PAT Reading

Australian norms 2022 update

Australian Council *for* Educational Research

Contents

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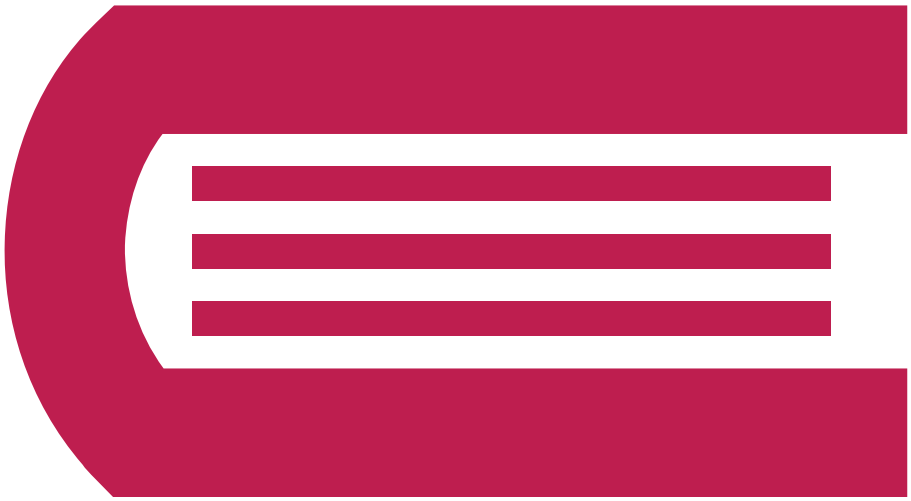
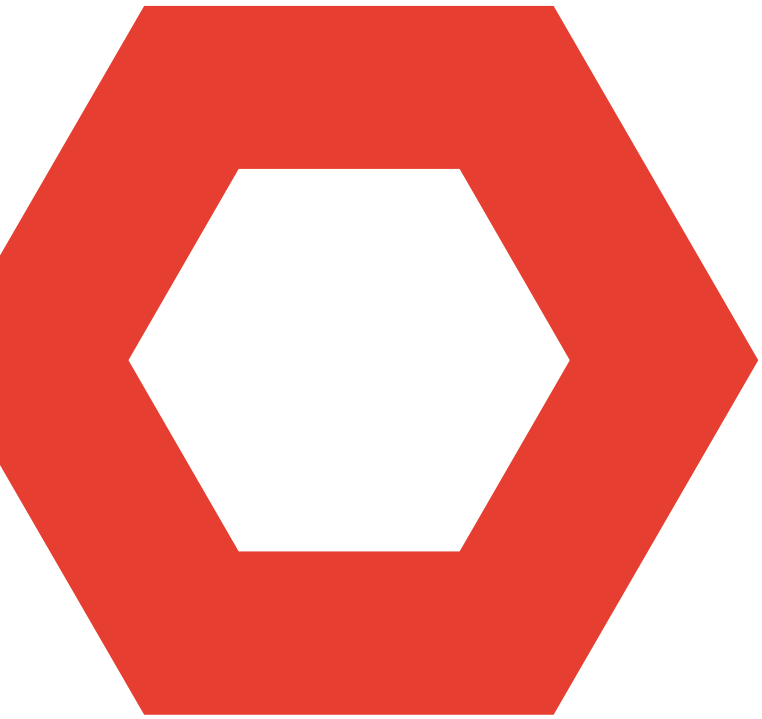


Figures and tables



Introduction

Australian norms are provided as a point of comparison between students' estimated achievement on the PAT Reading scale and the typical achievement of students at each year level nationally. Comparisons between a student's scale score achievement and the Australian norm for a given year level can be expressed as a percentile rank. The percentile rank of a student's scale score indicates the proportion of the comparison group who achieved less than that scale score. Conversion tables outlining the corresponding raw scores, scale scores, and percentile ranks can be found on page 9.

Norm comparisons provide contextual information about a student's relative achievement, but they do not indicate the skills or knowledge that can be expected of the student according to their achievement on their PAT Reading test, nor can they be used to infer progress over time. For these, the student's estimated scale score and the described achievement bands are the best measure.

A note on terminology

This document refers to the current norms as the '2022 update', reflecting their year of publication. The data that comprise the norms were collected in 2019 and represent student achievement at that time.

The previous norms – the '2016 update' – comprised data collected in 2012–2014.

Australian norms

PAT Reading norms are established using a de-identified sample of Australian students and are updated periodically. The 2022 norm update sample is drawn from *PAT Reading 5th Edition* tests completed in ACER's Online Assessment and Reporting System (OARS) during October and November 2019.

The sample is limited to students tested around the same time of year so that comparisons can be made to students at approximately the same stage of their schooling. Students in a particular year level completing a test at the beginning of the year would likely perform differently from students at the same level tested at the end of the year.

At each level, year 1–10, only cases where the student's age fell within an appropriate range were retained. The age ranges were drawn from Australian Bureau of Statistics (ABS) data on the distribution of students by age and year level. This measure was taken to minimise erroneous or unusual year level information in the OARS database and with the assumption that students described as being in a particular year level at the time of testing would fall within the typical age range.

The sample was further restricted to schools that could be matched to the ACER 2019 School Sampling Frame, which provides population-level information about schools and students in Australia.

Change in methodology

The sampling methodology used to estimate the 2022 norms differs in one important respect from the 2016 update. The 2022 update includes results data from the full range of *PAT Reading 5th Edition* tests, whereas the previous norm sample included only results from the test that aligned with each student's year level. For example, the 2016 update year 6 norms represented national achievement on Test 6 only, while the 2022 norm sample does not exclude results based on test level.

This change in methodology reflects an increase in schools administering tests of varying difficulty to students according to their abilities, rather than the same test to all students in a cohort. This method of assessment matches ACER's Progressive Achievement approach and the understanding that assessment is more accurate and valuable when it is well-matched to students' abilities.

2022 norm sample

The final numbers of schools and students comprising the 2022 norm sample are shown in Table 1. The total number of students' results used to calculate the norms are presented by state/territory in Table 2 (page 3), and by sector in Table 3 (page 3).

Table 1 *Schools and students by year level*

Year level	No. of schools	Number of students
Year 1	1687	55 182
Year 2	2814	110 375
Year 3	2935	117 221
Year 4	2978	121 414
Year 5	2978	120 425
Year 6	2983	125 449
Year 7	897	70 306
Year 8	832	62 994
Year 9	752	50 781
Year 10	538	29 785

Table 2 *Students by year level and state/territory*

Year level	ACT	NSW	NT	Qld	SA	Tas	Vic	WA
Year 1	546	10 436	2022	7170	2674	2659	22 933	6742
Year 2	1923	29 395	2286	15 729	5561	4947	37 748	12 786
Year 3	2410	31 803	2272	17 285	3945	5269	40 137	14 100
Year 4	2505	33 038	2283	18 232	4416	5376	41 224	14 340
Year 5	2407	32 332	2298	18 816	4214	5600	40 894	13 864
Year 6	2663	34 165	2457	18 837	3930	5260	43 032	15 105
Year 7	2187	13 171	1738	15 468	3613	4403	25 207	4519
Year 8	1805	11 447	1610	14 144	3171	4294	22 721	3802
Year 9	1175	10 021	1350	10 240	2600	3571	18 622	3202
Year 10	1288	6842	1157	3515	1036	2448	12 070	1429

Table 3 *Students by year level and school sector*

Year level	Government	Catholic	Independent
Year 1	31 468	16 857	6857
Year 2	58 960	37 378	14 037
Year 3	62 088	39 183	15 950
Year 4	63 487	40 235	17 692
Year 5	63 116	38 918	18 391
Year 6	62 530	41 920	20 999
Year 7	30 979	24 193	15 134
Year 8	27 620	21 154	14 220
Year 9	21 118	18 614	11 049
Year 10	12 669	11 038	6078

The 2022 update sample size compares well with the size of the 2016 update. Due to smaller annual testing numbers, data for the 2016 update were drawn from across three calendar years, 2012 to 2014. Increased use of PAT Reading meant that results data from a single year, 2019, were sufficient to estimate year level norms for the 2022 update. 2019 was selected as the last stable year of data collection before the COVID-19 global pandemic, which affected schools and students across Australia in 2020 and 2021.

The data for this study remain 'self-selecting'. This means that the sample was not selected using probability sampling methods but rather used all appropriate data gathered from *PAT Reading 5th Edition* tests in OARS. Therefore, the data are not necessarily nationally representative.

For this reason, a weighting adjustment was applied for analysis so that students representing different components of the national population – for example, states, sectors, locations, and socio-economic backgrounds – contribute to the norm outcomes in proportion to their representation in the population.

Weighting

The underlying assumption behind weighting is that the participating student is representative of the group of students that the student is being weighted to – the so-called 'weighting class'. This assumption is more likely to hold when the weighting class is confined to a relatively small part of the population. Rather than simply considering year 2 students in the OARS database from Victoria as representative of all Victorian year 2 students and giving each participant the same weight reflecting the proportion of that group in the data, it is better to consider those students as representatives of smaller subgroups within the larger Victorian year 2 group – for example, students from schools in similar locations or socio-economic areas, or students from the same school sector.

At the same time, it is important that weighting classes are represented by a good number of schools and students. Too few participating schools or students representing a weighting class may lead to individual students being assigned relatively large weights. This is undesirable as these students may have an overly strong influence on outcomes.

The formation of weighting classes is, therefore, an exercise in finding well-defined, smaller subgroups within the population within which a good number of schools and students have participated. For each year level, the available student data were distributed across subpopulations defined by the following criteria:

Jurisdiction	Six states
	Two territories
Management	Government
	Non-government
Sector	Government
	Catholic
	Independent
School location	Metropolitan
	Non-metropolitan
School socio-economic status	Five quintiles based on the postcode-derived Education and Occupation Index, one of the ABS Socio-Economic Index for Areas (SEIFA) indices.[1]

The population reference used was the ACER Sampling Frame, and the maximum possible number of weighting classes across the population was 240.

Weight classes were not maintained if fewer than five schools were present in the weighting class. Where this standard was not met, weight classes with small numbers of schools were collapsed to form a larger class, usually working backwards through the components outlined above.

Following the initial formation of weighting classes, the distribution of data within weight classes by student gender was examined. A weight adjustment was made so that the weighted number of boys and girls in the weighting class matched the population for that class. In some cases, due to the presence of single-gender schools, the number of schools in the newly formed weighting classes was reduced to below five after taking the gender of students into account. In these cases, another round of collapsing was undertaken so that a minimum of five schools per weighting class was maintained.

While the weighting was quite successful in aligning the data from students participating in PAT assessments available from the OARS database to the population distributions, weighting can only attempt to ameliorate the potential biases arising from the differences between the distributions of students in the OARS database and the general population. The assumption that students who have completed PAT tests and were used for weighting are fully representative of the subpopulation from the weighting class cannot be verified.

[1] Australian Bureau of Statistics (2016), Table 1 Postal Area (POA) SEIFA Summary, 2016, 2033.0.55.001 Socio-Economic Indexes for Australia (SEIFA), 2016, accessed January 2020

Table 4 shows the weighted distribution of students comprising the norm sample by state/territory and sector compared with the population distribution calculated from the ABS Schools Data, Table 42b Number of Full-time and Part-time Students.[2]

Table 4 *Weighted distribution of students versus population distribution*

		Government		Catholic		Independent	
	State	Weighted sample %	Population %	Weighted sample %	Population %	Weighted sample %	Population %
Year 1	ACT	1.4	1.8	2.8	2.1	3.1	2.0
	NSW	31.5	31.3	32.5	32.7	29.7	30.3
	NT	1.2	1.2	0.7	0.5	1.2	1.1
	QLD	20.9	21.1	19.5	19.6	22.9	21.0
	SA	5.9	6.2	5.9	5.9	10.5	9.6
	TAS	2.1	2.1	1.8	1.8	1.4	1.6
	VIC	25.4	24.9	28.0	28.3	21.6	23.9
	WA	11.6	11.4	8.8	9.0	9.7	10.5
Year 2	ACT	1.7	1.7	2.8	2.2	1.1	2.1
	NSW	31.4	31.3	32.4	32.6	30.3	30.4
	NT	1.2	1.3	0.9	0.6	1.1	1.1
	QLD	21.2	21.4	19.9	20.0	22.8	21.0
	SA	6.2	6.4	5.7	5.8	9.9	9.4
	TAS	2.2	2.1	1.9	1.9	1.6	1.7
	VIC	24.7	24.5	27.5	27.8	22.5	23.5
	WA	11.4	11.3	9.0	9.1	10.7	10.8
Year 3	ACT	1.7	1.7	2.8	2.2	1.1	2.1
	NSW	31.4	31.3	32.4	32.6	30.3	30.4
	NT	1.2	1.3	0.9	0.6	1.1	1.1
	QLD	21.2	21.4	19.9	20.0	22.8	21.0
	SA	6.2	6.4	5.7	5.8	9.9	9.4
	TAS	2.2	2.1	1.9	1.9	1.6	1.7
	VIC	24.7	24.5	27.5	27.8	22.5	23.5
	WA	11.4	11.3	9.0	9.1	10.7	10.8
Year 4	ACT	1.8	1.7	2.2	2.5	1.7	2.0
	NSW	32.8	30.7	28.1	31.9	26.3	30.2
	NT	1.3	1.2	0.9	0.6	0.7	1.1
	QLD	23.7	22.4	17.7	20.3	20.3	21.8
	SA	0.0	6.3	16.7	5.6	21.4	9.1
	TAS	2.3	2.2	1.8	2.0	1.4	1.7
	VIC	26.1	24.2	24.5	27.8	19.2	23.2
	WA	12.0	11.2	8.2	9.3	9.1	10.8
Year 5	ACT	1.7	1.6	2.3	2.5	1.5	1.8
	NSW	33.0	30.8	28.6	31.9	25.9	30.5
	NT	1.2	1.2	0.9	0.6	0.7	1.1
	QLD	23.8	22.4	15.6	19.9	22.0	21.5
	SA	0.0	6.5	17.2	5.5	20.0	8.7
	TAS	2.5	2.3	1.8	2.0	1.5	1.8
	VIC	25.8	24.0	25.1	28.1	19.6	23.7
	WA	12.0	11.2	8.5	9.4	8.9	10.8
Year 6	ACT	1.6	1.5	2.2	2.4	1.4	1.7
	NSW	32.9	30.9	28.8	32.0	25.6	29.8
	NT	1.3	1.2	0.6	0.6	0.9	1.0
	QLD	23.9	22.5	14.5	19.6	22.7	21.4
	SA	0.0	6.5	17.8	5.8	18.9	8.9
	TAS	2.4	2.2	1.9	2.0	1.5	1.9
	VIC	25.8	24.0	25.6	28.3	19.8	24.0
	WA	12.1	11.3	8.6	9.3	9.2	11.3

[2] Australian Bureau of Statistics (2019) Table 42b. Number of Full-time and Part-time Students by Affiliation, Sex, Grade, Age and Indigenous Status, States and Territories, 2006-2020 [data set], Schools, 2020, accessed July 2021.

Table 4 *Weighted distribution of students versus population distribution (continued)*

		Government		Catholic		Independent	
	State	Weighted sample %	Population %	Weighted sample %	Population %	Weighted sample %	Population %
Year 7	ACT	1.8	1.6	2.4	2.6	1.4	1.7
	NSW	32.3	30.2	31.5	34.1	25.7	28.5
	NT	1.2	1.1	1.0	0.8	0.5	1.0
	QLD	24.8	23.1	14.8	19.3	22.7	21.9
	SA	0.0	6.8	15.7	5.5	13.8	7.3
	TAS	2.4	2.3	2.1	2.2	1.4	1.7
	VIC	25.4	23.7	23.6	26.1	23.9	26.2
	WA	12.1	11.2	8.8	9.5	10.4	11.7
Year 8	ACT	1.8	1.6	2.5	2.5	1.3	1.7
	NSW	32.2	29.9	31.5	34.1	25.7	28.5
	NT	1.2	1.1	0.9	0.7	0.6	1.1
	QLD	25.2	23.5	14.0	19.3	22.9	21.4
	SA	0.0	6.9	15.3	5.5	14.8	7.6
	TAS	2.5	2.3	2.1	2.1	1.5	1.8
	VIC	25.5	23.7	24.7	26.2	22.6	26.0
	WA	11.7	10.9	9.0	9.7	10.5	12.0
Year 9	ACT	1.7	1.6	2.7	2.5	1.1	1.7
	NSW	32.5	30.3	32.0	34.2	25.2	28.3
	NT	1.1	1.0	1.0	0.7	0.6	1.0
	QLD	24.9	23.3	13.9	19.5	23.7	21.8
	SA	0.0	6.7	15.0	5.6	14.7	7.6
	TAS	2.4	2.2	2.0	2.1	1.4	1.7
	VIC	25.7	23.9	24.9	26.0	22.6	26.2
	WA	11.7	10.9	8.5	9.5	10.6	11.7
Year 10	ACT	1.8	1.7	2.2	2.4	1.5	1.7
	NSW	32.6	30.3	34.1	34.3	23.3	28.2
	NT	1.6	1.1	0.3	0.6	0.1	0.9
	QLD	24.4	23.0	13.6	19.0	23.8	22.1
	SA	0.0	7.2	16.1	6.0	15.3	7.8
	TAS	2.4	2.2	2.5	2.2	1.2	1.7
	VIC	26.2	24.4	25.4	26.1	21.8	25.8
	WA	11.0	10.2	5.8	9.5	13.1	11.7

Student achievement

Results from *PAT Reading 5th Edition* tests administered to the norm samples of Australian students were used to ascertain the scale score averages and standard deviations of each year level and – assuming a normal distribution – to calculate the set of percentile ranks associated with achieved scale scores.

The percentile rank of a score is the percentage of students who achieve less than that score. For example, a student with a percentile rank of 75th compared to year 3 has a scale score that is higher than 75 per cent of Australian year 3 students.

Table 5 and Figure 1 (page 8) show the PAT Reading scale score values for given percentile ranks, as well as the standard deviation of achievement, at each year level of the 2022 norms. The 50th percentile represents the mean, or average, achievement of each norm group.

Table 5 *Student achievement by year level*

Percentile rank	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
95th	110.9	125.8	139.2	147.5	147.5	149.8	152.0	153.6	155.9	160.5
75th	95.1	111.2	123.7	131.8	134.7	137.4	139.4	141.2	143.9	148.7
50th (mean)	84.2	101.1	113.0	120.9	125.8	128.8	130.7	132.6	135.5	140.5
25th	73.2	91.0	102.3	110.0	116.9	120.1	121.9	124.0	127.2	132.2
5th	57.5	76.4	86.8	94.3	104.1	107.7	109.4	111.6	115.2	120.4
Standard deviation	16.3	15.0	15.9	16.2	13.2	12.8	13.0	12.8	12.4	12.2

Differences between 2016 and 2022 norms

Some differences in mean student achievement exist between the 2022 and 2016 PAT Reading norm updates. Overall, the 2022 means are slightly lower than the 2016 means at years 1 and 7–9 and are very similar at the other year levels.

The change in methodology described at the beginning of this document likely contributes in part to the differences in mean student achievement. A small percentage of students in lower year levels completed more difficult tests with the potential to obtain higher scores in 2019. Similarly, a small number of students at higher year levels completed easier tests than those targeted to their year levels. This means that students were able to access tests with content and difficulty more suited to their ability, providing a more accurate measure of their ability. Cases of these types were excluded by the methodology employed in the 2016 update, potentially limiting the range of achievement captured in those norms.

While national norms tend to remain relatively stable over time, it is relevant that each norm update comprises results from independent student populations: students who were in years 1–10 in 2012, 2013 and/or 2014, and students who were in years 1–10 in 2019. Additionally, as the OARS data is a self-selected sample, the means may still not fully represent the Australian population even after linking to the Australian sampling frame and weighting. The data used for the 2016 norm update came from PAT tests completed in 2012, 2013 and 2014. The data collected in 2019 for the 2022 update may represent quite a different group of client systems, schools, and students.

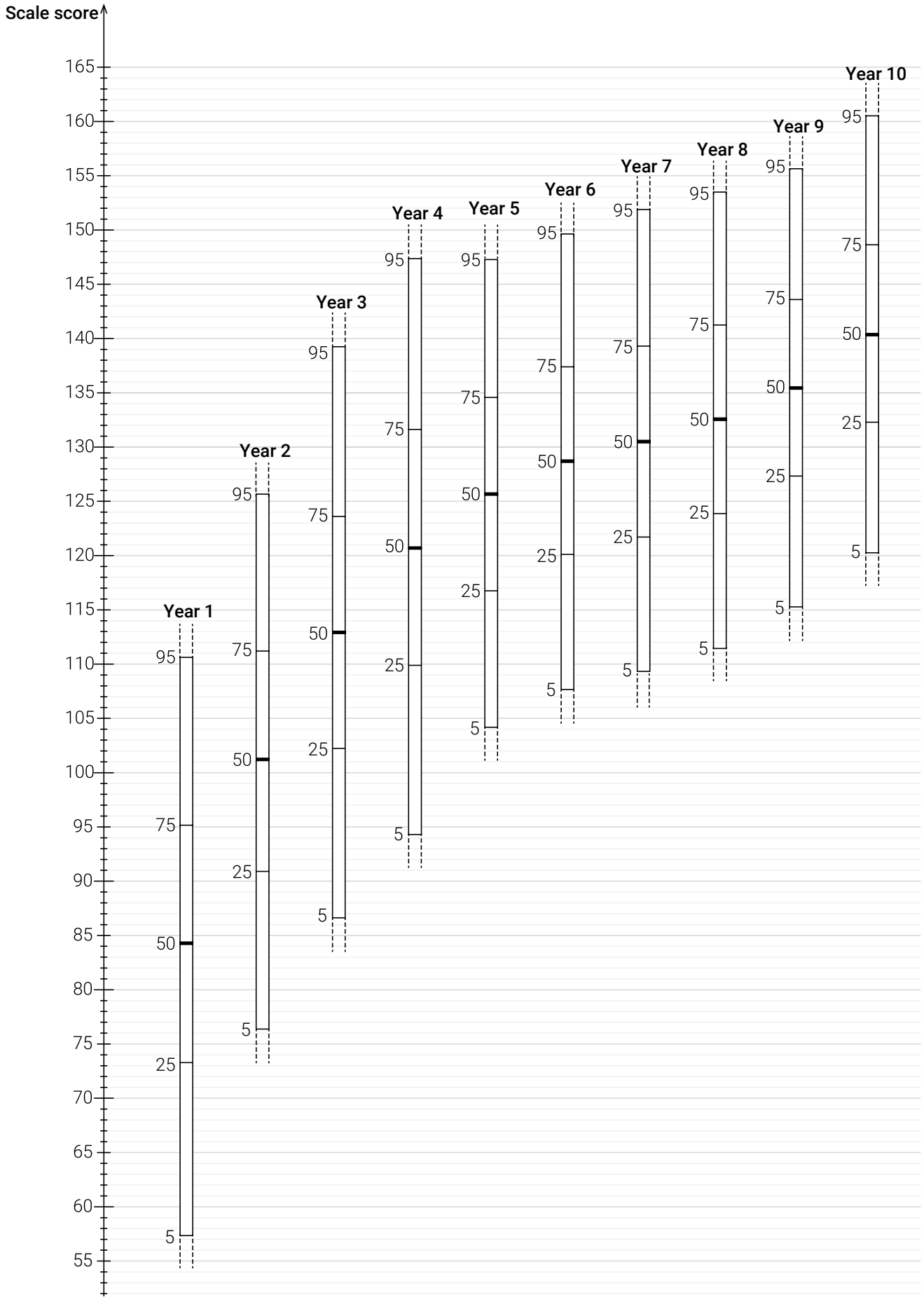


Figure 1 *Student achievement by year level*

Score conversion tables

A student's 'raw' score – most commonly, the total count of correct responses on a test – can be converted to an estimated score on the common PAT Reading scale by accounting for the different mean difficulty of each test. While raw scores on two different tests are not equivalent, scale scores reflect estimated overall achievement and can be directly compared between students and over time, regardless of students' year levels or the tests they have completed.

The following tables show the conversions between raw scores, scale scores (with measurement error margins), and percentile ranks for each *PAT Reading 5th Edition* test. These score conversions are calculated automatically within the online reports. Score conversions are not published for *PAT Reading Adaptive*, due to the large number of test pathways.

PAT Reading 5th Edition Test 1

Raw score	Scale score	Error (+/-)	Year 1 percentile rank	Year 2 percentile rank
14	102.7	>9.2	87	54
13	90.6	9.2	65	24
12	84.2	7.5	50	13
11	79.6	6.7	38	7
10	75.7	6.2	30	4
9	72.3	5.9	23	2
8	69.0	5.8	17	
7	65.9	5.8	13	
6	62.7	5.8	9	
5	59.4	6.0	6	
4	55.9	6.3	4	1
3	51.8	6.5	2	
2	46.9	7.7		
1	40.1	9.5	1	
0	27.3	>9.5		

PAT Reading 5th Edition Test 2

Raw score	Scale score	Error (+/-)	Year 1 percentile rank	Year 2 percentile rank	Year 3 percentile rank
29	143.4	>8.7	99	99	97
28	131.8	8.7		97	88
27	126.1	6.9		95	79
26	122.2	6.0		91	71
25	119.0	5.5	98	88	64
24	116.4	5.1	97	84	58
23	114.0	4.8	96	80	52
22	111.9	4.6	95	76	47
21	109.9	4.5	94	72	42
20	108.0	4.3	92	67	37
19	106.2	4.3	91	63	33
18	104.5	4.2	89	58	29
17	102.8	4.2	87	54	26
16	101.1	4.1	85	50	22
15	99.4	4.1	82	45	19
14	97.7	4.2	79	41	16
13	96.0	4.2	76	36	14
12	94.3	4.2	73	32	11
11	92.5	4.3	69	28	9
10	90.7	4.4	65	24	8
9	88.8	4.5	61	20	6
8	86.8	4.6	56	17	4
7	84.7	4.7	51	13	3
6	82.4	5.0	45	10	2
5	79.9	5.2	39	7	1
4	77.0	5.6	32	5	
3	73.7	6.2	25	3	
2	69.5	7.1	18		
1	63.5	8.9	10	1	
0	51.6	>8.9	2		

PAT Reading 5th Edition Test 3

Raw score	Scale score	Error (+/-)	Year 2 percentile rank	Year 3 percentile rank	Year 4 percentile rank
32	150.6	>8.7	99	99	96
31	137.5	8.7		93	84
30	131.1	6.9	97	87	73
29	126.7	5.9	95	80	63
28	123.3	5.3	93	74	55
27	120.4	4.9	90	67	48
26	117.9	4.7	86	62	42
25	115.7	4.4	83	56	37
24	113.6	4.3	79	51	32
23	111.7	4.1	75	46	28
22	109.9	4.0	72	42	24
21	108.2	3.9	68	38	21
20	106.5	3.9	64	34	18
19	104.9	3.8	59	30	16
18	103.3	3.8	55	27	13
17	101.7	3.8	51	23	11
16	100.1	3.8	47	20	9
15	98.6	3.8	43	18	8
14	97.0	3.8	39	15	6
13	95.4	3.9	35	13	5
12	93.7	3.9	31	11	4
11	92.0	4.0	27	9	3
10	90.2	4.1	23	7	2
9	88.4	4.2	19	6	
8	86.4	4.4	16	4	1
7	84.2	4.6	13	3	
6	81.9	4.8	10	2	
5	79.2	5.1	7	1	
4	76.2	5.5	4		
3	72.5	6.2	2		
2	67.8	7.2	1		
1	61.0	9.1			
0	47.3	>9.1			

PAT Reading 5th Edition Test 4

Raw score	Scale score	Error (+/-)	Year 3 percentile rank	Year 4 percentile rank	Year 5 percentile rank
29	164.3	>8.8	99	99	99
28	150.3	8.8		96	96
27	143.5	7.1	97	91	90
26	138.6	6.2	94	86	83
25	134.8	5.6	91	80	75
24	131.6	5.2	87	74	66
23	128.7	5.0	83	68	58
22	126.1	4.8	79	62	50
21	123.6	4.6	74	56	43
20	121.3	4.5	69	50	36
19	119.1	4.4	64	45	30
18	117.0	4.4	59	40	25
17	114.9	4.4	54	35	20
16	112.9	4.3	49	30	16
15	110.8	4.3	44	26	12
14	108.7	4.4	39	22	9
13	106.7	4.4	34	18	7
12	104.5	4.5	29	15	5
11	102.3	4.5	25	12	3
10	100.1	4.6	20	9	2
9	97.7	4.8	16	7	1
8	95.2	4.9	13	5	
7	92.5	5.1	9	3	
6	89.6	5.3	7	2	
5	86.4	5.6	4	1	
4	82.8	6.0	2		
3	78.6	6.6	1		
2	73.3	7.5			
1	66.0	9.3			
0	51.6	>9.3			

PAT Reading 5th Edition Test 5

Raw score	Scale score	Error (+/-)	Year 4 percentile rank	Year 5 percentile rank	Year 6 percentile rank
29	170.6	>9.1	99	99	99
28	157.0	9.1	98		98
27	150.1	7.3	96	96	95
26	145.3	6.4	93	92	90
25	141.4	5.8	89	88	83
24	138.1	5.4	85	82	76
23	135.2	5.1	81	76	69
22	132.6	4.9	76	69	61
21	130.1	4.7	71	62	54
20	127.8	4.6	66	55	47
19	125.7	4.5	61	49	40
18	123.5	4.4	56	42	34
17	121.5	4.4	51	37	28
16	119.5	4.3	46	31	23
15	117.5	4.3	41	26	18
14	115.5	4.3	36	21	14
13	113.6	4.3	32	17	11
12	111.6	4.4	28	14	8
11	109.5	4.4	23	10	6
10	107.4	4.5	20	8	4
9	105.3	4.6	16	5	3
8	103.0	4.7	13	4	2
7	100.6	4.9	10	2	1
6	98.0	5.1	7	1	
5	95.1	5.4	5		
4	91.8	5.7	3		
3	88.0	6.3	2		
2	83.3	7.2	1		
1	76.5	9.0			
0	63.1	>9.0			

PAT Reading 5th Edition Test 6

Raw score	Scale score	Error (+/-)	Year 5 percentile rank	Year 6 percentile rank	Year 7 percentile rank
34	174.8	>8.7	99	99	99
33	162.0	8.7			
32	155.8	6.9	98	98	97
31	151.4	6.0	97	96	94
30	148.0	5.4	95	93	90
29	145.1	5.0	92	89	86
28	142.6	4.8	89	86	82
27	140.3	4.5	86	81	77
26	138.2	4.4	82	76	71
25	136.3	4.2	78	72	66
24	134.5	4.1	74	67	61
23	132.7	4.1	69	62	56
22	131.0	4.0	65	56	50
21	129.4	3.9	60	51	46
20	127.8	3.9	55	47	41
19	126.2	3.9	51	42	36
18	124.6	3.9	46	37	31
17	123.1	3.9	41	32	27
16	121.5	3.9	37	28	23
15	119.9	3.9	32	24	20
14	118.3	3.9	28	20	16
13	116.7	3.9	24	17	14
12	115.1	4.0	20	14	11
11	113.4	4.1	17	11	9
10	111.6	4.2	14	8	7
9	109.7	4.3	11	6	5
8	107.8	4.4	8	5	3
7	105.6	4.6	6	3	2
6	103.3	4.8	4	2	
5	100.8	5.1	2		
4	97.9	5.5			
3	94.4	6.1		1	1
2	89.9	7.0	1		
1	83.6	8.8			
0	70.7	>8.8			

PAT Reading 5th Edition Test 7

Raw score	Scale score	Error (+/-)	Year 6 percentile rank	Year 7 percentile rank	Year 8 percentile rank
35	175.5	>8.7	99	99	99
34	162.7	8.7			
33	156.5	6.9	98	97	96
32	152.1	6.0	96	95	93
31	148.7	5.4	94	91	89
30	145.8	5.0	90	87	84
29	143.3	4.7	87	83	79
28	141.1	4.5	83	78	74
27	139.1	4.3	79	74	69
26	137.2	4.2	74	69	64
25	135.4	4.1	69	64	58
24	133.7	4.0	65	59	53
23	132.0	3.9	59	54	48
22	130.4	3.9	55	49	43
21	129.0	3.8	50	44	38
20	127.3	3.8	45	39	33
19	125.8	3.8	40	35	29
18	124.3	3.8	36	31	25
17	122.8	3.8	32	27	22
16	121.3	3.8	27	23	18
15	119.8	3.8	24	20	15
14	118.3	3.8	20	16	13
13	116.7	3.9	17	14	10
12	115.1	4.0	14	11	8
11	113.4	4.0	11	9	6
10	111.7	4.1	9	7	5
9	109.8	4.2	6	5	3
8	107.9	4.4	5	3	2
7	105.8	4.6	3	2	1
6	103.5	4.8	2	1	
5	101.0	5.1	1		
4	98.0	5.5			
3	94.6	6.1			
2	90.1	7.0			
1	83.7	8.8			
0	70.8	>8.8			

PAT Reading 5th Edition Test 8

Raw score	Scale score	Error (+/-)	Year 7 percentile rank	Year 8 percentile rank	Year 9 percentile rank
34	184.4	>8.6	99	99	99
33	170.6	8.6			
32	163.9	6.8			98
31	159.3	5.9	98	98	97
30	155.8	5.3	97	96	94
29	152.8	4.9	95	94	91
28	150.2	4.6	93	91	88
27	148.0	4.4	90	88	84
26	145.9	4.2	87	85	79
25	143.9	4.0	84	81	75
24	142.1	3.9	81	77	70
23	140.4	3.8	77	72	65
22	138.7	3.8	73	68	60
21	137.1	3.7	68	63	55
20	135.6	3.7	64	59	50
19	134.0	3.7	60	54	45
18	132.5	3.6	55	49	40
17	131.0	3.6	50	44	35
16	129.5	3.6	46	40	31
15	128.0	3.7	41	35	27
14	126.4	3.7	37	31	22
13	124.9	3.7	32	27	19
12	123.2	3.8	28	23	15
11	121.6	3.9	24	19	12
10	119.8	3.9	20	15	10
9	118.0	4.1	16	12	7
8	116.1	4.2	13	9	5
7	114.0	4.4	9	7	4
6	111.7	4.6	7	5	2
5	109.1	4.9	4	3	1
4	106.1	5.3	2	1	
3	102.5	5.9	1		
2	97.9	6.8			
1	91.2	8.6			
0	77.4	>8.6			

PAT Reading 5th Edition Test 9

Raw score	Scale score	Error (+/-)	Year 8 percentile rank	Year 9 percentile rank	Year 10 percentile rank
35	192.9	>8.6			
34	179.0	8.6		99	99
33	172.3	6.8	99		
32	167.7	5.9			98
31	164.2	5.3		98	97
30	161.2	4.9	98		95
29	158.6	4.6	97	96	93
28	156.3	4.4	96	95	90
27	154.2	4.2	95	93	86
26	152.3	4.0	93	91	83
25	150.5	3.9	91	88	79
24	148.8	3.8	89	85	75
23	147.1	3.8	87	82	70
22	145.5	3.7	84	79	65
21	144.0	3.7	81	75	61
20	142.4	3.6	77	71	56
19	140.9	3.6	74	66	51
18	139.5	3.6	70	62	46
17	138.0	3.6	66	57	42
16	136.5	3.6	61	53	37
15	135.0	3.6	57	48	32
14	133.5	3.7	52	43	28
13	131.9	3.7	47	38	24
12	130.3	3.8	42	33	20
11	128.7	3.8	37	29	16
10	126.9	3.9	32	24	13
9	125.1	4.0	27	19	10
8	123.2	4.2	23	15	7
7	121.1	4.4	18	12	5
6	118.8	4.6	13	8	3
5	116.3	4.9	10	5	2
4	113.3	5.3	6	3	
3	109.7	5.9	3		
2	105.2	6.8		1	1
1	98.5	8.6	1		
0	84.7	>8.6			

PAT Reading 5th Edition Test 10

Raw score	Scale score	Error (+/-)	Year 9 percentile rank	Year 10 percentile rank
35	197.5	>8.6	99	99
34	183.7	8.6		
33	177.0	6.8		
32	172.5	5.8		
31	169.0	5.2		
30	166.0	4.8		98
29	163.5	4.5	98	97
28	161.2	4.3		95
27	159.2	4.1	97	93
26	157.2	4.0	96	91
25	155.5	3.9	94	89
24	153.8	3.8	93	86
23	152.1	3.7	90	82
22	150.6	3.7	88	79
21	149.0	3.6	86	75
20	147.5	3.6	83	71
19	146.0	3.6	80	67
18	144.6	3.6	76	63
17	143.1	3.6	72	58
16	141.6	3.6	68	53
15	140.1	3.6	64	48
14	138.6	3.7	59	43
13	137.1	3.7	55	39
12	135.5	3.8	49	34
11	133.8	3.8	44	29
10	132.1	3.9	39	24
9	130.2	4.1	33	20
8	128.3	4.2	27	15
7	126.2	4.4	22	12
6	123.8	4.6	17	8
5	121.2	4.9	12	5
4	118.2	5.4	8	3
3	114.6	6.0	4	1
2	109.9	6.9	1	
1	103.1	8.7		
0	89.1	>8.7		