

# PIRLS 2005/2006 IN NEW ZEALAND

A summary of national findings from the second cycle of the Progress in International Reading Literacy Study (PIRLS)



MINISTRY OF EDUCATION

*Te Tāhuhu o te Mātauranga*



# 2005/2006 WHAT IS PIRLS?



Every five years New Zealand students take part in an international study that looks at primary school students' reading literacy achievement. This study is the Progress in International Reading Literacy Study – PIRLS. New Zealand took part in PIRLS in 2001 and 2005. From this study, parents, whanau, teachers, principals, policy makers, and the public are able to compare New Zealand children's progress in reading literacy with similar age children in other countries. It also gives information on how New Zealand students' reading literacy achievement at the system level fares as new policies are put in place. The information in this brochure relates to the study undertaken in 2005/2006.

## What is the focus of PIRLS?

PIRLS looks at the two main reasons why middle primary students read. They read for literary experience and to acquire and use information. As well as looking at the reasons for reading, the study looks at the processes and skills of reading comprehension. For example, when students read they often need to interpret and integrate ideas in order to understand the underlying message of a story. Students' attitudes towards reading, their views of themselves as readers, and what they do to develop their reading literacy are important factors which have been found to be linked to achievement and are therefore looked at in this study.

## Which countries took part?

Forty countries from around the world took part in the 2005/2006 study. The majority of the countries (37) were in the Northern Hemisphere – Europe, North Africa, the Middle East, Asia, North America, and the Caribbean. These countries administered PIRLS in early 2006. New Zealand along with two other Southern Hemisphere countries – Singapore and South Africa – took part in the study in late 2005.

## Which students took part?

Middle primary school is an important transition point in a child's reading development; most children would have learned to read and are now reading to learn. The study focuses typically on Grade 4 students around the world and in New Zealand this is equivalent to Year 5. New Zealand students that took part in this study were on average 10 years-old and this was about the same as the average age of students in most of the countries that participated.

## Years of formal schooling and school starting age

Across the countries there was some variation in the years of formal schooling students had. For example in England, New Zealand, Scotland, and Trinidad and Tobago students were just completing their fifth year of formal schooling when they did the PIRLS assessment, while in most other countries students were just completing their fourth year. New Zealand children and those in England, Scotland, and Trinidad and Tobago however start school at an earlier age (5 years). This is not the case in most other countries. In for example France and Singapore, children start school when they are at age 6 while in Sweden they start at age 7. New Zealand is also unique in that most children start on or just after their 5th birthday. In other countries children start at specific points such as the beginning of the new school year.

## What did the students have to do in PIRLS?

Each student was given a booklet that contained either two literary (story) texts, two information texts, or one of each. There were five different literary texts and five different information texts so that students did not all have the same material. Each passage (story or information text) was followed by a series of questions that were designed to assess the student's reading comprehension. Some questions were closed (i.e., students selected an answer from those provided) and some questions were open (i.e., students had to write their own response to the question).

## What other information was collected in PIRLS?

Students, parents and caregivers, reading teachers, and school principals were each asked to complete a questionnaire. Their responses to a range of questions were used to better understand the context of students' reading achievement. The questionnaires covered topics such as students' views about reading, the availability of educational resources at home, early literacy activities in the home, and teachers' organisational and instructional practice for teaching reading.

## In which language were students assessed?

All countries that took part in PIRLS assessed students according to the language in which they received their instruction. Many countries tested in more than one language because more than one language was used for instruction in their country. In New Zealand schools were given the option of testing students in English or in te reo Māori. When reporting at the national/country level, countries combine the results for the different languages and so does New Zealand. The reading literacy achievement results described relate to all Year 5 New Zealand students.

## How did New Zealand Year 5 students fare in the international context?

The majority of the international results are in a bigger report – *Reading Literacy in New Zealand: an overview of New Zealand's results from the Progress in International Reading Literacy Study (PIRLS) 2005/2006*, which was published in November 2007. Here are some of the key findings.

- The average (mean) reading literacy score for New Zealand Year 5 students was 532.
- The New Zealand average was:
  - in statistical terms, significantly higher than the PIRLS scale average of 500
  - significantly higher than the average score for students in 19 countries
  - similar to the average score for students in three countries – Chinese Taipei, Scotland, and the Slovak Republic, and
  - significantly lower than the average score for students in 17 countries including England, Hong Kong, and the United States.
- The average reading literacy score for New Zealand in statistical terms did not change from 2001 to 2005.
- There was a small increase in the average score for informational reading from when Year 5 students were assessed in 2001 to when they were assessed in 2005 but in statistical terms this was not a significant change.
- Overall, New Zealand students showed relatively stronger performance on questions where they had to use reasoning skills (e.g., interpreting and integrating ideas) than on questions that required them to use text-based skills (e.g., focus on and retrieving explicitly stated information). Because of the features of the different reading texts, the questions assessing the text-based processes were not necessarily less difficult than the questions assessing the reasoning processes.
- Compared with many other countries participating in this study, New Zealand had a relatively large group of students who demonstrated very advanced reading comprehension skills.
- New Zealand also had a slightly bigger group of weaker readers than some other higher performing countries. These students were likely to have difficulties in locating a specific part of a story, or locating and reproducing information actually stated in a text.
- New Zealand Year 5 boys and girls typically achieved above the international averages for boys and girls. However the average difference between New Zealand girls and boys of 24 points was one of the biggest internationally.

## How did New Zealand Year 5 sub-groups fare in PIRLS?

The majority of the national results are in a bigger report – *PIRLS 2005/2006 in New Zealand: an overview of national findings from the second cycle of the Progress in International Reading Literacy Study (PIRLS) 2005/2006*. Here are some of the key findings.

- There was no significant change in the average reading literacy achievement of any of the four main ethnic groupings, or of Year 5 boys and Year 5 girls from 2001 to 2005.

- There were both high and low-achieving students in all ethnic groupings. However, Pākehā/European (552) and Asian (550) students generally scored at a much higher level than Māori (483) and Pasifika (479) students.
- Pākehā/European (564) and Asian (562) girls generally had the strongest achievement in PIRLS; they were also more likely to demonstrate they had advanced reading comprehension skills than other Year 5 students.
- The weakest average achievement was found for Pasifika (471) and Māori (469) boys; along with Pasifika girls they were also more likely to be over-represented among students with weaker comprehension skills than other Year 5 students.
- Pākehā/European, Asian, and Māori girls tended to do significantly better than their respective male counterparts. In statistical terms, the difference between the average reading literacy scores for Pasifika boys and Pasifika girls was not significant.
- Year 5 students in all ethnic groupings tended to show better performance on the information texts they read than on the literary texts (stories). This is the opposite of what was observed in 2001.
- Year 5 students in all ethnic groupings tended to show stronger performance on questions where they had to use reasoning skills than on questions that required them use text-based skills.

## Did speaking the language of the assessment test at home make a difference?

New Zealand students were asked how frequently they spoke at home the language in which they were assessed in PIRLS. The average score for those students who frequently spoke the language of the PIRLS assessment at home (542) was noticeably higher than those students who sometimes (or rarely) did (519). This difference was larger than England and the United States but smaller than some western European countries like Germany.

- When the home language data was looked at for each of New Zealand's ethnic groupings, in statistical terms, there was no difference between the average reading literacy scores of students who spoke the test language at home and those who did not.

## Are there things about the home environment that made a difference to students' reading achievement?

The home has an important role in fostering literacy. There are some important early-literacy activities that parents or caregivers can do with their young child that have been found to be related to higher reading achievement when children are older and in school. These activities include reading from books to their children, telling stories, singing songs, playing with the alphabet or word games and reading labels and singing aloud. A child's views about reading can also be enhanced through access to home educational resources such as books, and having parents or caregivers who themselves have positive attitudes to reading.

### Starting early makes a difference

According to their parents' responses, about three-quarters (74%) of New Zealand Year 5 students had a high level of engagement in early literacy-related activities prior to starting school, compared with about half (54%) of students internationally.

- There was no difference between New Zealand boys' and girls' levels of engagement in the activities.
- Pākehā/European students were the most likely to have a high level of engagement (90%) while Asian students were the least (52%).

Most (90%) New Zealand Year 5 students had attended an early childhood education (ECE) facility for more than 1 year before starting school. These tended to be Pākehā/European students (93%) while Asian students (82%) were the least likely. On average, the Year 5 students who had *not* attended an ECE facility, or who had attended for up to and including 1 year, had lower reading literacy achievement than other Year 5 students.

## Students' love of reading

Compared with students in other countries, New Zealand Year 5 students were positive towards reading. However, they were less sure about their reading ability than many of their international counterparts and less sure about their reading ability than they were in 2001. The change in their level of certainty was found across the New Zealand sub-groups: boys and girls and three out of the four main ethnic groupings. The one exception was Asian students: they tended to be more positive in 2005 than in 2001.

Year 5 students who reported reading for fun at least once or twice a week generally achieved higher reading scores (551) than those who rarely (518) or never (488) did. About one in five Year 5 students never read for fun. Year 5 boys were more likely to say they never read for fun (27%), and in particular, Māori and Pasifika boys (both 32%).

## In school

The reading literacy achievement of New Zealand Year 5 students was about the same regardless of the urban-rural locality of the school they attended.

The achievement information was also looked at by the decile of the school students attended. State and state-integrated schools were grouped into three groups: deciles 1–3, deciles 4–7, and deciles 8–10. Because the sample of independent schools was very small it was not possible to report the average achievement for Year 5 students attending these schools.

- There were high-achieving and low-achieving students in all three school decile band categories.
- The average reading literacy scores for the students in mid-range (538) and higher decile schools (560) were higher than the average reading literacy score for students in lower decile schools (485).

New Zealand principals' reports indicate that resource shortages or inadequacies had little or no impact on reading instruction in schools. However, principals of both lower and higher deciles schools in 2005 tended to be a little less sure about the impact compared with their 2001 counterparts.

The climate for learning in New Zealand primary schools was on the whole viewed positively. However, principals of state and state-integrated schools with a lower decile were more likely to express some concerns about negative student behaviours than principals of mid-range or higher decile schools.

Some New Zealand Year 5 students had experienced a few negative behaviours at school, however on the whole they were very positive about their school life, including what they felt about their teachers and their fellow students.

- Of some concern was the fact that about one in four boys said they did not like being at schools. Pākehā/European boys were more likely to have this view than other Year 5 students.

## Literacy in New Zealand

New Zealand has a Literacy Strategy. The goal of this strategy is to raise literacy achievement for all New Zealand students. To realise this goal, a number of policies and initiatives which aim to improve literacy achievement have been put in place. For example, the *Effective Literacy Practice in Years 1 to 4* is a handbook for teachers of students in the first four years of their schooling was distributed to all primary schools in August 2003. Building on the success of this guide, *Effective Literacy Practice in Years 5 to 8* was also made available to schools in 2006, while *Literacy Learning Progressions* a (draft) tool for teachers that sets out the expectations for students in their literacy learning was released in late 2007.

As well as the guides, a number of teacher professional development initiatives are in place such as the Literacy Professional Development Project which began in 2004. What is known is that there have been significant shifts in students' literacy achievement in the schools where the professional development has been held. As PIRLS was conducted in New Zealand at the end of 2005 it was unlikely that the positive outcomes of this relatively small-scale professional development activity would have been reflected in a large-scale assessment like PIRLS.

## Who conducted PIRLS?

PIRLS is co-ordinated by the International Association for the Evaluation of Educational Achievement (IEA). The Ministry of Education's Comparative Education Research Unit is responsible for PIRLS in New Zealand.

## Would you like more information?

You will find the New Zealand reports on PIRLS-05/06 on [www.educationcounts.govt.nz](http://www.educationcounts.govt.nz).

The international report and a companion encyclopaedia on reading education are on the PIRLS web site: [www.pirls.org](http://www.pirls.org)

## Countries and Canadian provinces participating in PIRLS-05/06

Austria	* Hong Kong SAR <sup>†</sup>	Luxembourg	* Russian Federation
Belgium (Flemish)	* Hungary	* Macedonia, Rep. of	* Scotland
Belgium (French)	* Iceland	* Moldova, Rep. of	* Singapore
* Bulgaria	Indonesia	* Morocco	* Slovak Republic
Chinese Taipei	* Iran, Islamic Rep. of	* Netherlands, the	* Slovenia
Denmark	* Israel	* New Zealand	South Africa
* England	* Italy	* Norway	Spain
* France	Kuwait	Poland	* Sweden
Georgia	* Latvia	Qatar	Trinidad and Tobago
* Germany	* Lithuania	* Romania	* United States

## Benchmarking participants

### Canadian provinces

Alberta	Nova Scotia	* Quebec
British Columbia	* Ontario	

### Notes

<sup>c</sup> The Canadian provinces took part separately. Their information was not used in any of the international calculations. They are referred to as *benchmarking* participants.

\* Countries participated in PIRLS-01

<sup>†</sup> Hong Kong Special Administrative Region.

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Comparative Education Research Unit  
Research Division  
Ministry of Education  
PO Box 1666  
Wellington 6140  
New Zealand

Email: [research.info@minedu.govt.nz](mailto:research.info@minedu.govt.nz)  
Fax: 64-4-463 8312  
Phone: 64-4-463 8000

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