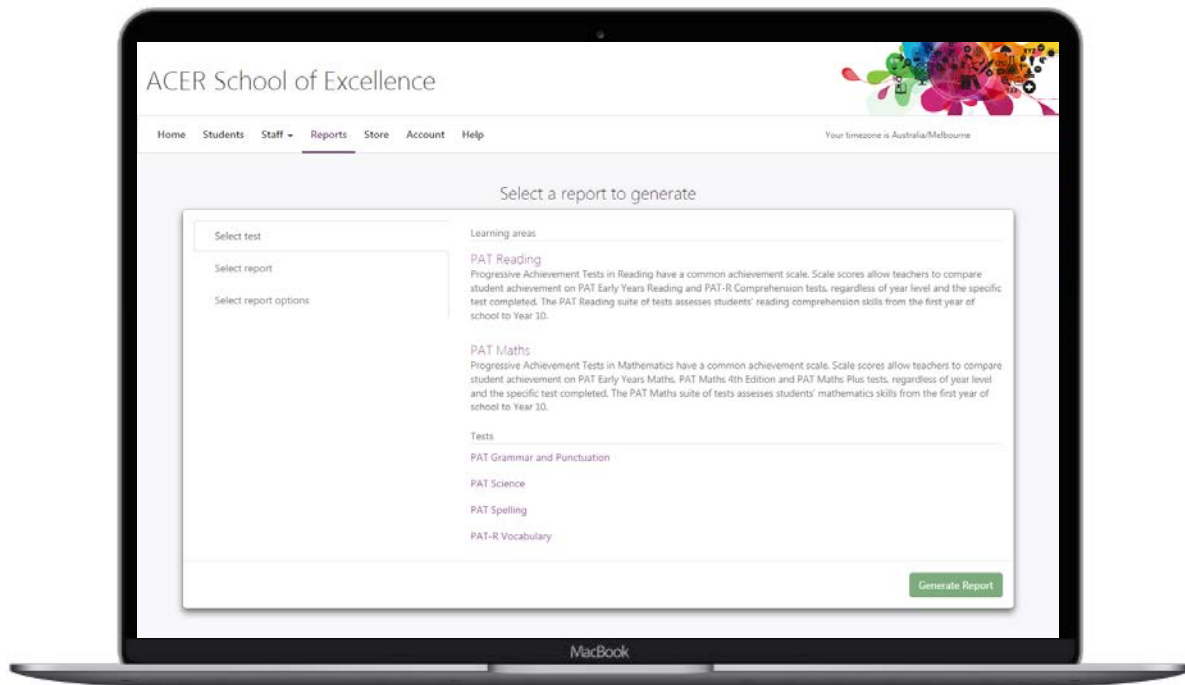
- Run reports

Candidate Manager and Report Generators have the combination of permissions listed.

Online account navigation

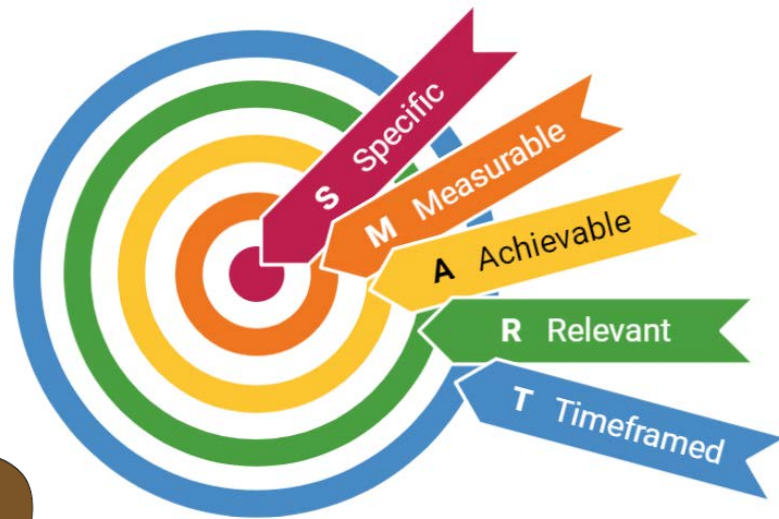
Live demonstration

- Account navigation
- Preview tests
- Assign tests
- Bands report
- Group report
- Individual report
- PAT Teaching Resources Centre



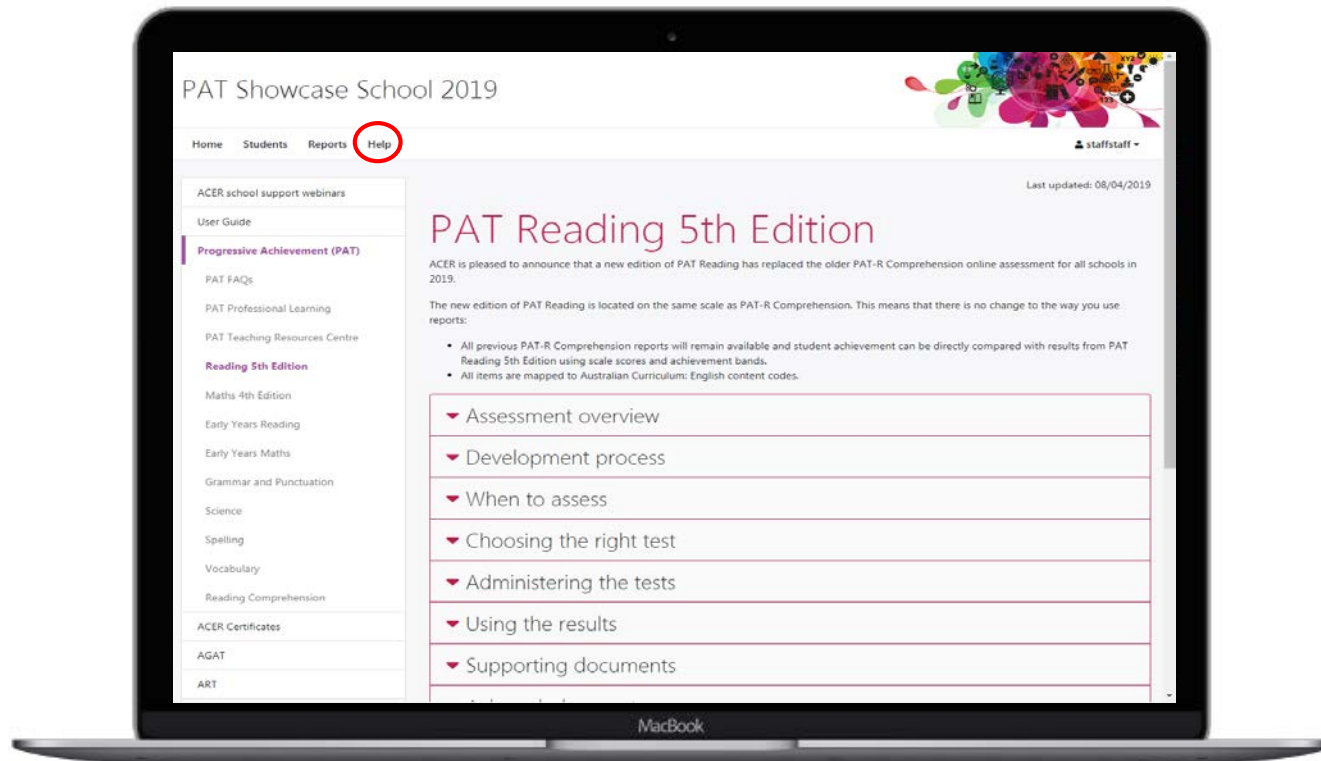
Target Setting – SMART Goals

- Not just a number or score
- What are my students individual strengths and weaknesses?
- Finding the gaps – what my students know and what they don't know.
- Achievement Band – what are some next steps in student learning that I can identify?
- How do I know what I have done or changed has worked?
- What next?



Where to find Help? Supporting Documents

Supporting documents are available in your school's online account under the Help menu.



Where to find support and help?

ACER online assessment support team

E: oarssupport@acer.org

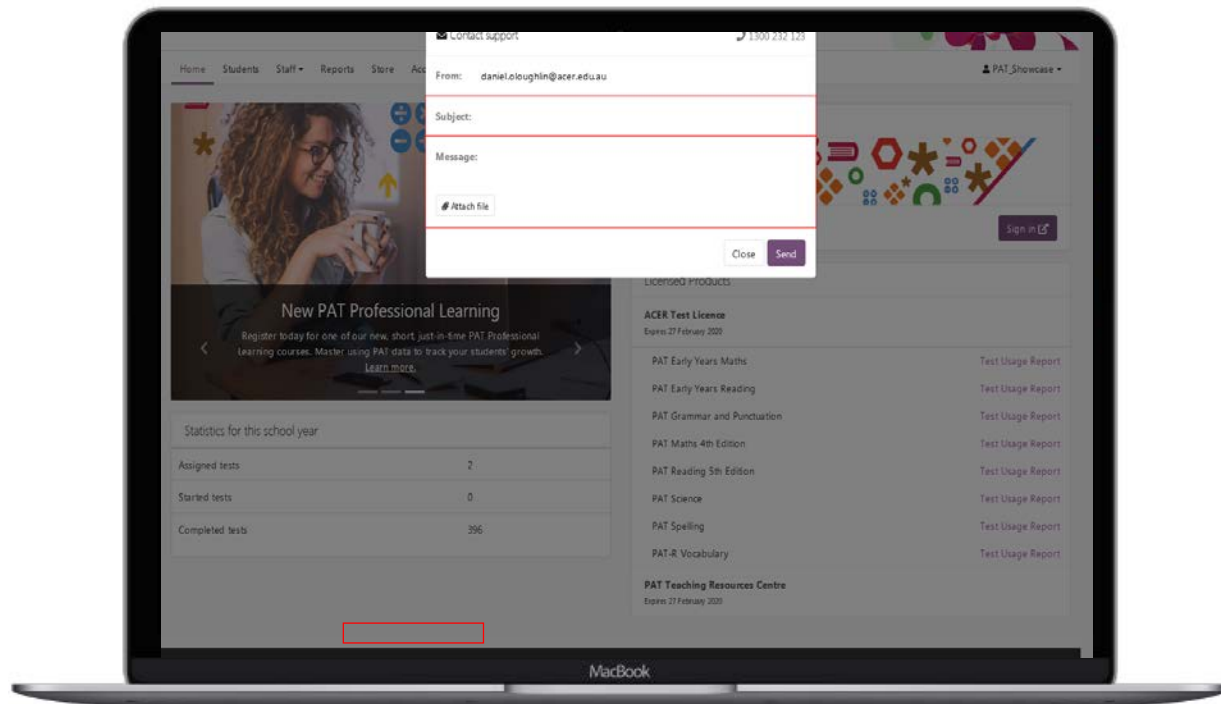
T: 1300 232 123

www.acer.org/pat

Monday – Friday

9am – 5pm AEST

- Webinars
- School support videos
- Online guides and supporting documents
- **Contact Us**



Contact details

ACER online assessment support team

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Thank you



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