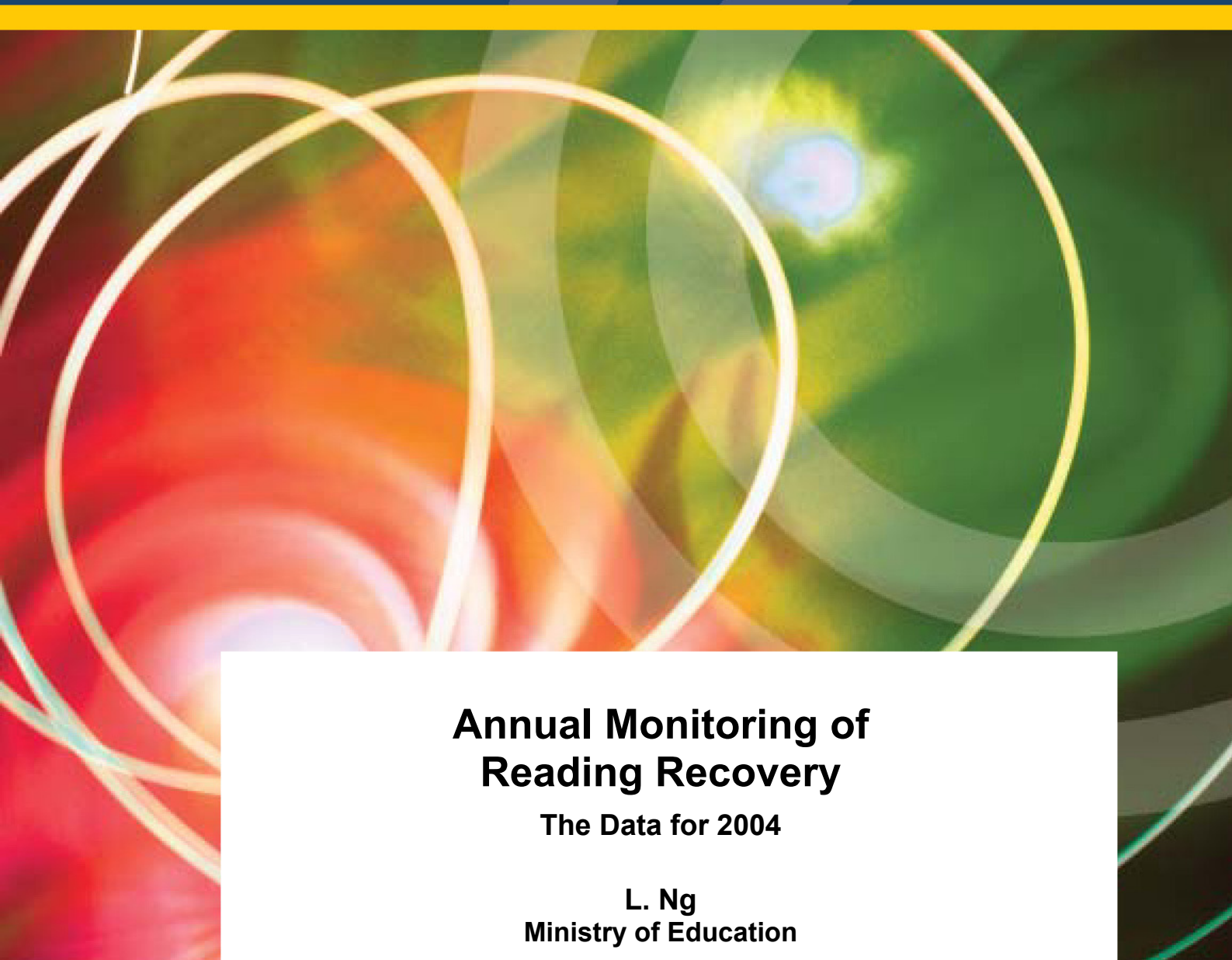




MINISTRY OF EDUCATION

Te Tāhuhu o te Mātauranga

New Zealand



Annual Monitoring of Reading Recovery

The Data for 2004

**L. Ng
Ministry of Education**

RESEARCH DIVISION

Wāhanga Mahi Rangahau

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Executive Summary

This report presents the latest available data on the number of schools and students who participated in Reading Recovery during 2004, and reports on the broad outcomes for students. In general, results repeated the trends evident in previous annual Reading Recovery monitoring reports.

The overall pattern of progress for students who entered Reading Recovery in 2004 remained the same as previous years, with 59 percent of students successfully completing Reading Recovery within the year and a further 24 percent judged to be responding well and expected to complete their series of individual sessions in 2005.

There was an increase in the absolute number of children entering Reading Recovery, which is consistent with the increased number of six-year-olds in New Zealand schools for 2004 (an increase of 2,555 six-year-olds between 2003 and 2004). However, there is now a slight but steady decline in the proportion of six-year-olds entering Reading Recovery (16% in 2000 and 2001, 15% in 2002 and 2003, and 14% in 2004). The proportion of schools operating Reading Recovery has similarly declined slightly over this period (69% in 2000 and 2001, 68% in 2002, 67% in 2003, and 64% in 2004).

In terms of school decile, the data show that Reading Recovery was more widely available in high decile schools than low decile schools. However, when available in low decile schools, there were more students participating and students had more time in Reading Recovery. While higher decile schools have slightly higher reading and writing scores (more so on entry than on exit), the gains that students made in lower decile schools were slightly greater than for students in higher decile schools for the Burt Word Reading Test and Writing Vocabulary Task. There was little difference in the Reading Recovery Instructional Text Level.

Introduction

Reading Recovery was designed by Dame Marie Clay, previously Professor of Education at The University of Auckland. It is an early literacy intervention which aims to reduce reading delay by providing intensive and individual help to children who are falling behind¹ in reading and writing after one year at school.

In 2004, as in previous years, Reading Recovery was available to state (including state-integrated) primary and composite schools. In addition, individual and school returns for 2004 were received from nine private schools, and one special school that also implemented Reading Recovery. Given that Reading Recovery primarily operates in state primary schools, this report presents information on participating six-year-olds from state and state-integrated schools only.

Reading Recovery data has been monitored and reported on annually since 1984, this report is a continuation of that annual series. Until 2000, the Ministry of Education had collected school based summary data for reporting purposes. In 2001, individual student data were collected for the first time to report on Reading Recovery. This report is the product of the fourth year of individualised data collection.

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

Method and Response Rates

After the successful implementation of the pilot online data collection in 2002, the Ministry has strongly encouraged the use of the data collection website² for the submission of Reading Recovery data. As in 2003, although schools were encouraged to submit their data electronically, paper returns were also accepted. Data collection via the electronic or paper media required the completion of both individual student reports and a school report. The questionnaires to be completed were exactly the same irrespective of the mode of data submission chosen by the school.

Schools opting to respond electronically were asked to submit their returns by 10 December 2004. With the electronic data collection, Reading Recovery teachers could record individual student reports for students at any point in time during 2004. For example, the teacher could immediately post the information about that student on the electronic website as soon as a student successfully completed his/her lessons (i.e. 'discontinued' from Reading Recovery). At the end of 2004, once all individual student reports were entered electronically by the teacher(s), the principal was asked to complete the end-of-the-year school report (which asks summarised information about Reading Recovery students and teachers in the school for that year) and to confirm the information entered by the teacher(s) earlier. Some principals delegate the task of completing the school report and/or confirming the individual student data to either the Reading Recovery teacher or to a senior staff member. Once this process was completed, Reading Recovery tutors were able to electronically check the data entered by teachers and/or principals. It should be noted that schools that submitted their individual student reports electronically did not necessarily confirm³ their end-of-the-year school report. In 2004, schools opting to respond by paper returns were asked to submit their data to their Reading Recovery tutors for checking purposes.

In 2004, 11,019 individual student reports and 1,308 school reports were received by the Ministry of Education. Over 95 percent of schools submitted their students and end-of-the-year school reports electronically.

²The Reading Recovery data collection website is www.readingrecoverydatacollection.minedu.govt.nz

³In total, 1,308 school reports were received in 2004. Out of these, 141 school reports were received as unconfirmed.

Schools and Students Involved in Reading Recovery in 2004

Schools and Students Involved in Reading Recovery Nationally and Regionally

At the end of 2004, a total of 1,419 individual teachers were reported to be teaching Reading Recovery at some point during that year. In total, 1,323 state and state-integrated schools were involved providing 407,374 hours of teaching, delivered to 11,058 students – around 37 hours of teaching time per student.

Table 1 shows the Reading Recovery schools that responded to the annual monitoring survey in 2004 by region. Reading Recovery was implemented in 64 percent of all state and state-integrated primary and composite schools with six-year-olds in New Zealand. These schools accounted for 76 percent of all six-year-olds in New Zealand, a slight decline compared to 2003 (78%). The overall percentage of schools that operated Reading Recovery in 2004 was lower in comparison to 2003 (64% in 2004 compared to 67% in 2003).

As shown in Table 1, Reading Recovery implementation varied from 40 percent in the Gisborne region to 86 percent in the Nelson region with most regions implementing it in the range of 50 percent to 75 percent of schools. However, it must be noted that school amalgamations and closures in 2004 could have potentially created regional variations in participation in Reading Recovery.

Table 1: Schools with Reading Recovery in 2004 by Region

Local Body (Region) ^a	Schools with Reading Recovery		Total schools with six-year-olds		Access to Reading Recovery	
	N	6 year olds on roll ^b	N	6 year olds on roll	Schools %	Six year olds %
Northland Region	68	1,606	130	2,321	52.3	69.2
Auckland Region	220	12,463	359	18,852	61.3	66.1
Waikato Region	177	4,714	259	5,839	68.3	80.7
Bay of Plenty Region	67	2,688	124	4,087	54.0	65.8
Gisborne Region	19	529	48	806	39.6	65.6
Hawkes Bay Region	63	1,832	111	2,395	56.8	76.5
Taranaki Region	56	1,280	88	1,547	63.6	82.7
Manawatu-Wanganui Region	103	2,452	175	3,269	58.9	75.0
Wellington Region	158	5,391	189	5,959	83.6	90.5
Tasman Region	22	605	28	646	78.6	93.7
Nelson Region	12	523	14	542	85.7	96.5
Marlborough Region	19	499	27	536	70.4	93.1
West Coast Region	17	325	39	430	43.6	75.6
Canterbury Region	196	5,911	251	6,467	78.1	91.4
Otago Region	75	1,588	122	2,260	61.5	70.3
Southland Region	51	918	84	1,314	60.7	69.9
Total	1,323	43,324	2,052	57,359	64.5	75.5

a Prior to 2002, Reading Recovery schools were presented by education district. In this report, as in the 2002 report, schools have been classified by region or Local Body (Region) as defined by the Education Institution Profile Codebook dated September 2002 of the Ministry of Education. This allows for consistency in comparisons between the 2002 report and the current report as well as in future reporting.

b Source: Data Management Unit, Ministry of Education, E4/2: Annual Return of Primary Pupils as at 1 July 2004. (To estimate the number of students who turned six during the year, five- and six-year-old totals were added together and then divided by two.)

Comparisons with the corresponding Table 1 of the 2003 Annual Monitoring Report (see Appendix Table 1) reveal interesting differences, although some of these are very small. Between 2003 and 2004, schools' participation in Reading Recovery has increased in the Gisborne, Hawkes Bay, Taranaki, Manawatu-Wanganui and Wellington regions, decreased in the remaining regions, and did not change in the Tasman region. The direction of the change across regions in students' access to Reading Recovery was similar to the change in schools' participation, although there were a few exceptions. For instance, the Hawkes Bay region experienced a slight increase in schools' participation in Reading Recovery, but a very slight decline in students' access to Reading Recovery from 2003 to 2004.

There were differences in the magnitude of change in schools' participation in and students' access to Reading Recovery from 2003 to 2004 across regions, ranging from less than one percent to 13 percent. For example, schools' participation decreased by 7 percent in the Nelson Region, while students' access decreased by 0.6 percent. Schools' access to Reading Recovery increased by less than one percent in the Gisborne region and students' access to Reading Recovery increased by 3 percent.

Table 2 shows that 14 percent of six-year-olds in state and state-integrated primary and composite schools entered Reading Recovery in 2004, a slight decline compared to 2003 (15%). Across the regions, there was, in general, a slight decline in the percentage of six-year-olds *entering* Reading Recovery in 2004 compared to 2003, with the largest proportionate declines occurring in the West Coast (6%) and Tasman

(5%) regions. It is the second year in a row that the Tasman region has had a decline in the percentage of six-year-olds *entering* Reading Recovery (a decline of 2% between 2002 and 2003). The Waikato, Gisborne, Manuwatu-Wanganui, Marlborough and Wellington regions had an increase in the number of six-year-olds entering Reading Recovery. The Marlborough region had the largest proportionate increase in the percentage of six-year-olds *entering* into Reading Recovery (4%).

Table 2: Six-year-old students who entered Reading Recovery in 2004 by region ^a

Local Body (Region)	Six year olds who <i>entered</i> Reading Recovery in 2004 ^b		Total six-year-old school population
	N	% of total	N
Northland Region	366	15.8	2,321
Auckland Region	2,054	10.9	18,852
Waikato Region	906	15.5	5,839
Bay of Plenty Region	467	11.4	4,087
Gisborne Region	127	15.8	806
Hawkes Bay Region	409	17.1	2,395
Taranaki Region	257	16.6	1,547
Manawatu-Wanganui Region	583	17.8	3,269
Wellington Region	1,101	18.5	5,959
Tasman Region	99	15.3	646
Nelson Region	70	12.9	542
Marlborough Region	99	18.5	536
West Coast Region	69	16.0	430
Canterbury Region	1,007	15.6	6,467
Otago Region	378	16.7	2,260
Southland Region	231	17.6	1,314
Total	8,223	14.3	57,359

- a This table is the same format used for presenting the 1994 to 2004 Reading Recovery data but differs from the equivalent table included in reports prior to 1994, in that it now only gives the numbers of students who entered Reading Recovery in the relevant year (in this case, 2004), rather than the total number involved in Reading Recovery. (The change was made because it became evident that the previous format was confusing and led to misinterpretation of the data and double counting.) However, if the number of students carried over from 2003, the number of students who transferred from other schools, and the number of students with this information missing were also included, the total number of students involved in Reading Recovery in 2004 would be 11,058 students (19 percent of the total six-year-old state school population in New Zealand in 2004).
- b This table is obtained by doing a match between the individual student reports received from Reading Recovery teachers (electronically and/or by paper mode) and the six-year old school population in schools in 2004. The table excludes students for whom individual student reports were received but with missing school information. As a result, no match could be done to perform the above analysis.

Table 3 shows the relationship between Reading Recovery schools and their decile rating⁴. Compared to 2003, there was a lower proportion of schools with Reading Recovery in each decile other than decile 1 in 2004. The proportion of decile 10 schools with Reading Recovery decreased the most compared to other

⁴ A school's decile indicates the extent to which the school draws its students from low socio-economic communities. Decile 1 schools are the 10% of schools with the highest proportion of students from low socio-economic communities, whereas Decile 10 schools are the 10% of schools with the lowest proportion of these students. Six factors are used in determining a school's socio-economic indicator. Five of these (household income, parents' occupations, household crowding, parents' educational qualifications, and parents receiving income support) are based on families with school age children within the catchment area of the school. This information is combined with the sixth factor, school ethnicity data (the proportion of Māori and Pasifika students, and, refugee students receiving ESOL support) to determine the school's socio-economic indicator and thus the school's decile.

deciles from 2003 to 2004 (a decrease of 10% of decile 10 schools). Proportionately, fewer students entered Reading Recovery in high decile schools (10% of students in decile 10 schools compared to 18% of students in decile 1 schools) in 2004. The time students had in Reading Recovery in 2004 was, on average, slightly greater in low decile schools (deciles 1-4) than high decile schools (deciles 9 and 10). There is a slight decrease in the number of hours spent in Reading Recovery with deciles 3, 4, 7, and 8 schools, but an increase in the remaining schools (except for decile 9 schools where it is relatively constant).

Table 3: Reading Recovery in 2004 by decile ^d

Decile	Schools in decile with Reading Recovery % ^a	Students who entered Reading Recovery % ^b	Time in Reading Recovery per Student (hours) ^c
1	54.8	17.6	44.7
2	49.8	15.0	42.1
3	57.4	14.0	39.6
4	65.5	16.2	40.0
5	68.2	16.0	41.1
6	65.6	14.5	40.8
7	65.9	13.5	36.9
8	64.1	14.1	37.8
9	67.1	13.0	38.2
10	67.6	10.4	40.5

- a The proportion of schools in Reading Recovery is calculated as the number of Reading Recovery schools that submitted their end-of-the-year school reports in 2004 divided by the total number of schools with six-year olds in each decile.
- b The percentage of six-year-olds who entered Reading Recovery in 2004 (in Reading Recovery schools) by decile.
- c The total amount of Reading Recovery time reported by schools in a particular decile divided by the total number of children in Reading Recovery in those schools.
- d The table excludes students for whom individual student reports were received but with missing school information. As a result, no match could be done to perform the above analysis.

Gender of Students Enrolled in Reading Recovery

As in previous years, two-thirds (66%) of the students in Reading Recovery in 2004 were boys. In the 2004 cohort, 24 percent of six-year-olds boys and 13 percent of six-year-old girls were in Reading Recovery (see Table 4 below). The percentage of boys in Reading Recovery was marginally lower than those found in 2003 data, but the percentage of girls remained the same.

Gender and Ethnicity of Students Enrolled in Reading Recovery

Table 4 shows the gender and primary ethnicity of students enrolled in Reading Recovery in 2004 (see footnote b to Table 4). The trend of the data is similar to previous years. In general, Asian boys and girls were less likely to be in Reading Recovery than boys and girls of other ethnic groups⁵. Māori, Pasifika (except for Fijian boys and girls, and Niuean boys and girls) and 'Other European' boys and girls were more likely to be in Reading Recovery than NZ European boys and girls.

⁵ As in 2003, the exceptions were Niuean and Fijian girls. Note, however, that the numbers of children in these groups were very small and the results should therefore be treated with caution.

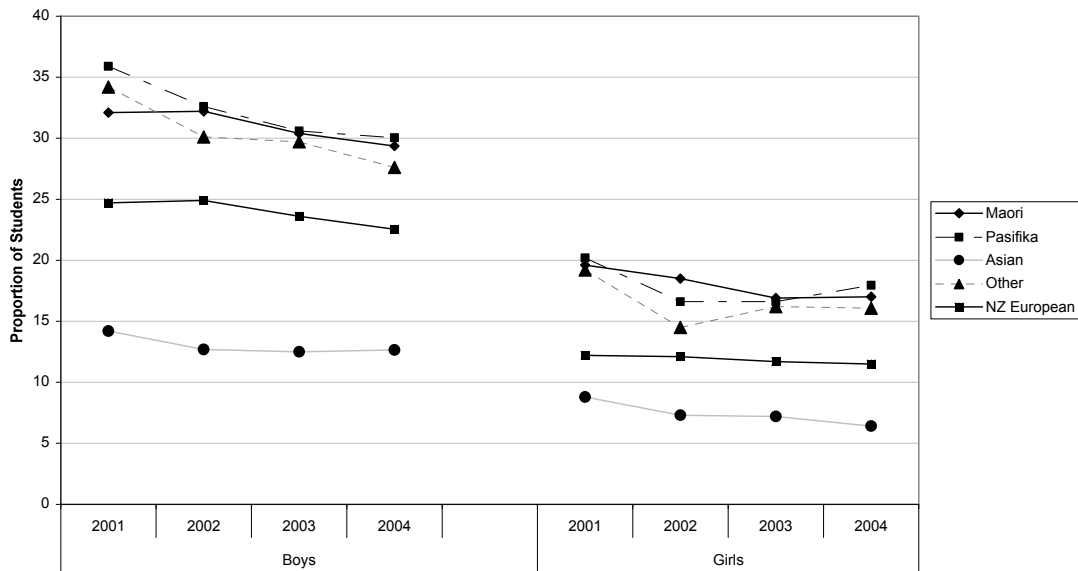
Table 4: Ethnicity and gender of students enrolled in Reading Recovery in 2004^{a,b}

Ethnicity	Boys			Girls		
	Total six year old boys in population	In Reading Recovery		Total six year old girls in population	In Reading Recovery	
	N	n	%	N	n	%
Māori	7,093	2,082	29.4	6,555	1,115	17.0
Tokelauan	73	29	39.7	51	15	29.4
Fijian	101	21	20.8	86	7	8.1
Niuean	153	32	20.9	176	14	8.0
Tongan	641	184	28.7	559	129	23.1
Cook Island Maori	457	132	28.9	419	65	15.5
Samoan	1,267	417	32.9	1,268	232	18.3
Other Pacific Islands	97	23	23.7	104	16	15.4
South East Asian	320	50	15.6	320	30	9.4
Indian	758	116	15.3	725	64	8.8
Chinese	678	59	8.7	628	21	3.3
Other Asian	450	54	12.0	415	19	4.6
Other	466	116	24.9	460	78	17.0
Other European	686	171	24.9	654	84	12.8
NZ European	16,718	3,769	22.5	15,880	1,827	11.5
Unspecified	105	31	-	79	17	-
Total	30,063	7,286	24.3	28,379	3,733	13.2

- a 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 by Statistics New Zealand in the 1996 census. For example, a child who has identified with the groups 'NZ Māori' and 'Tongan' will be reported in the group 'NZ Māori'.
- b Totals in this table do not add up to the total number of students in Reading Recovery in 2004 (N=11,058) given in footnote b of Table 2 due to missing gender information.

Figure 1 shows a time series analysis of the last four years of Reading Recovery data. The graph enables comparison of the proportion of students in Reading Recovery across gender and ethnic groups over the last four years of individual data collection. The 14 ethnic groups identified in the returns have been allocated to one of the five groupings (Māori, Pasifika, Asian, New Zealand European and 'Other').

Figure 1: Ethnicity and Gender of Students in Reading Recovery over time



The left-hand side and right-hand side line-graphs represent the proportion of boys and girls in Reading Recovery respectively. The graph shows a small reduction between 2001 and 2004 in the proportion of boys of all ethnicities, except Asian boys for whom there is an initial drop but has remained constant since 2002. For Māori, New Zealand European, and Asian girls, proportions have also fallen, while for Pasifika and “Other” girls, there was an initial drop in 2002 and a slight but steady increase since.

Students' Progress in Reading Recovery

Students Entering Reading Recovery in 2004

In 2004, 11,019 individual student forms were received from state and state-integrated schools operating Reading Recovery. A further 39 students were identified as students who participated in Reading Recovery but had no individual student reports⁶ (classified in the 'missing data' categories in the tables below). Hence, an estimated⁷ 11,058 students took part in Reading Recovery during 2004 (an increase of 183 students from 2003). As shown in Table 5, most of these (74%) entered Reading Recovery for the first time in 2004. The rest were carried over from previous years or from other schools. These figures show very little change from 2003.

Table 5: How students entered Reading Recovery in 2004

Students' entry in Reading Recovery in 2004	N	%
Carried over from 2003 from same school	2,435	22.0
Transferred from another school ^a	330	3.0
Entered Reading Recovery for the first time in 2004	8,223	74.4
Missing data	70	0.6
Total	11,058	100.0

a Some double-counting will have occurred here, as these students are also likely to be grouped with those in Reading Recovery in their previous school, either as being carried over from 2003 or as entering Reading Recovery during 2004.

Students in Reading Recovery in 2004 and their Outcomes

Table 6: Students' progress in Reading Recovery in 2004

Type of outcome	Students in Reading Recovery	
	N	%
Child successfully completed	6,521	59.0
Child responding and to be carried over into 2005	2,662	24.1
Child referred for specialist help or long-term reading support	909	8.2
Child responding but not able to be continued	197	1.8
Child left the school before completion ^a	615	5.6
Missing data	154	1.4
Total	11,058	100.0

a Some double-counting is likely here, as some of these students may have completed Reading Recovery at their new school.

Table 6 shows the progress of students. The data show a similar pattern to 2003. Of the children in Reading Recovery, 59 percent successfully completed in 2004, and 24 percent were carried over to 2005,

⁶ These students were identified by four schools who submitted school reports only, with no accompanied student reports (a total of 15 student reports missing in this category), and eight schools had mismatches between the number of students indicated on school reports and the actual number of student reports received (a total of 24 missing students reports in this category).

⁷ Some double-counting will have occurred here, as these students are also likely to be grouped with those in Reading Recovery in their previous school, either as being carried over from 2003 or as entering Reading Recovery during 2004.

with the expectation of successfully completing Reading Recovery. An estimate of the number of students who, upon entering Reading Recovery, would successfully complete their series of individual lessons (either within the year they entered or the following year, and in the same school or in another school) can also be obtained. This estimate⁸ indicates that 83 percent of the children who left Reading Recovery in 2004 would do so after completing it successfully.

Over the years this data have been collected, some minor discrepancies have been noted. For example, 2,435 students were **actually** carried over from the year 2003; the year 2003 returns specified that 2,697 children were **expected** to be carried over into 2004 – a discrepancy of 262 children. Similarly, 330 students transferred into Reading Recovery from another school, while 615 left Reading Recovery due to transferring into another school, a discrepancy of 285 students. The pattern of discrepancy for 2004 is consistent with those in previous years.

There may be a number of reasons why there is a discrepancy of students who were actually carried over from the year 2003 and the children expected to be carried over into 2004. For example, some of these students may have changed their school. The transferring student will not have appeared in the Reading Recovery roll if Reading Recovery did not operate in his/her new school or a space was not available for the child to continue Reading Recovery. As teachers become more familiar with the use of the unique student identifier and with the operation of the online database (which has validation checks to help ensure that the unique student identifier is correctly recorded), it is expected that discrepancies will be reduced.

Students in Reading Recovery in 2004, their Outcomes by Gender and Ethnicity

Gender

Tables 7 and 8 show the children's outcomes from Reading Recovery by gender and ethnicity respectively. Table 7 shows that girls were more likely to have successfully completed Reading Recovery in 2004, and boys were more likely to be carried over to another year. Girls were marginally less likely to be 'referred on' for specialist or long-term reading support. Boys and girls were equally likely to leave school before completion. Note that there is little difference by gender in the total success rate⁹ at 83 percent (boys) and 86 percent (girls).

⁸ To obtain this estimate, the number of students who left the school before completing Reading Recovery, and the number for whom an outcome was missing — based on the assumption that the outcomes for these students would be the same as for other students in Reading Recovery — was proportionally split into the other possible outcomes. The number of students who were reported to be responding positively and were to be carried over into 2005 was then subtracted from the total number of students participating in Reading Recovery during 2004. Finally, the proportions of students falling into each outcome category were calculated. It should be noted that some students might have moved more than once during the year.

⁹ Total success rate comprises the percentage of children who successfully completed Reading Recovery in 2004 plus the children who are responding and carried over to 2005 with every expectation of a successful outcome.

Table 7: Student's outcome by gender^a

Type of Outcome	Boys %	Girls %
Child successfully completed	57.8	63.6
Child responding and to be carried over into 2005	25.3	22.7
Child referred for specialist help or long-term reading support	9.5	6.1
Child responding but not able to be continued	1.8	1.8
Child left the school before completion ^b	5.6	5.8

a Percentages exclude any missing data on gender and/or outcome.

b Some double-counting is likely here, as some of these students may have completed Reading Recovery at their new school.

Ethnicity

Table 8 shows the children's outcome according to their ethnicity. The fourteen ethnic groups identified in the returns have been grouped into Māori, Pasifika, Asian, NZ European and 'Other'. Māori (8%) are more likely than other children to leave the school before completing Reading Recovery. Asian and NZ European (62% and 63% respectively) students were more like to have successfully completed Reading Recovery than Māori (56%) and Pasifika (56%) students. Asian students were least likely to be 'referred on' for specialist help or long-term reading support and to be responding but not able to be continued, while NZ Europeans were least likely to have left the school before completion of their sessions. Total success rate (see definition above), including those responding and continuing next year (2005), ranged from 80 percent (Māori) to 87 percent (NZ European).

Table 8: Student's outcome by ethnicity^a

Type of Outcome	Māori %	Pasifika %	Asian %	NZ European %	Other %
Child successfully completed	55.5	56.3	62.2	62.8	61.6
Child responding and to be carried over into 2005	24.8	26.5	22.4	23.8	25.1
Child referred for specialist help or long-term reading support	9.2	9.8	6.8	7.8	6.3
Child responding but not able to be continued	2.3	1.3	2.7	1.6	1.1
Child left the school before completion ^b	8.2	6.1	5.9	4.0	5.9

a Some double-counting is likely here, as some of these students may have completed Reading Recovery at their new school.

b Percentages exclude any missing data on ethnicity and/or outcome.

Students Leaving Reading Recovery in 2004

Table 9: Students leaving Reading Recovery in 2004 and their outcomes^a

Type of Outcome	Carried over from 2003		Transferred from another school		Entered in 2004	
	N	%	N	%	N	%
Child successfully completed Reading Recovery	1,885	77.6	247	75.3	7,051	86.6
Child "referred on" for specialist help or long-term reading support	350	14.4	44	13.4	515	6.3
Child responding but not able to be continued	35	1.4	4	1.2	158	1.9
Child left the school before completion ^b	160	6.6	33	10.1	422	5.2
Total	2,430	100.0	328	100.0	8,146	100.0

a Some double-counting is likely here, as some of these students may have completed Reading Recovery at their new school.

b Excludes any missing information on students' outcomes and/or entry status into Reading Recovery.

Table 9 shows the outcomes of students who exited in 2004 according to how they entered Reading Recovery. The data follow a similar overall pattern as previous years. Compared with 2003, a larger proportion (87% compared to 80% in 2003) of students, who had entered in 2004 successfully completed Reading Recovery in the same year. Students carried over from 2003 and those transferred from another school were more likely than the other students entered in 2004 to be 'referred on' for specialist help.

Students Leaving Reading Recovery in 2004 by Decile

Table 10 shows the outcomes of those students who exited in 2004 according to the decile rating of their Reading Recovery school.

Table 10: Students leaving Reading Recovery in 2004 by decile^a

Decile	Successful completion		'Referred on' for specialist support		Child responding but not able to be continued		Child left school before completion		Total
	N	%	N	%	N	%	N	%	N
1	766	72.1	143	13.5	40	3.8	114	10.7	1,063
2	585	74.2	91	11.5	30	3.8	82	10.4	788
3	619	75.5	99	12.1	25	3.0	77	9.4	820
4	605	77.6	103	13.2	14	1.8	58	7.4	780
5	692	78.8	111	12.6	11	1.3	64	7.3	878
6	545	80.3	87	12.8	7	1.0	40	5.9	679
7	682	82.0	77	9.3	20	2.4	53	6.4	832
8	514	82.2	46	7.4	18	2.9	47	7.5	625
9	743	83.8	87	9.8	14	1.6	43	4.8	887
10	766	86.5	65	7.3	18	2.0	37	4.2	886

a Totals do not match with Table 6 earlier as a few returns had missing information on the school of the students at the time of response.

When the outcomes of student categories by decile are examined some trends are evident. The percentage of students successfully completing Reading Recovery in 2004, increased by decile, from 72 percent in

decile 1 schools to 86 percent in decile 10 schools. Note that this analysis does not include children who will be carried over to 2005. As would be expected, the increasing percentage of students having their Reading Recovery lessons discontinued by decile is matched by a relative decline in the percentage of students having other outcomes. A child in decile 1 school is more likely to be 'referred on' to a specialist programme than a child in a decile 10 school (13% and 7% respectively) and more than twice as likely to be leaving the school in question prior to completing Reading Recovery.

Table 11 shows, by region, the students who successfully completed their individually designed lessons in 2004 as a proportion of those who exited Reading Recovery in 2004 (i.e. excluding those children who were carried over to 2005).

Table 11: Proportion of students who successfully completed Reading Recovery and exited in 2004 by region

Local Body (Region) ^a	Six year olds who successfully completed Reading Recovery in 2004		Total number of students who left Reading Recovery in 2004
	N ^b	% of total ^c	N
Northland Region	277	75.7	366
Auckland Region	1,631	80.0	2,039
Waikato Region	669	75.5	886
Bay of Plenty Region	369	82.2	449
Gisborne Region	70	70.0	100
Hawkes Bay Region	319	81.0	394
Taranaki Region	205	77.1	266
Manawatu-Wanganui Region	459	78.7	583
Wellington Region	953	83.7	1,138
Tasman Region	86	78.9	109
Nelson Region	63	78.8	80
Marlborough Region	69	72.6	95
West Coast Region	47	64.4	73
Canterbury Region	804	80.8	995
Otago Region	340	80.2	424
Southland Region	160	65.3	245

a Region refers to Local Body (Region).

b Totals do not add up with Table 6 earlier as some returns did not have any information about the school of the students.

c These were calculated by dividing the number of students in the region who successfully completed Reading Recovery in 2004 by the total number of students in the region who exited in 2004 (i.e. excluding those children who were carried over to 2005).

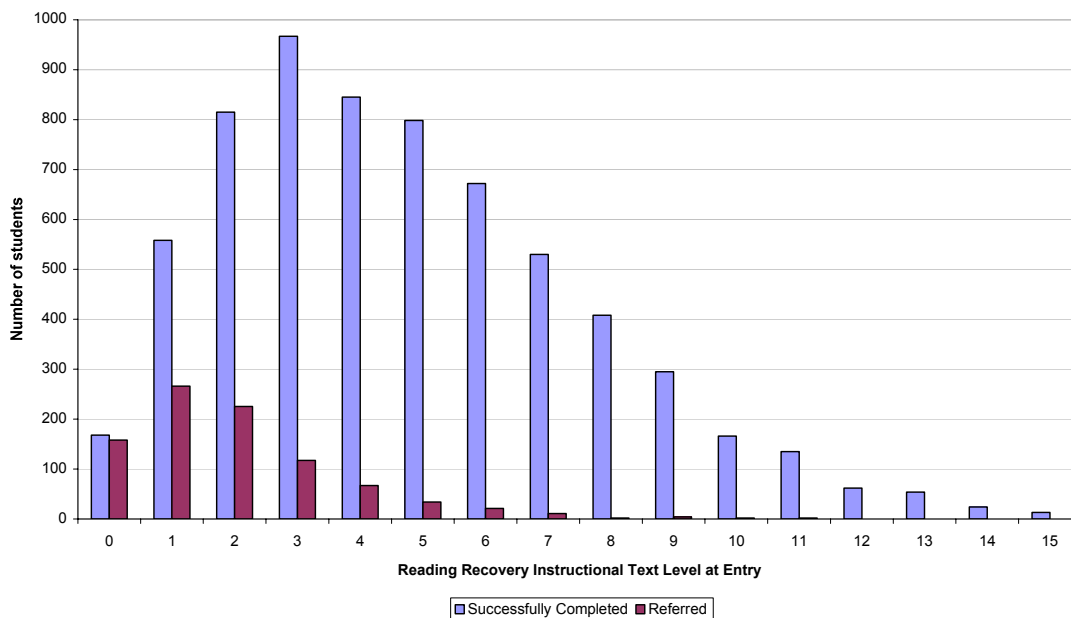
As in 2003, the proportion of students who successfully completed Reading Recovery in 2004 varied from 84 percent in the Wellington region to 64 percent in the West Coast region. Compared to 2003, the Southland region experienced the largest decrease in the proportion of students who had successfully completed Reading Recovery (from 75% in 2003 to 65% in 2004) while the Northland region had the largest increase in the same period (from 71% to 76% in 2004).

Students' Levels of Progress and Outcomes

Students in Reading Recovery were assessed by three measures: the Reading Recovery Instructional Text Level; the Burt Word Reading Test; and the Writing Vocabulary (Clay). Data on reading levels were

captured for students whose series of lessons were discontinued or 'referred on' from Reading Recovery. Figure 2 below suggests that the child's initial reading level (Instructional Text Level) is closely linked to the outcome of the child in being 'referred on' but cannot be used to predict it. The results of the Burt Word Reading Test and the Writing Vocabulary test (Clay) show a similar result (see Appendix Figures 1 and 2). The average reading scores for the students, who eventually required referrals, were typically half the scores of students who successfully completed Reading Recovery. This suggests that many of the more serious reading problems students may have, which require referral, are affecting scores from the beginning. Students, who were eventually referred because they needed ongoing individual support, spent on average 88 sessions in Reading Recovery, 10 sessions more than their classmates whose lessons had been discontinued because they no longer needed such support. These 'referred' students made only 62 percent of the gain¹⁰ of the average student whose series of lessons had been discontinued. However, as noted above, the initial low reading score, while suggestive of a potential referral requirement, is not predictive. The majority of children with low initial scores completed their series of lessons successfully as shown in Figure 2.

Figure 2: Reading Recovery Instructional Text Level At Initial Entry



In total, 197 students were responding but not able to be continued in Reading Recovery in 2005. Various reasons were given for their non-continuation, including resource issues (Reading Recovery teachers and school no longer offering Reading Recovery). Other reasons included the student's poor attendance, parents' decision to withdraw their children from Reading Recovery, and the child leaving the country. A very small number of students left due to serious illness.

The Mean Number of Reading Recovery Sessions and Calendar Weeks in 2004

Table 12 shows the mean number of half-hour sessions and the mean number of calendar weeks for whole sessions received by those students who successfully completed Reading Recovery and those who were 'referred on' for specialist or long-term reading support.

¹⁰ Gain is calculated as the difference between the Reading Recovery Instructional Text Level scores at initial entry and when discontinued/referred. The average gain was 13.2 for students with a successful outcome (i.e. those who made successful progress and were discontinued) and 8.2 for those who were 'referred on' for further specialist support.

Table 12: Mean Sessions and Calendar Weeks in 2004

Type of outcome	N	Mean Number of 30 Minute Sessions	Mean Number of Calendar Weeks
Child successfully completed Reading Recovery	6,521	77.2	19.1
Child referred for specialist help or long-term reading support	909	87.7	22.4

The table shows that, on average, students who were ‘referred on’ received a higher number of sessions. In 2004, less time (in terms of the number of calendar weeks) was also spent with successfully completed students compared to ‘referred’ students.

The Mean Number of Reading Recovery Sessions in 2004 by Gender and Ethnicity

Table 13 shows the mean number of half-hour sessions and calendar weeks spent with children who successfully completed Reading Recovery in 2004, based on gender and ethnicity. Students who completed Reading Recovery successfully had an average of 77 sessions (an average of 79 and 75 sessions was received by boys and girls respectively). The mean number of sessions ranged from 66 sessions (Other European girls) to 87 sessions (Niuean boys), but in these cases the absolute number of children are small.

Overall, there was little difference in the mean number of calendar weeks of sessions spent with boys and girls. Māori and Pasifika boys experienced relatively more calendar weeks on average than Asian and NZ European boys. Māori and Pasifika girls (except Tokelauan and Fijian girls) experienced a slightly higher number of calendar weeks on average than Asian and NZ European girls.

Table 13: The Mean Number of Reading Recovery Sessions in 2004 by Gender and Ethnicity ^{a,b}

Ethnicity	Mean number of sessions ^c		Mean number of calendar weeks ^d	
	Boys	Girls	Boys	Girls
Māori	80.1	77.2	20.1	19.6
Tokelauan	75.4	70.3	19.5	16.0
Fijian	73.1	68.2	19.0	16.5
Niuean	87.2	77.2	21.1	19.4
Tongan	82.1	80.5	20.7	20.8
Cook Island Maori	85.1	79.4	21.8	20.7
Samoaan	80.5	77.9	20.7	20.1
Other Pacific Islands	80.6	82.2	20.8	20.9
South East Asian	72.4	76.1	17.2	18.7
Indian	80.7	68.3	19.8	16.6
Chinese	76.1	73.5	18.9	18.5
Other Asian	70.4	68.8	17.2	17.5
Other	80.7	81.6	19.8	20.0
Other European	76.8	65.6	18.7	15.8
NZ European	77.7	72.5	18.9	17.7
Unspecified	82.6	61.0	20.9	16.7
Total	78.7	74.5	19.4	18.5

a Excludes students enrolled in the Correspondence School, private schools, health camps, and special schools.

b The data for this table refers to those students who successfully completed Reading Recovery in 2004.

c Mean number of sessions was calculated by dividing the total number of sessions by the number of children, who successfully completed Reading Recovery in 2004, for each gender and ethnicity.

d Mean number of calendar weeks was calculated by dividing the total number of calendar weeks by the number of children, who successfully completed Reading Recovery in 2004, for each gender and ethnicity.

Students' Learning Gains

Students' Gains in Reading and Writing by Gender and Ethnicity

In terms of gender, there is little difference in gains across the three measures between girls and boys. On the Reading Recovery Instructional Text Level, students who successfully completed Reading Recovery gained an average of 13 (also 13 in 2003), with boys (13.3) gaining a similar amount to girls (13.0). On the Burt Word Reading Test, the overall average gain of students was 17 (also 17 in 2003), with boys gaining 17 and girls gaining 16. The average gain in the Clay assessment for all those who successfully completed Reading Recovery was 35 (34 in 2003), with boys gaining 34 and girls gaining 35. This is as one might expect, given that the student must reach the average achievement band to have their series of lessons discontinued.

Table 14: Ethnicity and gender of students with successful outcomes and their gains in reading and writing in 2004^{a,b}

Ethnic Groups	Gain in Reading Recovery Instructional Text Level ^c		Gain in Burt Word Reading Test (NZ Version)		Gain in Writing Vocabulary Task (Clay)	
	Boys	Girls	Boys	Girls	Boys	Girls
Māori	13.4	13.4	17.8	17.6	36.0	37.5
Tokelauan	14.6	14.8	19.8	20.5	37.8	29.5
Fijian	13.3	13.8	18.0	12.5	33.5	34.3
Niuean	14.2	13.7	19.0	20.0	33.3	38.3
Tongan	14.1	13.8	17.8	18.6	36.4	40.5
Cook Island Maori	13.9	13.7	18.9	17.9	38.7	36.7
Samoaan	14.0	13.8	18.8	18.4	37.4	39.2
Other Pacific Islands	14.3	12.3	18.0	17.9	35.7	32.8
South East Asian	13.0	13.4	15.5	17.6	40.9	35.4
Indian	13.9	13.7	17.0	16.7	33.2	36.7
Chinese	13.4	13.9	16.9	15.9	34.4	37.2
Other Asian	13.1	11.8	17.3	16.8	37.0	33.3
Other	13.9	14.3	17.6	17.3	35.4	36.4
Other European	13.4	13.5	17.3	14.9	33.8	34.6
NZ European	13.0	12.6	16.5	15.4	32.5	33.0
Unspecified	12.9	11.0	16.9	10.0	34.1	20.7
Total	13.3	13.0	17.1	16.4	34.1	35.2

a Excludes students enrolled in the Correspondence School, private schools, health camps, and special schools.

b The data for this table refers to those students who successfully completed Reading Recovery in 2004.

c Gain is calculated as the difference between the level/score at initial entry and when discontinued divided by the number of students in that ethnicity group.

Table 14 above shows the gain in reading and writing from participating in Reading Recovery by gender and ethnicity. In terms of ethnicity, Tokelauan girls gained more than other students in the Reading Recovery Instructional Text Level and in the Burt Word Reading Test, but did not do as well in the Writing Vocabulary Task (Clay). South East Asian boys had the highest gains in the Writing Vocabulary Task (Clay). However, because of the small number of students involved in these ethnic groups, the results should be treated with caution.

Students' Gains in Reading Recovery in 2004 by Decile

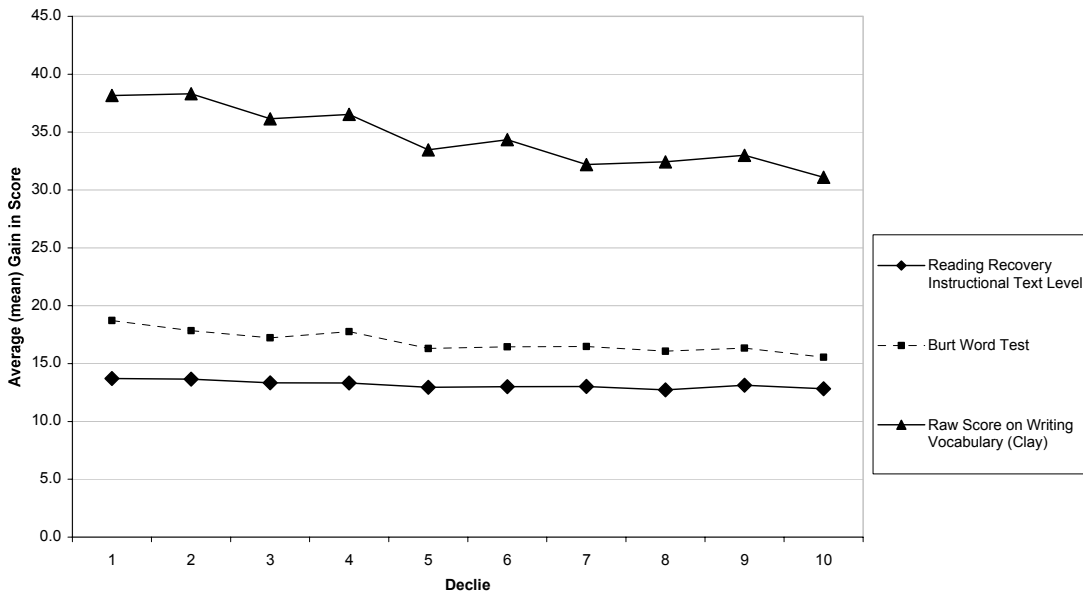
Table 15: Mean scores of successfully discontinued students in Reading Recovery by decile^a

Decile	Reading Recovery Instructional Text Level		Raw Score on Burt Word Reading test		Raw Score on Writing Vocabulary (Clay)	
	In	Out	In	Out	In	Out
1	3.8	17.5	8.1	26.8	15.8	54.0
2	4.0	17.6	8.8	26.7	17.3	55.6
3	4.4	17.7	10.0	27.2	19.9	56.1
4	4.3	17.6	9.6	27.4	19.0	55.5
5	5.0	18.0	11.2	27.5	21.4	54.8
6	5.1	18.1	11.4	27.8	20.8	55.1
7	5.1	18.1	11.2	27.7	21.8	54.0
8	5.5	18.3	11.8	27.8	21.7	54.2
9	5.2	18.4	11.7	28.1	21.7	54.7
10	5.7	18.5	12.9	28.5	23.3	54.4

a The data for this table refers to those students who successfully completed Reading Recovery in 2004.

Table 15 shows the mean assessment scores of those students who successfully completed Reading Recovery according to the decile rating of their schools at their points of entry and exit. There is a clear trend according to decile, with students in higher decile schools having slightly higher reading and writing levels, more so on entry than on exit. In all measures and deciles, the score at exit is similar, which is expected, since students who had not reached the average band would not have 'discontinued' from Reading Recovery.

Figure 3: Students' Learning Gains in Reading and Writing in 2004



While higher decile schools have slightly higher reading and writing scores (more so on entry than on exit), the gains that students made in lower decile schools are slightly greater than for students in higher decile schools for the Burt Word Reading Test and Writing Vocabulary Task (there was little difference in the Reading Recovery Instructional Text Level). Figure 3 above shows this. Considered in light of

Table 3, which showed that students in lower decile schools had more time in Reading Recovery, this data suggest that, in general, the gains in reading and writing took more time to achieve in lower decile schools. This finding was expected since students in lower decile schools had lower reading and writing scores at entry than students in higher decile schools.

Summary

Reading Recovery in 2004 has followed the trends established since the mid 1990s. Up until 1995, data on Reading Recovery consistently exhibited an increase in the number of students each year. The data for the period 1996 – 2003 suggested a slight decline in the number of students in Reading Recovery, however, the 2004¹¹ figure showed a slight increase in absolute numbers, with 11,058 (19%) students enrolled in 2004, but the percentage of students in Reading Recovery remained constant (10,875 students enrolled in 2003, 19%). The proportion of schools implementing Reading Recovery has slowly declined from 71 percent in 1999 to 64 percent in 2004. In addition, the proportion of the six-year-old population in those schools with Reading Recovery has decreased to 76 percent in 2004 (78% in 2003).

Reading Recovery is more widely available in high decile schools, but where present, Reading Recovery in lower decile schools has relatively more students and offers more hours per student than in higher decile schools. While higher decile schools have slightly higher reading and writing scores (more so at entry than at exit), the gains that students made in lower decile schools are slightly greater than for students in higher decile schools for the Burt Word Reading Test and Writing Vocabulary Task. There was little difference in the Reading Recovery Instructional Text Level.

Findings from the individual data follow the general patterns of literacy in New Zealand with gender, ethnicity and school decile being important factors in terms of students' outcome. There are proportionally more boys, Pasifika and Māori students, and proportionately fewer girls, Asians and NZ Europeans in Reading Recovery. Students in low decile schools are less likely to have successful outcomes than those in higher decile schools, being more likely to be 'referred on' or to leave the school before completing, although many students in lower decile schools achieve standards required for being 'discontinued' from Reading Recovery.

Data presented in this report also indicate that the overall pattern of students' progress in Reading Recovery remained fairly consistent with that of previous years, with approximately 59 percent of students completing Reading Recovery successfully during 2004 and a further 24 percent considered to be responding well and carried over into 2005 with the expectation of successful completion of their lesson series.

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

¹¹ Data supplied by the Ministry of Education's Data Management and Analysis Division indicate that there was almost no change in the total six-year-old population in New Zealand between 1995 and 1996 (from 57,491 in 1995 to 57,416 in 1996). However, between 1996 and 1997 there was an overall increase of four percent in the six-year-old population (bringing the total to 59,739, an increase of 2,323 children). There was an overall decrease of two percent in the six-year-old population (1,317 children) between 1997 and 1998, a decrease of three percent (1,505 children) between 1998 and 1999 and a decrease of one percent (547 children) between 1999 and 2000. This decreasing trend of one percent in the six-year old population has reached a plateau in 2002 (a decrease of 407 children between 2000 and 2001 and a decrease of 763 children between 2001 and 2002). In 2003, there was an increase of 687 children in the six-year old population or an increase of one percent, contrary to the declining trend since 1997. In 2004, there was an increase of 2,555 children.

Appendices

Appendix 1: Schools with Reading Recovery in 2003, by region ^a

Local Body (Region) ^b	Schools with Reading Recovery		Total schools with six-year-olds		Participation in Reading Recovery	
	N ^c	6 year olds on roll ^d	N	6 year olds on roll	Schools %	Six year olds %
Northland Region	78	1,700	129	2,264	60.5	75.1
Auckland Region	228	12,840	345	18,336	66.1	70.0
Waikato Region	193	4,740	265	5,683	72.8	83.4
Bay of Plenty Region	72	2,834	123	3,948	58.5	71.8
Gisborne Region	19	492	49	785	38.8	62.7
Hawkes Bay Region	61	1,813	113	2,346	54.0	77.3
Taranaki Region	58	1,210	95	1,502	61.1	80.6
Manawatu-Wanganui Region	98	2,226	183	3,258	53.6	68.3
Wellington Region	158	5,204	192	5,898	82.3	88.2
Tasman Region	22	554	28	597	78.6	92.8
Nelson Region	12	497	13	512	92.3	97.1
Marlborough Region	20	496	27	526	74.1	94.3
West Coast Region	22	345	39	409	56.4	84.4
Canterbury Region	213	5,853	254	6,275	83.9	93.3
Otago Region	81	1,638	132	2,215	61.4	74.0
Southland Region	54	928	85	1,333	63.5	69.6
Total	1,389	43,370	2,072	55,887	67.0	77.6

a Excludes the Correspondence School, private school, health camps and special schools.

b Prior to 2002, Reading Recovery schools were presented by education district. In this report, as in the 2002 report, schools have been classified by region or Local Body (Region) as defined by the Education Institution Profile Codebook dated September 2002 of the Ministry of Education. This allows for consistency in comparisons between the 2002 report and the current report as well as in future reporting.

c Source: Data Management Unit, Ministry of Education, E4/2: Annual Return of Primary Pupils as at 1 July 2003. (To estimate the number of students who turned six during the year, five- and six-year-old totals were added together and then divided by two.)

Appendix 2: Six-year-old students who entered Reading Recovery in 2003, by region ^{a, c}

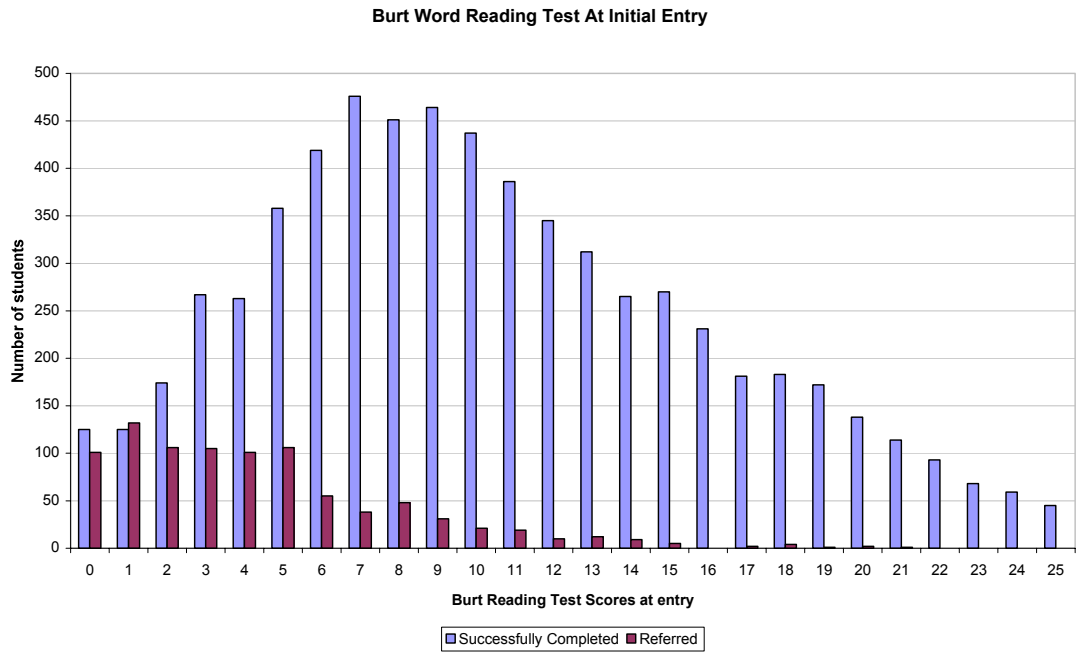
Local Body (Region)	Six year olds who entered Reading Recovery in 2003 ^b		Total six-year-old school population
	N	% of total	N
Northland Region	362	16.0	2,264
Auckland Region	2,117	11.5	18,336
Waikato Region	871	15.3	5,683
Bay of Plenty Region	438	11.1	3,948
Gisborne Region	101	12.8	785
Hawkes Bay Region	453	19.3	2,346
Taranaki Region	249	16.6	1,502
Manawatu-Wanganui Region	501	15.4	3,258
Wellington Region	1,045	17.7	5,898
Tasman Region	120	20.1	597
Nelson Region	81	15.8	512
Marlborough Region	78	14.8	526
West Coast Region	89	21.8	409
Canterbury Region	979	15.6	6,275
Otago Region	412	18.6	2,215
Southland Region	255	19.1	1,333
Total	8,151	14.6	55,887

a Excludes the Correspondence School, private schools, health camps, special schools.

b This table is the same format used for presenting the 1994 to 2002 Reading Recovery data but differs from the equivalent table included in reports prior to 1994, in that it now only gives the numbers of students who entered Reading Recovery in the relevant year (in this case, 2003), rather than the total number involved in Reading Recovery. (The change was made because it became evident that the previous format was confusing and led to misinterpretation of the data and double counting.) However, if the number of students carried over from 2002 and the number of students who transferred from other schools were also included, the total number of students involved in Reading Recovery in 2003 would be 10,875 students (19 percent of the total six-year-old state school population in New Zealand in 2003).

c This table is obtained by doing a match between the individual student reports received from Reading Recovery teachers (electronically and/or by paper mode) and the six-year old school population in schools in 2003. The table excludes seven students for whom individual student reports were received but with missing school information. As a result, no match could be done to perform the above analysis.

Appendix Figure 1



Appendix Figure 2

