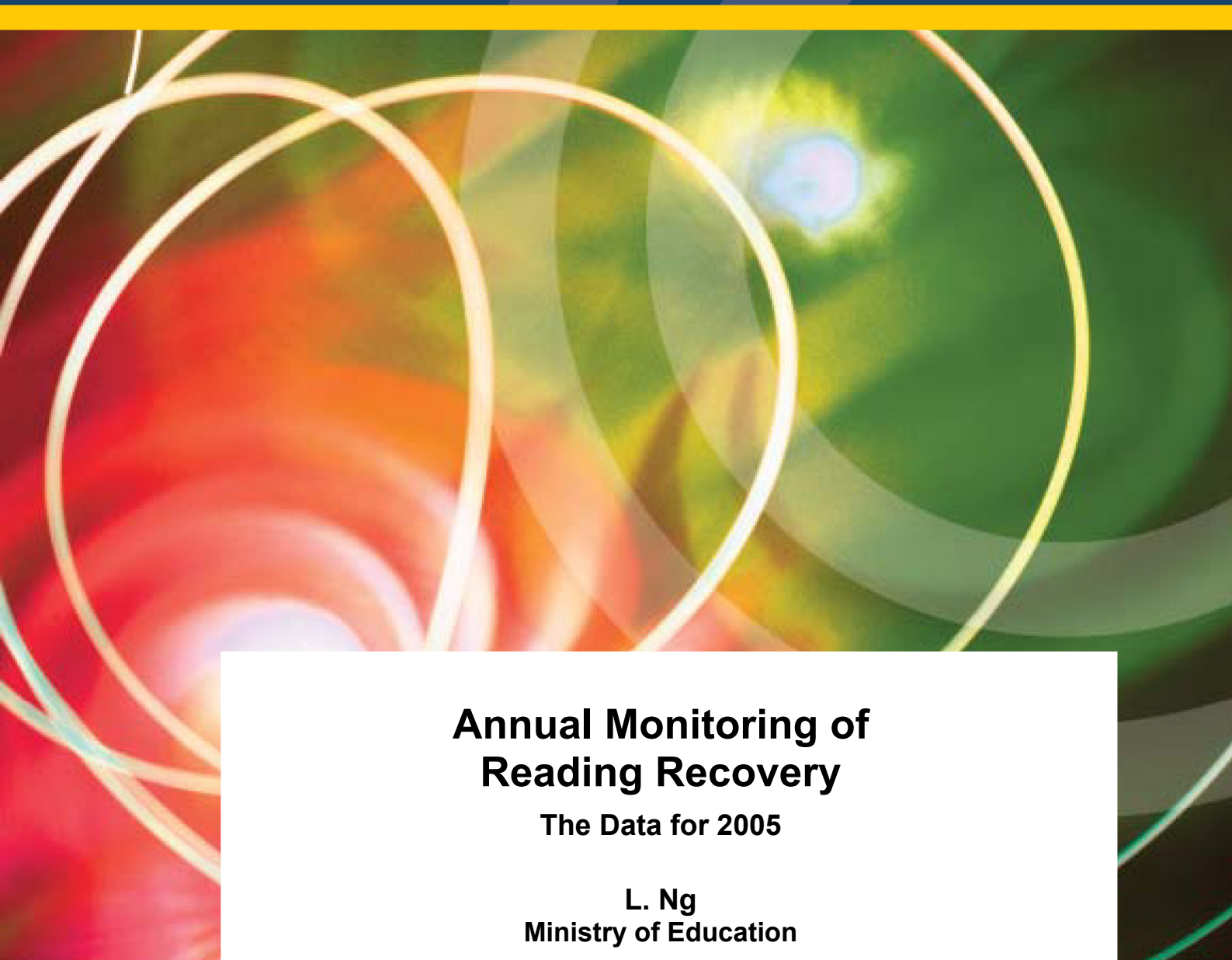




MINISTRY OF EDUCATION

Te Tāhuhu o te Mātauranga

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Annual Monitoring of Reading Recovery

The Data for 2005

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Ministry of Education**

RESEARCH DIVISION

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Contents

EXECUTIVE SUMMARY	1
INTRODUCTION.....	3
METHOD AND RESPONSE RATES.....	5
SCHOOLS AND STUDENTS INVOLVED IN READING RECOVERY IN 2005	7
SCHOOLS AND STUDENTS INVOLVED IN READING RECOVERY NATIONALLY AND REGIONALLY	7
GENDER OF STUDENTS ENROLLED IN READING RECOVERY	11
GENDER AND ETHNICITY OF STUDENTS ENROLLED IN READING RECOVERY	11
STUDENTS' PROGRESS IN READING RECOVERY	15
STUDENTS ENTERING READING RECOVERY	15
STUDENTS IN READING RECOVERY AND THEIR OUTCOMES	15
STUDENTS IN READING RECOVERY, THEIR OUTCOMES BY GENDER AND ETHNICITY	16
STUDENTS LEAVING READING RECOVERY	17
STUDENTS' LEVELS OF PROGRESS AND OUTCOMES	19
THE MEAN NUMBER OF READING RECOVERY SESSIONS AND CALENDAR WEEKS FOR SUCCESSFUL AND REFERRED STUDENTS.....	21
NUMBER OF SESSIONS AND TIME SPENT IN READING RECOVERY BY GENDER AND ETHNICITY	21
STUDENTS' LEARNING GAINS.....	23
STUDENTS' GAINS IN READING AND WRITING BY GENDER AND ETHNICITY	23
STUDENTS' GAINS IN READING RECOVERY BY DECILE	24
SUMMARY.....	27
APPENDICES	29
APPENDIX 1: SCHOOLS WITH READING RECOVERY IN 2004, BY REGION	29
APPENDIX 2: SIX-YEAR-OLD STUDENTS WHO ENTERED READING RECOVERY IN 2004, BY REGION ^{A, C}	30
APPENDIX FIGURE 1	31
APPENDIX FIGURE 2	31

Tables

Table 1:	Schools with Reading Recovery by Region	8
Table 2:	Six-year-old students who entered Reading Recovery by region	10
Table 3:	Reading Recovery by decile	11
Table 4:	Ethnicity and gender of students enrolled in Reading Recovery	12
Table 5:	How students entered Reading Recovery	15
Table 6:	Students' progress in Reading Recovery	15
Table 7:	Students' outcome by gender	16
Table 8:	Students' outcome by ethnicity	17
Table 9:	Students leaving Reading Recovery and their outcomes	17
Table 10:	Students leaving Reading Recovery by decile	18
Table 11:	Proportion of students who successfully completed Reading Recovery and exited by region	19
Table 12:	Mean Sessions and Calendar Weeks	21
Table 13:	Number of Sessions and Time Spent in Reading Recovery by Gender and Ethnicity	22
Table 14:	Ethnicity and gender of students with successful outcomes and their gains in reading and writing	23
Table 15:	Mean scores of successfully discontinued students in Reading Recovery by decile.....	24

Executive Summary

This report presents the latest available data on the number of schools and students who participated in Reading Recovery during 2005, 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 2005 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 lessons in 2006.

The absolute number of children entering Reading Recovery in 2005 was similar to 2004. The proportion of six-year-olds entering Reading Recovery has also remained similar to previous years (15% in 2002 and 2003, 14% in 2004, 15% in 2005). The proportion of schools operating Reading Recovery has initially decreased over this period (68% in 2002, 67% in 2003, 64% in 2004) but then increased in 2005 (67%).

In terms of school decile, the data show that Reading Recovery was available in a higher proportion of 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 entry scores across both reading and writing tasks, at exit these differences do not exist. Furthermore, 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 2005, as in previous years, Reading Recovery was available to state (including state-integrated) primary and composite schools. In addition, individual and school returns for 2005 were received from ten private schools 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 (including student's gender and ethnicity, entry and exit scores, and the number of lessons and weeks spent in Reading Recovery). This report is the product of the fifth 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

As in 2004, 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. For each school, two types of forms are required. The end-of-year school report collects information on school level information and the individual student report collects information on the student's progress in Reading Recovery.

Schools opting to respond electronically were asked to submit their returns by 20 December 2005. Primary school principals were sent an e-mail message as a reminder to submit their data in November 2005. Reading Recovery tutors also reminded and assisted schools to submit their data.

With the electronic data collection, Reading Recovery teachers could record individual student reports for students at any point in time during 2005. 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. have his/her series of Reading Recovery lessons 'discontinued'). At the end of 2005, 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 is completed, Reading Recovery tutors are 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 confirm² their end-of-the-year school report. In 2005, schools opting to respond by paper returns were asked to submit their data to their Reading Recovery tutors for checking purposes, who then forwarded the forms to the Ministry of Education.

In 2005, 11,038 individual student reports were received by the Ministry of Education, and a further 16 students were identified as students who participated in Reading Recovery but had no individual student reports (i.e., a total of 11,054 students participated in Reading Recovery in 2005). Furthermore, a total of 1,200 school reports were received, and a further 122 schools were identified as Reading Recovery schools as a result of student reports being submitted from these schools (i.e., a total of 1,322 schools were involved in Reading Recovery in 2005).

² *In total, 1,200 school reports were received in 2005. Out of these, 71 school reports were received as unconfirmed.*

Schools and Students Involved in Reading Recovery in 2005

Schools and Students Involved in Reading Recovery Nationally and Regionally

At the end of 2005, a total of 1,386 individual teachers were reported to be teaching Reading Recovery at some point during that year. In total, 1,322 state and state-integrated schools were involved providing 401,624 hours of teaching, delivered to 11,054 students – around 36 hours of teaching time per student.

Table 1 shows the schools with Reading Recovery that responded to the annual monitoring survey in 2005 by region. Reading Recovery was implemented in 67 percent of all state and state-integrated primary and composite schools with six-year-olds in New Zealand. These schools accounted for 78 percent of all six-year-olds in New Zealand, an increase compared to 2004 (76%). The overall percentage of schools that operated Reading Recovery in 2005 was higher in comparison to 2004 (67% in 2005 compared to 64% in 2004), but the same as for 2003.

As shown in Table 1, Reading Recovery implementation varied from 38 percent in the Gisborne region to 92 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 2005 could have potentially created regional variations in participation in Reading Recovery. Other regional variations in participation in Reading Recovery may be due to the size of schools and the proportion of lower decile schools in the region.

Table 1: Schools with Reading Recovery by Region

Local Body (Region) ^{a,c}	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	71	1,739	121	2,295	58.7	75.8
Auckland Region	225	12,509	350	18,498	64.3	67.6
Waikato Region	169	4,484	254	5,649	66.5	79.4
Bay of Plenty Region	73	2,932	123	3,960	59.3	74.0
Gisborne Region	18	498	47	784	38.3	63.5
Hawkes Bay Region	66	1,893	102	2,252	64.7	84.1
Taranaki Region	54	1,335	82	1,524	65.9	87.6
Manawatu-Wanganui Region	100	2,355	176	3,025	56.8	77.9
Wellington Region	156	5,365	184	5,981	84.8	89.7
Tasman Region	21	514	28	560	75.0	91.8
Nelson Region	12	487	13	498	92.3	97.8
Marlborough Region	20	468	28	500	71.4	93.6
West Coast Region	20	318	33	362	60.6	87.8
Canterbury Region	191	5,909	239	6,412	79.9	92.2
Otago Region	84	1,680	124	2,200	67.7	76.4
Southland Region	42	867	75	1,257	56.0	69.0
Total	1,322	43,353	1,979	55,775	66.8	77.8

- 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 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 earlier reports 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 2005. (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.)
- c Where school reports are missing, data are obtained from a match between the institution numbers provided in the individual students reports and data from Data Management Unit, Ministry of Education

Compared to the corresponding Table 1 in the 2004 Annual Monitoring Report (see Appendix Table 1), the proportion of participating schools in Reading Recovery has decreased slightly in the Waikato and Manawatu-Wanganui regions, with the largest decrease of close to 5 percent in the Southland region. The largest increases (up to 5% or more) were in the Northland, Hawkes bay, Nelson, West Coast and Otago regions (West Coast had the largest increase of 17%, this being a combination of a slight increase in the number of schools with Reading Recovery and a number of school closures in the 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 exceptions. For example, the Manawatu-Wanganui region experienced a decrease in schools participation in Reading Recovery, but an increase in students' access to Reading Recovery. However, caution must be taken when comparing the 2004 data to the 2005 data. Schools from the previous years' data were excluded from the analysis where the school report was missing. In 2005, schools with missing school reports were included in the analysis. These schools were identified as a result of student reports being submitted from these schools.

There were differences in the magnitude of change in schools' participation in and students' access to Reading Recovery from 2004 to 2005 within regions. For example, schools' participation increased by 7 percent in the Nelson region, while students' access increased by only 1 percent.

Table 2 shows that 15 percent of six-year-olds in state and state-integrated primary and composite schools entered Reading Recovery in 2005, similar to 2004 (14%). Across the regions, there were very small changes in the percentage of six-year-olds *entering* Reading Recovery in 2005 compared to 2004, with the largest proportionate increases occurring in the West Coast (9%) and Nelson (6%) regions.

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

Local Body (Region)	Six year olds who entered Reading Recovery in 2004 ^b		Total six-year-old school population
	N	% of total	N
Northland Region	359	15.6	2,295
Auckland Region	2,047	11.1	18,498
Waikato Region	864	15.3	5,649
Bay of Plenty Region	488	12.3	3,960
Gisborne Region	121	15.4	784
Hawkes Bay Region	441	19.6	2,252
Taranaki Region	275	18.0	1,524
Manawatu-Wanganui Region	507	16.8	3,025
Wellington Region	1,066	17.8	5,981
Tasman Region	103	18.4	560
Nelson Region	93	18.7	498
Marlborough Region	91	18.2	500
West Coast Region	92	25.4	362
Canterbury Region	940	14.7	6,412
Otago Region	434	19.7	2,200
Southland Region	236	18.5	1,257
Total	8,157	14.6	55,757

- 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 only gives the numbers of students who entered Reading Recovery in the relevant year (in this case, 2005), 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 2004, 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 2005 would be 11,054 students (20 percent of the total six-year-old state school population in New Zealand in 2005).
- 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 2005.

Table 3 shows the relationship between Reading Recovery schools and their decile rating³. In most deciles, there were higher proportions of schools with Reading Recovery compared to 2004. The proportion of decile 9 and 10 schools decreased the most compared to other deciles from 2004 to 2005 (a decrease of 7% and 4% respectively). Proportionately, fewer students entered Reading Recovery in high decile schools (12% of students in decile 10 schools compared to 17% of students in decile 1 schools) in 2005.

Across deciles, the time students had in Reading Recovery in 2005 ranged from 34 to 44 hours per student. Compared to 2004, there is a slight decrease in the average number of hours spent for students in deciles 1, 2, 5, 7, and 10 schools, but an increase in the remaining schools. However,

³ 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.

caution must be taken when interpreting the data. The number of hours spent in Reading Recovery at each school is recorded on the school report, and in 2005, the number of missing school reports was high (122 school reports were missing), therefore the number of total number of hours spent in Reading Recovery per student could have been affected.

Table 3: Reading Recovery 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 d}
1	61.3	17.2	39.1
2	64.7	15.7	36.4
3	67.0	13.8	44.2
4	69.5	17.6	41.8
5	69.1	14.4	38.7
6	67.4	16.4	43.0
7	64.7	14.4	34.3
8	69.5	13.3	38.6
9	60.5	13.9	39.7
10	64.0	11.6	38.3

- 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 2005 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 2005 (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 This column 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 (67%) of the students in Reading Recovery in 2005 were boys. In the 2005 cohort, 25 percent of six-year-old boys and 13 percent of six-year-old girls were in Reading Recovery (see Table 4 below). The percentage of boys and girls in Reading Recovery was similar to previous years.

Gender and Ethnicity of Students Enrolled in Reading Recovery

Table 4 shows the gender and primary ethnicity of students enrolled in Reading Recovery in 2005 (see footnote 'a' 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 groups⁴. Māori and Pasifika boys and girls on the whole were more likely to be in Reading Recovery than NZ European boys and girls, however, the total number of students in some of the Pasifika groups are small.

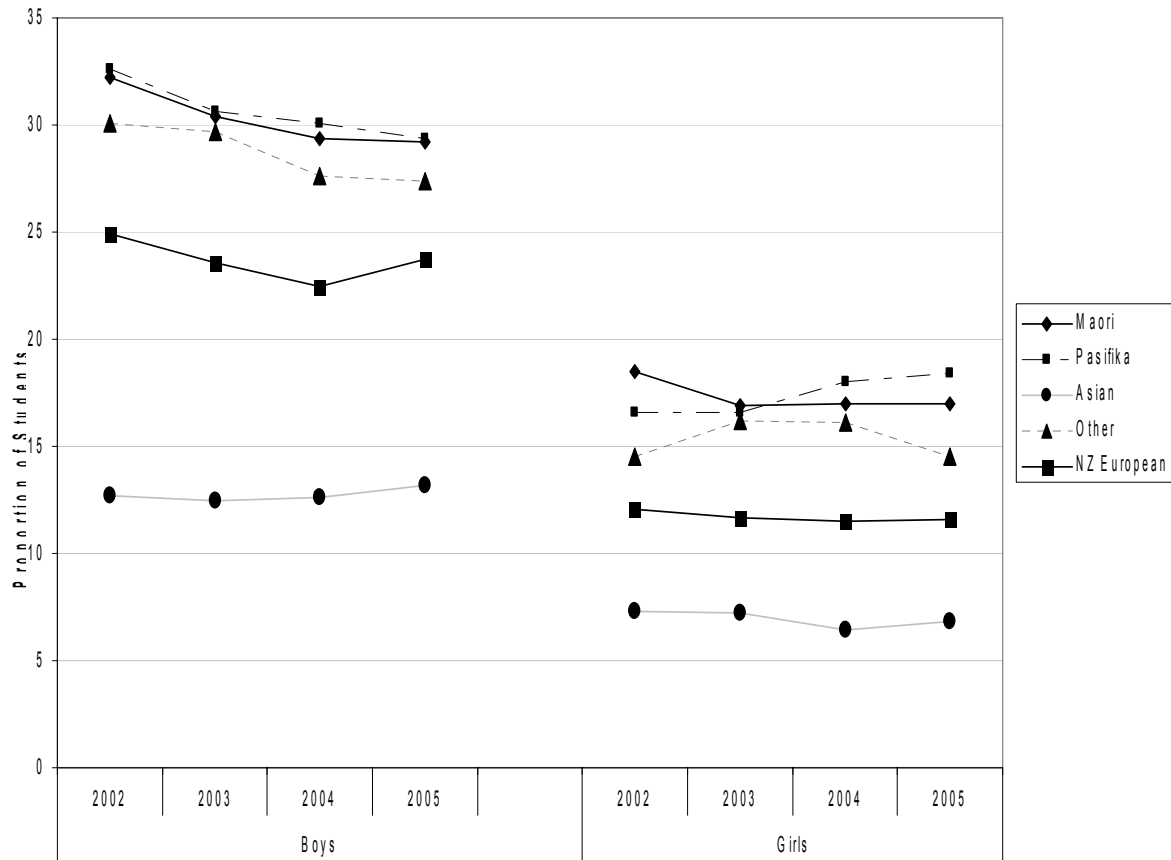
⁴ As in 2004, the exceptions were Niuean girls. However, the numbers of children in these groups were very small and the results should therefore be treated with caution.

Table 4: Ethnicity and gender of students enrolled in Reading Recovery^{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	7,053	2,063	29.2	6,401	1,088	17.0
Tokelauan	69	21	30.4	75	15	20.0
Fijian	90	21	23.3	93	8	8.6
Niuean	159	23	14.5	147	18	12.2
Tongan	605	184	30.4	589	127	21.6
Cook Island Maori	422	123	29.1	458	84	18.3
Samoan	1,395	429	30.8	1,241	231	18.6
Other Pacific Islands	104	35	33.7	115	16	13.9
South East Asian	324	52	16.0	294	21	7.1
Indian	765	121	15.8	697	64	9.2
Chinese	659	61	9.3	610	25	4.1
Other Asian	413	51	12.3	420	28	6.7
Other	478	125	26.2	506	65	12.8
Other European	777	202	26.0	824	111	13.5
NZ European	16,003	3,797	23.7	15,143	1,764	11.6
Unspecified	79	38	-	68	27	-
Total	29,395	7,346	25.0	27,681	3,692	13.3

- 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 2005 (N=11,054) given in footnote b of Table 2 due to missing gender information.

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 gradual but small reduction between 2002 and 2005 in the proportion of boys of all ethnicities, except for New Zealand European boys, where there is an increase between 2004 and 2005, and Asian boys which shows little change across the years. Changes for girls over the years have been slight, where there has been a gradual increase of Pasifika girls and a decrease in the proportion of 'Other' girls.

Students' Progress in Reading Recovery

Students Entering Reading Recovery

In 2005, 11,038 individual forms were received from state and state-integrated schools operating Reading Recovery. A further 16 students were identified as students who participated in Reading Recovery but had no individual student reports⁵ (classified in the 'missing data' categories in the tables below). Hence, an estimated⁶ 11,054 students took part in Reading Recovery during 2005 (a small decrease of 4 students from 2004). As shown in Table 5, most of these (74%) entered Reading Recovery for the first time in 2005. The rest were carried over from previous years or from other schools. These figures show very little changes from 2004.

Table 5: How students entered Reading Recovery

Students' entry in Reading Recovery in 2005	N	%
Carried over from 2004 from same school	2,532	22.9
Transferred from another school ^a	314	2.8
Entered Reading Recovery for the first time in 2005	8,157	73.8
Missing data	51	0.5
Total	11,054	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 2004 or as entering Reading Recovery during 2005.

Students in Reading Recovery and their Outcomes

Table 6: Students' progress in Reading Recovery

Type of outcome	Students in Reading Recovery	
	N	%
Child successfully completed	6,534	59.1
Child responding and to be carried over into 2006	2,663	24.1
Child referred for specialist help or long-term reading support	927	8.4
Child responding but not able to be continued	196	1.8
Child left the school before completion ^a	604	5.5
Missing data	130	1.2
Total	11,054	100.0

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

⁵ These students were identified by eight schools who had mismatches between the number of students indicated to be in Reading Recovery on their school reports and the actual number of student reports received (a total of 16 missing students reports).

⁶ 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 2004 or as entering Reading Recovery during 2005.

Table 6 shows the progress of students. These data show a similar pattern to 2004. Of the children in Reading Recovery, 59 percent successfully completed in 2005, and 24 percent were carried over to 2006 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 estimate⁷ indicates that 83 percent of the children who left Reading Recovery in 2005 would do so after completing it successfully.

Over the years these data have been collected, some minor discrepancies have been noted. For example, 2,532 students were **actually** carried over from the year 2004; the year 2004 returns specified that 2,662 children were **expected** to be carried over into 2005 – a discrepancy of 130 children. Similarly, 314 students transferred into Reading Recovery from another school, while 604 left Reading Recovery in one school due to transferring into another school, a discrepancy of 290 students.

There may be a number of reasons why there is a discrepancy of students who were actually carried over from the year 2004 and the children expected to be carried over into 2005. For example, some of these students may have changed their school. The transferring students 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.

Students in Reading Recovery, 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 2005, and boys were equally as likely to be carried over to another year as girls. Girls were 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 rate⁸ at 83 percent (boys) and 86 percent (girls).

Table 7: Students' outcome by gender^a

Type of Outcome	Boys %	Girls %
Child successfully completed	58.7	62.0
Child responding and to be carried over into 2005	24.6	24.0
Child referred for specialist help or long-term reading support	9.5	6.5
Child responding but not able to be continued	1.7	1.9
Child left the school before completion ^b	5.5	5.5

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.

⁷ To obtain this estimate, the number of students who left the school before completing Reading Recovery, and the number of 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 2006 was then subtracted from the total number of students participating in Reading Recovery during 2005. 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.

⁸ Total success rate comprises the percentage of children who successfully completed Reading Recovery in 2005 plus the children who are responding and carried over to 2006 with every expectation of a successful outcome.

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%) were more likely than other children to leave school before completing Reading Recovery. Asian and NZ European (68% and 63% respectively) students were more likely to have successfully completed Reading Recovery than Māori (56%) and Pasifika (55%) 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 in footnote above), including those responding and continuing in 2006, ranged from 80 percent (Māori) to 89 percent (Asian).

Table 8: Students' outcome by ethnicity^a

Type of Outcome	Māori %	Pasifika %	Asian %	NZ European %	Other %
Child successfully completed	56.0	54.9	67.9	62.5	60.8
Child responding and to be carried over into 2006	24.1	28.6	21.2	23.8	24.5
Child referred for specialist help or long-term reading support	9.5	10.2	5.2	8.0	6.4
Child responding but not able to be continued	2.7	0.8	0.5	1.6	1.4
Child left the school before completion ^b	7.8	5.5	5.2	4.1	6.8

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

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

Type of Outcome	Carried over from 2004		Transferred from another school		Entered in 2005	
	N	%	N	%	N	%
Child successfully completed Reading Recovery	1,929	76.3	235	75.3	7,033	87.0
Child "referred on" for specialist help or long-term reading support	390	15.4	39	12.5	498	6.2
Child responding but not able to be continued	30	1.2	9	2.9	157	1.9
Child left the school before completion ^b	180	7.1	29	9.3	395	4.9
Total	2,529	100.0	312	100.0	8,083	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 2005 according to how they entered Reading Recovery. The data follow a similar overall pattern as previous years. Compared with 2004, a similar proportion (87% in 2004 and 2005) of students, who had entered in 2005 successfully completed Reading Recovery in the same year. Students carried over from 2004 and those transferred from another school were more likely than other students entered in 2005 to be 'referred on' for specialist help.

Students Leaving Reading Recovery by Decile

Table 10 shows the outcomes of those students who exited in 2005 according to the decile rating of their Reading Recovery school.

Table 10: Students leaving Reading Recovery 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	751	71.1	166	11.8	32	2.3	108	7.7	1,057
2	633	74.7	115	10.2	19	1.7	80	7.1	847
3	564	76.6	96	9.8	16	1.6	60	6.1	736
4	633	77.8	90	8.4	19	1.8	72	6.7	814
5	637	78.0	98	9.0	18	1.7	64	5.9	817
6	554	80.8	69	7.5	17	1.9	46	5.0	686
7	689	84.7	64	6.0	26	2.4	34	3.2	813
8	564	83.3	61	6.9	15	1.7	37	4.2	677
9	717	81.8	88	7.6	20	1.7	59	5.1	884
10	789	85.2	79	6.5	14	1.2	44	3.6	926

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 2005 increased by decile, from 71 percent in decile 1 schools to 85 percent in decile 10 schools. Note that this analysis does not include children who will be carried over to 2006. 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 (12% and 7% respectively) and 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 2005 as a proportion of those who exited Reading Recovery in 2005 (i.e., excluding those children who were carried over to 2006).

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

Local Body (Region) ^a	Six year olds who successfully completed Reading Recovery in 2005		Total number of students who left Reading Recovery in 2005
	N	% of total ^b	N
Northland Region	274	71.4	384
Auckland Region	1,577	77.1	2,046
Waikato Region	689	79.3	869
Bay of Plenty Region	384	80.2	479
Gisborne Region	99	81.8	121
Hawkes Bay Region	369	80.7	457
Taranaki Region	209	77.4	270
Manawatu-Wanganui Region	418	78.1	535
Wellington Region	931	85.8	1,085
Tasman Region	79	73.8	107
Nelson Region	67	73.6	91
Marlborough Region	76	77.6	98
West Coast Region	66	75.9	87
Canterbury Region	765	79.8	959
Otago Region	347	80.5	431
Southland Region	184	76.0	242

a Region refers to Local Body (Region).

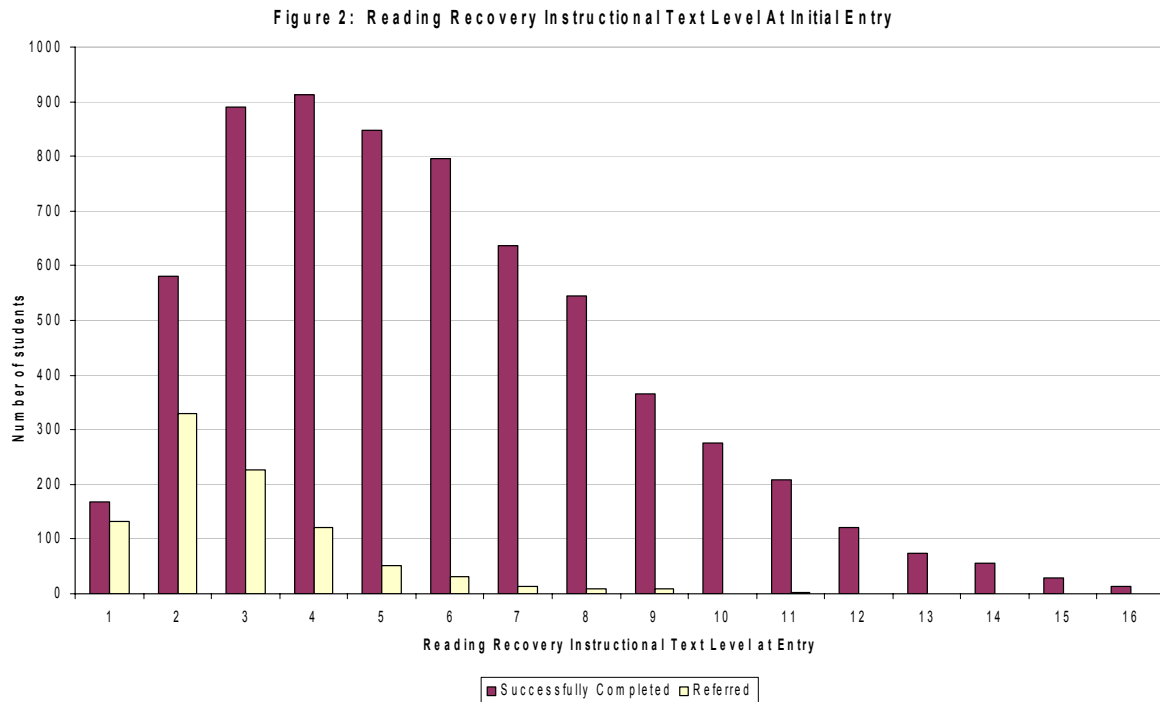
b These were calculated by dividing the number of students in the region who successfully completed Reading Recovery in 2005 by the total number of students in the region who exited in 2005 (i.e. excluding those children who were carried over to 2006).

The proportion of students who successfully completed Reading Recovery in 2005 varied from 86 percent in the Wellington region to 71 percent in the Northland region. Compared to 2004, the Gisborne, West Coast, and Southland regions experienced the largest increases in the proportion of students who had successfully completed Reading Recovery (from 70% in 2004 to 82% in 2005 for Gisborne, 64% to 76% for the West Coast and 65% to 76% for Southland). The Nelson and Tasman regions experienced the largest decrease in the same period (from 79% to 74% for both regions).

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 referral, were typically half the scores of students who successfully completed Reading Recovery. This suggests that more serious reading problems may be affecting scores from the beginning. Students, who were eventually 'referred on', spent on average 87 sessions in Reading Recovery, 10 sessions more than their classmates whose lessons had been discontinued because they no longer

needed such support. These ‘referred on’ students made only 62 percent of the gain⁹ 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 large majority of children with low initial scores completed their series of lessons successfully as shown in Figure 2. Those students who were less likely to successfully complete Reading Recovery were those with lowest entry scores at levels 1, 2 and 3.



In total, 196 students were responding but not able to continue in Reading Recovery. Various reasons were given for their non-continuation, including resource issues (for example, loss of the Reading Recovery teacher and the school no longer offering Reading Recovery). Other reasons included the student's poor attendance, the parents' decision to withdraw their child from Reading Recovery, and the child leaving the country. A very small number of students left the programme due to serious illness.

⁹

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.

The Mean Number of Reading Recovery Sessions and Calendar Weeks for Successful and Referred Students

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

Table 12: Mean Sessions and Calendar Weeks

Type of outcome	N	Mean Number of 30 Minute Sessions	Mean Number of Calendar Weeks
Child successfully completed Reading Recovery	6,534	76.4	19.2
Child referred for specialist help or long-term reading support	927	87.2	22.4

The table shows that, on average, students who were 'referred on' received a higher number of sessions and spent more time (in terms of the number of calendar weeks) in Reading Recovery than successfully completed students.

Number of Sessions and Time Spent in Reading Recovery 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 2005, based on gender and ethnicity. Students who completed Reading Recovery successfully had an average of 76 sessions (an average of 78 and 74 sessions was received by boys and girls respectively). The mean number of sessions ranged from 62 sessions (Other Asian girls) to 83 sessions (Cook Island and Tongan boys), but in these cases the absolute numbers 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 (except Tokelauan boys) experienced relatively more calendar weeks on average than Asian and NZ European boys. Māori and Pasifika girls (except Niuean girls) experienced a slightly higher number of calendar weeks on average than Asian and NZ European girls.

Table 13: Number of Sessions and Time Spent in Reading Recovery by Gender and Ethnicity^a

Ethnicity	Mean number of sessions ^b		Mean number of calendar weeks ^c	
	Boys	Girls	Boys	Girls
Māori	79.0	74.7	20.1	19.3
Tokelauan	71.7	73.9	18.3	19.1
Fijian	79.8	81.6	20.0	20.2
Niuean	75.5	73.6	19.1	17.6
Tongan	82.7	78.7	20.9	20.6
Cook Island Maori	82.9	73.1	21.1	19.2
Samoan	76.0	77.3	20.0	20.8
Other Pacific Islands	80.0	71.9	20.5	18.3
South East Asian	75.9	69.2	18.8	18.0
Indian	79.2	72.1	19.6	18.0
Chinese	68.9	73.0	17.1	17.6
Other Asian	77.5	61.5	18.9	15.5
Other	80.6	76.8	19.7	19.3
Other European	74.5	73.6	18.4	17.9
NZ European	77.2	73.0	19.0	18.1
Unspecified	86.7	70.6	22.4	16.8
Total	77.8	73.9	19.4	18.7

a The data for this table refers to those students who successfully completed Reading Recovery in 2005.

b Mean number of sessions was calculated by dividing the total number of sessions by the number of children, who successfully completed Reading Recovery in 2005, for each gender and ethnicity.

c 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 2005, 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 2004), 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 2004), 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 (also 35 in 2004), with boys gaining 35 and girls gaining 36.

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

Ethnic Groups	Gain in Reading Recovery Instructional Text Level		Gain in Burt Word Reading Test (NZ Version)		Gain in Writing Vocabulary Task (Clay)	
	Boys	Girls	Boys	Girls	Boys	Girls
Māori	13.5	13.2	18.6	17.3	37.2	36.9
Tokelauan	13.7	14.5	18.5	20.5	33.7	43.1
Fijian	13.3	14.6	19.6	19.2	43.3	51.8
Niuean	14.4	14.8	19.8	19.9	31.4	43.8
Tongan	14.3	13.9	18.6	17.9	36.9	38.4
Cook Island Maori	14.2	13.8	19.0	16.8	39.1	36.8
Samoan	14.0	14.1	18.9	19.2	38.3	40.2
Other Pacific Islands	14.5	13.6	21.3	17.1	40.5	41.1
South East Asian	13.9	12.7	16.8	15.6	38.5	35.6
Indian	14.4	14.0	18.6	17.2	37.1	35.3
Chinese	13.7	13.6	16.6	16.1	36.8	45.4
Other Asian	14.1	13.3	16.0	15.1	41.1	35.5
Other	14.7	14.9	19.5	19.6	37.0	36.5
Other European	13.4	13.1	17.7	16.6	34.1	36.0
NZ European	12.9	12.6	16.6	15.4	33.7	33.8
Unspecified	14.0	13.0	19.2	14.4	39.3	27.8
Total	13.3	13.0	17.5	16.5	35.3	35.6

a The data for this table refers to those students who successfully completed Reading Recovery in 2005.

b 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.

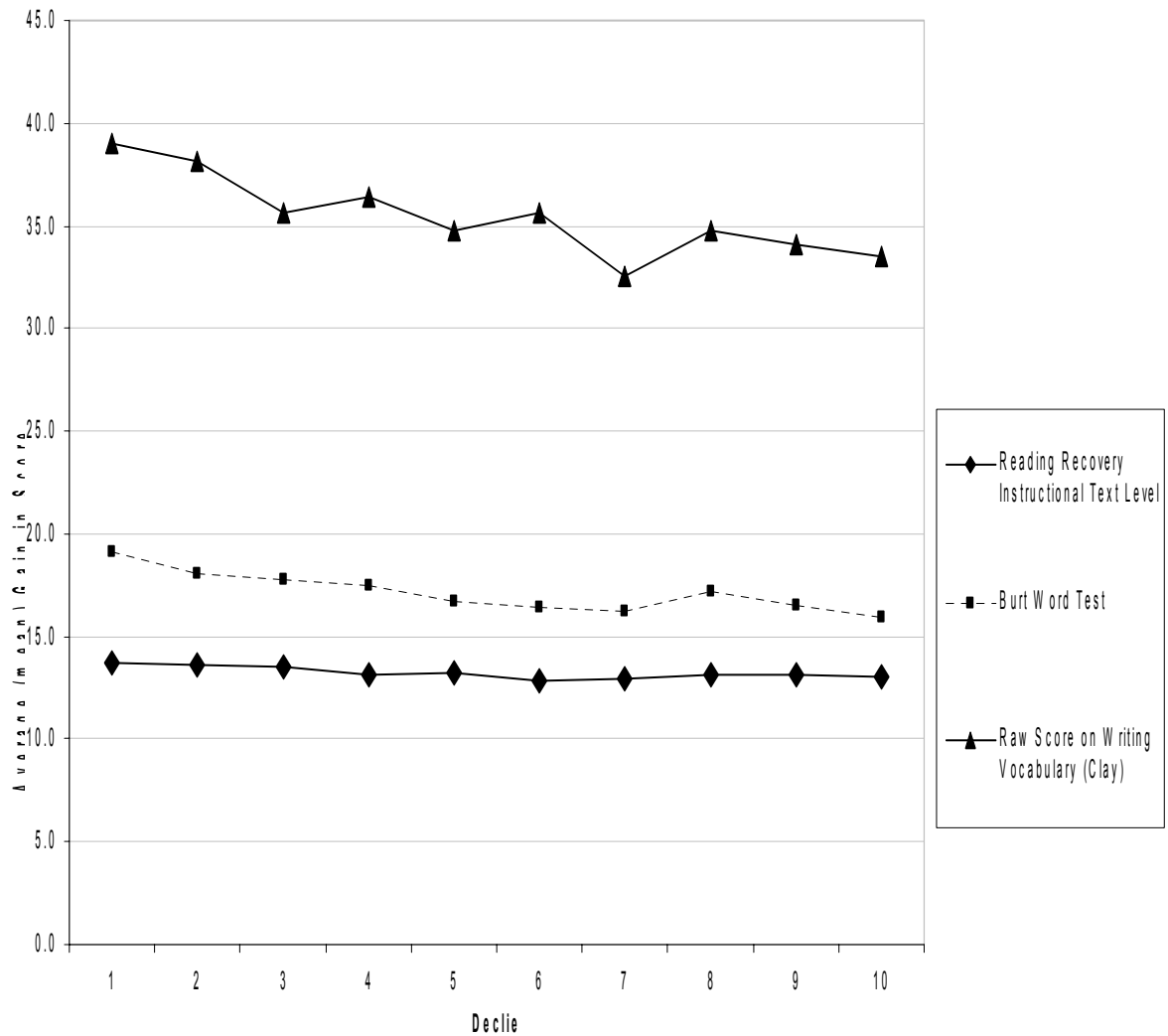
Table 14 above shows the gain in reading and writing from participating in Reading Recovery by gender and ethnicity. In terms of ethnicity, 'Other' girls gained more than other students in the Reading Recovery Instructional Text Level. 'Other Pacific Islands' boys had the highest gain in the Burt Word Reading Test. Fijian girls 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 by Decile**Table 15: Mean scores of successfully discontinued students in Reading Recovery by decile**

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	3.9	17.6	8.2	27.3	15.9	54.9
2	4.3	17.9	9.2	27.3	17.4	55.5
3	4.3	17.8	9.6	27.4	19.1	54.7
4	4.7	17.8	10.0	27.5	19.6	56.0
5	4.8	18.0	10.2	26.9	20.1	54.9
6	5.1	17.9	11.3	27.7	20.2	55.8
7	5.3	18.2	11.8	28.0	21.9	54.4
8	4.9	18.0	10.4	27.6	19.4	54.2
9	5.3	18.4	11.5	28.0	21.4	55.5
10	5.5	18.5	12.4	28.3	22.1	55.6

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 2005



While higher deciles have slightly higher reading and writing scores at entry, 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, and scores at exit were similar.

Summary

Reading Recovery in 2005 followed a number of 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, there was an increase from 10,875 in 2003 to 11,058 in 2004. In 2005, the number and percentage of students in Reading Recovery remained fairly constant (11,058 students enrolled in 2004, 19%, 11,054 students, 20% in 2005). The proportion of schools implementing Reading Recovery has slowly declined from 71 percent in 1999 to 64 percent in 2004¹⁰. However in 2005 both the population of schools and the proportion of the six-year-old population in those schools with Reading Recovery have increased slightly (from 64% to 67%, and 76% to 78% respectively).

Reading Recovery is more widely available in high decile schools, but where offered, lower decile schools provide Reading Recovery for relatively more students and offer more hours per student than higher decile schools. While higher decile schools have slightly higher entry scores across both reading and writing tasks, at exit these differences do not exist. Furthermore, the gains 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, 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, and are more likely to be 'referred on' to other services for continued help or to leave the school before completing. However, many students in lower decile schools achieve the levels required for no longer needing the extra support of Reading Recovery lessons to achieve successfully in their classes.

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 59 percent of students completing Reading Recovery successfully during 2005 and a further 24 percent considered to be responding well and carried over into 2006 with the expectation of successful completion of their lesson series.

¹⁰ 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 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 and in 2004, there was an increase of 2,555 children. In 2005, there was a decrease of 1,602 children.

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

Appendices

Appendix 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.)

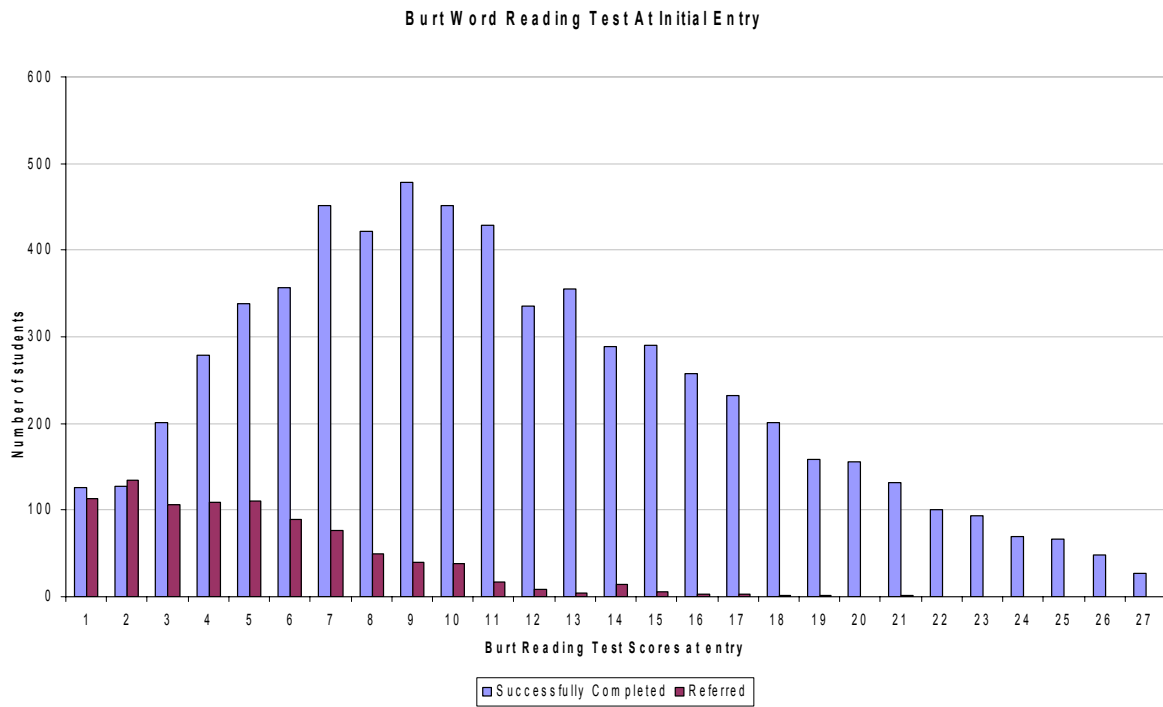
Appendix 2: Six-year-old students who entered Reading Recovery in 2004, by region

a, c

Local Body (Region)	Six year olds who entered 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.

Appendix Figure 1



Appendix Figure 2

