

Te Tāhuhu o te Mātauranga Aotearoa

Annual Monitoring of Reading Recovery

The Data for 2011 **Megan Lee Ministry of Education**

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Executive Summary

This report presents data on state and state-integrated schools that offered Reading Recovery in 2011, and the students who received support from this intervention. The key findings were:

- The majority (82%) of students who exited Reading Recovery in 2011were successfully discontinued from the intervention (an increase from 78% in 2009 and 80% in 2010). A further 12% of students were referred on for specialist reading support (down slightly from 13% in 2009 and 2010), five per cent left their school before their lessons could be discontinued (down from seven per cent in 2009 and equal to five per cent in 2010), and one per cent were responding well but were unable to continue their lessons (down from two per cent in 2009 and 2010).
- The majority of successfully discontinued students (91%) were reading texts at, or above, the Turquoise level of Ready to Read (the New Zealand Curriculum Reading Standard for "After two years at school") when they exited Reading Recovery. The standard was designed to be used for all children after two years at school. The majority (76%) of successfully discontinued students had not yet completed two years of schooling when they exited Reading Recovery. These results should be interpreted with care as classroom teachers will use a range of evidence when making judgements about student achievement in relation to the Standards.
- Data collected from the Burt Word Reading Test and the Writing Vocabulary Task (Clay) provided
 additional evidence that on average, successfully discontinued students were reading and writing at the
 average level expected for their age group when they exited the intervention.
- Girls, NZ European/Pākehā and Asian students, and students from higher decile schools (deciles 8 to 10) were more likely to have successfully discontinued their series of lessons than boys, Māori and Pasifika students, and students from decile 1 to 3 schools. It is important to note, however, that many students (ie, more than 75%) in these latter groups did achieve the levels required to successfully discontinue their Reading Recovery lessons.
- Just under two-thirds (64%) of state and state-integrated schools with six-year-old students offered Reading Recovery in 2011 (slightly less than 66% in 2010). Three-quarters (75%) of the total six-year-old population in state and state-integrated schools attended schools where Reading Recovery was offered (same as 75% in 2010). The proportion of schools offering Reading Recovery and access to Reading Recovery at the student level has decreased slightly (by three per cent and four per cent respectively) over the last 10 years.
- Fourteen per cent (n=7,895) of students attending state and state-integrated schools entered Reading Recovery for the first time in 2011. In total there were 10,745 students involved with Reading Recovery during the year (includes students who were carried over from 2010 and who transferred from another school). Although the number of students in Reading Recovery was slightly lower than it was in 2010 (11,040 students), the proportion of six-year-olds entering the intervention remained consistent with data from previous years.

- Consistent with trends identified in previous years:
 - Reading Recovery was more likely to be implemented in higher decile schools than in lower decile schools. However lower decile schools that did offer Reading Recovery had proportionately more students enter the intervention than did higher decile schools.
 - Access to Reading Recovery was lowest in the Auckland region, where a large proportion of Māori and Pasifika learners are enrolled.
 - Māori and Pasifika students were less likely to attend schools where Reading Recovery was offered, compared with the total six-year-old population. However, Māori and Pasifika students from schools that did offer Reading Recovery were more likely than New Zealand European/Pākehā and Asian students to be involved in the intervention.

Introduction

Reading Recovery is an early literacy intervention that aims to reduce reading and writing delay by providing intensive, daily one-to-one literacy instruction to children who are falling behind¹ in reading and writing after one year at school.

Reading Recovery was developed by the late Dame Marie Clay, previously Professor of Education at the University of Auckland. The intervention was designed to achieve two outcomes:

- accelerate students' reading and writing achievement to the average level of their peers, so that they can learn effectively in the classroom without further additional support.
- 2. identify the small proportion of students who need ongoing and specialist literacy support.

All state and state-integrated schools can apply for funding from the Ministry of Education to help with the costs associated with the implementation of Reading Recovery.

Reading Recovery data has been monitored and reported on annually by the Ministry of Education since 1984. The purpose of the Annual Monitoring of Reading Recovery report is to provide information about access to the intervention (ie, schools that offered Reading Recovery) and to report on student outcomes and progress as a result of Reading Recovery.

¹ The proportion of children regarded as "falling behind" varies across schools. In some schools, children regarded as "falling behind" are those who, at the age of six, come into the bottom 5, 10 or 15 per cent of readers and writers in their peer group. In other schools, however, children in the bottom 20-25 per cent of readers and writers are seen to be "falling behind". There may be as many as 30 per cent of six-year-olds in a particular school in Reading Recovery, although this is rare.

Method

State and state-integrated schools that offered Reading Recovery during 2011 were required to submit two types of forms to the Ministry of Education: an end-of-year school report and individual student reports.

One end-of-year school report was submitted for each school that offered Reading Recovery. This form provided school-level information such as the number of students involved in Reading Recovery and the number of hours and teachers allocated to Reading Recovery for the year. The Ministry of Education received 1,232 reports from schools that offered Reading Recovery in 2011. A further 33 schools were identified as having offered the Reading Recovery as a result of student reports being submitted from these schools.

Individual student reports were submitted for each child involved in Reading Recovery. These forms gathered student-level information such as the demographic/background characteristics of the student, the amount of time spent in Reading Recovery, outcome from Reading Recovery and entry and exit scores on three assessment tools. In their end-of-year reports, schools reported there were 10,768 students involved in Reading Recovery during 2011. Individual student reports were received for 10,745 of these students.

Throughout the year, Reading Recovery teachers' recorded student-level information on an electronic data collection system as students entered and exited the intervention. At the end of the year, when all individual student reports had been entered by the teacher(s), the principal of each Reading Recovery school was asked to confirm this information, as well as complete the end-of-year school report. Schools were asked to submit their returns by December 2011. Siliconcoach Limited, the company that administers the Reading Recovery database, assisted teachers and schools with their data submissions where necessary.

Section 1: Schools and Students involved in Reading Recovery

In 2011, 1,452 teachers were involved in delivering 484,222 hours of Reading Recovery to 10,768 students. This equates to an average of 45.0 hours of teaching time per student.

As shown in Table 1, the number of hours allocated to Reading Recovery was higher in 2011 than it had been at any point over the last ten years. The number of students in Reading Recovery decreased in 2011, following two years (2009 and 2010) of relatively high student numbers in the intervention.

As a result of the increase in hours allocated to Reading Recovery, and the decrease in the number of students involved in Reading Recovery, the average teaching time per student in 2011 was higher (45 hours) than it had been in any of the 10 years prior.

Table 1: Reading Recovery resources for the past ten years (2002–2011)

Year	Number of Reading Recovery teachers	Total Reading Recovery hours	Number of students in Reading Recovery	Average teaching time (hours) per student
2002	1,499	455,630	11,565	39.4
2003	1,478	435,700	10,875	40.1
2004	1,419	407,374	11,058	36.8
2005	1,386	401,624	11,054	36.3
2006	1,396	425,907	10,757	39.6
2007	1,456	446,804	10,777	41.5
2008	1,437	468,682	10,774	43.5
2009	1,433	480,142	11,085	43.3
2010	1,450	482,148	11,040	43.7
2011	1,452	484,222	10,768	45.0

Schools involved in Reading Recovery nationally and regionally

In 2011, just under two-thirds (64%) of state and state-integrated schools with six-year-old students offered Reading Recovery (Table 2). Over the past ten years, the proportion of schools that offered Reading Recovery has been within the range 65% to 68%.

Consistent with figures from 2010 (in brackets on Table 2), the proportion of schools that offered Reading Recovery in 2011 was *highest* in the Nelson (92%), Tasman (86%) and Wellington (80%) regions and *lowest* in the Northland (50%), Manawatu-Whanganui (53%), West Coast (53%) and Gisborne (52%) regions.

Three-quarters (75%) of the total six-year-old population in state and state-integrated schools attended schools where Reading Recovery was offered. Over the past 10 years, access to Reading Recovery at the student level has remained within the range 75% to 78%. While these figures provide a basic measure of access to Reading Recovery, it should be noted that the proportion of students who are offered the intervention within these schools varies.

Compared with 2010 figures, access to Reading Recovery for six-year-old students *increased* in the Gisborne region (88%, up from 79% in 2010). In other regions, there were only slight variations in access to Reading Recovery between 2010 and 2011.

The regions with the fewest schools with six-year-old students (Tasman, Nelson and Marlborough) had the *highest* level of access to Reading Recovery (between 94% and 97%). Conversely, the Auckland region which has the highest number of schools with six-year-old students had the *lowest* level of access (61%).

Table 2: Schools with Reading Recovery in 2011, by region

	Schools that offered Reading Recovery		Total schools with six- year-olds ¹		Access to Reading Recovery ²			
Local Body (Region)	N	6-year- olds on roll	N	6-year- olds on roll	% of so	chools (2010)	% of 6-y 2011	ear-olds (2010)
Northland Region	62	1,693	124	2,301	50.0	(52.5)	73.6	(75.5)
Auckland Region	218	11,973	371	19,521	58.8	(59.3)	61.3	(61.1)
Waikato Region	160	4,636	253	5,843	63.2	(66.8)	79.3	(79.8)
Bay of Plenty Region	74	3,232	127	4,012	58.3	(59.7)	80.6	(77.9)
Gisborne Region	24	665	46	757	52.2	(54.3)	87.8	(78.6)
Hawkes Bay Region	56	1,695	97	2,215	57.7	(62.4)	76.5	(79.5)
Taranaki Region	56	1,323	77	1,523	72.7	(69.2)	86.9	(82.9)
Manawatu-Whanganui Region	86	2,108	161	2,958	53.4	(52.5)	71.3	(69.2)
Wellington Region	149	5,222	187	5,998	79.7	(82.5)	87.1	(88.0)
Tasman Region	24	609	28	649	85.7	(85.7)	93.8	(94.0)
Nelson Region	12	515	13	531	92.3	(84.6)	97.0	(94.6)
Marlborough Region	21	431	27	459	77.8	(8.08)	93.9	(94.9)
West Coast Region	17	294	32	351	53.1	(56.3)	83.8	(85.1)
Canterbury Region ³	182	5,638	242	6,394	75.2	(77.1)	88.2	(88.6)
Otago Region	78	1,821	117	2,305	66.7	(65.3)	79.0	(80.7)
Southland Region	46	1,091	72	1,306	63.9	(68.1)	83.5	(87.0)
Total	1,265	42,946	1,974	57,123	64.1	(65.6)	75.2	(75.3)

¹ Source: Education Information and Analysis Division, Ministry of Education, E4/2:Annual Return of Primary Pupils as at 1 July 2011.

² Please note that care should be taken when interpreting results from regions with a low number (i.e. less than n=30) of schools with six-year-old students.

 $^{3\,}$ $\,$ One school from the Chatham Islands is included in the Canterbury region.

Māori students access to Reading Recovery — nationally and regionally

In 2011, Reading Recovery was offered in 67% of state and state-integrated schools with six-year-old Māori students (Table 3). This was slightly lower than the proportion of schools with six-year-old Māori students that offered Reading Recovery in the five years prior (68% to 70% in the 2006 to 2010 period). A comparison of figures in Table 2 and Table 3 shows that Reading Recovery was slightly more likely to be offered in schools with six-year-old Māori students (67%) than it was in schools with six-year-olds in general (64%).

Access to Reading Recovery at the *individual* level however, was lower for Māori six-year-olds than it was for six-year-olds in the general population. That is, fewer Māori six-year-olds (70%) attended schools where Reading Recovery was offered, compared with the total six-year-old population (75%). This ongoing trend suggests that Reading Recovery is not being offered in some schools with high numbers of Māori students. Access to Reading Recovery for Māori students has remained within the range 69% to 71% since 2006.

Access to Reading Recovery for Māori students was *lowest* in the Auckland region (56%, up slightly from 54% in 2010). Access to Reading Recovery was *highest* in those regions with the smallest number of schools with Māori students (Tasman, Nelson and West Coast and Marlborough regions; all 98% or higher). Access for Māori students *increased* in the Gisborne region (84%, up from 71% in 2010) and Otago region (85%, up from 80% in 2010) and *decreased* in the Hawkes Bay region (74%, down from 81% in 2010).

Table 3: Schools with Reading Recovery in 2011, by region – Māori students

	Schools with six-year- old Māori students that offered Reading Recovery		Total schools with six- year-old Māori students ¹		Access to Reading Recovery ²			
		6-year-olds		6-year-olds		chools		ear-olds
Local Body (Region)	N	on roll	N	on roll	2011	(2010)	2011	(2010)
Northland Region	61	770	121	1,219	50.4	(53.8)	63.2	(65.6)
Auckland Region	201	1,872	342	3,367	58.8	(58.9)	55.6	(53.6)
Waikato Region	148	1,447	229	2,061	64.6	(68.6)	70.2	(69.8)
Bay of Plenty Region	73	1,182	124	1,765	58.9	(59.5)	67.0	(65.8)
Gisborne Region	24	404	43	481	55.8	(54.3)	84.0	(71.3)
Hawkes Bay Region	54	642	85	870	63.5	(65.9)	73.8	(80.5)
Taranaki Region	48	321	62	400	77.4	(70.8)	80.3	(78.6)
Manawatu-Whanganui Region	81	667	140	1,019	57.9	(56.6)	65.5	(62.7)
Wellington Region	138	1,055	169	1,265	81.7	(83.7)	83.4	(83.6)
Tasman Region	18	70	19	71	94.7	(95.2)	98.6	(97.8)
Nelson Region	12	95	13	96	92.3	(84.6)	99.0	(95.5)
Marlborough Region	19	77	21	79	90.5	(84.2)	97.5	(96.7)
West Coast Region	15	47	20	54	75.0	(72.7)	87.0	(90.6)
Canterbury Region ³	161	703	195	803	82.6	(84.6)	87.5	(88.6)
Otago Region	65	269	89	317	73.0	(73.1)	84.9	(79.9)
Southland Region	42	219	56	257	75.0	(79.2)	85.2	(88.2)
Total	1,160	9,840	1,728	14,124	67.1	(68.2)	69.7	(69.6)

¹ Source: Education Information and Analysis Division, Ministry of Education, E4/2: Annual Return of Primary Pupils as at 1 July 2011.

² Please note that care should be taken when interpreting results from regions with a low number (i.e. less than n=30) of schools with six-year-old Māori students.

³ One school from the Chatham Islands is included in the Canterbury region.

Pasifika students access to Reading Recovery nationally and regionally

In 2011, Reading Recovery was offered in 78% of state and state-integrated schools with six-year-old Pasifika students (Table 4). Implementation of Reading Recovery for schools with six-year-old Pasifika students has remained high, and within the range 78% to 81%, since this information was first gathered in 2006.

In most regions more than 80% of schools with Pasifika six-year-olds offered Reading Recovery, with the exception of the Auckland (63%), Northland (70%, down from 77% in 2010) and Manawatu-Whanganui (77%) regions².

As with Māori students however, access to Reading Recovery at the *individual* level was slightly lower for Pasifika students (73%) than it was for six-year-olds in the general population (75%).

Although almost three-quarters (72%) of all six-year-old Pasifika students live in the Auckland region, access to Reading Recovery for Pasifika students at the individual level was *lowest* in this region (65%). This ongoing finding suggests that Reading Recovery is not being offered in some schools with high numbers of Pasifika students in the Auckland region.

Table 4: Schools with Reading Recovery in 2011, by region – Pasifika students

	Schools with six-year- old Pasifika students that offered Reading Recovery		Total schools with six- year-old Pasifika students ¹		Access to Reading Recovery ²				
		6-year-olds		6-year-olds	% of s	chools	% of 6-y	6-year-olds	
Local Body (Region)	,	on roll	N	on roll	2011	(2010)	2011	(2010)	
Northland Region	16	29	23	37	69.6	(77.4)	78.4	(82.2)	
Auckland Region	190	2,733	303	4,178	62.7	(63.9)	65.4	(63.7)	
Waikato Region	64	179	79	212	81.0	(80.0)	84.4	(82.3)	
Bay of Plenty Region	38	86	46	100	82.6	(80.5)	86.0	(84.5)	
Gisborne Region	6	16	6	16	100.0	(100.0)	100.0	100.0)	
Hawkes Bay Region	26	119	29	122	89.7	(92.1)	97.5	(96.5)	
Taranaki Region	8	16	9	18	88.9	(92.9)	88.9	(91.3)	
Manawatu-Whanganui Region	40	92	52	116	76.9	(73.3)	79.3	(75.7)	
Wellington Region	118	605	132	648	89.4	(89.6)	93.4	(94.3)	
Tasman Region	5	7	5	7	100.0	(88.9)	100.0	(91.7)	
Nelson Region	9	17	10	18	90.0	(85.7)	94.4	(90.9)	
Marlborough Region	6	19	6	19	100.0	(100.0)	100.0	(100.0)	
West Coast Region	5	7	5	7	100.0	(100.0)	100.0	100.0)	
Canterbury Region	82	213	92	229	89.1	(89.5)	93.0	(90.3)	
Otago Region	29	59	34	65	85.3	(81.8)	90.8	(88.2)	
Southland Region	17	30	18	31	94.4	(86.7)	96.8	(92.6)	
Total	659	4,227	849	5,823	77.6	(77.9)	72.6	(71.1)	

¹ Source: Education Information and Analysis Division, Ministry of Education, E4/2:Annual Return of Primary Pupils as at 1 July 2011.

² Please note that care should be taken when interpreting results from regions with a low number (i.e. less than n=30) of schools with six-year-old Pasifika

² These results must be considered with caution due to the small number of Pasifika students in some of the regions.

Students level of involvement in Reading Recovery by region

Just over one in seven (14%) six-year-old students enrolled in New Zealand state and state-integrated schools *entered* Reading Recovery in 2011 (Table 5). This figure has remained consistent over the past ten years.

Consistent with data from 2010 (in brackets), the West Coast region had the *highest* rate of student entry into Reading Recovery (approximately one in four six-year-olds entered the intervention) and the Auckland region had the *lowest* entry rate (approximately one in ten six-year-olds entered the intervention).

Compared with regional figures from the previous year, the percentage of six-year-olds who entered Reading Recovery *increased* in the Marlborough region (22%, up from 17% in 2010). In all other regions, the percentage of students who entered Reading Recovery in 2011 was similar to that in 2010.

Table 5: Six-year-old students who entered Reading Recovery in 2011 by region

	Six-yea Readir	Total six-year-old school population ¹			
Local Body (Region)	N	% of	total	N	
	N	2011	(2010)	_ N	
Northland Region	348	15.1	(15.2)	2,301	
Auckland Region	2,134	10.9	(11.6)	19,521	
Waikato Region	850	14.5	(16.1)	5,843	
Bay of Plenty Region	470	11.7	(13.3)	4,012	
Gisborne Region	129	17.0	(19.1)	757	
Hawkes Bay Region	367	16.6	(17.5)	2,215	
Taranaki Region	255	16.7	(17.4)	1,523	
Manawatu-Whanganui Region	394	13.3	(14.1)	2,958	
Wellington Region	1,029	17.2	(17.5)	5,998	
Tasman Region	128	19.7	(18.5)	649	
Nelson Region	73	13.7	(13.8)	531	
Marlborough Region	100	21.8	(17.2)	459	
West Coast Region	91	25.9	(22.4)	351	
Canterbury Region	908	14.2	(13.8)	6,394	
Otago Region	355	15.4	(18.8)	2,305	
Southland Region	264	20.2	(19.4)	1,306	
Total	7,895	13.8	(14.5)	57,123	

¹ Source: Education Information and Analysis Division, Ministry of Education, E4/2: Annual Return of Primary Pupils as at 1 July 2011.

Access to Reading Recovery over the last ten years (2002–2011)

The proportion of state and state-integrated schools offering Reading Recovery, and access to Reading Recovery at the individual level (the percentage of six-year-olds attending schools where Reading Recovery was offered), has decreased very slightly over the past ten years (Figure 1).

The proportion of schools that offered Reading Recovery dropped by three per cent between 2002 and 2011. Similarly, the proportion of six-year-olds attending schools where Reading Recovery was offered dropped by four per cent between 2002 and 2011.

The percentage of six-year-old students who entered Reading Recovery has remained stable (between 14% and 15%) since 2002.

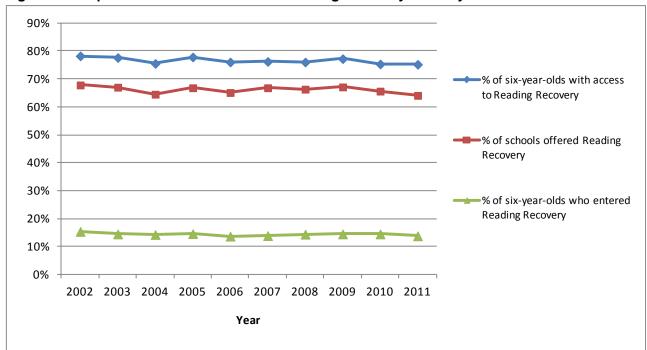


Figure 1: Implementation and access to Reading Recovery for the years 2002–2011

Schools' and students' level of involvement in Reading Recovery by school decile

As shown in Figure 2, high decile schools were more likely to offer Reading Recovery than low decile schools. Almost three-quarters (71%) of decile 8 to 10 schools offered Reading Recovery in 2011, compared with 65% of decile 4 to 7 schools and 56% of decile 1 to 3 schools. At the student level, Reading Recovery was less accessible for students in low decile schools. That is, 77% of students in decile 8 to 10 schools and 79% of students in decile 4 to 7 schools attended schools where Reading Recovery was offered, compared with 68% of students attending decile 1 to 3 schools.

Although students attending decile 1 to 3 schools had lower levels of access to Reading Recovery, in decile 1 to 3 schools where Reading Recovery *was* offered, they entered the intervention at a greater rate than students attending higher decile schools. That is, approximately one in six students (17%) in low decile Reading Recovery schools entered the intervention, compared with one in seven (14%) students attending decile 4 to 7 Reading Recovery schools, and one in nine students (11%) students attending decile 8 to 10 Reading Recovery schools. This has been a consistent trend over the past five years.

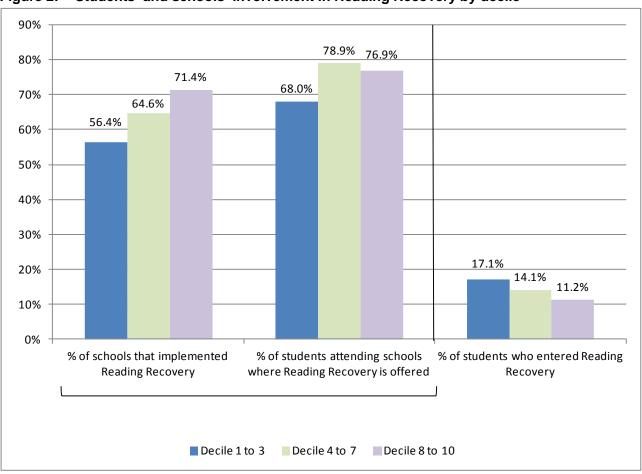


Figure 2: Students' and schools' involvement in Reading Recovery by decile

In addition to having the highest rate of entry into Reading Recovery, decile 1 schools allocated more Reading Recovery hours per student (an average of 52 hours per student) than other decile schools. The average Reading Recovery allocation in decile 2 to 10 schools ranged from 43 to 46 hours per student. The number of Reading Recovery teachers delivering the intervention in schools during 2011 was highest in decile 10 schools (164 teachers) and lowest in decile 6 schools (127 teachers).

Table 6: Involvement in Reading Recovery by school decile

Decile	Students who entered Reading Recovery (%)	Average Reading Recovery hours allocated per student ¹	Number of teachers delivering the intervention
1	17.7	51.7	145
2	16.8	44.8	143
3	16.8	43.6	151
4	17.0	44.5	147
5	13.3	45.9	137
6	13.2	44.4	127
7	13.2	45.2	136
8	12.6	43.5	149
9	12.4	42.7	153
10	9.5	42.9	164

¹ The average Reading Recovery hours allocated per student is calculated from the number of students that schools counted as having participated in Reading Recovery, and the number of hours they had allocated for these students. Thus these averages are an estimate of the number of hours each student might have had.

Section 2: Students involved in Reading Recovery in 2011

Students' involved in Reading Recovery in 2011

Just under three-quarters (73%) of students who were involved in Reading Recovery during 2011 had entered the intervention (started their series of lessons) for the first time during the year (Table 7). A further one-quarter (24%) of students were continuing their series of lessons from the previous year in the same school. A small percentage (three per cent) of students had transferred from another school where they had previously started the intervention.

Table 7: Students' entry into Reading Recovery in 2011¹

Entry into Reading Recovery in 2011	N	%
Entered Reading Recovery for the first time in 2011	7,895	73.5
Carried over from 2010 in the same school	2,550	23.7
Arrived from another school with incomplete lesson series and continued Reading Recovery	288	2.7
Missing entry information	12	0.1
Total	10,745	100.0

¹ This table counts students' first method of entry in Reading Recovery for the 2011 year. Some students who were carried over from 2010, or who entered Reading Recovery for the first time in 2011 transferred to another school at some point during 2011. To avoid double counting, only the first method of entry into Reading Recovery is included.

Gender and ethnicity of students in Reading Recovery

Two-thirds of all students in Reading Recovery during 2011 were boys (65%) and one-third (35%) were girls (Table 8). Nationally, one-quarter (24%) of six-year-old boys attending state and state-integrated schools, and 14% of six-year-old girls attending state and state-integrated schools were involved in Reading Recovery during 2011³.

Consistent with ongoing trends, Māori and Pasifika students were more likely to be involved in Reading Recovery than Asian and NZ European/Pākehā students. Twenty-nine per cent of Māori six-year-old boys and 31% of Pasifika six-year-old boys (Pasifika ethnicity has been disaggregated in Table 8) were involved in Reading Recovery during 2011, compared with 22% of NZ European/Pākehā and 13% of Asian boys. Similarly, 17% of Māori six-year-old girls and 20% of Pasifika six-year-old girls were involved in Reading Recovery during 2011, compared with 12% of NZ European/Pakeha and 8% of Asian girls.

Table 8: Ethnicity and gender of students in Reading Recovery^{1, 2}

				Girls		
	Total six year old boys in population	boys in		Total six- year-old girls in population	In Reading Recovery	
Ethnicity	N	n	%	N	n	%
Māori	7,230	2,067	28.6	6,901	1,169	16.9
NZ European/Pākehā	14,364	3,217	22.4	13,851	1,670	12.1
Tokelauan	68	19	27.9	66	13	19.7
Fijian	161	32	19.9	148	19	12.8
Niuean	173	34	19.7	159	21	13.2
Tongan	725	245	33.8	619	148	23.9
Cook Island Māori	384	125	32.6	409	71	17.4
Samoan	1,377	433	31.4	1,299	261	20.1
Other Pacific Islands	122	32	26.2	113	30	26.5
South East Asian	566	92	16.3	468	46	9.8
Indian	1,009	159	15.8	912	81	8.9
Chinese	738	61	8.3	670	29	4.3
Other Asian	522	59	11.3	490	39	8.0
Other	669	146	21.8	617	84	13.6
Other European	1,159	210	18.1	1,112	104	9.4
Total	29,305	6,931	23.7	27,877	3,785	13.6

Schools' enrolment forms usually allow for students to self identify or be identified by their parents/guardians as belonging to more than one ethnic group. However, for the purposes of the Reading Recovery return students are reported in one ethnic group only. The Reading Recovery return follows the same system of priority recording as used in previous reports.

² Excludes data from 29 students with missing ethnicity information.

³ There may have been some students who were carried over from 2010 who turned seven years old while they were receiving a continuation of their Reading Recovery lessons in 2011. These figures are therefore estimates regarding the proportion of the total student population involved in Reading Recovery.

Section 3: Student Outcomes from Reading Recovery

At the end of the year, students involved in Reading Recovery may have:

- reached the average level of reading and writing for their cohort and been *successfully discontinued* from the intervention
- been referred on for further specialist or long-term reading support
- been unable to continue the intervention for various reasons (see Figure 6 for further detail)
- *left the school* before completing their series of lessons (and may or may not have continued at their new school)
- been unable to complete their series of lessons in the current year and had these lessons *carried over* to the following year

As a proportion of all students who were involved in Reading Recovery in 2011, 61% (n=6,575) of students were successfully discontinued from the intervention (up from 59% in 2010). A further nine per cent (n=951) of students were referred on for specialist help or long-term reading support (10% in 2010). Four per cent (n=438) left their school before their lessons could be discontinued and one per cent (n=97) were unable to continue their lessons for various reasons (both unchanged from 2010).

A further 24% (n=2,631) of students were unable to complete their lessons during the year and were expected to continue their lessons the following year (similar to 25% in 2010).

Table 9: Students' Reading Recovery outcomes^{1,2}

Type of outcome	N	%
Student successfully discontinued lessons	6,575	61.2
Student's series of lessons carried over to 2012	2,631	24.5
Student referred for specialist help or long-term reading support	951	8.9
Student left the school before completion	438	4.1
Student responding but not able to be continued	97	0.9
Missing data	53	0.5
Total	10,745	100.0

Many students who transferred schools during the year ended up with two student reports (one for each school that they attended while receiving Reading Recovery lessons). To avoid double counting, this table only includes the Reading Recovery outcome for the last school the student attended during the year.

² Does not include data from 23 students with missing student reports

Reading Recovery outcomes for students who exited Reading Recovery in 2011

In total, three-quarters (75%, n=8,061) of students who were involved in Reading Recovery in 2011 *exited* the intervention during the year. The analysis presented in this section, and Section 4, is based on these students.

As a proportion of students who exited Reading Recovery in 2011, the majority (82%) were successfully discontinued from the intervention (Table 10). A further 12% of students were referred on for specialist help or long-term reading support, five per cent left their school before their lessons could be discontinued and one per cent were responding well but were unable to continue their lessons.

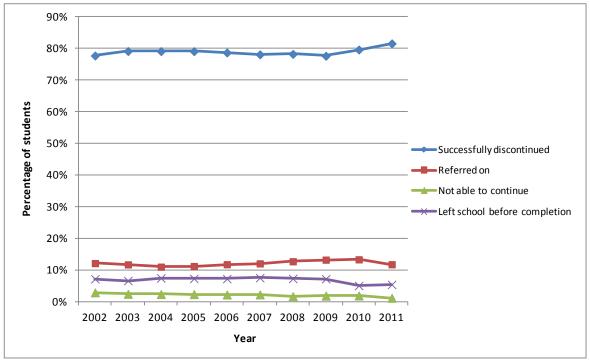
Table 10: Exiting students' Reading Recovery outcomes^{1,2}

Type of outcome	N	%
Student successfully discontinued lessons	6,575	81.6
Student referred for specialist help or long-term reading support	951	11.8
Student left the school before completion	438	5.4
Student responding but not able to be continued	97	1.2
Total	8,061	100.0

¹ This table only includes the Reading Recovery outcome for the last school the student attended during the year.

As shown in Figure 3, the percentage of students who successfully discontinued their series of Reading Recovery lessons has increased by four percentage points over the past three years (78% in 2009, 80% in 2010, 82% in 2011). The percentage of students who were referred on for further support decreased slightly from 13% in 2009 and 2010 to 12% in 2011.

Figure 3: Students' Reading Recovery outcomes for the years 2002 - 2011



² Does not include data from students who were carried over to 2012 and students with missing student reports or outcome information.

Reading Recovery outcome by entry status

Students who entered Reading Recovery for the first time in 2011 were more likely to have successfully discontinued their series of lessons in 2011 (83%) than students who were carried over from 2010 (80%) and students who had transferred from another school (75%). Although this has been a consistent trend over the past 10 years, These figures may indicate that the gap in discontinue rates between these groups of students is decreasing. That is, in 2010, 81% of students who entered Reading Recovery for the first time in 2010 successfully discontinued their lessons, compared with 77% of students who had been carried over from 2009 and 72% of students who transferred from another school.

Students who had been carried over from 2010 and students who were transferred from another school were more likely to be referred on for specialist help or long-term support in 2011 (15% and 14% respectively, compared with 10% of students who entered for the first time in 2011).

Table 11: Exiting students' Reading Recovery outcome by entry status^{1, 2}

Type of Outcome	Entered for the first time in 2011 % (n=5,282)	Carried over from 2010 % (n=2,528)	Transferred from another school % (n=250)	Total % (n=8,061)
Student successfully discontinued Reading Recovery lessons	82.7	79.8	75.2	81.6
Student referred on for specialist help or long-term reading support	10.4	14.6	14.0	11.8
Student responding but not able to be continued	1.4	0.7	1.2	1.2
Student left the school before completion	5.5	4.9	9.6	5.4
Total	100.0	100.0	100.0	100.0

¹ Does not include students who were carried over into 2012, as they have not yet exited Reading Recovery. Also excludes data from 54 students with missing information about their entry to and/or exit from Reading Recovery.

² Table based on students' initial entry type, and final outcome from Reading Recovery (where more than one school was attended during the year).

Reading Recovery outcome by gender

Girls (85%) were more likely to have successfully discontinued their series of lessons in 2011 than boys (80%). In comparison, boys (14%) were more likely to have been referred on for specialist help or long-term reading support than girls (nine per cent). This pattern of results has been observed since 2001.

Table 12: Exiting students' Reading Recovery outcome by gender^{1, 2}

Type of Outcome	Boys % (n=5,212)	Girls % (n=2,849)	Total % (n=8,061)
Student successfully discontinued lessons	79.6	85.1	81.6
Student referred for specialist help or long-term reading support	13.6	8.6	11.8
Student responding but not able to be continued	1.3	1.0	1.2
Student left the school before completion	5.5	5.3	5.4
Total	100.0	100.0	100.0

Does not include students who were carried over into 2012, as they have not yet exited Reading Recovery. Also excludes data from 53 students with missing information about their Reading Recovery outcome.

² Table based on students' final outcome from Reading Recovery (where more than one school was attended during the year).

Reading Recovery outcome by ethnicity

New Zealand European/Pākehā (85%) and Asian (88%) students were more likely than Māori (76%) and Pasifika (81%) students to have successfully discontinued their series of lessons in 2011. This pattern of results has been observed in the Reading Recovery data since 2001.

It should be noted however, that the difference between the proportion of New Zealand European/Pākehā students and Pasifika students who successfully discontinued Reading Recovery was smaller in 2011 than it was in 2010 (where 84% of New Zealand European/Pākehā and 76% of Pasifika students successfully discontinued Reading Recovery).

Māori students were more likely to be referred on for specialist support (14%) and to have left their school before completing their lessons (eight per cent) than Pasifika students (12% and six per cent respectively), NZ European/Pākehā students (11% and three per cent respectively) and Asian students (seven per cent and five per cent respectively). This same pattern of results was observed in the years prior, except for in 2009 when NZ European/Pākehā, Māori and Pasifika students had similar rates of referral to specialist support (all 14%).

Table 13: Exiting students' Reading Recovery outcome by ethnicity^{1, 2}

Type of Outcome	Māori % (n=2,408)	NZ European/ Pākehā % (n=3,708)	Pasifika % (n=1,105)	Asian % (n=415)	Other % (n=408)
Student successfully discontinued lessons	76.1	84.6	80.9	88.4	81.6
Student referred for specialist help or long-term reading support	13.8	11.2	12.2	6.5	8.6
Student responding but not able to be continued	1.8	1.0	1.2	0.5	0.7
Student left the school before completion	8.3	3.2	5.7	4.6	9.1
Total	100.0	100.0	100.0	100.0	100.0

¹ Does not include students who were carried over into 2012, as they have not yet exited Reading Recovery. Also excludes data from 70 students with missing information about their Reading Recovery outcome and/or ethnicity

² Table based on students' final outcome from Reading Recovery (where more than one school was attended during the year).

Reading Recovery outcome by school decile

As shown in Figure 4, the proportion of students who successfully discontinued Reading Recovery in 2011 increased in all decile groupings. The majority (86%) of students attending decile 8 to 10 schools successfully discontinued their series of lessons, compared with 82% of students attending decile 4 to 7 schools and 77% of students attending decile 1 to 3 schools.

In comparison, the proportion of students who were referred on for specialist support, and the proportion of students who left their school without completing their lessons were higher in the low decile schools. One in seven students (14%) from decile 1 to 3 schools who were involved in Reading Recovery were referred on for further support, compared with one in 11 (nine per cent) students involved in Reading Recovery in attending decile 8 to 10 schools (and 12% of students attending decile 4 to 7 schools). Students from decile 1 to 3 schools were also more likely to have left their school with an incomplete programme (8%) compared with students from decile 4 to 7 (5%) and decile 8 to 10 (4%) schools.

Disaggregated data for each decile is available in Appendix Table 1.

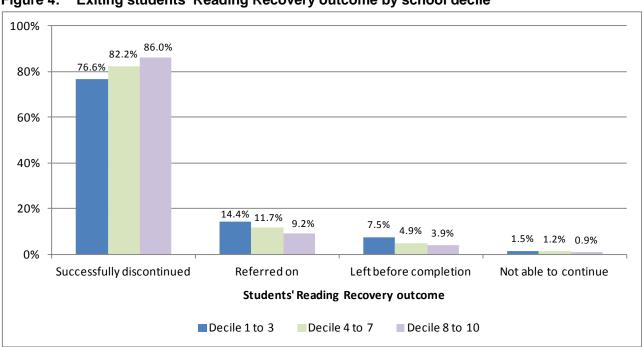


Figure 4: Exiting students' Reading Recovery outcome by school decile^{1, 2}

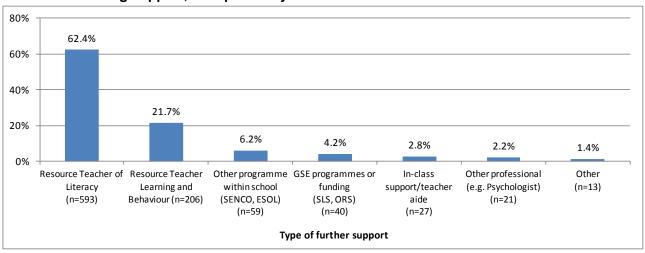
Does not include students who were carried over into 2012, as they have not yet exited Reading Recovery. Also excludes data from 70 students with missing information about their Reading Recovery outcome and/or ethnicity

² Table based on students' final outcome from Reading Recovery (where more than one school was attended during the year).

Students referred on for further support

In 2011, 951 students were referred on from Reading Recovery for specialist help or long-term reading support (down from 1,098 students in 2010). Almost two-thirds (62%) of these students were referred to Resource Teachers: Literacy (RTLit), an increase from 46% in 2010. A further 22% of students were referred to Resource Teachers Learning and Behaviour (RTLB), slightly down from 29% in 2010. A small percentage of students were referred to other support programmes managed within the school (six per cent), GSE programmes or funding (four per cent), in-class support programmes/teacher aides (three per cent) and other professionals (two per cent).

Figure 5: Type of further support for students' referred on for specialist help or long-term reading support, as reported by schools¹

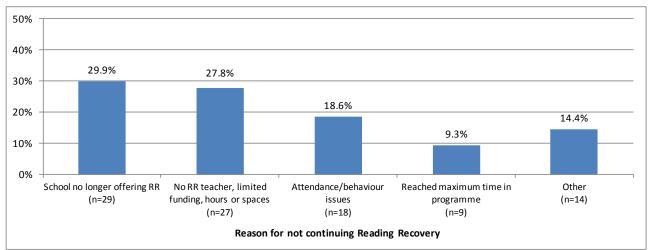


¹ Percentages do not sum to 100% as students may have been referred on for more than one type of support.

Students unable to continue Reading Recovery

A small number of students (n=97) involved in Reading Recovery during 2011 were unable to continue their series of lessons (down from 159 in 2010). According to schools, this was often because the school was not going to offer Reading Recovery in 2012 (30%), or there was a lack of resources (eg, the Reading Recovery teacher was no longer available, there were limited funding, hours or spaces available; 28%). Nineteen per cent of students were unable to continue due to attendance or behavioural issues and a further nine per cent had completed 20 or more weeks of Reading Recovery and, while not at the level to be successfully discontinued, had improved to the point that further progress could be made in the classroom.

Figure 6: Reasons why students who were responding to their Reading Recovery lessons were unable to continue



Regional variation in the proportion of successfully discontinued and referred on students

The proportion of students who successfully discontinued Reading Recovery in 2011 was *highest* in the Wellington and Otago regions (both 85%) and *lowest* in the Nelson region (74%). The proportion of students who were referred on from Reading Recovery in 2011 was *highest* in the Nelson region (20%), followed by the Marlborough region (17%) and *lowest* in the Bay of Plenty region (eight per cent).

Compared with regional figures from 2010, the proportion of students who successfully discontinued Reading Recovery notably *increased* (by more than 5 percentage points) in the Waikato (84%, up from 79% in 2010), Gisborne (78%, up from 71%), West Coast (84%, up from 68% in 2010) and Otago (85%, up from 80% in 2010) regions. The proportion of students who successfully discontinued Reading Recovery did not *decrease* between 2010 and 2011 in any of the regions, with the exception of a marginal drop (from 80% to 79%) in the Canterbury region

Table 14: Proportion of exited students who were successfully discontinued and referred on from Reading Recovery by region

	l			Students referred for specialist help or long-term reading support (n=951)			Total number of students who left Reading Recovery in 2011 (n=8,061)	
		% of	total		% of	total		
Local Body (Region)	N	2011	(2010)	N	2011	(2010)	N	
Northland Region	269	79.1	(76.0)	39	11.5	(11.3)	340	
Auckland Region	1701	79.1	(77.9)	303	14.1	(14.9)	2151	
Waikato Region	717	84.5	(79.3)	73	8.6	(12.5)	849	
Bay of Plenty Region	416	83.7	(82.8)	39	7.8	(9.8)	497	
Gisborne Region	91	77.8	(71.4)	17	14.5	(16.7)	117	
Hawkes Bay Region	326	84.5	(80.6)	42	10.9	(14.6)	386	
Taranaki Region	225	81.8	(80.9)	36	13.1	(12.7)	275	
Manawatu-Whanganui Region	335	80.5	(80.0)	47	11.3	(12.3)	416	
Wellington Region	902	84.7	(84.5)	105	9.9	(10.8)	1065	
Tasman Region	112	83.6	(79.9)	15	11.2	(14.2)	134	
Nelson Region	55	74.3	(74.7)	15	20.3	(14.5)	74	
Marlborough Region	68	75.6	(74.2)	15	16.7	(20.4)	90	
West Coast Region	78	83.9	(68.3)	13	14.0	(23.8)	93	
Canterbury Region	740	79.4	(80.4)	121	13.0	(13.9)	932	
Otago Region	323	85.0	(79.9)	41	10.8	(12.8)	380	
Southland Region	217	82.8	(79.7)	30	11.5	(14.1)	262	

Time in Reading Recovery for successfully discontinued and referred on students

On average, students who were referred on from Reading Recovery in 2011 attended more half-hour lessons (90 lessons over 23 weeks) than did students who were successfully discontinued (77 lessons over 19 weeks). Both groups of students averaged four Reading Recovery lessons per week.

Time in Reading Recovery by entry and exit status

Students who entered Reading Recovery in 2010 and successfully discontinued their lessons in 2011 attended an average of 14 more lessons than did successfully discontinued students who entered and exited the intervention within one year (2011).

The data presented in Table 15, in conjunction with data from Table 11 (page 19), show that carried over students were less likely to have their series of lessons discontinued, and where they did have their lessons successfully discontinued, they took longer to achieve this outcome than students who entered and exited in one year. Most students who were carried over from 2010 started their series of lessons in October or later. Thus, the increased number of lessons these students have most likely reflects the effect of the summer break on students' progress.

This pattern of results has been detected in previous years.

Table 15: Number of sessions and weeks in Reading Recovery for successfully discontinued and referred on students outcome, by entry status¹

		successfully dis leading Recove		Students referred for specialist help or long-term reading support		
Entry into Reading Recovery	N	Mean 30- min sessions	Mean calendar weeks	N	Mean 30- min sessions	Mean calendar weeks
Entered for the first time in 2011	4,368	72.5	17.8	548	89.2	22.8
Carried over from 2010	2,018	87.0	21.8	368	92.2	23.8
Transferred from another school	188	80.7	20.6	35	87.7	22.7
Total	6,574	77.2	19.1	951	90.3	23.2

¹ Table based on students' initial entry type, and final outcome from Reading Recovery (where more than one school was attended during the year). Excludes data from one student with missing information about their entry into Reading Recovery.

Time in Reading Recovery by gender and ethnicity

Boys who successfully discontinued Reading Recovery had an average of four more lessons than did successfully discontinued girls.

Māori boys who successfully discontinued Reading Recovery had slightly more lessons (82 lessons over 21 weeks) than did Pasifika boys (79 lessons over 20 weeks), New Zealand European/Pākehā boys (77 lessons over 19 weeks) and Asian boys (75 lessons over 18 weeks).

Māori girls who successfully discontinued Reading Recovery had more lessons (78 lessons over 20 weeks) than did Asian girls (74 lessons over 19 weeks), New Zealand European/Pākehā girls (74 lessons over 18 weeks) and Pasifika girls (72 lessons over 18 weeks).

Boys and girls who were referred on from Reading Recovery had a similar number of lessons and weeks in the intervention.

Māori girls who were referred on had fewer lessons (89 lessons over 24 weeks) than did Pasifika girls (91 lessons over 26 weeks), New Zealand European/Pākehā girls (92 lessons over 23 weeks) and Asian girls (100 lessons over 24 weeks).

In comparison, Pasifika boys who were referred on had fewer lessons (85 lessons over 23 weeks) than did Māori and Asian students (both 90 lessons over 24 and 22 weeks respectively) and New Zealand European/Pākehā boys (93 lessons over 23 weeks).

Table 16: Mean lessons and weeks in Reading Recovery by gender and ethnicity

	Stud		fully disconti Recovery	nued	Students referred for specialist help or long-term reading support			
	Mean # of sessions Mean # of weeks			Mean # of sessions Mean # of			f weeks	
Ethnicity	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Māori	82.0	77.9	20.8	19.7	89.5	88.6	23.5	24.1
NZ European/Pākehā	77.2	73.8	18.7	18.1	92.5	92.1	22.8	23.2
Pasifika	79.0	72.4	20.1	18.3	84.7	90.8	22.5	25.6
Asian	75.4	73.9	18.2	18.9	89.7	99.8	22.1	24.0
Total	78.7	74.8	19.5	18.7	90.1	91.0	23.0	23.8

Time in Reading Recovery by decile

Successfully discontinued students from lower decile (1 to 3) schools attended more lessons (an average of 79 lessons over 20 weeks), than successfully discontinued students from higher decile (8 to 10) schools (75 lessons over 18 weeks).

In comparison, referred on students from higher decile (8 to 10) schools attended more Reading Recovery lessons on average (94 lessons over 23 weeks) than students from lower decile (1 to 3) schools (88 lessons over 23 weeks).

Disaggregated data for each decile is available in Appendix Table 2.

Table 17: Mean sessions and calendar weeks in Reading Recovery by school decile

	Successfully disc	ontinued students	Referred on students		
Decile grouping	Mean number of sessions	Mean number of calendar weeks	Mean number of sessions	Mean number of calendar weeks	
Decile 1 to 3	78.9	20.1	88.3	23.4	
Decile 4 to 7	77.8	19.2	90.2	23.0	
Decile 8 to 10	75.0	18.1	93.6	23.0	

Section 4: Students' Learning Gains During Reading Recovery

Reading and writing gains in Reading Recovery are assessed across six measures from the Observation Survey of Early Literacy Achievement (Clay, 2002)⁴ and the Burt Word Reading Test (NZCER, 1981)⁵. Three of these measures are reported to the Ministry: Instructional Text Levels (obtained by taking Running Records), the Burt Word Reading Test and the Writing Vocabulary Task (Clay). These assessments are administered when students begin and end their Reading Recovery lessons. This section presents data for students who successfully discontinued Reading Recovery and students who were referred on from Reading Recovery⁶.

Shift in Instructional Text Levels over the course of Reading Recovery

Figure 7 and Figure 8 present instructional text levels at entry to and exit from Reading Recovery for successfully discontinued and referred on students. The equivalent colours of the Ready to Read colour wheel appear on the horizontal axes.

While both successfully discontinued and referred on students made gains in text levels over the course of their Reading Recovery lessons, successfully discontinued students made more of a marked improvement overall, compared with referred on students. These have been consistent findings over the past ten years.

The majority of successfully discontinued students (95%) entered the intervention reading texts ranging from level 1 (Magenta 1) to level 11 (Blue 3). On exit, *all* successfully discontinued students were reading texts at or above level 15 (Orange 1). Most of these students (81%) were reading texts between level 17 (Turquoise 1) and level 20 (Purple 2) upon exit from Reading Recovery.

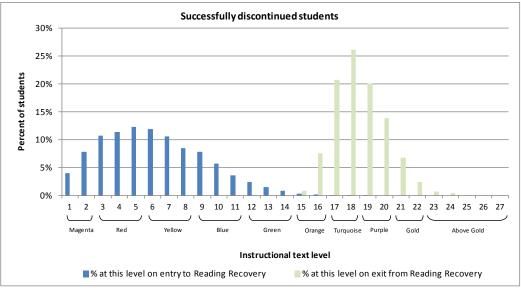


Figure 7: Instructional text levels at entry and exit for successfully discontinued students¹

¹ Based on data from n=6,494 successfully discontinued students with complete text level data

⁴ Clay, M. (2002). An Observation Survey of Early Literacy Achievement (2nd Edition). Heinemann Education, New Zealand.

⁵ Gilmore, A., Croft, C., & Reid, N. (1981). Burt Word Reading Text: New Zealand Revision. New Zealand Council for Educational Research, Wellington.

⁶ Complete assessment data for students who experienced other outcomes (e.g. incomplete programme) is often not available.

Compared with students who successfully discontinued their lessons, the majority (91%) of referred on students entered the intervention reading texts between level 1 (Magenta 1) to level 5 (Red 3). Ninety-eight per cent of referred on students entered Reading Recovery reading texts at or below level 8 (Yellow 3). The range of texts that referred on students were reading when they exited Reading Recovery was widely varied. Three-quarters (75%) of referred on students were reading texts between level 9 (Blue 1) and level 16 (Orange 2) when they stopped their Reading Recovery lessons.

Referred on students 30% 25% Percent of students 20% 15% 10% 5% 10 17 Green Orange Turquoise Above Gold Instructional text level ■% at this level on exit from Reading Recovery ■% at this level on entry to Reading Recovery

Figure 8: Instructional text levels at entry and exit for referred on students¹

1 Based on data from n=836 referred on students with complete text level data

Shift in Burt Word Reading Test scores over the course of Reading Recovery

Figure 9 and Figure 10 present students' Burt Word scores at entry to and exit from Reading Recovery, for successfully discontinued and referred on students. The tables attached to the bottom of these graphs compares the average age of students in each group, their average Burt Word score and the equivalent age bands associated with the test at entry and exit from Reading Recovery.

Most (89%) successfully discontinued students entered Reading Recovery with a Burt Word reading score of 21 or below. In comparison, almost all (96%) of students exited the intervention with a Burt score of 22 or higher.

Successfully discontinued students had an average Burt Word score of 29 when they exited the intervention. The equivalent age band for a score of 29 is 6.07 – 7.01 years/months. Given that the average chronological age for successfully discontinued students at exit was 6 years 10 months, this result provides some evidence that, on average, successfully discontinued students obtained Burt Word Reading Test scores at, or close to, the expected level for their age group when they exited the intervention.

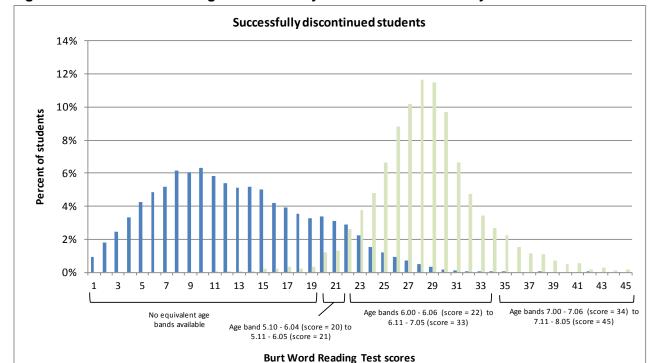


Figure 9: Burt Word Reading scores at entry and exit for successfully discontinued students¹

At e	entry to Reading Reco	very	Upon exit from Reading Recovery			
Average age ²	Average Burt score	Equivalent age band	Average age ²	Average Burt score	Equivalent age band	
6 years and 4 months	13	Less than 5.10	6 years and 10 months	29	6.07 – 7.01	

% at this level on exit from Reading Recovery

% at this level on entry to Reading Recovery

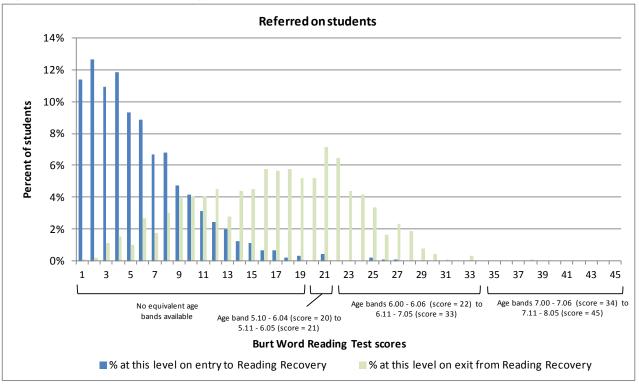
Based on data from n=6,520 successfully discontinued students with Burt Word scores at entry and exit

² A small proportion of students did not have correct date of birth information and could not be included in the calculation of average age. Thus, this figure is our best estimate of the average age of students as they entered and exited the intervention.

Burt Word scores for referred on students upon entry to Reading Recovery were highly skewed towards the lowest end of the scale. The majority (87%) of these students entered Reading Recovery with a raw Burt Word score of 10 or less (below the 5.10–6.04 age band). Burt Word scores for referred on students were again widely varied at exit but, overall, higher than they were at entry. The majority (83%) of referred on students exited Reading Recovery with a Burt Word score between 10 (below the 5.10–6.04 age band) and 28 (equivalent age band 6.06–6.11 years).

On average, referred on students exited Reading Recovery with an average Burt Word score of 17. The equivalent age band for a score of 17 is less than 5 years 10 months. The average age of referred on students at the time of exit from Reading Recovery was 7 years old. Thus, although many referred on students made gains in relation to the Burt Word test over the course of their Reading Recovery lessons, the aggregated results for this group of students suggest that on average, students obtained Burt Word Reading Test scores below the expected level for their age group when they exited the intervention.





At e	ntry to Reading Reco	very	Upon exit from Reading Recovery			
Average age ²	erage age ² Average Burt score Equivalent age band		Average age2	Average Burt score	Equivalent age band	
6 years and 4 months	6	Less than 5.10	7 years and 0 months	17	Less than 5.10	

¹ Based on data from n=870 referred on students with Burt Word scores at entry and exit

A small proportion of students did not have correct date of birth information and could not be included in the calculation of average age. Thus, this figure is our best estimate of the average age of students as they entered and exited the intervention.

Shift in Writing Vocabulary Task (Clay) over the course of Reading Recovery

Figure 11 and Figure 12 present students' Writing Vocabulary Task (Clay) scores at entry to and exit from Reading Recovery, for successfully discontinued and referred on students.

Age-based norms for the Writing Vocabulary Task (Clay) are presented as stanines for each of the following age bands (5.01-5.50; 5.51-6.0; 6.01-6.50; 6.51-7.0 years). Stanines are a method of standardising test scores using a nine-point scale (with a mean of five and a standard deviation of two). In this method, test scores are ranked and assigned to a stanine according to the per centile they fall into (see Table 18). For example, the top 4% of scores are assigned to stanine 9, the next seven per cent of scores are assigned to stanine 8, etc.

Given that the average age of successfully discontinued and referred on students was around 6.5 years on entry to Reading Recovery and closer to 7 years on exit, the stanine scores for the 6.01-6.50 years age band were used for the comparisons on entry and the scores for the 6.51-7.00 years age band were used for the comparisons on exit. The stanine scores for these two age bands are presented in Table 18.

Table 18: Writing Vocabulary Task (Clay) stanines for the 6.00-6.50 and 6.51-7.00 years age groups¹

3	_										
Result ranking	4%	7%	12%	17%	20%	17%	12%	7%	4%		
Stanine	1	2	3	4	5	6	7	8	9		
6.01 – 6.50 years age group											
Test Scores	0-4	5-13	14-25	26-36	37-49	50-59	60-69	70-83	84+		
6.51 – 7.00 years age group											
Test Scores	0-8	9-25	26-35	36-45	46-56	57-66	67-80	81-99	100+		

¹ Clay, M. (2002). An Observation Survey of Early Literacy Achievement (2nd Edition). Heinemann Education, New Zealand.

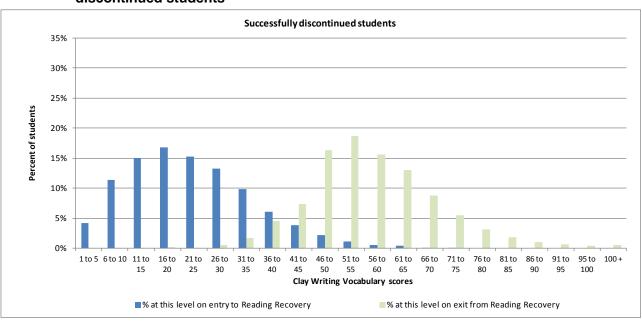
As with the data for the other two assessment measures (Instructional Text levels and Burt Word scores), Figure 11 and Figure 12 highlight clear differences in the distribution of Writing Vocabulary Task (Clay) scores achieved by successfully discontinued and referred on students at entry and exit from Reading Recovery.

The majority (82%) of students who were successfully discontinued had Writing Vocabulary Task (Clay) scores between 6 and 35 when they started their lessons. When they exited Reading Recovery, the majority (80%) had scores between 41 and 70.

The table below Figure 12 shows that successfully discontinued students exited Reading Recovery with an average Writing Vocabulary Task (Clay) score of 57. This score falls into the sixth stanine, which is above the mean for the 6.51 - 7.00 years age group.

This result provides some evidence that on average, successfully discontinued students tended to exit the intervention with Writing Vocabulary Task (Clay) scores that were above, or close to, the average level for their age group.

Figure 11: Writing Vocabulary Task (Clay) scores at entry and exit for successfully discontinued students¹



En	try to Reading Recov	ery	Exit from Reading Recovery			
Average age ²	Average Writing Vocabulary Task (Clay) score	Stanine group for 6.01 – 6.50 years	Average age ²	Average Writing Vocabulary Task (Clay) score	Stanine group for 6.51 – 7.00 years	
6 years and 4 months	23	Stanine group 3	6 years and 10 months	57	Stanine group 6	

Based on data from n=6,568 successfully discontinued students with Clay Writing Vocabulary scores at entry and exit from Reading Recovery

² A small proportion of students did not have correct date of birth information and could not be included in the calculation of average age. Thus, this figure is our best estimate of the average age of students as they entered and exited the intervention.

Writing Vocabulary Task (Clay) scores for referred on students upon entry to Reading Recovery were highly skewed towards the lowest end of the scale and the majority (89%) of these students entered Reading Recovery with a Writing Vocabulary (Clay) score of 20 or less. In comparison, the majority (78%) of referred on students exited Reading Recovery with Writing Vocabulary Task (Clay) scores of 21 or higher.

The table below Figure 12 shows that referred on students exited Reading Recovery with an average Writing Vocabulary Task (Clay) score of 32. This score falls into the 3rd stanine, which is below the mean for the 6.51 – 7.00 years age group. This result shows that on average, referred on students exited the intervention with Writing Vocabulary Task (Clay) scores that were below the average level for their age group

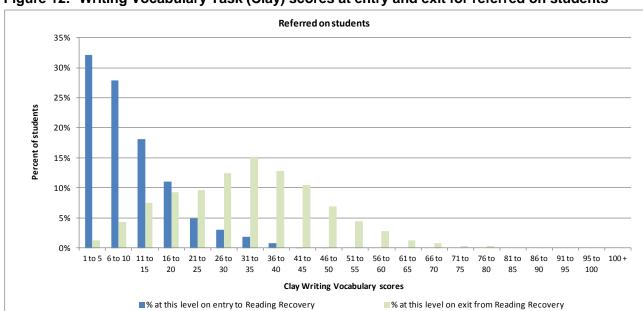


Figure 12: Writing Vocabulary Task (Clay) scores at entry and exit for referred on students¹

En	try to Reading Recov	ery	Exit from Reading Recovery			
Average age ²	Average Writing Vocabulary Task (Clay) score	Stanine group for 6.01 – 6.50 years	Average age ²	Average Writing Vocabulary Task (Clay) score	Stanine group for 6.51 – 7.00 years	
6 years and 4 months	10	Stanine group 2	7 years and 0 months	32	Stanine group 3	

¹ Based on data from n=933 referred on students with Writing Vocabulary Task (Clay) scores at entry and exit from Reading Recovery

² A small proportion of students did not have correct date of birth information and could not be included in the calculation of average age. Thus, this figure is our best estimate of the average age of students as they entered and exited the intervention.

Shifts in reading and writing for successfully discontinued and referred on students by decile

As shown in Table 19, successfully discontinued students from lower decile schools made slightly greater gains in all three measures of reading and writing than successfully discontinued students from higher decile schools. This result reflects the fact that students from lower decile schools who were successfully discontinued tended to enter the intervention with slightly lower reading and writing levels than students from higher decile schools, but exit Reading Recovery at a similar level to students at higher decile schools. This result is to be expected as successfully discontinued students must reach the average band for their class cohort before their series of lessons are discontinued.

Table 19: Mean entry and exit scores for successfully discontinued students by decile

	Instru	uctional Text	levels	Burt '	Word Readin	g test	Writin	Writing Vocabulary (Clay)		
Decile	In	Out	Gain	In	Out	Gain	In	Out	Gain	
1	4.8	18.2	13.3	9.7	27.9	18.2	18.6	56.6	38.0	
2	5.4	18.2	12.8	11.3	28.2	16.9	20.2	55.2	35.0	
3	5.9	18.4	12.4	12.5	28.8	16.3	22.4	58.5	36.1	
4	5.6	18.2	12.6	11.7	28.3	16.6	21.4	57.1	35.7	
5	5.9	18.3	12.4	12.2	28.3	16.1	21.9	55.7	33.8	
6	6.3	18.4	12.1	13.0	28.3	15.3	24.2	56.2	32.0	
7	6.4	18.4	12.0	13.3	28.8	15.6	24.5	57.3	32.8	
8	6.6	18.8	12.2	13.8	28.9	15.1	23.6	56.8	33.1	
9	6.5	18.7	12.2	14.1	28.8	14.7	24.9	58.3	33.4	
10	6.7	18.8	12.1	14.6	29.2	14.6	24.9	57.4	32.4	

In comparison, there were no discernable differences in the gains made by referred on students from lower and higher decile schools across the three measures (Table 20). Referred on students from lower decile schools however, did tend to have lower entry and lower exit scores on the three reading and writing measures than did referred on students from higher decile schools.

Table 20: Mean entry and exit scores for referred on students by decile

	Instru	ctional Text	levels	Burt \	Word Readin	g test	Writing Vocabulary (Clay)		
Decile	In	Out	Gain	ln	Out	Gain	In	Out	Gain
1	1.9	10.6	8.7	3.8	14.9	11.1	8.0	30.4	22.4
2	2.2	11.2	9.0	4.1	15.8	11.8	8.0	30.7	22.7
3	2.3	11.3	9.0	5.1	16.0	10.8	9.6	31.4	21.8
4	2.2	10.6	8.5	4.9	15.0	10.1	9.2	29.6	20.4
5	2.7	11.6	8.9	5.4	16.6	11.2	11.2	33.3	22.1
6	2.9	10.9	8.0	6.1	15.8	9.7	13.4	32.7	19.2
7	2.7	12.3	9.6	6.0	18.3	12.4	11.2	34.9	23.6
8	2.8	11.7	8.9	5.6	16.0	10.4	10.2	30.8	20.6
9	3.4	12.8	9.4	7.3	18.9	11.6	13.8	37.2	23.4
10	3.0	12.5	9.5	6.6	18.3	11.7	11.2	33.4	22.2

Shifts in reading and writing for successfully discontinued and referred on students by ethnicity

Māori and Pasifika students who successfully discontinued their series of Reading Recovery lessons made slightly greater gains in all three assessment measures, than did New Zealand European/Pākehā students. As highlighted by Table 21, this occurred because Māori and Pasifika students tended to enter Reading Recovery with slightly lower assessment scores than New Zealand European/Pākehā students. All three student groups exited the intervention with similar assessment scores.

Table 21: Mean entry and exit scores for successfully discontinued students by ethnicity¹

	Instructional Text levels			Burt Word Reading test			Writing Vocabulary (Clay)		
	In	Out	Gain	In	Out	Gain	In	Out	Gain
Māori	5.5	18.2	12.7	11.3	28.3	17.0	21.0	56.1	35.1
NZ European/ Pākehā	6.5	18.6	12.0	13.4	28.5	15.0	23.7	56.6	33.0
Pasifika	5.5	18.4	12.9	11.9	28.9	17.0	22.2	58.8	36.6
Asian	5.9	18.6	12.8	13.8	29.8	16.0	23.5	59.6	36.0
Other	6.1	18.7	12.6	13.5	28.8	15.3	23.7	56.7	33.0

¹ Excludes data from students of unknown ethnicity and those with missing ethnicity information.

There were only slight differences in the gains made by referred on students across the different ethnic groupings. Pasifika and Asian students who were referred on from Reading Recovery made slightly greater gains than Māori and New Zealand European/Pākehā students on the Burt Word Reading test and the Writing Vocabulary (Clay) test. This result reflects the fact that Pasifika students had slightly lower scores on these measures at entry compared with Māori and New Zealand European/Pākehā students.

Table 22: Mean entry and exit scores for referred on students by ethnicity¹

	•			• • •						
	Instructional Text levels			Burt V	Burt Word Reading test			Writing Vocabulary (Clay)		
	In	Out	Gain	In	Out	Gain	In	Out	Gain	
Māori	2.4	11.3	9.0	4.8	15.7	10.9	9.3	31.4	22.1	
NZ European/Pākehā	2.9	11.6	8.7	5.9	16.6	10.6	11.4	32.9	21.5	
Pasifika	1.9	11.0	9.1	4.4	16.5	12.1	8.5	31.6	23.1	
Asian	1.8	11.3	9.5	5.1	17.6	12.5	9.4	32.9	23.5	
Other	2.9	12.8	9.9	6.7	19.1	12.4	12.6	32.1	19.5	

¹ Excludes data from students of unknown ethnicity and those with missing ethnicity information.

Reading achievement for exiting students in relation to the New Zealand Curriculum Reading Standards

The following section presents information about students' reading achievement in relation to the New Zealand Curriculum Reading Standards introduced in 2010⁷. The purpose of this analysis was to investigate the relationship between students' reading achievement upon exit from Reading Recovery and the Reading Standard for 'After two years at school'.

Background to the analysis: The reading standard 'After two years at school' is used as a reference point for this analysis because students typically start Reading Recovery after they have been at school for at least one year. According to the New Zealand Curriculum Reading Standards, a student is expected to be reading texts at the Turquoise level of Ready to Read after two years at school.

It is important to note however, that many students will not yet have completed two years at school at the time they exit Reading Recovery. Therefore, students who are not reading at the standard for 'After two years at school' may still be on track to achieve the standard by the end of their second year at school.

Limitations of the analysis: Classroom teachers will use a range of evidence when making judgements about student achievement in relation to the Standards. The analysis presented here uses evidence from only one source, the Reading Recovery data, and should be interpreted with caution.

The years 1–3 Reading Standards are based on the core instructional series (Ready to Read) that supports reading in the New Zealand Curriculum. Reading Recovery teachers select books for individual students from a range of books of equivalent levels. The Reading Recovery Booklist used by teachers to assist them in their book selection was developed in line with the original Ready to Read series. While there is intended equivalence between the text readability levels within the booklist and the Ready to Read series, there may be some variation in the extent to which individual books are matched. The following analysis approximates the text levels provided by Reading Recovery teachers to text readability as specified on the colour wheel of the Ready to Read series.

⁷ For more information about the Reading and Writing Standards see http://nzcurriculum.tki.org.nz/National-Standards.

Figure 13 presents the proportion of students who were reading at the level specified by the New Zealand Curriculum Reading Standard for 'After two years at school' (Turquoise level of Ready to Read), disaggregated by Reading Recovery outcome.

According to the National Standard for reading, learners should be reading texts at the Turquoise level after two years at school. The majority (91%) of successfully discontinued students were reading texts at the Turquoise level of the Ready to Read series when they exited the intervention. It is important to note that three-quarters (76%) of successfully discontinued students had not yet completed two years of schooling when they exited Reading Recovery. Nine per cent of successfully discontinued students were reading at or above the Green level (the standard for 'After one year at school') when they exited Reading Recovery.

Six per cent of students who were referred on from Reading Recovery were reading texts at the Turquoise level when they exited the intervention. Almost half (48%) of referred on students were reading texts at or above the Green level (the standard for 'After one year at school') but not yet at the Turquoise level and a further 46% were not yet reading at the Green level. Two-thirds (62%) of referred on students had completed two years of schooling when they exited Reading Recovery.

Just over half (52%) of students who were unable to continue their series of lessons were not yet reading texts at the Green level when they exited the intervention. A further 41% were reading at or above the Green level, but not yet the Turquoise level and seven per cent were reading texts at the Turquoise level when they exited the intervention.

Two-thirds of students who left their school before completing their series of lessons (62%) were not yet reading texts at the Green level when they exited the intervention. A further 33% were reading texts at or above the Green level but not yet at the Turquoise level and five per cent were reading at or above the Turquoise level when they exited the intervention.

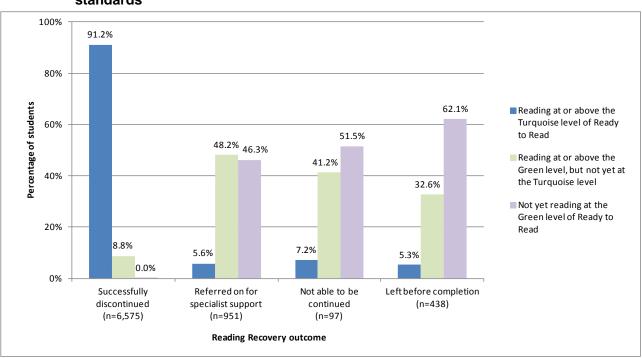


Figure 13: Reading achievement on exit from Reading Recovery in relation to reading standards

Conclusion

The data presented in the 2011 Annual Monitoring of Reading Recovery report shows that the majority (82%) of students who exited Reading Recovery in 2011 were successfully discontinued from the intervention as their progress in reading and writing placed them at the average level of their class cohort.

Furthermore, Running Records indicate that most students (91%) who were successfully discontinued from Reading Recovery in 2011 were reading texts at the Turquoise level of Ready to Read (the Reading Standard for 'After two years of school'). Many of these students had not yet completed two years of schooling.

Data collected from the Burt Word Reading test and the Writing Vocabulary Task (Clay) provided additional evidence that successfully discontinued students were reading and writing at the average level expected for their age group when they exited the intervention.

Approximately one in eight students who exited Reading Recovery in 2011 were referred on for specialist help or long-term support. Overall, these students made some progress during the course of their Reading Recovery lessons, but on average, were reading and writing at levels below the expected levels given their chronological age.

Students' Reading Recovery outcomes differed across a number of key demographic factors. Girls, NZ European/Pākehā and Asian students, and students from higher decile schools (deciles 8 to 10) were more likely to have successfully discontinued their series of lessons than boys, Māori and Pasifika students, and students from lower decile schools (deciles 1 to 3). It is important to note however, that many Māori and Pasifika students, and students from lower decile schools (deciles 1 to 3) did achieve the levels required to successfully discontinue their Reading Recovery lesson series, and where they did, they tended to make greater gains than NZ European/Pākehā and Asian students, and students from higher decile schools (deciles 8 to 10).

For further information about Reading Recovery, contact National Reading Recovery, Faculty of Education, The University of Auckland, Private Bag 92601, Symonds Street, Auckland 1150 or visit the Reading Recovery website www.readingrecovery.ac.nz

Appendices

Appendix Table 1: Exiting students' Reading Recovery outcome by school decile 1,2

		ssfully ntinued		d on' for t support	but not a	esponding ble to be nued		eft school ompletion	Total
Decile	N	%	N	%	N	%	N	%	N
1	672	73.7	139	15.2	21	2.3	80	8.8	912
2	666	77.9	128	15.0	6	0.7	55	6.4	855
3	661	78.3	109	12.9	13	1.5	61	7.2	844
4	649	78.3	115	13.9	12	1.4	53	6.4	829
5	543	81.3	80	12.0	12	1.8	33	4.9	668
6	594	85.1	73	10.5	7	1.0	24	3.4	698
7	604	84.7	73	10.2	3	0.4	33	4.6	713
8	678	86.6	72	9.2	8	1.0	25	3.2	783
9	734	83.9	98	11.2	8	0.9	35	4.0	875
10	774	87.6	64	7.2	7	0.8	39	4.4	884

¹ Does not include students who were carried over into 2012, as they have not yet exited Reading Recovery. Also excludes data from 54 students with missing information about their entry to and/or exit from Reading Recovery.

Appendix Table 2: Mean sessions and calendar weeks in Reading Recovery for successfully discontinued and referred on students by decile

	Stu	dent successfully dis Reading Recove		Student referred for specialist help or long-term reading support				
Decile	N	Mean Number of 30 Minute Sessions	Mean Number of Calendar Weeks	N	Mean Number of 30 Minute Sessions	Mean Number of Calendar Weeks		
1	672	81.4	20.9	139	83.9	22.7		
2	666	78.7	20.0	128	92.4	24.6		
3	661	76.5	19.3	109	89.1	23.0		
4	649	78.6	19.6	115	88.3	22.9		
5	543	79.0	19.8	80	96.3	24.7		
6	594	76.8	18.7	73	82.9	20.7		
7	604	76.7	18.9	73	93.8	23.8		
8	678	75.3	18.4	72	95.4	23.8		
9	734	74.7	17.9	98	91.6	22.6		
10	774	74.9	18.1	64	94.8	22.7		
Total	6,575	77.2	19.1	951	90.3	23.2		

² Table based on students' final outcome from Reading Recovery (where more than one school was attended during the year).