NATIONAL EDUCATION MONITORING PROJECT

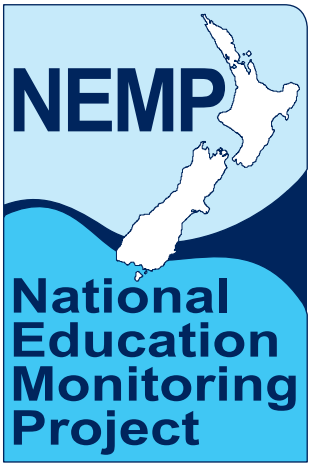
Information Skills

Assessment Results 2005

Lester Flockton, Terry Crooks & Jane White
Educational Assessment Research Unit

INFORMATION SKILLS ASSESSMENT RESULTS 2005

NEMP Report 35



NEW ZEALAND

Information Skills

Assessment Results

2005

Lester Flockton
Terry Crooks
Jane White

with extensive assistance from
other members of the EARU team:

Lee Baker
Linda Doubleday
Lynette Jones
Tamsin Meaney
James Rae
Esther Smaill
Jeffrey Smith
Lisa Smith
Pamala Walrond

EARU

NATIONAL EDUCATION MONITORING
REPORT 35

MINISTRY OF EDUCATION
Te Tāhuhu o te Mātauranga

NEMP REPORTS

CYCLE 1

1995	1	Science
	2	Art
	3	Graphs, Tables and Maps
1996	4	Music
	5	Aspects of Technology
	6	Reading and Speaking
1997	7	Information Skills
	8	Social Studies
	9	Mathematics
1998	10	Listening and Viewing
	11	Health and Physical Education
	12	Writing

CYCLE 2

1999	13	Science
	14	Art
	15	Graphs, Tables and Maps
	16	Māori Students' Results
2000	17	Music
	18	Aspects of Technology
	19	Reading and Speaking
	20	Māori Students' Results
2001	21	Information Skills
	22	Social Studies
	23	Mathematics
	24	Māori Students' Results
2002	25	Listening and Viewing
	26	Health and Physical Education
	27	Writing
	28	Māori Students' Results

CYCLE 3

2003	29	Science
	30	Visual Arts
	31	Graphs, Tables and Maps
2004	32	Music
	33	Aspects of Technology
	34	Reading and Speaking
2005	35	Information Skills
	36	Social Studies
	37	Mathematics
	38	Māori Students' Results

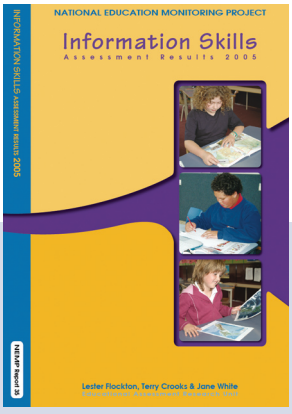
Note that reports are published the year after the research is undertaken i.e. reports for 2006 will not be available until 2007.

UNIVERSITY OF OTAGO
Te Whare Wānanga o Otāgo

EDUCATIONAL ASSESSMENT RESEARCH UNIT
PO Box 56, Dunedin, New Zealand
Tel: 0800 808 561 Fax: 64 3 479 7550
Email: *earu@otago.ac.nz*
Web: http://*nemp.otago.ac.nz*

Contents

34 A page number enclosed in a box indicates that the associated task is a Trend Task for this report.



NATIONAL EDUCATION MONITORING REPORT 35

This report was prepared and published by the Educational Assessment Research Unit, University of Otago, New Zealand, under contract to the Ministry of Education, New Zealand.

ISSN 1174-0000 ISBN 1–877182–56–7

Acknowledgements

The Project directors acknowledge the vital support and contributions of many people to this report, including:

- the very dedicated staff of the Educational Assessment Research Unit
- Stephen Porteners and other staff members of the Ministry of Education
- members of the Project's National Advisory Committee
- members of the Project's Information Skills Advisory Panel
- principals and children of the schools where tasks were trialled
- principals, staff and Board of Trustee members of the 248 schools included in the 2005 sample
- the 2879 children who participated in the assessments and their parents
- the 96 teachers who administered the assessments to the children
- the 44 senior tertiary students who assisted with the marking process
- the 172 teachers who assisted with the marking of tasks early in 2006.

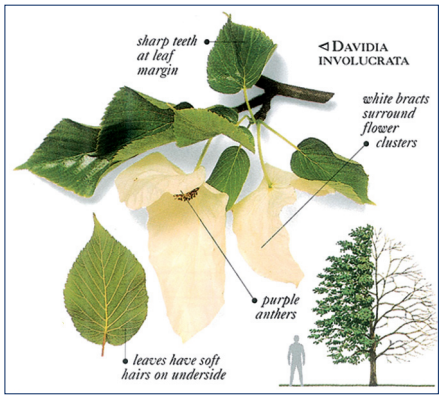
Summary

New Zealand's National Education Monitoring Project commenced in 1993, with the task of assessing and reporting on the achievement of New Zealand primary school children in all areas of the school curriculum. Children are assessed at two class levels: year 4 (halfway through primary education) and year 8 (at the end of primary education). Different curriculum areas and skills are assessed each year, over a four-year cycle. The main goal of national monitoring is to provide detailed information about what children can do so that patterns of performance can be recognised, successes celebrated, and desirable changes to educational practices and resources identified and implemented.

Each year, small random samples of children are selected nationally, then assessed in their own schools by teachers specially seconded and trained for this work. Task instructions are given orally by teachers, through video presentations, on laptop computers, or in writing. Many of the assessment tasks involve the children in the use of equipment and supplies. Their responses are presented orally, by demonstration, in writing, in computer files, or through submission of other physical products. Many of the responses are recorded on videotape for subsequent analysis.

The use of many tasks with both year 4 and year 8 students allows comparisons of the performance of year 4 and 8 students in 2005. Because some tasks have been used twice, in 2001 and again in 2005, trends in performance across the four-year period can also be analysed.

In 2005, the third year of the third cycle of national monitoring, three areas were assessed: mathematics, social studies and information skills. This report presents details and results of the assessments of information skills.



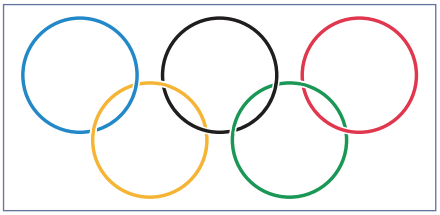
ASSESSING TECHNOLOGY

Chapter 2 explains the place of information skills in the New Zealand curriculum and presents the framework for information skills. This identified three main content areas or strands: clarifying information needs, finding and gathering information, and analysing and using information. Within each of these areas, various strategies, skills and processes were identified. The importance of attitudes and motivation was also noted.

CLARIFYING INFORMATION NEEDS

Chapter 3 presents information about students' skills in clarifying information needs based on 11 assessment tasks. Year 8 students enjoyed more success than year 4 students. Averaged across 43 task components attempted by both years, 14 percent more year 8 than year 4 students succeeded well with these components.

Averaged across nine trend task components attempted by year 4 students in both 2001 and 2005, three percent fewer students succeeded in 2005 than in 2001. This is a small decrease. At year 8 level, again with nine components included, on average there was no change between 2001 and 2005. Both of these trend results should be interpreted cautiously because they are based on just nine components of two trend tasks.



FINDING AND GATHERING INFORMATION

Chapter 4 presents results for 24 tasks that involved finding and gathering information. Year 8 students enjoyed substantially more success than year 4 students. Averaged across 52 components of eight tasks attempted by both years, 23 percent more year 8 than year 4 students succeeded well with these components. Year 8 students scored higher on all 52 components.

Averaged across 25 components of two trend tasks attempted by year 4 students in both 2001 and 2005, one percent fewer students succeeded in 2005 than in 2001. This is a negligible decrease. At year 8 level, with 68 components of four trend tasks included, on average three percent more students succeeded in 2005. This is a small increase.

ANALYSING AND USING INFORMATION

Chapter 5 presents results for 16 tasks that asked students to analyse and use information. Year 8 students enjoyed substantially more success than year 4 students. Averaged across 84 components of 11 tasks attempted by both years, 17 percent more year 8 than year 4 students succeeded well with these components.

Averaged across seven components of two trend tasks attempted by year 4 students in both 2001 and 2005, one percent fewer students succeeded in 2005 than in 2001. This is a negligible decrease, based on a small sample of tasks and components. At year 8 level, with 25 components of four tasks included, on average two percent fewer students succeeded in 2005. This decrease is also too small to be regarded as meaningful.

OVERALL TRENDS

Overall trends can be assessed by considering all 12 trend tasks from Chapters 3 to 5. For year 4 students, based on 41 components of six trend tasks, on average one percent fewer students than in 2001 succeeded with the task components in 2005. For year 8 students, based on 101 components of 10 trend tasks, one percent more students than in 2001 succeeded with the task components in 2005. Both of these trends are too small to be meaningful.

INFORMATION SKILLS SURVEY

Chapter 6 focuses on the results of a survey that sought information from students about their strategies for, involvement in, and enjoyment of information gathering and interpreting activities. For both year 4 and year 8 students in 2005, the internet was by a substantial margin the most popular source of information, with a significant increase since 2001 both overall and relative to other sources such as libraries. A substantially greater proportion of year 8 than year 4 students reported that they had to find information for a project or topic heaps or quite a lot. Perhaps as a consequence of being given such tasks more frequently, year 8 students were much less inclined than year 4 students to be enthusiastic about hunting for information and about writing down the information they found. While year 4 students responded similarly to questions 1 and 2, the pattern was quite different for year 8 students, suggesting that many of the information-finding projects which year 8 students were asked to attempt were not viewed as "really interesting". Most students are quite happy to share with others the information they have found. Only about 40 percent of students at both year levels report having used a library catalogue heaps or quite a lot. Where comparisons with 1997 and 2001 responses are possible, the results in 2005 appear to be very similar.

PERFORMANCE OF SUBGROUPS

Chapter 7 details the results of analyses comparing the performance of different demographic subgroups. School type (full primary, intermediate, or year 7 to 13 high school), school size, community size and geographic zone did not seem to be important factors predicting achievement on the information skills tasks. The same was true for the 2001 and 1997 assessments. However, there were statistically significant differences in the performance of students from low, medium and high decile schools on 57 percent of the tasks at year 4 level (compared to 43 percent in 2001 and 81 percent in 1997) and 54 percent of the tasks at year 8 level (compared to 71 percent in 2001 and 56 percent in 1997).

For the comparisons of boys with girls, Pakeha with Māori, Pakeha with Pasifika students, and students for whom the predominant language at home was English with those for whom it was not, effect sizes were used. Effect size is the difference in mean (average) performance of the two groups, divided by the pooled standard deviation of the scores on the particular task. For this summary, these effect sizes were averaged across all tasks.

Year 4 girls averaged slightly higher than boys, with a mean effect size of 0.14 (compared to 0.06 in 2001). Year 8 girls averaged moderately higher than boys, with a mean effect size of 0.27 (compared to 0.15 in 2001). As was also true in 2001, the information skills survey results at both year levels showed some evidence that girls were more positive than boys about information skills activities.

Pakeha students averaged moderately higher than Māori students, with mean effect sizes of 0.36 for year 4 students and 0.27 for year 8 students (the corresponding figures in 2001 were 0.25 and 0.39).

Year 4 Pakeha students averaged moderately higher than Pasifika students, with a mean effect size of 0.37 (compared to 0.40 in 2001). Year 8 Pakeha students averaged substantially higher than Pasifika students, with a mean effect size of 0.48 (compared to 0.46 in 2001). The information skills survey results showed that Pasifika students were more involved in and enthusiastic about some aspects of information skills.

Compared to students for whom the predominant language at home was English, students from homes where other languages predominated averaged slightly lower, with mean effect sizes of 0.16 for year 4 students and 0.18 for year 8 students. Comparative figures are not available for the assessments in 2001.

The National Education Monitoring Project 1

This chapter presents a concise outline of the rationale and operating procedures for national monitoring, together with some information about the reactions of participants in the 2005 assessments. Detailed information about the sample of students and schools is available in the Appendix.

Purpose of National Monitoring

The New Zealand Curriculum Framework (1993, p26) states that the purpose of national monitoring is to provide information on how well overall national standards are being maintained, and where improvements might be needed.

The focus of the National Education Monitoring Project (NEMP) is on the educational achievements and attitudes of New Zealand primary and intermediate school children. NEMP provides a national "snapshot" of children's knowledge, skills and motivation, and a way to identify which aspects are improving, staying constant, or declining. This information allows successes to be celebrated and priorities for curriculum change and teacher development to be debated more effectively, with the goal of helping to improve the education which children receive.

Assessment and reporting procedures are designed to provide a rich picture of what children can do and thus to optimise value to the educational community. The result is a detailed national picture of student achievement. It is neither feasible nor appropriate, given the purpose and the approach used, to release information about individual students or schools.

Monitoring at Two Class Levels

National monitoring assesses and reports what children know and can do at two levels in primary and intermediate schools: year 4 (ages 8-9) and year 8 (ages 12-13).

National Samples of Students

National monitoring information is gathered using carefully selected random samples of students, rather than all year 4 and year 8 students. This enables a relatively extensive exploration of students' achievement, far more detailed than would be possible if all students were to be assessed. The main national samples of 1440 year 4 children and 1440 year 8 children represent about 2.5 percent of the children at those levels in New Zealand schools, large enough samples to give a trustworthy national picture. At year 8 level only, a special sample of 96 children learning in Māori immersion schools or classes is selected. Their achievement will be reported in a separate report.

Three Sets of Tasks at Each Level

So that a considerable amount of information can be gathered without placing too many demands on individual students, different students attempt different tasks. The 1440 students selected in the main sample at each year level are divided into three groups of 480 students, comprising four students from each of 120 schools. Each group attempts one third of the tasks.

Timing of Assessments

The assessments take place in the second half of the school year, between August and November. The year 8 assessments occur first, over a five-

	YEAR	NEW ZEALAND CURRICULUM		
1	2003 (1999) (1995)	Science Visual Art Information Skills: *graphs, tables, maps, charts and diagrams*	Communication skills Problem-solving skills Self-management and competitive skills Social and cooperative skills Work and study skills	Attitudes
2	2004 (2000) (1996)	Language: *reading and speaking* Aspects of Technology Music		
3	2005 (2001) (1997)	Mathematics : *numeracy skills* Social Studies Information Skills: *library, research*		
4	2006 (2002) (1998)	Language: *writing, listening, viewing* Health and Physical Education		

week period. The year 4 assessments follow, over a similar period. Each student participates in about four hours of assessment activities spread over one week.

Specially Trained Teacher Administrators

The assessments are conducted by experienced teachers, usually working in their own region of New Zealand. They are selected from a national pool of applicants, attend a week of specialist training in Wellington led by senior Project staff and then work in pairs to conduct assessments of 60 children over five weeks. Their employing school is fully-funded by the Project to employ a relief teacher during their secondment.

Four-Year Assessment Cycle

Each year, the assessments cover about one quarter of the areas within the national curriculum for primary schools. The New Zealand Curriculum Framework is the blueprint for the school curriculum. It places emphasis on seven essential learning areas, eight essential skills and a variety of attitudes and values. National monitoring aims to address all of these areas, rather than restrict itself to pre-selected priority areas.

The first four-year cycle of assessments began in 1995 and was completed in 1998. The second cycle ran from 1999 to 2002. The third cycle began in 2003 and will finish in 2006. The areas covered each year and the reports produced for cycle 2 and the first three years of cycle 3 are listed opposite the contents page of this report.

Some of the tasks are kept constant from one cycle to the next. This re-use of tasks allows trends in achievement across a four-year interval to be observed and reported. Starting from 2002, the percentage of tasks retained was increased from 35 to 45 percent, so that trends will be able to be reported more thoroughly.

Important Learning Outcomes Assessed

The assessment tasks emphasise aspects of the curriculum which are particularly important to life in our community, and which are likely to be of enduring importance to students. Care is taken to achieve balanced coverage of important skills, knowledge and understandings within the various curriculum strands, but without attempting to follow slavishly the finer details of current curriculum statements. Such details change from time to time, whereas national monitoring needs to take a long-term perspective if it is to achieve its goals.

Wide Range of Task Difficulty

National monitoring aims to show what students know and can do. Because children at any particular class level vary greatly in educational development, tasks spanning multiple levels of the curriculum need to be included if all children are to enjoy some success and all children are to experience some challenge. Many tasks include several aspects, progressing from aspects most children can handle well to aspects that are less straightforward.

Engaging Task Approaches

Special care is taken to use tasks and approaches that interest students and stimulate them to do their best. Students' individual efforts are not reported and have no obvious consequences for them. This means that worthwhile and engaging tasks are needed to ensure that students' results represent their capabilities rather than their level of motivation. One helpful

factor is that extensive use is made of equipment and supplies which allow students to be involved in hands-on activities. Presenting some of the tasks on video or computer also allows the use of richer stimulus material and standardises the presentation of those tasks.

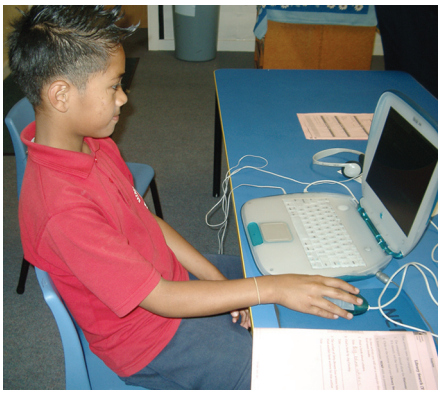
Positive Student Reactions to Tasks

At the conclusion of each assessment session, students completed evaluation forms in which they identified tasks that they particularly enjoyed, tasks they felt relatively neutral about and tasks that did not appeal. Averaged across all tasks in the 2004 assessments, 75 percent of year 4 students indicated that they particularly enjoyed the tasks. The range across the 131 tasks was from 91 percent down to 46 percent. As usual, year 8 students were more demanding. On average, 57 percent of them indicated that they particularly enjoyed the tasks, with a range across 181 tasks from 89 percent down to 23 percent. Four tasks were more disliked than liked, by year 8 students only. These were two mathematics tasks involving fractions, a social studies task about the role of the Governor General, and an information skills task summarising a passage about Dame Kiri Te Kanawa.

Appropriate Support for Students

A key goal in Project planning is to minimise the extent to which student strengths or weaknesses in one area of the curriculum might unduly influence their assessed performance in other areas. For instance, skills in reading and writing often play a key role in success or failure in paper-and-pencil tests in areas such as science, social studies, or even mathematics. In national monitoring, a majority of tasks are presented orally by teachers, on video, or on computer, and most answers are given orally or by demonstration rather than in writing. Where reading or writing skills are required to perform tasks in areas other than reading and writing, teachers are happy to help students to understand these tasks or to communicate their responses. Teachers are working with no more than four students at a time, so are readily available to help individuals.

To free teachers further to concentrate on providing appropriate guidance and help to students, so that the students



achieve as well as they can, teachers are not asked to record judgements on the work the students are doing. All marking and analysis is done later, when the students' work has reached the Project office in Dunedin. Some of the work comes on paper, but much of it arrives recorded on videotape. In 2005, about half of the students' work came in that form, on a total of about 3600 videotapes. The video recordings give a detailed picture of what students and teachers did and said, allowing rich analysis of both process and task achievement.

Four Task Approaches Used

In 2005, four task approaches were used. Each student was expected to spend about an hour working in each format. The four approaches were:

- *One-to-one interview*
  Each student worked individually with a teacher, with the whole session recorded on videotape.
- *Stations*
  Four students, working independently, moved around a series of stations where tasks had been set up. This session was not videotaped.
- *Team*
  Four students worked collaboratively, supervised by a teacher, on some tasks. This session was recorded on videotape.
- *Group and Independent*
  Four students worked collaboratively, supervised by a teacher, on some tasks. This was recorded on videotape. The students then worked individually on some paper-and-pencil tasks.

Professional Development Benefits for Teacher Administrators

The teacher administrators reported that they found their training and assessment work very stimulating and professionally enriching. Working so closely with interesting tasks administered to 60 children in at least five schools offered valuable insights. Some teachers have reported major changes in their teaching and assessment practices as a result of their experiences working with the Project. Given that 96 teachers served as teacher administrators in 2005, or about half a percent of all primary teachers, the Project is making a major contribution to the professional development of teachers in assessment knowledge and skills. This contribution is steadily growing, since preference for appointment each year is given to teachers who have not previously served as teacher administrators. The total after 11 years is 1070 different teachers, 39 of whom have served more than once.

Marking Arrangements

The marking and analysis of the students' work occurs in Dunedin. The marking process includes extensive discussion of initial examples and careful checks of the consistency of marking by different markers.

Tasks which can be marked objectively or with modest amounts of professional experience usually are marked by senior tertiary students, most of whom have completed two or three years of pre-service preparation for primary school teaching. Forty-four student markers worked on the 2005 tasks, employed five hours per day for about five weeks.

The tasks that require higher levels of professional judgement are marked by teachers, selected from throughout New Zealand. In 2005, 172 teachers were appointed as markers. Most teachers worked either mornings or afternoons for one week. Teacher professional development through participation in the marking process is another substantial benefit from

national monitoring. In evaluations of their experiences on a four-point scale ("dissatisfied" to "highly satisfied"), 67 to 94 percent of the teachers who marked student work from 2005 chose "highly satisfied" in response to questions about:

- the instructions and guidance given during marking sessions
- the degree to which marking was professionally satisfying and interesting
- its contribution to their professional development in the area of assessment
- the overall experience.

Analysis of Results

The results are analysed and reported task by task. Most task reports include a total score, created by adding scores for appropriate task components. Details of how the total score has been constructed for particular assessment tasks can be obtained from the NEMP office (earu@otago.ac.nz).

Although the emphasis is on the overall national picture, some attention is also given to possible differences in performance patterns for different demographic groups and categories of school. The variables considered are:

- *Student gender:*
  – male
  – female
- *Student ethnicity:*
  – Māori
  – Pasifika
  – Pakeha (including Asian)
- *Home language:*
  (predominant language spoken at home)
  – English
  – any other language
- *Geographical zone:*
  – Greater Auckland
  – other North Island
  – South Island
- *Size of community:*
  – main centre over 100,000
  – provincial city of 10,000 to 100,000
  – rural area or town of less than 10,000
- *Socio-economic index for the school:*
  – lowest three deciles
  – middle four deciles
  – highest three deciles
- *Size of school:*
  YEAR 4 SCHOOLS
  – less than 25 year-4 students
  – 25 to 60 year-4 students
  – more than 60 year-4 students

  YEAR 8 SCHOOLS
  – less than 35 year-8 students
  – 35 to 150 year-8 students
  – more than 150 year-8 students
- *Type of school*: (for year 8 sample only)
  – full primary school
  – intermediate school
  – year 7–13 high school
  (some students were in other types of schools, but too few to allow separate analysis).

Categories containing fewer children, such as Asian students or female Māori students, were not used because the resulting statistics would be based on the performance of less than 70 children, and would therefore be unreliable.

An exception to this guideline was made for Pasifika children and children whose home language was not English because of the agreed importance of gaining some information about their performance.

Funding Arrangements

National monitoring is funded by the Ministry of Education, and organised by the Educational Assessment Research Unit at the University of Otago, under the direction of Professor Terry Crooks and Lester Flockton. The current contract runs until 2007. The cost is about $3 million per year, less than one tenth of a percent of the budget allocation for primary and secondary education. Almost half of the funding is used to pay for the time and expenses of the teachers who assist with the assessments as task developers, teacher administrators or markers.

Reviews by International Scholars

In June 1996, three scholars from the United States and England, with distinguished international reputations in the field of educational assessment, accepted an invitation from the Project directors to visit the Project. They conducted a thorough review of the progress of the Project, with particular attention to the procedures and tasks used in 1995 and the results emerging. At the end of their review, they prepared a report which concluded as follows:

> *The National Education Monitoring Project is well conceived and admirably implemented. Decisions about design, task development, scoring and reporting have been made thoughtfully. The work is of exceptionally high quality and displays considerable originality. We believe that the project has considerable potential for advancing the understanding of and public debate about the educational achievement of New Zealand students. It may also serve as a model for national and/or state monitoring in other countries.*
>
> *(Professors Paul Black, Michael Kane & Robert Linn, 1996)*

A further review was conducted late in 1998 by another distinguished panel (Professors Elliot Eisner, Caroline Gipps and Wynne Harlen). Amid very helpful suggestions for further refinements and investigations, they commented that:

> *We want to acknowledge publicly that the overall design of NEMP is very well thought through… The vast majority of tasks are well designed, engaging to students and consistent with good assessment principles in making clear to students what is expected of them.*

Further Information

A more extended description of national monitoring, including detailed information about task development procedures, is available in:

Flockton, L. (1999). *School-wide Assessment: National Education Monitoring Project.* Wellington: New Zealand Council for Educational Research.

Assessing Information Skills 2

The New Zealand Curriculum Framework includes information skills as one of the eight groupings of essential skills. It states (p18) that students will:

- identify, locate, gather, store, retrieve and process information from a range of sources
- organise, analyse, synthesize, evaluate, and use information
- present information clearly, logically, concisely, and accurately
- identify, describe, and interpret different points of view, and distinguish fact from opinion
- use a range of information-retrieval and information-processing technologies confidently and competently.

These skills are clearly important to everyday life in our communities. The range and quantity of information available to us is rapidly increasing, and skill in accessing, collating, interpreting and using information is very helpful to most educational, work and leisure activities.

Other National Monitoring Reports

Some of the skills listed above are assessed in other national monitoring reports. For instance, reports on Graphs, Tables and Maps results (1995, 1999 and 2003 assessments) have examined in some depth students' capabilities in making use of graphs, tables and maps to find, interpret or present information. Similarly, reports on Reading and Speaking results (1996, 2000 and 2004 assessments) have dealt quite extensively with students' skills in finding and understanding written information, and their skills in presenting information clearly in oral form. Most other NEMP reports have also, to a greater or lesser degree, required students to identify, interpret, organise, evaluate and present information.

The Role of This Report

Despite the substantial coverage of information skills in other reports, it was always intended that national monitoring should include one set of assessments specifically focused on information skills, with special emphasis on skills which would be only lightly or unsystematically covered in other reports. These skills include clarifying information needs, finding suitable sources of information, searching those sources for specific information needed, gathering that information, and interpreting, collating and reporting information.

Framework for Assessment of Information Skills

National monitoring task frameworks are developed with the Project's curriculum advisory panels. These frameworks have two key purposes. They provide a valuable guideline structure for the development and selection of tasks, and they bring into focus those important dimensions of the learning domain which are arguably the basis for valid analyses of students' skills, knowledge and understandings.

The assessment frameworks are intended to be flexible and broad enough to encourage and enable the development of tasks that lead to meaningful descriptions of what students know and can do.

NEMP INFORMATION SKILLS FRAMEWORK 2005

Finding and using information to meet diverse needs
•clarifying information needs •finding and gathering information
•analysing and using information

STRATEGIES, SKILLS AND PROCESSES

Clarifying information needs

Asking questions:

- *What does this task require me to know?*
- *What do I already know?*
- *What do I need to do?*

Finding and gathering information

- Knowing about sources of information.
- Identifying sources of information for a purpose.
- Accessing those sources of information.
- Finding information within the sources and evaluating for relevance and quality.
- Selecting and recording the most relevant information.
- Recording the source of the information.

Analysing and using information

- Analysing and interpreting information.
- Evaluating which information is most valuable for the purpose.
- Discarding information.
- Sorting and organising information.
- Synthesizing and applying information to the task.
- Communicating the information.
- Evaluating how well the purpose has been achieved *(knowledge, skills and attitudes).*

LIKELY SOURCES OF INFORMATION

- people
- newspapers
- magazines
- books
- school journals
- dictionaries
- encyclopaedias
- atlases
- internet
- catalogues
- indexes
- audio tapes
- CDs
- videos/films/DVDs
- pictures/photos
- charts
- posters

ATTITUDES AND MOTIVATION

Curiosity
I want to know

Open-mindedness
I'll allow new information to change my thinking

Discrimination
I'll critically evaluate information

Confidence
I know how to go about it

Self-management
I can plan what to do and get it done

Perseverance
I don't give up easily

Satisfaction
I enjoy using information to learn

They are also designed to help ensure a balanced representation of important learning outcomes.

The information skills framework has a central organising theme, three interrelated content areas, and lists of strategies, skills or processes associated with each content area.

A wide range of possible sources of information is highlighted, and attention is drawn in the final section to the importance of students' attitudes and motivation.

The most important message emerging from the framework is that students possessing well-developed information skills can perform three main tasks effectively: clarifying information needs, finding and gathering relevant information, and then analysing and using that information to meet the required purposes. A substantial proportion of the intellectual demands occur during the first and third of these tasks: finding and gathering information is clearly important, but its value is greatly dependent on the extent to which it can be validly interpreted and used to answer important questions.

The Choice of Tasks for National Monitoring

The choice of tasks for national monitoring is guided by a number of educational and practical considerations. Uppermost in any decisions relating to the choice or administration of a task is the central consideration of validity and the effect that a whole range of decisions can have on this key attribute. Tasks are chosen because they provide a good representation of important knowledge and skills, but also because they meet a number of requirements to do with their administration and presentation. For example:

- Each task, with its associated materials, needs to be structured to ensure a high level of consistency in the way it is presented by specially trained teacher administrators to students of wide-ranging backgrounds and abilities, and in diverse settings throughout New Zealand.
- Tasks need to span the expected range of capabilities of year 4 and 8 students and to allow the most able students to show the extent of their abilities while also giving the least able the opportunity to show what they can do.
- Materials for tasks need to be sufficiently portable, economical, safe and within the handling capabilities of students. Task materials also need to have meaning for students.
- The time needed for completing an individual task has to be balanced against the total time available for all of the assessment tasks, without denying students sufficient opportunity to demonstrate their capabilities.
- Each task needs to be capable of sustaining the attention and effort of students if they are to produce responses that truly indicate what they know and can do. Since neither the student nor the school receives immediate or specific feedback on performance, the motivational potential of the assessment is critical.
- Tasks need to avoid unnecessary bias on the grounds of gender, culture or social background while accepting that it is appropriate to have tasks that reflect the interests of particular groups within the community.

National Monitoring Information Skills Assessment Tasks and Survey

Fifty-two information skills tasks were administered. Each student also completed a survey questionnaire that investigated their interests, attitudes and involvement in information skills activities.

Twelve tasks were administered in one-to-one interview settings, where students used materials and visual information. Eight tasks were presented in team or group situations involving small groups of students working together. Twenty-seven tasks were attempted in a stations arrangement, where students worked independently on a series of tasks, some presented on laptop computers. The final five tasks were administered in an independent approach, where students sat at desks or tables and worked through a series of paper-and-pencil tasks.

Twenty-five of the 52 tasks were the same or overlapped substantially for year 4 and year 8 students. Of the remaining tasks, five were specifically for year 4 students and 22 for year 8 students. Some of these single year tasks had parallel tasks at the other level, but with different stimulus material or significantly different instructions.

Trend Tasks

Twelve of the tasks in this report were previously used in identical form in the 2001 information skills assessments. These were called link tasks in the 2001 report, but were not described in detail to avoid any distortions in 2005 results that might have occurred if the tasks had been widely available for use in schools since 2001. In the current report, these tasks are called trend tasks and are used to examine trends in student performance: whether they have improved, stayed constant or declined over the four-year period since the 2001 assessments.

Link Tasks

To allow comparisons between the 2005 and 2009 assessments, 23 of the tasks used for the first time in 2005 have been designated link tasks. Results of student performance on these tasks are presented in this report, but the tasks are described only in general terms because they will be used again in 2009.

Marking Methods

The students' responses were assessed using specially designed marking procedures. The criteria used had been developed in advance by Project staff, but were sometimes modified as a result of issues raised during the marking. Tasks that required marker judgement and were common to year 4 and year 8 were intermingled during marking sessions, with the goal of ensuring that the same scoring standards and procedures were used for both.

Task-by-Task Reporting

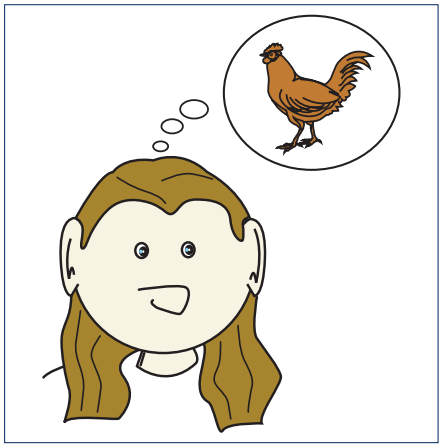
National monitoring assessment is reported task by task so that results can be understood in relation to what the students were asked to do.

Access Tasks

Teachers and principals have expressed considerable interest in access to NEMP task materials and marking instructions, so that they can use them within their own schools. Some are interested in comparing the performance of their own students to national results on some aspects of the curriculum, while others want to use tasks as models of good practice. Some would like to modify tasks to suit their own purposes, while others want to follow the original procedures as closely as possible. There is obvious merit in making available carefully developed tasks that are seen to be highly valid and useful for assessing student learning.

Some of the tasks in this report cannot be made available in this way. Link tasks must be saved for use in four years' time, and other tasks use copyright or expensive resources that cannot be duplicated by NEMP and provided economically to schools. There are also limitations on how precisely a school's administration and marking of tasks can mirror the ways that they are administered and marked by the Project. Nevertheless, a substantial number of tasks are suitable to duplicate for teachers and schools. In this report, these access tasks are identified with the symbol above, and can be purchased in a kit from the New Zealand Council for Educational Research (P.O. Box 3237, Wellington 6000, New Zealand). Teachers are also encouraged to use the NEMP web site (http://nemp.otago.ac.nz) to view video clips and listen to audio material associated with some of the tasks.

3 Clarifying Information Needs



The assessments included 11 tasks that allowed students to show their skills in clarifying information needs through analysing what information was required, planning how to obtain the information, and selecting or developing appropriate questions.

Six tasks were identical for both year 4 and year 8 students, two were attempted only by year 4 students and three were attempted only by year 8 students. Three are trend tasks (fully described with data for both 2001 and 2005), three are released tasks (fully described with data for 2005 only) and five are link tasks (to be used again in 2009, so only partially described here).

The tasks are presented in the following order:

- trend tasks attempted by both year 4 and year 8 students;
- trend tasks attempted by only year 4 or year 8 students;
- released tasks attempted by both year 4 and year 8 students;
- released tasks attempted by only year 4 or year 8 students;
- link tasks attempted by both year 4 and year 8 students;
- link tasks attempted by only year 4 or year 8 students.

Year 8 students enjoyed more success than year 4 students. Averaged across 43 task components attempted by both years, 14 percent more year 8 than year 4 students succeeded well with these components. Year 8 students scored higher on 39 components and lower on four components.

Averaged across nine trend task components attempted by year 4 students in both 2001 and 2005, three percent fewer students succeeded in 2005 than in 2001. This is a small decrease. At year 8 level, again with nine components included, on average there was no change between 2001 and 2005. Both of these trend results should be interpreted cautiously because they are based on just nine components of two trend tasks.

Trend Task: NEMP Access Task

Class Visitor

Approach:	Station
Focus:	Selecting appropriate questions
Resources:	Photo of Prime Minister, 11 question cards

Year: 4 & 8

Questions / instructions:

The Prime Minister is going to talk to a class about being a Prime Minister.

The class made up some questions to ask the Prime Minister.

1. What do you like doing most as Prime Minister?
2. How do you get to be the Prime Minister?
3. Who do you think is the best rugby team in New Zealand?
4. Do you drive your own car or does someone drive for you?
5. What did you do before you were the Prime Minister?
6. What does a Prime Minister have to be good at doing?
7. What is the best country you have been to?
8. Have you met the Queen or other members of the Royal family?
9. What does a Prime Minister do?
10. What are the hardest things a Prime Minister has to do?
11. Do you know how many people live in New Zealand?

There are too many questions.

1. Choose **5** of the questions that you think would be good to find out about being a Prime Minister.
2. Write the number of each question card in these boxes:

1st question	
2nd question	
3rd question	
4th question	
5th question	

		% response 2005 ('01) year 4	year 8
Best choices:	question 1	52 (73)	65 (69)
	question 2	63 (58)	77 (72)
	question 5	63 (53)	64 (60)
	question 6	51 (48)	73 (72)
	question 9	47 (48)	75 (75)
	question 10	60 (66)	82 (89)
Total score:	5	19 (23)	59 (63)
	4	26 (27)	25 (20)
	3	33 (28)	11 (11)
	2	16 (16)	4 (5)
	1	4 (6)	1 (1)
	0	2 (0)	0 (0)

Commentary:

Forty percent more year 8 than year 4 students identified five appropriate questions to ask the Prime Minister. There was little change between 2001 and 2005.

Trend Task: Spiders

NEMP Access Task

Approach:	Team	Year:	4
Focus:	Planning information gathering and appropriate questions		
Resources:	A3 recording sheet, 2 instruction cards, 2 A4 answer sheets, highlighter pen		

Questions / instructions:

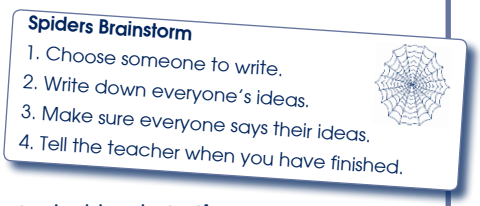
In this activity you are going to start planning a study on spiders.

You are going to do a brainstorm about spiders, which means writing down all of the ideas and information you know about spiders.

Give out A3 sheet and pen.

This piece of paper is for you to write down everything you know about spiders. Remember to write down everyone's ideas. Here is a card to remind you what you have to do.

Read instruction card to team. Stand back and allow sufficient time.



Now you are going to work in pairs to decide what **other** information you might need for a study on spiders. After that, I want you to write four questions about spiders that would help you to search for the information you need. These are questions that you don't know the answers to. This card will remind you what you have to do.

Read card to team.

You have about five minutes to make up your questions.

Assign students to pairs – students 1 and 2; and students 3 and 4. Give each pair an answer sheet, pencils and instruction card. Allow about five minutes.

Now you are going to work together as a group again. Show and read your four questions to each other. After that, decide on three of the best questions that will help you to find the information for your study. Use the highlighter pen to mark them.

Allow time for the group to identify three questions.

Now read to me the three questions you highlighted.

Brainstorm process:

	% response 2005 ('01) year 4
Involvement –	
all members contributed substantially	61 (60)
3/4 or 2/3 members contributed substantially	36 (33)
1/4, 2/4 or 1/3 members contributed substantially	3 (7)
Acceptance –	
all ideas received constructively	77 (67)
majority of ideas received constructively	20 (26)
half or less of ideas received constructively	3 (7)
Rejection – no member had all or most of their ideas rejected	92 (87)
one member had all or most of their ideas rejected	6 (11)
two or more members had all or most of their ideas rejected	2 (2)

Selection of final three questions:

	% response 2005 ('01) year 4
Collaboration –	
decisions made by consensus, involving constructive dialogue	23 (16)
decisions made by consensus, quick agreement without much discussion	54 (48)
decisions made without consensus, through initiative of one or two members	20 (25)
decisions made after disagreement, with disagreements clearly not resolved *(at least one person unhappy about decision)*	3 (11)

Questions selected:

First Question –	
gave relevant "new" information, potentially very rich in detail/depth	43 (57)
gave relevant "new" information, but likely to be quite succinct *(eg. single fact)*	52 (41)
gave irrelevant information or information already available in brainstorm	5 (2)
Second Question –	
gave relevant "new" information, potentially very rich in detail/depth	47 (43)
gave relevant "new" information, but likely to be quite succinct *(eg. single fact)*	51 (54)
gave irrelevant information or information already available in brainstorm	2 (3)
Third Question –	
gave relevant "new" information, potentially very rich in detail/depth	47 (50)
gave relevant "new" information, but likely to be quite succinct *(eg. single fact)*	50 (47)
gave irrelevant information or information already available in brainstorm	3 (3)
Total score: 6	15 (24)
5	29 (19)
4	28 (38)
3	25 (16)
0–2	3 (3)

Commentary:

A high proprotion of the groups made their decisions in a positive, collaborative way. Almost half developed either two or three strong questions suitable for rich information. Performance was a little weaker in 2005 than in 2001.

Trend Task: NEMP Access Task **ANZAC Day**

Approach:	Team	Year:	8
Focus:	Planning information gathering and appropriate questions		
Resources:	A3 answer sheet, 2 A4 answer sheets, 1 brainstorm instruction card, 2 pair question instruction cards, highlighter pen		

Questions / instructions:

In this activity you are going to start planning a study on ANZAC Day. You are going to do a brainstorm about ANZAC Day, which means writing down all of the ideas and information you know.

Give out blank A3 sheet and pen.

This piece of paper is for you to write down everything you know about ANZAC Day. Remember to write down everyone's ideas. Here is a card to remind you what you have to do.

Read instruction card (ANZAC Day Brainstorm) to team. Stand back and allow sufficient time.

> **ANZAC Day Brainstorm**
> 1. Choose someone to write.
> 2. Write down everyone's ideas.
> 3. Make sure everyone says their ideas.
> 4. Tell the teacher when you have finished.

Now you are going to work in pairs to decide what other information you might need for a study on ANZAC Day. After that, I want you to write four questions about ANZAC Day that would help you to search for the information you need. These are questions that you don't know the answers to. This card will remind you what you have to do.

Read card (ANZAC Day Pair Questions) to team.

You have about five minutes to make up your questions.

> **ANZAC Day Pair Questions**
> 1. Talk about what you need to find out about Anzac Day.
> 2. Write four questions that will help you to search for the information you need about Anzac Day.

Assign students to pairs - Students 1 and 2; and students 3 and 4. Give each pair an answer sheet, pencils and instruction card. Allow about five minutes.

Now you are going to work together as a group again. Show and read your **four** questions to each other. After that, decide on **three** of the best questions that will help you to find the information for your study. Use the highlighter pen to mark them.

Allow time for the group to identify three questions.

Now read to me the three questions you highlighted.

Brainstorm process:

	% response 2005 ('01) year 8
Involvement –	
all members contributed substantially	45 (38)
3/4 or 2/3 members contributed substantially	42 (43)
1/4, 2/4 or 1/3 members contributed substantially	13 (19)
Acceptance – all ideas received constructively	82 (62)
majority of ideas received constructively	16 (38)
half or less of ideas received constructively	2 (0)
Rejection – no member had all or most of their ideas rejected	96 (90)
one member had all or most of their ideas rejected	3 (10)
two or more members had all or most of their ideas rejected	1 (0)

Selection of final three questions:

	% response 2005 ('01) year 8
Collaboration –	
decisions made by consensus, involving constructive dialogue	21 (22)
decisions made by consensus, quick agreement without much discussion	49 (36)
decisions made without consensus, through initiative of one or two members	28 (40)
decisions made after disagreement, with disagreements clearly not resolved *(at least one person unhappy about decision)*	2 (2)

Questions selected:

First Question –	
gave relevant "new" information, potentially very rich in detail/depth	32 (37)
gave relevant "new" information, but likely to be quite succinct *(eg. single fact)*	66 (58)
gave irrelevant information or information already available in brainstorm	2 (5)
Second Question –	
gave relevant "new" information, potentially very rich in detail/depth	42 (43)
gave relevant "new" information, but likely to be quite succinct *(eg. single fact)*	55 (55)
gave irrelevant information or information already available in brainstorm	3 (2)
Third Question –	
gave relevant "new" information, potentially very rich in detail/depth	59 (48)
gave relevant "new" information, but likely to be quite succinct *(eg. single fact)*	41 (50)
gave irrelevant information or information already available in brainstorm	0 (2)
Total score: 6	7 (10)
5	35 (25)
4	42 (42)
3	13 (21)
0–2	3 (2)

Commentary:

The performance of year 8 students, on this task, closely parallels the performance of year 4 students on the similar task, *Spiders*. A high proportion of the groups made their decisions in a positive, collaborative way. Almost half developed either two or three strong questions, suitable for gathering rich information. Performance was similar in 2005 and 2001.

Task: Olympic Games History

NEMP Access Task

Approach:	Independent
Focus:	Identifying information needs for a purpose
Resources:	Olympic rings A4 answer sheet

Year: 4 & 8

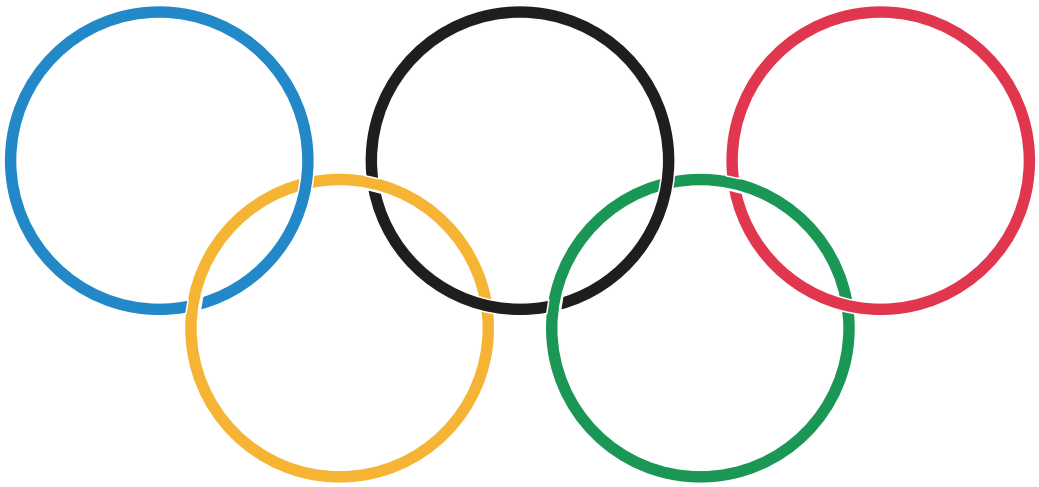
Questions / instructions:

Imagine that you have been chosen to give an interesting talk to your class about the history of the Olympic Games.

You could find lots of good information on the internet.

1. In each circle, write one of the things that you would search for on the internet.

What I need to know for my talk about the Olympic Games



Examples of broad, relevant information:

- *history of events/sports*
- *world sportspeople*
- *NZ sportspeople*
- *NZ connection to the Olympics*
- *Ancient Games*
- *Origin of the Games*
- *Modern Games*

		% responses y4	% responses y8
Blue Ring:	broad and relevant	16	20
	narrow/particular and relevant	50	61
	any other response	34	19
Yellow Ring:	broad and relevant	13	24
	narrow/particular and relevant	48	60
	any other response	39	16
Black Ring:	broad and relevant	12	20
	narrow/particular and relevant	50	64
	any other response	38	16
Green Ring:	broad and relevant	9	23
	narrow/particular and relevant	44	58
	any other response	47	19
Red Ring:	broad and relevant	10	19
	narrow/particular and relevant	38	60
	any other response	52	21

Total score:	% responses y4	% responses y8
9–10	2	5
7–8	9	21
5–6	34	48
3–4	17	12
1–2	14	5
0	24	9

Commentary:

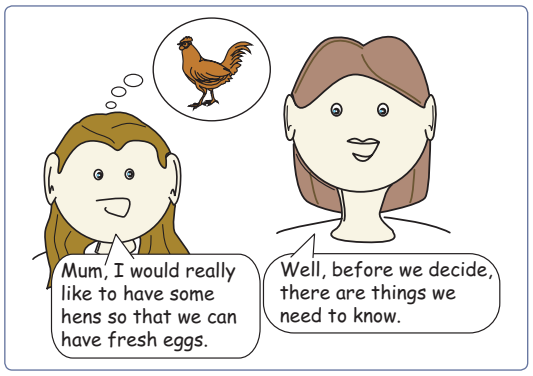
More than half of the year 4 students identified relevant information for most of the circles, but largely focused on specific facts rather than broader issues. Year 8 students performed better, on average, with 74 percent scoring five or higher, compared to 45 percent of year 4 students.

Task: Hens

NEMP Access Task

Approach:	Independent	Year:	4 & 8
Focus:	Identifying information needs for a purpose		
Resources:	None		

Questions / instructions:



Pippi and her mum are thinking about getting some hens so that they can have fresh eggs.

Write down all of the things Pippi and her mum would need to know about keeping hens to help them decide if they should get some.

		% responses y4	% responses y8
Mentioned:	food/water	75	86
	housing/coops/yard	66	80
	health issues/diseases	16	24
	predators	5	10
	need roosters for producing eggs	2	5
	anything else reasonable	39	53
Total score:	5–6	0	2
	4	6	16
	3	26	38
	2	41	31
	1	19	8
	0	8	5

Commentary:

Fifty-six percent of year 8 students, compared to 32 percent of year 4 students, wrote down three or more relevant aspects needing consideration.

Task: ANZAC Day Talk

NEMP Access Task

Approach:	Station	Year:	8
Focus:	Identifying information needs for a purpose		
Resources:	Picture of web page		

Questions / instructions:

Imagine that you have been chosen to give an interesting talk to your class about ANZAC Day, using the RSA website.

Before you hunt for information, you could think about what you want to find out.

Write the things you want to find out using the RSA website.

Examples of relevant information:

- *Poppy Day*
- *90th Anniversary of ANZAC Day*
- *Gallipoli Campaign*
- *History of ANZAC Day*
- *When ANZAC Day occurs*
- *Who is commemorated*
- *ANZAC Day activities*

	% responses y8
5+ bits of relevant information	22
3-4 bits of relevant information	34
1-2 bits of relevant information	26
relevant questions but none from list	7
any other response	11

Commentary:

Fifty-six percent of the year 8 students identified three or more relevant things to find out about.

LINK TASK: 1
Approach: Station
Year: 4 & 8
Focus: Identifying information needs

Total score:	% responses y4	% responses y8
5–8	6	27
4	17	34
3	22	19
2	17	8
1	16	6
0	22	6

LINK TASK: 2
Approach: Team
Year: 4 & 8
Focus: Appropriate information sources

Total score:	% responses y4	% responses y8
11–12	1	2
9–10	3	7
7–8	7	22
5–6	35	36
3–4	45	29
0–2	9	4

LINK TASK: 3
Approach: Independent
Year: 4 & 8
Focus: Identifying information needs

Total score:	% responses y4	% responses y8
9–13	3	15
7–8	15	40
5–6	34	23
3–4	27	15
0–2	21	7

LINK TASK: 4
Approach: Team
Year: 4
Focus: Identifying appropriate questions

Total score:	% responses y4	% responses y8
7–8	3	
6	23	
4–5	45	
2–3	26	
0–1	3	

LINK TASK: 5
Approach: Station
Year: 8
Focus: Planning an information project

Total score:	% responses y4	% responses y8
9–10		13
7–8		34
5–6		30
3–4		19
0–2		4

Finding and Gathering Information 4

The assessments included 24 tasks that explored how well the students could find and gather information. Specifically, the tasks explored students' knowledge and skills relating to:

- the organisation of libraries, reference books and other books
- the types of information available from different sources
- finding particular information in books, pamphlets, diagrams, video recordings, and simulations of the internet
- extracting and recording relevant information.

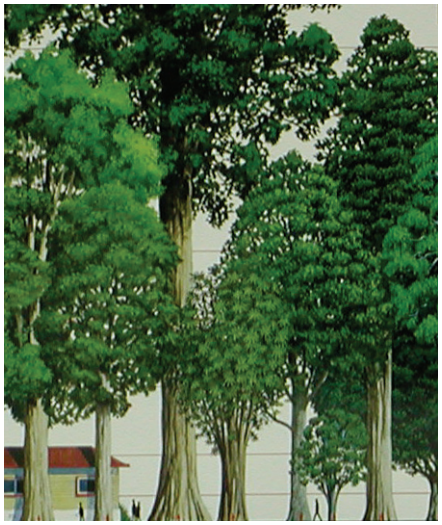
Six tasks were identical for both year 4 and year 8 students, two were very similar for year 4 and year 8 students but truncated for year 4 students, three were attempted only by year 4 students and 13 were attempted only by year 8 students. Five are trend tasks (fully described with data for both 2001 and 2005), nine are released tasks (fully described with data for 2005 only) and 10 are link tasks (to be used again in 2009, so only partially described here).

The tasks are presented in the following order:

- trend tasks attempted by both year 4 and year 8 students
- trend tasks attempted by only year 4 or year 8 students
- released tasks attempted by both year 4 and year 8 students
- released tasks attempted by only year 4 or year 8 students
- link tasks attempted by both year 4 and year 8 students
- link tasks attempted by only year 4 or year 8 students.

Year 8 students enjoyed substantially more success than year 4 students. Averaged across 52 components of eight tasks attempted by both years, 23 percent more year 8 than year 4 students succeeded well with these components. Year 8 students scored higher on all 52 components.

Averaged across 25 components of two trend tasks attempted by year 4 students in both 2001 and 2005, one percent fewer students succeeded in 2005 than in 2001. This is a negligible decrease. At year 8 level, with 68 components of four trend tasks included, on average three percent more students succeeded in 2005. This is a small increase.



Trend Task: Library Books

NEMP Access Task

Approach:	One to one	Year:	4 & 8
Focus:	Understanding library classification systems		
Resources:	4 library location signs — fiction, non-fiction, picture books, reference; 16 book covers in numerical order; recording book		

Questions / instructions:

Place library classification cards in front of student.

These signs show the different book sections in a library.

Point to and read each one.

Picture Books

Non-Fiction

Fiction

Reference

I'm going to show you some covers of books. I want you to tell me the section of the library where you would find each book.

Show student each book cover in numerical order, 1—16.

Which section of the library would you find this book?

Record the classification for each book.

		% response 2005 ('01) year 4	year 8
Book cover 1:	non-fiction	45 (51)	60 (56)
Book cover 2:	non-fiction	33 (35)	52 (47)
Book cover 3:	reference	29 (26)	74 (76)
Book cover 4:	reference	31 (31)	57 (58)
Book cover 5:	non-fiction	43 (41)	60 (52)
Book cover 6:	fiction	31 (30)	51 (46)
Book cover 7:	fiction	40 (47)	73 (67)
Book cover 8:	fiction	42 (47)	73 (67)
Book cover 9:	picture books	71 (75)	84 (81)
Book cover 10:	non-fiction	47 (51)	62 (60)
Book cover 11:	reference	55 (54)	91 (88)
Book cover 12:	picture books	76 (77)	86 (87)
Book cover 13:	picture books	73 (77)	87 (86)
Book cover 14:	picture books	74 (77)	82 (82)
Book cover 15:	fiction	44 (50)	74 (68)
Book cover 16:	reference	43 (48)	76 (77)
Total score:	15–16	2 (3)	23 (18)
	13–14	8 (8)	24 (23)
	11–12	11 (12)	16 (18)
	9–10	16 (20)	12 (14)
	7–8	27 (25)	15 (16)
	5–6	22 (20)	8 (7)
	0–4	14 (12)	2 (4)

Commentary:

Forty-seven percent of year 8 students, compared to ten percent of year 4 students, correctly classified more than 12 of the 16 books. There was little change at either year level between 2001 and 2005.

Trend Task: Bats (Y4)

Approach:	Station	Year:	4
Focus:	Information sources and searching processes		
Resources:	Video recording on laptop computer, cartoon card		

Questions / instructions:

This activity uses the computer.

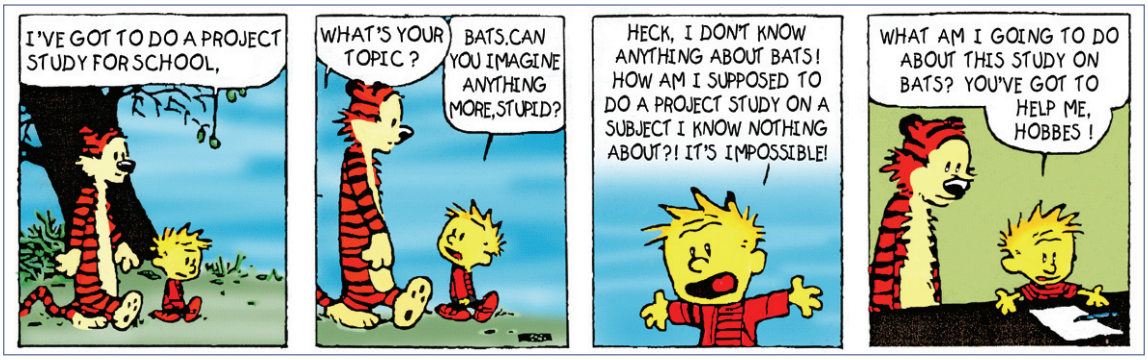
This activity is called **Bats**. We'll start by watching a short video about Calvin. Calvin has to do a study about bats, and he asks Hobbes to help him.

Click the **Bats** button. The video will start.

Hand student cartoon card.

If you were Hobbes, what would you say to Calvin so that he would know how to find information about bats?

Where could Calvin go to find information about bats?



[Video shows four still cartoons in sequence, identical to the cartoon card above; voice-over same as text shown.]

	% response 2005 ('01) year 4
mentioned initial thought about what information was going to be needed or useful	2 (1)
Sources mentioned:	
computer *(internet, computer encyclopaedia, etc.)*	48 (44)
encyclopaedia *(book or not specified)*	20 (14)
library	61 (73)
zoo, museum, information centre	22 (18)
experts *(museum curator, zookeeper,biologist)*	14 (13)
teacher, family, friends	33 (31)
fieldwork finding and looking at bats	35 (25)

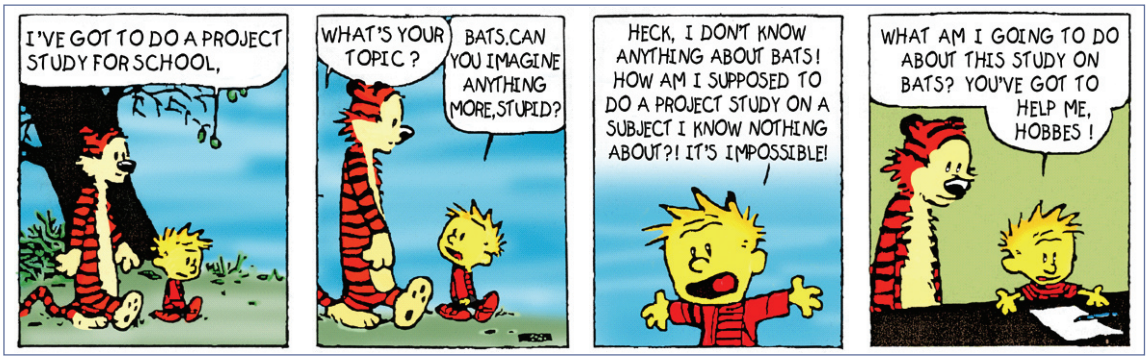
		% response 2005 ('01) year 4
Searching process and resources:		
clear account of good searching procedures for more than one resource		2 (0)
clear account of good searching procedure for one resource		6 (2)
vague		17 (5)
none		75 (93)
Total score:	6–11	3 (1)
	5	7 (4)
	4	13 (10)
	3	27 (27)
	2	34 (34)
	1	15 (20)
	0	1 (4)

Commentary:

There is some evidence of reduced emphasis on using a library as an appropriate source of information and greater interest in fieldwork. Results were a little higher in 2005 than in 2001.

Trend Task: Bats (Y8)

Approach:	Station	Year:	8
Focus:	Information sources, search processing and reporting findings		
Resources:	Video recording on laptop computer, cartoon card		



[Video shows four still cartoons in sequence, identical to the cartoon card above; voiceover same as text shown.]

Questions / instructions:

This activity uses the computer.

Click on the button that says **Bats.**
The video will play.

Calvin has to do a project study about bats. He asks Hobbes to help him. Hobbes asks YOU!

Hobbes wants a step-by-step list which tells:

- where he and Calvin can go for information
- what they should do to find information on bats
- what to do with the information when they find it.

Write a step-by-step list of what they should do. Write them in the order they should be done.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

	% response 2005 ('01) year 8
mentioned initial thought about what information was going to be needed or useful	18 (8)
Sources mentioned:	
computer *(internet, computer encyclopaedia, etc)*	70 (51)
encyclopaedia *(book or not specified)*	17 (16)
library	74 (87)
zoo, museum, information centre	11 (7)
experts *(museum curator, zookeeper,biologist)*	7 (8)
teacher, family, friends	21 (12)
fieldwork finding and looking at bats	3 (4)

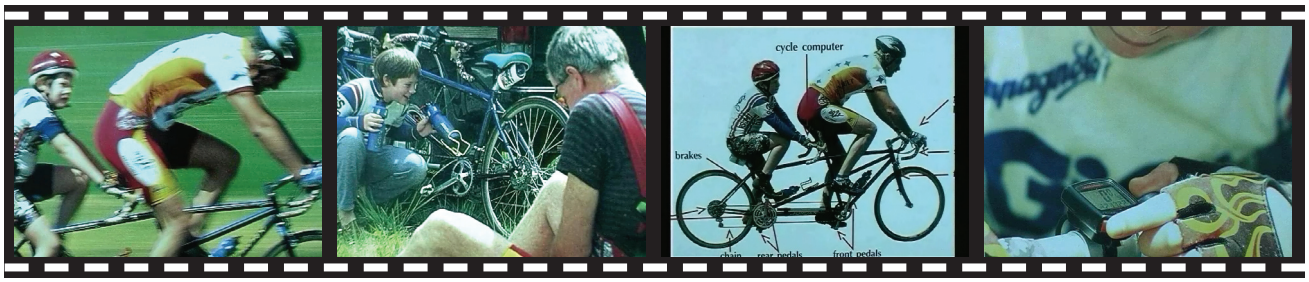
		% response 2005 ('01) year 8
Searching process and resources:		
clear account of good searching procedures for more than one resource		1 (0)
clear account of good searching procedure for one resource		9 (14)
vague		15 (14)
none		75 (72)
Uses of information:		
evaluating merit of information		11 (11)
after some information has been gathered, thinking about gaps still needing information		6 (1)
note taking		40 (31)
printing *(computer)* or photocopying		9 (8)
organising, structuring information		25 (13)
discarding less useful information		6 (6)
writing a report		45 (36)
editing the draft		12 (14)
getting feedback from others		2 (2)
producing a final copy *(publishing)*		37 (31)
presenting report orally		6 (4)
prettying up		22 (10)
Order of list made logical sense		53 (44)
Total score:	11–24	3 (0)
	9–10	9 (7)
	7–8	19 (12)
	5–6	29 (24)
	3–4	25 (37)
	0–2	15 (20)

Commentary:

Year 8 students placed much greater emphasis on using internet or computer resources in 2005 than in 2001, with a smaller decline in emphasis on library use. Overall, performance was a little higher in 2005 than in 2001.

Trend Task: NEMP Access Task **On the Double**

Approach:	Team	**Year:**	8
Focus:	Recording information from a video		
Resources:	Video recording on laptop computer, 4 answer sheets		



Questions / instructions:

This activity uses the computer.

Hand out answer sheets.

Where they go on the race	Things they need to take	About the bike

In this activity you will be watching a video. The video will tell you what you are to do.

Click the *On the Double* button to start the video.

VIDEO VOICE-OVER (VIDEO IS STILL SHOTS ONLY):

You are about to listen to an article on bike racing. The article tells of Steffi Lilibee and her father getting ready to race their tandem bike. You will hear the article being read two times. The first time you hear it, listen carefully to the information. Just listen; don't write any notes. We'll start now.

"Now, have we got everything ready?" asks Steffi's dad. "Helmet, gloves, waterbottle?"

"Yes," says Steffi. "Come on. Let's go!"

Steffi and her dad are getting ready for a cycle race. It's just a fun race but Steffi keeps thinking how awesome it would be if they won. They're going to ride their tandem – a bike that's built for two people.

On a tandem bike, the person on the front seat controls the brakes, gears and steering. The pedals are joined by a long chain so that the riders have to pedal in time with each other.

The race starts at Glenhope, about 90 kilometres south of Nelson and it finishes at Murchison, a distance of almost 44 kilometres. Steffi and her dad have been doing lots of training so Steffi knows she can pedal that far. The weather forecast sounds okay - sunny and warm with strong south-west winds. That means they'll be cycling into a head wind all the way.

Dad checks the brakes while Steffi pumps up the tyres.

Steffi's wearing her cycling gear. She has lycra shorts, with a padded seat to stop her backside getting too sore. Her jersey has pockets in the back to hold snacks such as a banana or a muesli bar. She also has special shoes with stiff soles that clip directly onto the pedals.

Steffi checks the cycle computer on her handlebars. It's connected to the back wheel and it tells her how fast the bike is going, how far they have come and how long they will have cycled for.

Steffi and dad sign on for the race and collect their race number. Dad ties the number 15 round Steffi's waist. She hopes it'll be a lucky number.

Now you will hear the same information again. This time jot down notes in the boxes on your answer sheet as you listen to the reading.

Remember , only write useful or important words. You can't write too much because you won't have time. Here is the second reading of the article.

(Voice-over, as italicised above, and still shots are repeated.)

		% response 2005 ('01) year 8
Where they go on the race:		
Notes recorded:	from Glenhope	46 (41)
	mentions 90km south of Nelson	17 (14)
	to Murchison	40 (39)
	distance 44km	42 (39)
Things they need to take:	helmet	91 (88)
	gloves	82 (77)
	water bottle	93 (90)
	snacks	54 (49)
About the bike:	tandem	82 (79)
	front person controls brakes, gears, steering (at least one of the three)	54 (55)
	pedals joined by long chain	23 (18)
	need to pedal together	28 (23)
	cycle computer mentioned	36 (36)
	cycle computer tells speed, distance, time (at least one of the three)	15 (11)
Note taking:	no irrelevant information	77 (84)
	a little irrelevant information	21 (15)
	a lot of irrelevant information	2 (1)
	any other response	0 (0)
Total score:	13–17	14 (12)
	11–12	29 (23)
	9–10	30 (33)
	7–8	19 (20)
	5–6	7 (10)
	0–4	1 (2)

Commentary:

The year 8 students classified and recorded slightly more information, on average, in 2005 than in 2001. Eight percent more scored 11 or higher.

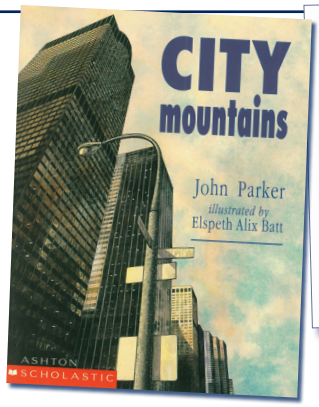
Trend Task: City Mountains

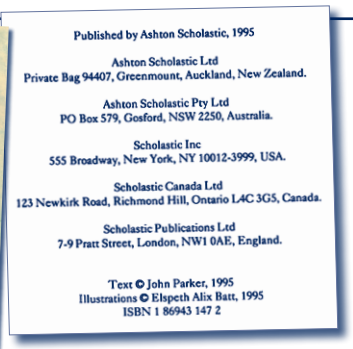
Approach:	One to one	Year:	8
Focus:	Understanding reference features in books		
Resources:	Book: *City Mountains*		

Questions / instructions:

We're going to have a look at some of the information printed in this non-fiction book called ***City Mountains***. As well as having information about making buildings in cities and giving the name of the author, the book also has other helpful information.

Show the book to the student, but don't allow them to handle it yet.




Published by Ashton Scholastic, 1995

Ashton Scholastic Ltd
Private Bag 94407, Greenmount, Auckland, New Zealand.

Ashton Scholastic Pty Ltd
PO Box 579, Gosford, NSW 2250, Australia.

Scholastic Inc
555 Broadway, New York, NY 10012-3999, USA.

Scholastic Canada Ltd
123 Newkirk Road, Richmond Hill, Ontario L4C 3G5, Canada.

Scholastic Publications Ltd
7-9 Pratt Street, London, NW1 0AE, England.

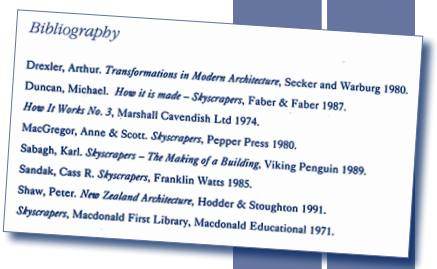
ISBN 1 86943 147 2

Now let's have a look inside the book.

Show the student the relevant pages when asking the following questions.

	% response 2005 ('01) year 8
1. In the book it will have the date when it was published. Where in the book would you expect to find that date?	
front, after title page	24 (6)
front *(other)*	52 (71)
any other response	24 (23)
This book has a table of contents, and an index.	
2. Where in the book would you expect to find the table of contents?	
front, after title page	16 (6)
front *(other)*	75 (85)
any other response	9 (9)
3. Where in the book would you expect to find the index? back	90 (92)
4. What is the difference between a Table of Contents and an Index?	
Order: *[Table of Contents in page number order (shows order of topics); Index has its entries in alphabetical order.]*	
both differences mentioned	8 (5)
only 1 difference mentioned	24 (21)
no differences mentioned	68 (74)
Content: *[Table of Contents identifies chapters and sometimes major sections; Index usually has lots more detail; more entries (eg. words, subsections, people referred to).]*	
both differences mentioned	35 (42)
only 1 difference mentioned	27 (27)
no differences mentioned	38 (31)
5. This book also has a bibliography. Can you tell me what a bibliography is?	
other sources of similar information	9 (7)
where information came from *(like reference list)*	29 (29)
6. It shows that the book was published in 1995. Why can it be helpful to have the date when a book was published?	
know how old or recent information is	57 (47)
to help to find/purchase same book/edition	8 (5)

At the back of the book is a bibliography. Let's look at one of the entries in the bibliography.


Bibliography

Drexler, Arthur. *Transformations in Modern Architecture*, Secker and Warburg 1980.
Duncan, Michael. *How it is made – Skyscrapers*, Faber & Faber 1987.
How It Works No. 3, Marshall Cavendish Ltd 1974.
MacGregor, Anne & Scott. *Skyscrapers*, Pepper Press 1980.
Sabagh, Karl. *Skyscrapers – The Making of a Building*, Viking Penguin 1989.
Sandak, Cass R. *Skyscrapers*, Franklin Watts 1985.
Shaw, Peter. *New Zealand Architecture*, Hodder & Stoughton 1991.
Skyscrapers, Macdonald First Library, Macdonald Educational 1971.

Point to *Duncan, Michael. How it is made — Skyscrapers, Faber & Faber 1987.*

Try to explain to me what each part of this reference refers to.

7. What does **Duncan, Michael** tell us? author	39 (41)
8. What does **How it is made — Skyscrapers** tell us? title / topic	36 (36)
9. What does **Faber & Faber** tell us? publisher	37 (37)
10. What does **1987** tell us? year of publication	31 (34)
when it was made, written	31 (28)
any other response	38 (38)
11. It can be helpful to have a bibliography. When might someone want to use the information that is in a bibliography?	
if they want to find out more information about subject	49 (48)
if they want to know where the information came from	16 (18)
Total score: 15–20	3 (2)
12–14	16 (14)
9–11	25 (24)
6–8	30 (31)
3–5	23 (25)
0–2	3 (4)

Commentary:

The results do not show strong understanding of the reference features in non-fiction books. Only 44 percent of the year 8 students scored more than eight out of 20. There was little change between 2001 and 2005.

Approach:	One to one
Focus:	Scanning for information
Resources:	Newspaper article

Year: 4 & 8

Mele's Game A Big Hit in Otara

Mele is a happy 12 year old girl who lives in Otara. Otara is in South Auckland. Mele loves living there because she has lots of friends. She has lived there all of her life, so she knows most of the kids who live near her place.

Mele and most of her friends go to Otara School. They are very proud of their school because all of the children and teachers are very friendly, and they all like to learn new things. Mele says that her teacher, Mr Sewa, is one of the best teachers in Auckland.

Mele and her friends love playing games. They are always trying to think up new games, or different ways to play old games.

Mele has made up a new game which has made her famous in Otara. Everyone is now playing the game at Otara School, and they call it Mele's Game.

The game is played with a stick with a long piece of string tied to it. A ball is tied to the end of the string. Mele turns the stick round and round with the ball near the ground. The other kids have to try to jump the string. If it touches them, they are 'out'.

Mr Tupua, who is a friend of Mele's family, is making the ball sticks that are used for the game. Mr Tupua said, "Some kids just make them themselves, and other kids have asked if they can buy them. Well, the best thing is kids having fun playing outside with their friends, so I'm happy to make the ball sticks for nothing."

Just about every day you can see children at Otara School playing Mele's Game. The little kids play with the big kids, and the big kids play with the little kids. It's always like that at Otara School.

Sometimes Mele plays her game with her Mum and Dad. Her Mum is really good at it, but her

Dad keeps on falling over, which makes Mele burst her sides with laughter. Her dad is a big man, so when he falls over, there is quite a crash.

Some people say Mele's Game could be dangerous because people might get hurt when they fall over. Mele and her friends say that is rubbish. "We always play it on the grass," says Mele. "And we kids know how to fall over."

We asked Mele if she would be making up any new games. "Me and my friends are trying to work out a new game that we could sell to the world – and that would make us really famous," said Mele. "Our school principal, Mrs Lualua said this could be a good technology project for us."

We asked Mrs Lualua what she thought was the best thing about Mele's game. "I think it's great that kids can learn to make their own fun. Mele's a really great kid. She enjoys her friends. She works hard at school, and she keeps herself really fit. We have a lot of children like that at Otara School."

Mele's stick and ball game is a winner.

Questions / instructions:

Mele has invented a new game. The newspaper did a story about Mele and her game. Look very quickly through the story to find the part that tells what the new game is. Don't read all of the story – just look for the part that tells about Mele's game. As soon as you have found it, read the part to me that describes the game.

Give student the newspaper article.

You can start now.

	% responses y4	% responses y8
read the section, *"The game is played with a stick…If it touches them, they are 'out'."*	65	90

Commentary:

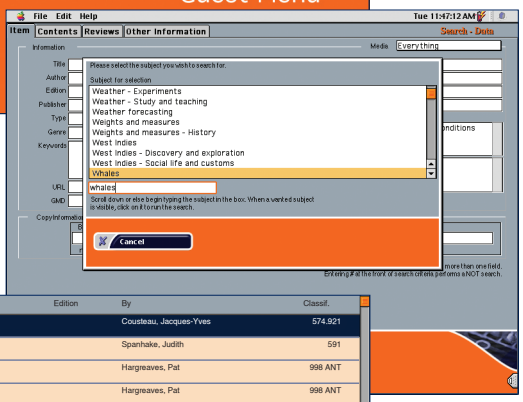
Twenty-five percent more year 8 than year 4 students accurately identified the appropriate part of the story.

Task: Library Search

Approach: Station
Focus: Using a library computer catalogue
Resources: Computer program on laptop computer
Year: 4 & 8

Questions / instructions:

Fast Find option

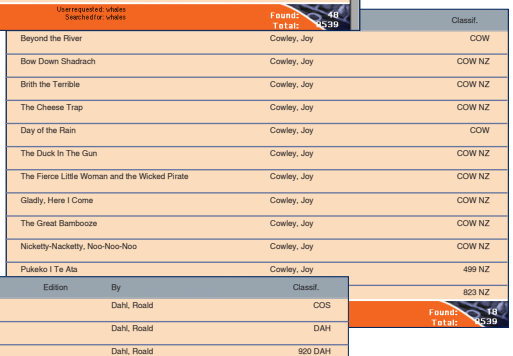


Advanced Search option

① *"whale" as keyword: 2 results*

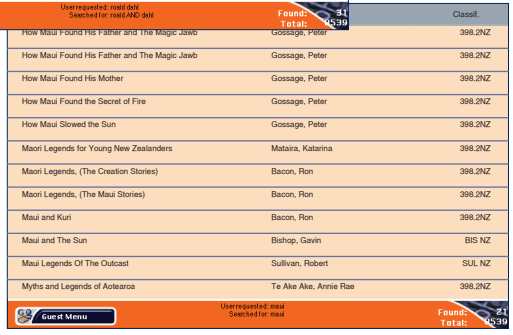
"whales" as keyword: 48 results

Scroll bar at right edge of all results screens

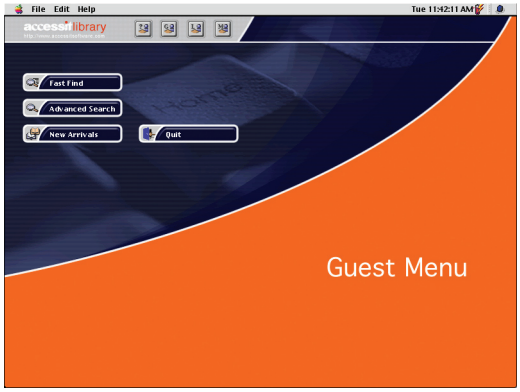


② *"Joy Cowley": 18 results*
"Cowley": 21 results

③ *"Roald Dahl" & "Dahl": 31 results*



④ *21 results*



This activity uses the computer.

Click on the button that says **Library Search**.

Enter username: **NEMP** with no password.

In this activity you will use a computer library catalogue to find some books.

1. Find a book about *whales*.

   book on provided list

2. Find a book by *Joy Cowley*.

   book on provided list

3. The author of *Dirty Beasts* has written lots of other great books. Find another book written by this author.

   book on provided list

YEAR 8 ONLY:

4. The Dewey number tells you where to look for a book on the shelf.

   Write down the Dewey number for the book called *How Maui Slowed the Sun*.

   398.2 or 398.2 NZ

% responses	y4	y8
	72	88
	48	79
	34	68
	•	74
Total score:	4	• 46
	3	24 32
	2	28 12
	1	26 7
	0	22 3

Commentary:

About three quarters of year 8 students showed good capabilities in searching the computer catalogue. Year 4 students were less assured.

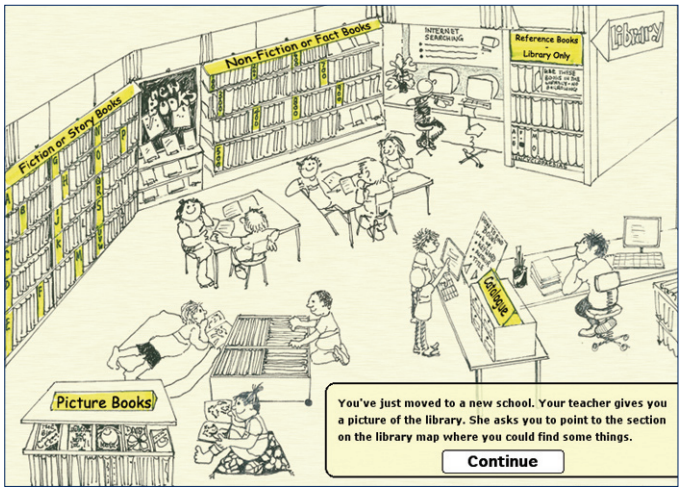
Approach:	Station
Focus:	Identifying appropriate resources in a library
Resources:	Computer program on laptop computer

Year: 4 & 8

Questions / instructions:

This activity uses the computer.

Click on the button which says **Where in the Library?**
The computer will tell you what to do.

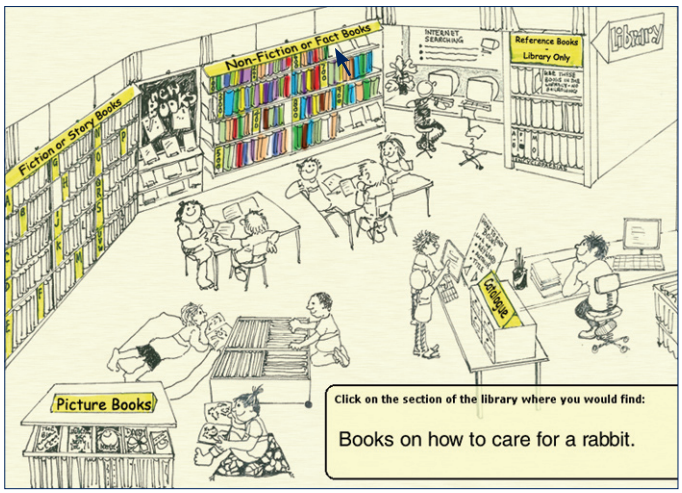


COMPUTER INSTRUCTION:

You've just moved to a new school. Your teachers gives you a picture of the library. She asks you to point to the section on the library map where you could find some things.

Click on the section of the library where you would find:

[No soundtrack. Each library section highlights in colour when the mouse is rolled over it. Once the student has clicked on their choice of library section for the book description, the screen automatically calls up the next description, in sequence, as per adjacent.]



Click on the section of the library where you would find:

		% responses y4	% responses y8
Information on New Zealand spiders	non-fiction	61	76
Encyclopaedias, dictionaries and other books to refer to.	reference	41	74
Books written by Roald Dahl.	fiction	45	76
Whether the library had any Margaret Mahy books. Remember they may be out.	catalogue	22	51
Stories for younger children – books with lots of pictures.	picture books	58	86
A World Atlas.	reference	30	71
Topic books.	non-fiction	42	69
Books on how to care for a rabbit.	non-fiction	53	84
Books in the Harry Potter series.	fiction	51	87
Where you'd look up your topic search terms to see if the library had any books.	catalogue	46	81

Total score:	% responses y4	% responses y8
10	4	27
8–9	13	35
6–7	17	16
4–5	23	12
2–3	32	8
0–1	11	2

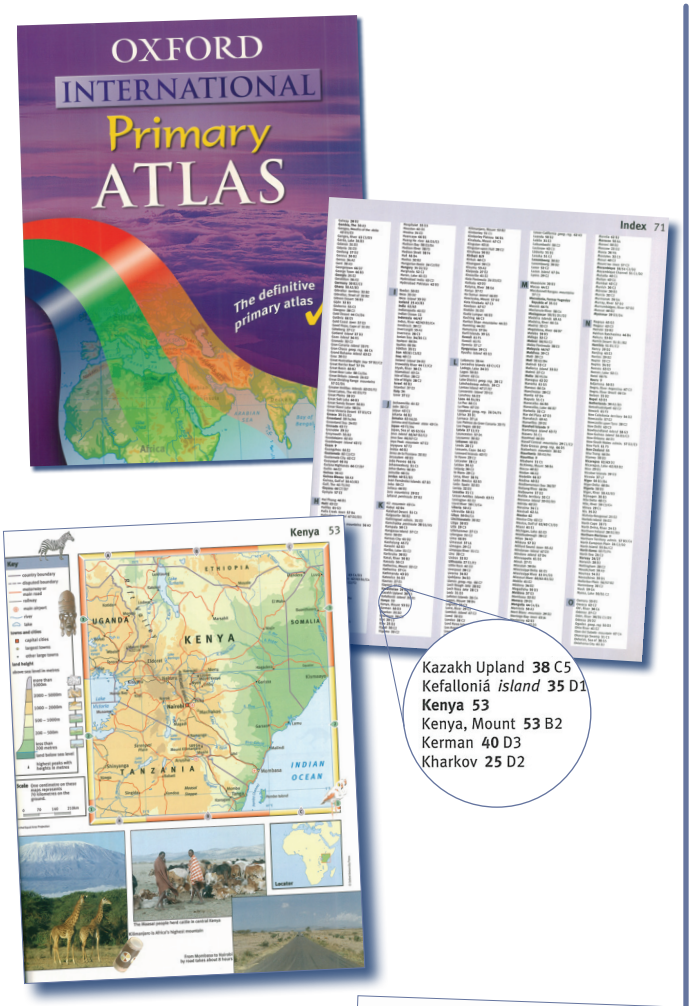
Commentary:

Sixty-two percent of year 8 students, compared to 17 percent of year 4 students, correctly identified where to look in a school library for solutions to eight or more of the information tasks.

Task: Atlas (Y4)

Approach:	One to one	Year:	4
Focus:	Understanding and using an atlas		
Resources:	Book: *Oxford International Primary Atlas,* recording book, 2 maps, 1 name card		

Questions / instructions:



Show student the atlas.

Here is an atlas of the World.

1. Why might people find this book useful?

	% responses y4
good for finding out where places are	83

I'll give you a very quick look through this atlas, then ask you to find some things.

Fan through the atlas and hand to student.

The index in a book tells us where information can be found.

2. Where would you find the **index** in this atlas? Tell me how you found it.

Record if student found the index or not.

found index	80

If the student can't find the index, show them, then close the book.

Hand student card – *Kenya*.

3. There is a country called Kenya. Use the index to find Kenya, then find the map of Kenya in the atlas.

Record if the student found Kenya or not.

used index to find map	85

Let's look at two maps about New Zealand.

Hand student the two maps of New Zealand.

4. What is different about the information on these two maps?

Record student's answer.

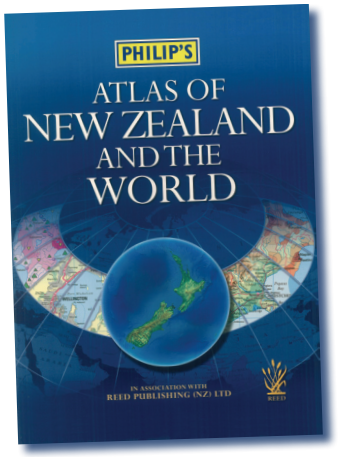
mentioned one map is taken from the satellite	13
mentioned map uses colour to show height of mountains, rivers, lakes	9
mentioned one map has names of places on it	77
mentioned one map has clouds and weather systems on it	40
mentioned anything else relevant to maps	22
Total score: 5–6	16
4	27
3	34
2	14
1	7
0	2

Commentary:

A high proportion of the year 4 students knew what an atlas was for and how to find a particular country using the index. Most were much less successful in identifying multiple distinguishing features of two different types of map.

Approach:	One to one	Year:	8
Focus:	Understanding and using an atlas		
Resources:	Book: *Philip's Atlas of New Zealand and the World,* recording book, 2 maps, 2 name cards		

Questions / instructions:



Hand student the atlas.

Here is an atlas of New Zealand and the World.

1. Why might people find this book useful?

good for finding out where places are — 92

Have a few minutes to look through this atlas, then I'll ask you to find some things.

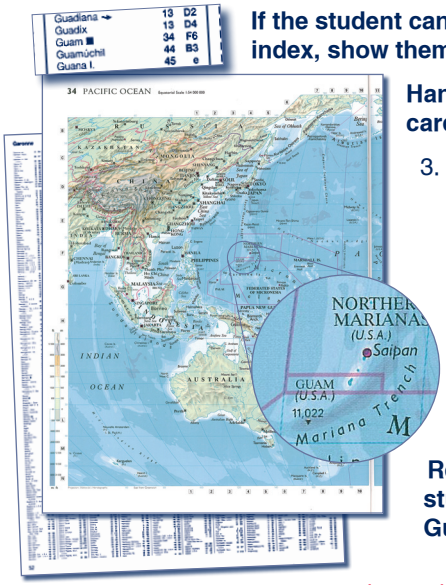
Allow time.

The index in a book tells us where information can be found.

2. Where would you find the **World Index** in this atlas? Tell me how you found it.

Record if student found the World Index or not.

found World Index — 92



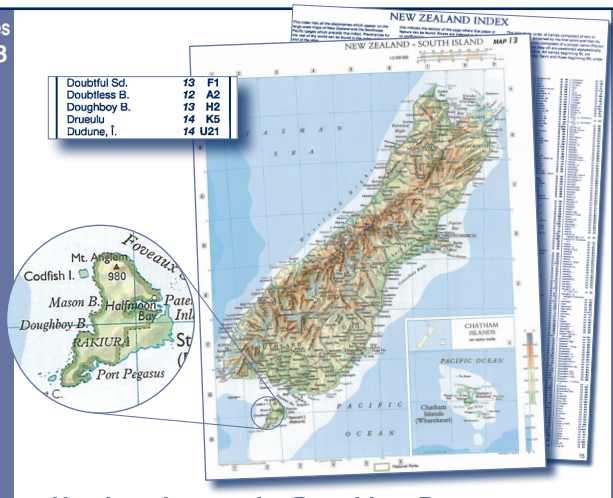
If the student can't find the index, show them.

Hand student card – *Guam.*

3. How would you find a map of Guam in this atlas? Show me where it is and tell me how you found this map.

Record if student found Guam or not.

located map of Guam — 83
used index to find map — 91
used co-odinates to find Guam on map — 82



Hand student card – *Doughboy Bay.*

Show student where the New Zealand Index is found in the atlas (p15).

4. Using the New Zealand Index look up Doughboy Bay. What map number and position does it give?

Record map number and position given.

map number found — 98
co-ordinates given correctly — 97

5. Using the map number and position try to find Doughboy Bay in this atlas. When you have found it show me.

Record if the student found Doughboy Bay or not.

found Doughboy Bay on the map — 88

Let's look at two maps about New Zealand.

Hand student the two maps of New Zealand.
[same as for Year 4 version on adjacent page]

6. What is different about the information on these two maps?

Record student's answer.

mentioned one map is taken from the satellite — 36
mentioned map uses colour to show height of mountains, rivers, lakes — 30
mentioned one map has names of places on it — 86
mentioned one map has clouds and weather systems on it — 66
mentioned anything else relevant to maps — 29

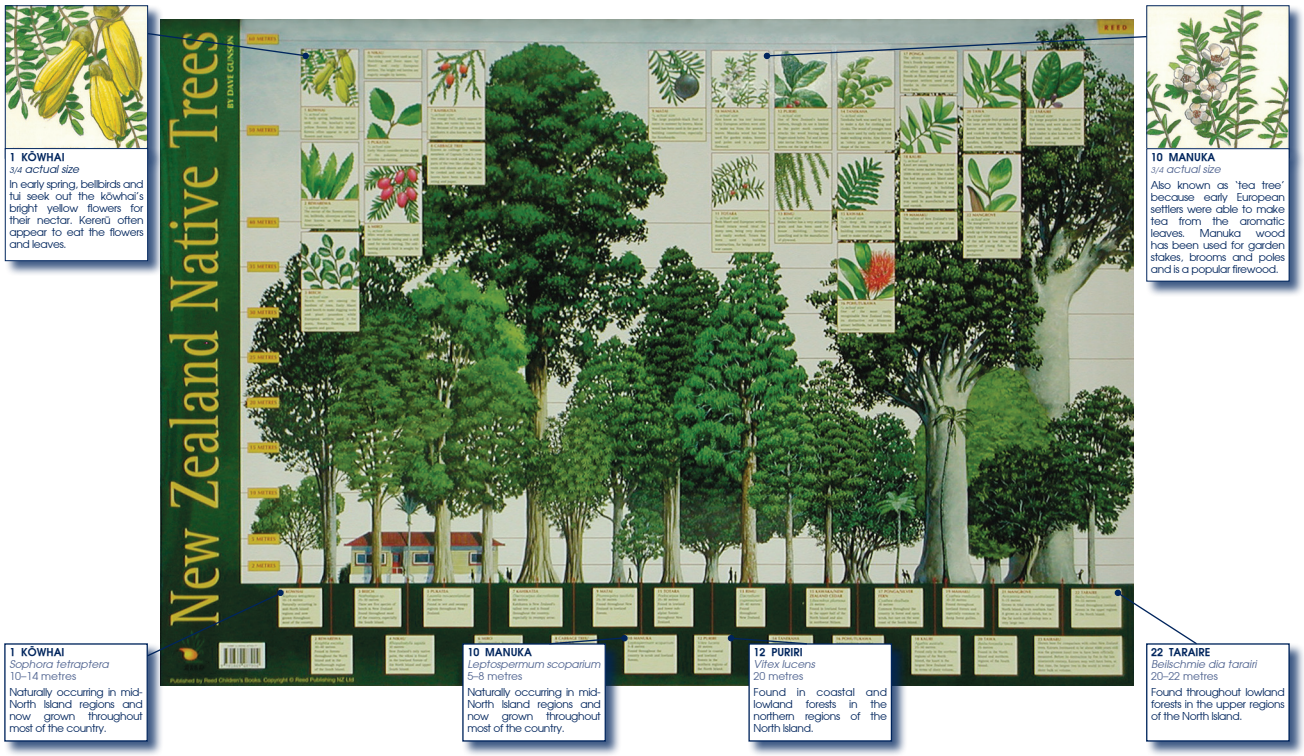
Total score:	% responses y8
11–12	15
9–10	51
7–8	23
5–6	6
3–4	4
0–2	1

Commentary:

The year 8 students were, on the whole, highly successful in using the atlas to find particular places. Compared to year 4 students (see **Atlas Y4**), they were substantially more successful in identifying multiple distinguishing features of two different types of map.

Task: New Zealand Native Trees

Approach:	One to one	Year:	8
Focus:	Finding information on a poster		
Resources:	Poster, photo, recording book, 2 information cards		



Questions / instructions:

Show student the poster.

Have a good look at this poster called New Zealand Native Trees. You are going to use this poster to answer some questions.

Point to the detail of the flowers for number 10.

1. Show me which tree you would see these leaves and flowers on.

   Record the student's answer. Manuka

Show photo of tree.

2. Here is a photograph that shows different parts of another tree. Use the poster to find the name of the tree, then show me where you found it.

   Record the student's answer. Kōwhai

   found on poster

Show and read information card 1.

INFORMATION CARD

A boy was camping near a beach in the North Island when he saw a beautiful tree. The tree was 20 metres tall and had fruit growing on it.

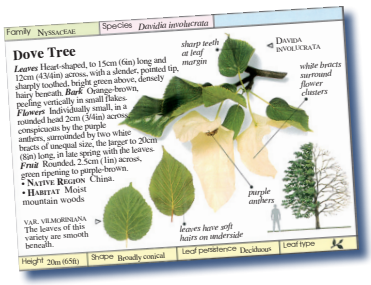
3. Use the poster to work out what tree the boy saw.

   Record the student's answer.

   Puriri

   Taraire

   any other response



Show information card about the Dove Tree.

4. Here is some information about the Dove Tree. This tree is not on the poster.

   Why do you think that it is not there?

   Record the student's answer.

   mentioned that it is not native to NZ

Total score:

5

4

3

2

0–1

% responses y8

	75
	92
	90
	36
	15
	49
	82
	34
	37
	18
	7
	4

Commentary:

Year 8 students handled this task well except for question 3 which provided no visual clues and required careful reading of the description and scanning of the poster for matching information.

Task: Kiwi Study

NEMP Access Task

Approach:	One to one	**Year:**	8
Focus:	Searching the internet		
Resources:	5 printed web pages (A-E), recording book, instruction card		

Questions / instructions:

Imagine you are doing a study on the kiwi.

Hand out and read instruction card to student.

You have front pages from five internet sites.

Give student front pages from internet sites.

Look at the front page of each site.

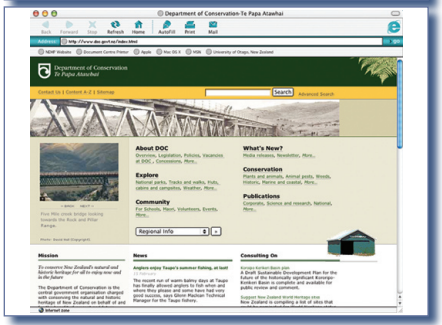
A

B

C

D

E



INSTRUCTION CARD

Your study should help you to understand these things:

- why kiwi are endangered
- conservation of kiwi
- kiwi predators (other animals that hunt/eat kiwi)
- different kinds of kiwi (species)
- the kiwi's habitat (where they live)

		% responses y8
1. Which **two** sites do you think would be most useful? **Record the sites that the student chooses.**		
First choice:	A	7
	B	16
	C	28
	D	40
	E	9
Second choice:	A	17
	B	30
	C	30
	D	18
	E	5
2. Why have you chosen these sites?	3+ criteria mentioned	4
	2 criteria mentioned	11
	1 criterion mentioned	29
	any other response	56

Remove all cards apart from the two cards chosen by the student.

Look at the front pages of the two sites you have chosen.

3. What would you click on next to find the information you need?	not marked	•
4. If you wanted to find some books to help you with your study on kiwis, which search terms would you type into the library computer? Try to think of **three**. **Record student's answer.**		
Search term 1:	appropriate – specific *(kiwi, endangered, conservation …)*	69
	vague *(eat, live…)*	22
	any other response	9
Search term 2:	appropriate – specific *(kiwi, endangered, conservation …)*	50
	vague *(eat, live…)*	33
	any other response	17
Search term 3:	appropriate – specific *(kiwi, endangered, conservation …)*	41
	vague *(eat, live…)*	37
	any other response	22
Total score:	6	23
	5	20
	4	29
	3	15
	2	7
	0–1	6

Commentary:

Most students selected two websites that would give useful information for the task given and identified one or more appropriate search terms. Fewer justified their choice of two sites well.

Task: Bird Book

Approach:	One to one	Year:	8
Focus:	Finding information in a reference book		
Resources:	Book: *Which New Zealand Bird?*, picture of egg, bird name card, recording book		

Questions / instructions:

Here is a book on New Zealand birds. Have a good look at the way the information in this book has been set out to help you find different birds.

Flip through the book and hand it to the student.

1. Use the book to show me where you can find information on mountain birds.

   Record if student found the mountain birds section.

	% responses y8
found the mountain bird section	95

Turn to page 89 in book. Hand student picture of an egg.

Here is a picture of a bird's egg.

2. Use the egg chart to find the bird it belongs to. Then show me a picture of that bird in the book.

   Record student's choice.

egg identified as Tui	96
used the index	42
found a picture of the correct bird	93

The White Heron, Kōtuku is a special New Zealand bird.

Hand student *White Heron / Kōtuku* card.

3. Use the book to show me where you can find information on the White Heron, Kōtuku.

   Record if student found the White Heron/ Kōtuku section.

located correct section	68

Show student page 81 if not found. Point to map in top right hand corner.

4. Why have they included a New Zealand map here?

showed where bird is found	90

5. Tell me how the book has been organised to make it helpful for finding information.

Mentioned:	section on types of birds *(page 3)*	68
	colour coding of sections	21
	"key" passages at the start of most sections *(e.g. pp6–7, 34–35)*	11
	index	32
Total score:	9–10	3
	7–8	38
	5–6	47
	3–4	10
	0–2	2

Commentary:

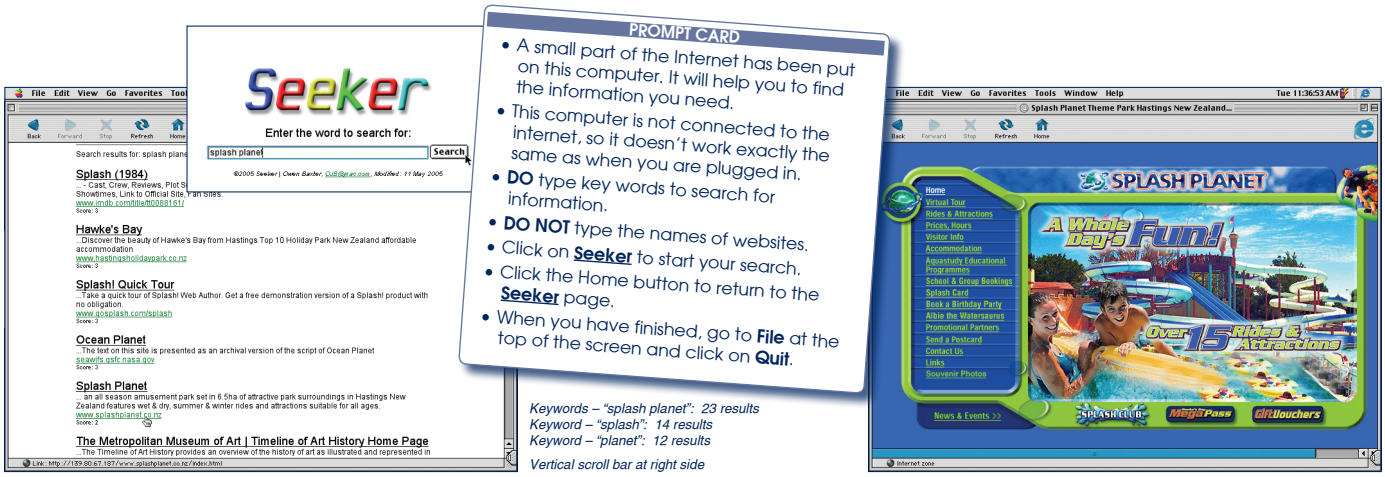
About 40 percent of the year 8 students showed considerable skill in using and understanding reference features of this non-fiction book. Another 47 percent performed quite well but did not identify or use a key feature.

Task: Splash Planet

Approach:	Station	Year:	8
Focus:	Finding information via the internet		
Resources:	Computer program on laptop computer; prompt card		

Questions / instructions:

This activity uses the computer. Click on the button which says **Splash Planet.** The computer will tell you what to do.

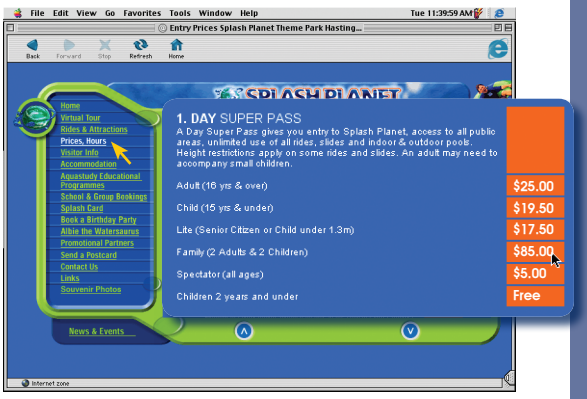


Imagine your family is planning a trip to Hastings, New Zealand, and would like to visit Splash Planet. Search the internet for information to answer these questions.

1. Take a Virtual Tour. What ride will you find at number 7? bumper boats

2. How many slides are there on the Sky Tunnel and Super Cruiser? 2 slides

3. How much does it cost for a family of 2 adults and 2 children to go to Splash Planet? $85.00



	% responses y8
1. Bumper boats	90
2. 2 slides	72
3. $85.00	67
Total score: 3	56
2	26
1	8
0	10

Commentary:

More than half of the year 8 students showed good proficiency in searching for particular information on internet sites.

LINK TASK: 6
Approach: One to one
Year: 4 & 8
Focus: Sorting books by classification

Total score:	% responses y4	% responses y8
3	21	38
2	25	25
1	22	19
0	32	18

LINK TASK: 7
Approach: One to one
Year: 4 & 8
Focus: Identifying appropriate information sources

Total score:	% responses y4	% responses y8
15–18	1	4
12–14	2	18
9–11	16	36
6–8	29	29
3–5	37	11
0–2	15	2

LINK TASK: 8
Approach: Station
Year: 4 & 8
Focus: Finding information in a text

Total score:	% responses y4	% responses y8
11–12	0	6
9–10	2	9
7–8	12	27
5–6	38	39
3–4	34	16
0–2	14	3

LINK TASK: 9
Approach: Station
Year: 4 & 8
Focus: Finding information on a website

Total score:	% responses y4	% responses y8
7	8	44
6	22	26
5	19	13
4	19	8
3	14	5
0–2	18	4

LINK TASK: 10
Approach: One to one
Year: 4
Focus: Reference features in books

Total score:	% responses y4	% responses y8
6	10	
5	14	
4	16	
3	21	
2	19	
0–1	20	

LINK TASK: 11
Approach: One to one
Year: 8
Focus: Reference features in books

Total score:	% responses y4	% responses y8
8		14
7		21
6		25
5		14
4		13
0–3		13

LINK TASK: 12
Approach: Station
Year: 8
Focus: Finding information in a text

Total score:	% responses y4	% responses y8
12		25
11		23
10		11
8–9		17
6–7		15
0–5		9

LINK TASK: 13
Approach: Station
Year: 8
Focus: Finding information on a website

Total score:	% responses y4	% responses y8
7		10
6		16
5		20
4		19
2–3		24
0–1		11

LINK TASK: 14
Approach: Station
Year: 8
Focus: Finding information in a dictionary

Total score:	% responses y4	% responses y8
8		57
7		23
5–6		10
3–4		4
0–2		6

LINK TASK: 15
Approach: Station
Year: 8
Focus: Finding information on a website

Total score:	% responses y4	% responses y8
4		1
3		21
2		31
1		30
0		17

Analysing and Using Information 5

The assessments included 16 tasks that explored how well the students could analyse and use information. The skills assessed included interpreting individual pieces of information, analysing and collating information from more than one source, understanding and describing the structure of a collection of information, and reporting findings.

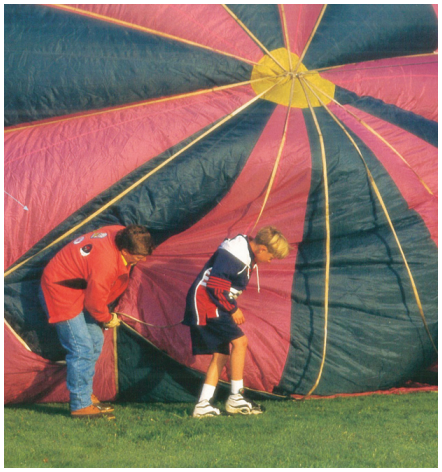
Ten tasks were identical for both year 4 and year 8 students, one was very similar for year 4 and year 8 students but simplified for year 4 students, and five were attempted only by year 8 students. Four are trend tasks (fully described with data for both 2001 and 2005), five are released tasks (fully described with data for 2005 only) and seven are link tasks (to be used again in 2009, so only partially described here).

The tasks are presented in the following order:

- trend tasks attempted by both year 4 and year 8 students
- trend tasks attempted by only year 8 students
- released tasks attempted by both year 4 and year 8 students
- a released task attempted by only year 8 students
- link tasks attempted by both year 4 and year 8 students
- link tasks attempted by only year 8 students.

Year 8 students enjoyed substantially more success than year 4 students. Averaged across 84 components of 11 tasks attempted by both years, 17 percent more year 8 than year 4 students succeeded well with these components. Year 8 students scored higher on 77 of the 84 components.

Averaged across seven components of two trend tasks attempted by year 4 students in both 2001 and 2005, one percent fewer students succeeded in 2005 than in 2001. This is a negligible decrease, based on a small sample of tasks and components. At year 8 level, with 25 components of four tasks included, on average two percent fewer students succeeded in 2005. This decrease is also too small to be regarded as meaningful.



Trend Task: Milk

NEMP Access Task

Approach:	Station
Focus:	Structure a flow chart
Resources:	10 word stickers, instruction card

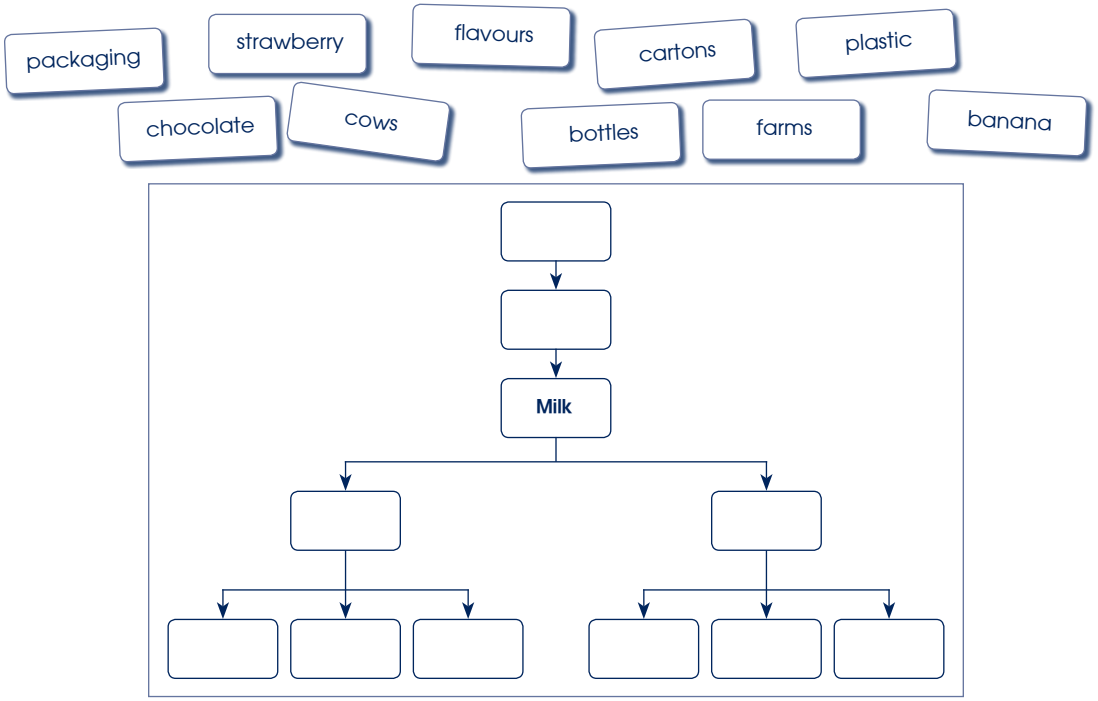
Year: 4 & 8

Questions / instructions:

You are going to make a diagram about milk.

1. **Place** the word stickers where you think they should go on the diagram.
2. **Stick** the words onto the diagram when you have decided where they should go.

[Instruction card same as text above]



	% response 2005 ('01) year 4	year 8
Top group:		
contained "farms" and "cows" in that order	61 (57)	83 (85)
contained "farms" and "cows" but not in that order	12 (12)	12 (12)
contained one appropriate sticker and leaves a box blank	1 (4)	0 (0)
any other response	26 (27)	5 (3)
Bottom left group:		
group labelled *(either "flavours" or "packaging")* in correct position, all specific labels below	41 (36)	77 (82)
group labelled in correct position, two of specific labels below	2 (4)	2 (2)
other	57 (60)	21 (16)

		% response 2005 ('01) year 4	year 8
Bottom right group:			
group labelled *(either "flavours" or "packaging")* in correct position, all specific labels below		39 (35)	79 (81)
group labelled in correct position, two of specific labels below		2 (4)	1 (1)
other		59 (61)	20 (18)
Total score:	7	25 (25)	64 (69)
	5–6	19 (14)	17 (16)
	3–4	24 (24)	12 (10)
	1–2	12 (13)	4 (2)
	0	20 (24)	3 (3)

Commentary:

Sixty-four percent of year 8 students, compared to 25 percent of year 4 students, labelled the entire flow chart correctly. There was little change, at both year levels, between 2001 and 2005.

Approach:	Station
Focus:	Using a dictionary
Resources:	Year 4 only: Word list; Year 8 only: Dictionary: *He Pa Auroa*
Year:	4 & 8

Questions / instructions:

YEAR 4 ONLY:
Use the word list to help you decide the best place name for each picture.

Word List – Kupu Taka

a
āe yes
ako learn
ao world
āporo apple
aroha love

e
eke climb up
engari but

h
haere go
haere mai welcome
hari joy, happy
hari carry
hōiho horse
hua fruit

i
inapō last night
ia he, she
ihu nose
ika fish
inu drink
iti little
iwi tribe

k
kaha strong
kai food
kino bad

m
mā white
mahi work
maunga mountain
moenga bed

p
pai good
pōuri sad

r
rā day
rākau tree
raro under
roto in, inside
roto lake
rua two

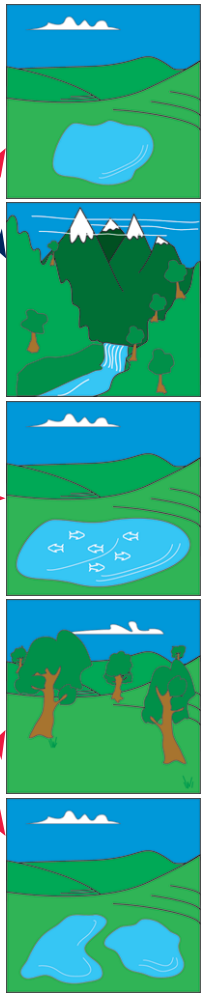
w
wā time
wai water
wera hot

YEAR 8 ONLY:
Use the dictionary to help you decide the best place name for each picture.

YEAR 4 & YEAR 8:
Match the names of the places with the pictures. The first one has been done for you.

Place Names

Maungarākau (Maunga-rākau)
Rotoiti (Roto-iti)
Rotoika (Roto-ika)
Rotorua (Roto-rua)
Pukerākau (Puke-rākau)



		% response 2005 ('01) year 4	year 8
Chose correct picture:	Rotoiti	58 (62)	77 (81)
	Rotoika	56 (62)	71 (77)
	Rotorua	58 (65)	75 (82)
	Pukerākau	62 (65)	84 (86)
Total score:	4	41 (48)	66 (72)
	3	1 (2)	1 (1)
	2	24 (20)	16 (14)
	1	19 (16)	8 (6)
	0	15 (14)	9 (7)

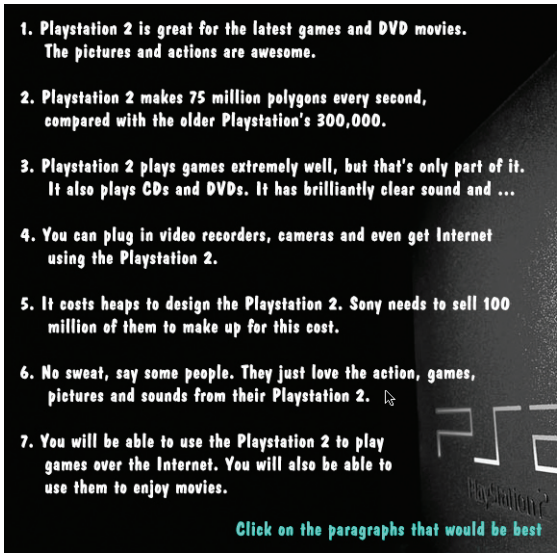
Commentary:

Sixty-six percent of year 8 students, compared to 41 percent of year 4 students, matched all the words with pictures correctly. Year 4 students had a simplified dictionary, so the results are not strictly comparable. At both year levels, there was a small decline in performance between 2001 and 2005.

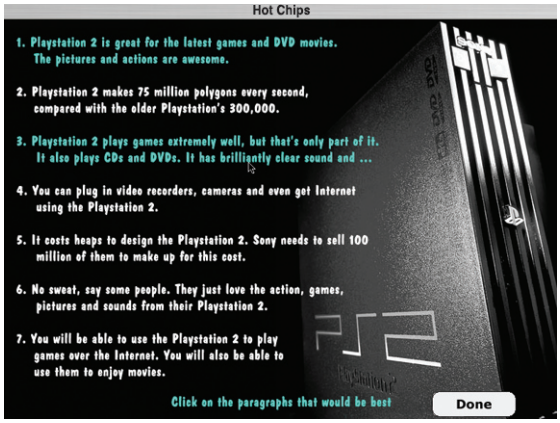
Trend Task: Hot Chips

Approach:	Station	Year:	8
Focus:	Choosing arguments for a purpose		
Resources:	Computer program on laptop computer		

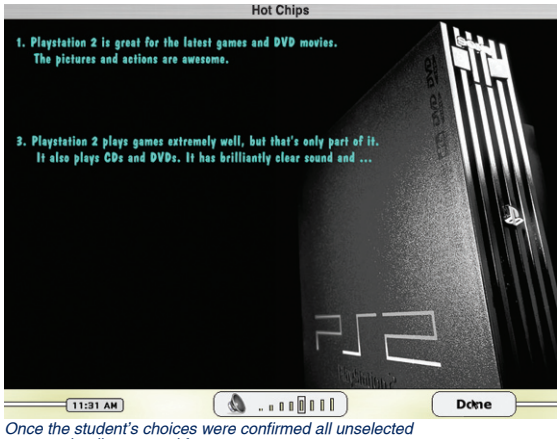
Questions / instructions:



Student read all paragraphs.



Student clicked on paragraphs that would contribute to a persuasive argument and those paragraphs were highlighted. Student was given the opportunity to change their choices.



Once the student's choices were confirmed all unselected paragraphs disappeared from screen.

This activity uses the computer.

Click on the button that says **Hot Chips**. The computer will tell you what to do.

I really want a *PlayStation 2*. My mum loves movies and music, and she uses the internet a lot. But she does not like games.

Read **Hot Chips**.

Some paragraphs might help Mum to think it would be good to get a *PlayStation 2*. Click on the paragraphs that would be good.

1. Use the information you have chosen to write **one** sentence that might help mum want to get a *PlayStation 2*.

	% response 2005 ('01) year 8
wrote just one sentence	74 (80)
Use of material provided:	
combined arguments/material from two or more of the paragraphs	63 (57)
combined arguments/material from two or more of the paragraphs but included material not from chosen paragraphs	17 (18)
no or maybe	20 (25)
wrote persuasive argument	81 (79)
Argument to persuade Mum:	
very appropriate	30 (38)
moderately appropriate	62 (52)
not appropriate	8 (10)
used own words/paraphrases	80 (82)
Total score: 7	16 (17)
6	32 (37)
5	22 (17)
4	11 (5)
3	9 (11)
0–2	10 (13)

Commentary:

Paragraphs 3, 4 and 7 were the most frequently chosen (60 percent or more of the students), with paragraph 1 not far behind. Paragraphs 2, 5 and 6 were rarely chosen (less than 10 percent of the students). About half of the students followed the instructions well and wrote quite a strong argument. There was little change between 2001 and 2005.

Trend Task: NEMP Access Task

Hot Air Balloon

Approach:	Group	Year:	8
Focus:	Preparing a structured summary		
Resources:	2 "Hot Air" articles, 4 highlighters, 2 strips of blank stickers, instruction card; answer sheet, scissors		

Questions / instructions:

In this activity you are going to work together to list the things you would do to get a hot air balloon ready to fly.

To start you will be working in pairs. Each pair will have a copy of the first couple of pages of the book called **Hot Air**.

You can have a few minutes to read the pages together. When you are reading, decide what things the people are doing to get the hot air balloon ready to fly. As you decide each thing, mark it with the highlighter. After that we will talk about the things you have highlighted.

Give teams text and highlighters and allow sufficient time.

Now your team is going to make a chart which shows the things you would do to get a hot air ballon ready to fly. You will write each thing on a separate sticker. Cut out the stickers then put them in order. After that, you will stick them down on this sheet to make a chart. You don't have to use all of the boxes. Work together, so everyone is helping.

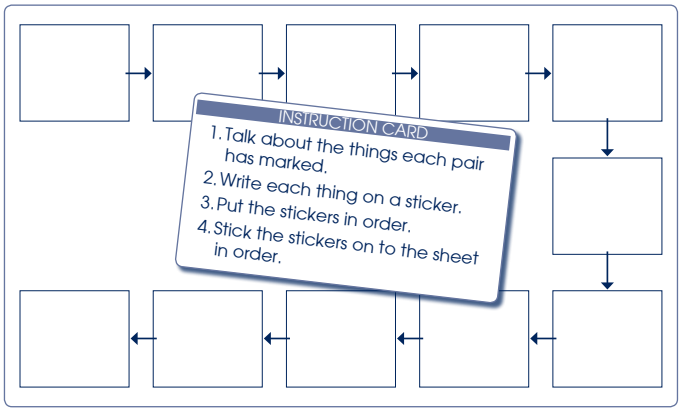
This instruction card will remind you what you have to do.

Show and read instruction card.

Give stickers, scissors, pencils and answer sheet.

Allow sufficient time.

To finish off, I want you to read your chart to me.



Flow chart included:

	% response 2005 ('01) year 8
drag balloon out into safe take-off area *(open)*	94 (93)
check weather/wind suitable	91 (91)
connect poles to basket	98 (97)
attach burner and fuel hoses	98 (96)
light burner *(to test pressure)*	92 (93)
connect balloon wires to basket	82 (82)
tie balloon to towbar of car *(so it won't take off)*	89 (89)
pump cold air into balloon *(inflate)*	90 (91)
turn on burner *(to heat air and lift balloon)*	83 (87)
hold onto basket *(so it won'st lift off)*	67 (72)

Order of 'things':		
	all 'things' in order	71 (61)
	1 or 2 things out of order	25 (28)
	any other response	4 (11)
Total score:	12	23 (26)
	11	37 (25)
	10	22 (23)
	9	11 (9)
	7–8	5 (9)
	0–6	2 (8)

Commentary:

Year 8 teams enjoyed a high level of success with this task, with 60 percent getting all or almost all key steps recorded and in an appropriate order. There was little change overall between 2001 and 2005.

Task: Breakdancing

NEMP Access Task

Approach:	Station	Year:	4 & 8
Focus:	Classification and organisation of ideas		
Resources:	10 stickers		

Questions / instructions:

A class is doing a project about breakdancing. They have made lots of notes but they are in a big muddle. You are going to make a chart to help sort out the notes.

1. Read the notes about breakdancing.
2. Place the notes where you think they should go on the chart.
3. Stick the notes onto the chart when you have decided where they should go.

Breakdancing				
Definition *(what is it?)*	Music	History	Moves	Safety

The music is really important. It is a mixture of rap, hip-hop, soul and funk.

Breakdancing is a mix of dance, gymnastics and acrobatics.

To do a headspin a breakdancer needs to stand on their head and spin around.

In 1969 a DJ in New York started mixing records so that there were no gaps between songs. People enjoyed dancing to his music. This dancing was called breakdancing.

In the 1990s people mixed hip-hop and breakdancing.

The freeze is a good move for beginners to start with.

It is important to wear a good helmet when you are doing a headspin.

In the 1970s some breakdancing moves were used in disco dancing.

Before you start to breakdance it is important to warm up.

The float is an important breakdancing move. Dancers carry the weight of their body on their hands.

	% responses y4	% responses y8
music	85	96
definition	55	89
moves	69	86
history	57	83
history	66	90
moves	71	92
safety	90	97
history	62	92
safety	75	94
moves	66	87
Total score: 10	18	55
9	15	21
8	14	14
6–7	25	6
4–5	19	2
0–3	9	2

Commentary:

Eighteen percent of year 4 students and 55 percent of year 8 students classified all ten notes correctly.

Task: Class Pet

NEMP Access Task

Approach:	Station
Focus:	Analysing information to make a decision
Resources:	5 information cards
Year:	4 & 8

Questions / instructions:

Imagine your class is going to choose a pet.

Choose a pet that:

- Does not cost more than $40
- Does not make it hard for children to do their work
- Can stay at school during the weekend
- Is easy for a child to take home and look after during the holidays

Use the information on the five cards to work out which pet will be the best for your class.

	% responses y4	% responses y8
1. Which animal will be best as your class pet?		
guinea pig	27	20
✔ mouse	47	70
cockatoo	6	2
turtle	3	1
cat	16	5
any other response	1	2
2. Why is this the best animal to choose as a class pet?		
mentioned cost	41	63
mentioned distraction issue	43	51
mentioned that the animal can stay at school during weekend	8	17
mentioned that animal can be cared for during the holidays	9	18
mentioned other relevant point *(e.g. safety)*	38	54
Total score: 5–6	3	7
4	4	23
3	22	33
2	29	16
1	29	14
0	13	7

Commentary:

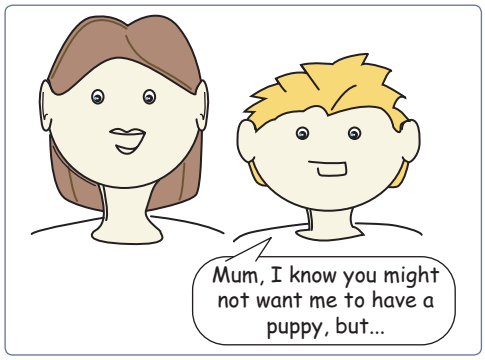
Seventy-one percent of year 4 students and 37 percent of year 8 students scored two or less, indicating quite limited proficiency in using information and criteria to make an appropriate decision and justify that decision using the criteria.

Task: Please, Mum!

NEMP Access Task

Approach:	Independent
Focus:	Identifying valid points and constructing an argument
Resources:	Recording book
Year:	4 & 8

Questions / instructions:



Imagine – your friend's dog is about to have puppies. They said you can have one for nothing. But .....

		% responses y4	% responses y8
You live in a house with a small section.	con	37	68
Your house is in a busy street with lots of traffic.	con	36	67
Dogs are good burglar alarms.	pro	56	78
Your mum takes great care of her flower garden.	con	39	65
There are some holes in your fence.	con	43	63
Dogs are good friends.	pro	59	78
Your mum hasn't got a lot of spare money.	con	33	59
You have a paper run.	pro	10	27
You play lots of sports after school.	con	27	51
Dogs can be easy to train.	pro	48	65

1. Use the PROs and CONs chart to work out all of the reasons FOR and AGAINST getting a puppy.

PROs *(Reasons FOR getting a puppy)*	CONs *(Reasons AGAINST getting a puppy)*

2. What will you say to get Mum to agree to have a puppy?

		% responses y4	% responses y8
Argument for a dog:	good coherent argument	10	31
	reasonable argument	32	37
	vague or no argument	58	32
Used pros and cons in argument : *(reasons need not be from Question 1)*			
	3+ used well	2	12
	3+ given but not integrated well	3	6
	2 given	4	11
	1 given	16	18
	none used	75	53
Total score:	12–16	5	28
	9–11	18	29
	6–8	18	15
	3–5	21	9
	0–2	38	19

Commentary:

On average, year 8 students were much more adept than year 4 students at identifying relevant arguments for and against getting a puppy and constructing a case to present to their mother.

Task: Oh Pussy Cat, Pussy Cat!

NEMP Access Task

Approach:	Independent
Focus:	Identifying and linking relevant information
Resources:	Highlighter
Year:	4 & 8

Questions / instructions:

Imagine your cat has gone missing.

You are really upset.

Your Mum says you can put an ad in the paper. Mum will have to pay for each word in the ad, so you can only use up to **20** words.

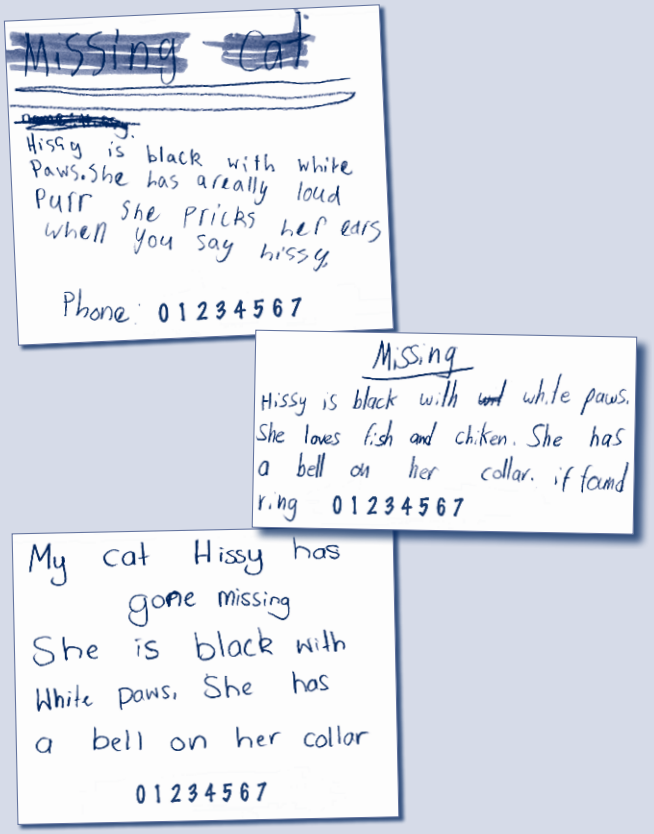
1. Use the **highlighter** to mark what you think needs to be in the ad.

	% responses y4	% responses y8
Hissy is pretty	27	20
My sister got Hissy for her birthday	22	6
She is black with white paws	88	92
She has a really loud purr	62	40
She pricks up her ears when you say "Hissy"	43	52
She loves fish and chicken	43	27
She sleeps on my bed	21	4
I think she is nicer than our neighbour's cat	18	3
Hissy has a bell on her collar to warn the birds	63	68
Hissy isn't afraid of dogs	39	24
I've never seen her eat a mouse	18	4
Not all cats are friendly	19	4

2. Write an ad for the paper. You can use up to **20** words.
[Only considered what was written in the first 20 words]

		% responses y4	% responses y8
Describes Hissy: *(black with white paws; pricks up ears when name called; bell on collar)*			
	3 or more pertinent parts of description	16	24
	1-2 pertinent parts of the description	57	54
	any other response	27	22
Provides contact details:	well	6	14
	some	3	6
	none	91	80
Total score:	7–8	1	2
	5–6	17	30
	4	22	25
	3	19	23
	2	15	10
	0–1	26	10

YEAR 4 – HIGH EXEMPLARS



YEAR 8 – HIGH EXEMPLARS

Commentary:

Year 8 students were more strategic than year 4 students in identifying the most useful information for an advertisement for a lost cat. Few students at either year level wrote a very appropriate ad within the listed constraint of 20 words.

Task: Kiri Te Kanawa

Approach:	Station
Focus:	Organising and summarising information
Resources:	Information card

Year: 8

Questions / instructions:

Here is some information about Kiri Te Kanawa from a book called, *Alan Duff's Māori Heroes*.

Read the information about Kiri Te Kanawa.

Dame Kiri Te Kanawa

Dame Kiri Te Kanawa is one of the most recognisable and successful New Zealanders ever. She is without question our superstar. In fact, she's a world superstar – with her beautiful rich soprano voice.

Millions of people all around the world have heard Kiri Te Kanawa singing– in fact one billion people watched her on television as she sang at Gisborne to mark the new millennium.

This was not the first time that Kiri performed for a worldwide television audience. In 1981 she sang at the royal wedding of Prince Charles and Diana, when 500 million people watched her.

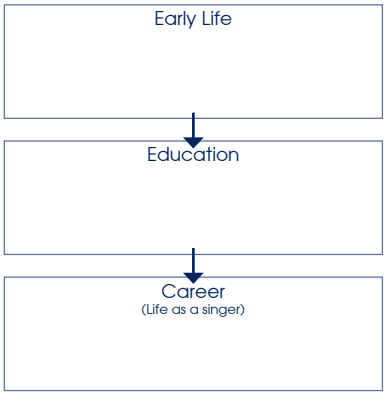
Kiri was born in Gisborne in 1944. She was adopted by a Māori father and a Pākehā mother. In 1959 Kiri's family moved to Auckland so that she could go to St Mary's Convent School. Here Kiri got singing lessons from Sister Mary Leo.

In 1965 Kiri won New Zealand's major singing competition - the Mobil Song Quest. The same year, she moved to London so that she could keep on studying music. Since then Kiri has had a very successful singing career. In 1982 she became Dame Kiri Te Kanawa. Although Kiri sang her last opera in 2002, she still sings in other concerts.

QUICK FACTS

- Born: 1944
- Grew up: Gisborne, Blockhouse Bay
- Schools: Studied with Sister Mary Leo, St Mary's Convent, Ponsonby
- Family: Married Desmond Park in 1967, with whom she adopted two children – Antonia and Thomas. The couple have since separated
- Claim to fame: Internationally successful opera singer; recipient of many awards including an OBE; DBE; Order of New Zealand

The information you have just read is a bit muddled up. Make short **notes** about Kiri's life so that things are listed in the order they happened.



	% responses y8
Notes about early life include:	
Relevant features: *(born in Gisborne; born in 1944; adopted; parents; grew up in Gisborne and Blockhouse Bay, Auckland)*	
4 or more relevant points	37
2-3 relevant points	43
1 relevant point	8
any other response	12
Notes about education include:	
Relevant features: *(attended St Mary's Convent School; singing lessons from Sister Mary Leo; studied music in London from 1965)*	
3 relevant points	5
2 relevant points	43
1 relevant point	33
any other response	19
Notes about career include:	
Relevant features: *(watched by 1 billion people in 2000; sang at wedding of Prince Charles and Lady Diana Spencer; won Mobil Song Quest; became Dame Kiri Te Kanawa; sang last opera in 2002; has rich soprano voice; is a superstar; has successful singing career as an opera singer)*	
6 or more relevant points	1
4-5 relevant points	13
2-3 relevant points	43
1 relevant point	29
any other response	14
Overall note taking style	
succinct paraphrased notes	22
mixture of paraphrasing and copying	54
sections of texts copied	15
any other response	9
Total score: 10–12	13
8–9	35
6–7	27
4–5	14
0–3	11

Commentary:

This task was distinctly unpopular with the year 8 students. Forty-eight percent scored 8 or more, indicating that they captured and classified correctly a substantial number of relevant points and recorded them appropriately.

		% responses y4	% responses y8
LINK TASK: 16			
Approach:	Station		
Year:	4 & 8		
Focus:	Using information to make choices		
Total score:	8	26	43
	6–7	37	31
	4–5	28	23
	2–3	7	2
	0–1	2	1

		% responses y4	% responses y8
LINK TASK: 17			
Approach:	Station		
Year:	4 & 8		
Focus:	Summarising instructions		
Total score:	4	51	62
	3	13	8
	2	12	10
	1	11	8
	0	13	12

LINK TASK: 18			
Approach:	Team		
Year:	4 & 8		
Focus:	Evaluating a position		
Total score:	4–5	3	16
	3	17	9
	2	64	64
	1	6	6
	0	10	5

LINK TASK: 19			
Approach:	Team		
Year:	4 & 8		
Focus:	Summarising and comparing information		
Total score:	38–52	2	15
	32–37	5	35
	26–31	16	40
	20–25	38	7
	14–19	28	2
	0–13	11	1

LINK TASK: 20			
Approach:	Team		
Year:	4 & 8		
Focus:	Developing a plan for an activity		
Total score:	18	24	26
	16–17	29	45
	14–15	26	15
	12–13	13	7
	0–11	8	7

LINK TASK: 21			
Approach:	Station		
Year:	8		
Focus:	Summarising and evaluating information		
Total score:	8–10		13
	6–7		32
	4–5		35
	2–3		12
	0–1		8

LINK TASK: 22			
Approach:	Station		
Year:	8		
Focus:	Interpreting and analysing information		
Total score:	4		44
	3		39
	2		8
	1		6
	0		3

6 Information Skills Survey

The information skills survey asked students about their strategies for, involvement in, and enjoyment of information-gathering activities. The questions were the same for year 4 and year 8 students. The survey was administered to the students in an independent-tasks session (four students working individually on tasks, supported by a teacher). The questions were read to year 4 students and also to individual year 8 students who requested this help.

The survey included eight questions which invited students to record a rating response by circling their choice and two questions which invited students to tick up to three options from a list (including an "other" option where students could describe an additional response).

One item asked students to indicate where they usually go when trying to find information. They could tick up to three options. Their responses are shown here, in order of popularity for year 4 students, with 2001 percentages for comparison.

WHERE STUDENTS USUALLY FIND INFORMATION

		year 4 2005 ('01)	year 8 2005 ('01)
Source:	internet	61 (47)	88 (72)
	library	46 (51)	53 (57)
	parent	45 (45)	43 (45)
	books at home	37 (41)	30 (38)
	town library	22 (22)	22 (27)
	teacher	25 (19)	14 (10)
	friend	17 (17)	12 (12)
	CD-ROM	7 (15)	6 (24)
	other (written in)	6 (3)	4 (2)

For both year 4 and year 8 students, the internet was the most popular source by a substantial margin. This represented a significant increase in popularity over the past four years. Next most popular were the library (probably the school library, given that the town library was listed separately) and parents.

Another item asked students to indicate what they do when they can't find information they need. They could tick up to three options. Their responses are shown here, in order of popularity for year 4 students, with 2001 and 1997 percentages for comparison.

WHEN STUDENTS CAN'T FIND INFORMATION

		year 4 2005 ('01) ['97]	year 8 2005 ('01) ['97]
Strategy:	keep looking	71 (67) [67]	58 (64) [54]
	ask a parent	54 (55) [45]	58 (64) [54]
	ask the teacher	40 (43) [47]	52 (51) [49]
	ask a friend	36 (34) [35]	31 (38) [31]
	ask a librarian	40 (33) [35]	41 (38) [50]
	give up	8 (7) [9]	11 (10) [8]
	other (written in)	6 (2) [5]	7 (7) [2]

Compared to year 4 students, year 8 students placed less emphasis on keeping looking themselves, and more emphasis on asking their teacher. There has been little change in the responses over the eight years since the first survey in 1997.

The remaining eight items used a rating format. The percentages of students choosing each response to these five questions are shown in the two tables opposite. Where available, 2001 and 1997 percentages are shown for comparative purposes.

YEAR 4 INFORMATION SKILLS SURVEY 2005 (2001) [1997]

	heaps	*quite a lot*	*sometimes*	*never*
1. How often do you have to find information for a study (research topic/project)?	14 (13) [13]	31 (32) [33]	50 (52) [53]	5 (3) [1]
2. How often do you have a really interesting study for which you have to find information?	15 (12) [14]	29 (31) [27]	47 (51) [51]	9 (6) [8]
3. How often do you look for information because you want to, not because you've been told to?	17 (17) [15]	20 (22) [23]	43 (45) [45]	20 (16) [17]
4. How often have you used a library catalogue?	17	24	37	22
				
5. How much do you like hunting for information?	39 (42) [38]	37 (34) [38]	15 (15) [14]	9 (9) [10]
6. How good do you think you are at hunting for information?	32 (33)	42 (43)	19 (17)	7 (7)
7. How much do you like sharing with others the information you find?	50 (51)	27 (25)	13 (15)	10 (9)
8. How much do you like writing down what you find out?	42 (43) [41]	28 (25) [32]	15 (19) [14]	15 (13) [13]

YEAR 8 INFORMATION SKILLS SURVEY 2005 (2001) [1997]

	heaps	*quite a lot*	*sometimes*	*never*
1. How often do you have to find information for a study (research topic/project)?	15 (18) [18]	48 (47) [52]	37 (34) [29]	0 (1) [1]
2. How often do you have a really interesting study for which you have to find information?	6 (7) [8]	25 (28) [27]	64 (61) [61]	5 (4) [4]
3. How often do you look for information because you want to, not because you've been told to?	5 (8) [9]	18 (19) [19]	60 (58) [60]	17 (15) [12]
4. How often have you used a library catalogue?	11	31	44	14
				
5. How much do you like hunting for information?	12 (17) [18]	48 (51) [51]	33 (25) [24]	7 (7) [7]
6. How good do you think you are at hunting for information?	18 (23)	52 (52)	22 (20)	8 (5)
7. How much do you like sharing with others the information you find?	31 (37)	42 (41)	20 (17)	7 (5)
8. How much do you like writing down what you find out?	16 (23) [16]	34 (37) [35]	32 (24) [34]	18 (16) [15]

A substantially greater proportion of year 8 than year 4 students reported that they had to find information for a project or topic heaps or quite a lot (question 1). Perhaps as a consequence of being given such tasks more frequently, year 8 students were much less inclined than year 4 students to be enthusiastic about hunting for information (question 5) and about writing down the information they found (question 8). While year 4 students responded similarly to questions 1 and 2, the pattern was quite different for year 8 students, suggesting that many of the information-finding projects which year 8 students were asked to attempt were not viewed as "really interesting". About 75 percent of students are quite happy to share with others the information they have found (question 7). Where comparisons with 2001 and 1997 responses are possible, the results in 2005 are very similar to the results of the earlier surveys, so the same conclusions apply.

7 Performance of Subgroups

Although national monitoring has been designed primarily to present an overall national picture of student achievement, there is some provision for reporting on performance differences among subgroups of the sample. Eight demographic variables are available for creating subgroups, with students divided into subgroups on each variable, as detailed in Chapter 1 (p5).

Analyses of the relative performance of subgroups used the total score for each task, created as described in Chapter 1 (p5).

SCHOOL VARIABLES

Five of the demographic variables related to the schools the students attended. For these five variables, statistical significance testing was used to explore differences in task performance among the subgroups. Where only two subgroups were compared (for *School Type*), differences in task performance between the two subgroups were checked for statistical significance using t-tests. Where three subgroups were compared, one-way analysis of variance was used to check for statistically significant differences among the three subgroups.

Because the number of students included in each analysis was quite large (approximately 450), the statistical tests were quite sensitive to small differences. To reduce the likelihood of attention being drawn to unimportant differences, the critical level for statistical significance for tasks reporting results for individual students was set at $p = .01$ (so that differences this large or larger among the subgroups would not be expected by chance in more than one percent of cases). For tasks administered to teams or groups of students, $p = .05$ was used as the critical level to compensate for the smaller numbers of cases in the subgroups.

For the first four of the five school variables, statistically significant differences among the subgroups were found for less than 11 percent of the tasks for both year 4 and year 8. For the remaining variable, statistically significant differences were found on more than half of the tasks at both levels. In the detailed report below, all "differences" mentioned are statistically significant (to save space, the words "statistically significant" are omitted).

School Size

Results were compared from students in large, medium-sized and small schools (exact definitions were given in Chapter 1, p8).

For year 4 students, there was a difference among the three subgroups

on one of the 30 tasks, with students from small schools scoring lowest on *Link Task 19* (p45). There were no differences on questions of the *Information Skills Survey* (p47).

For year 8 students, there were no differences on any of the 46 tasks, or on questions of the *Information Skills Survey* (p47).

Community Size

Results were compared for students living in communities containing over 100,000 people (main centre), communities containing 10,000 to 100,000 people (provincial city) and communities containing less than 10,000 people (rural areas).

For year 4 students, there were differences among the three subgroups on two of the 30 tasks. Students from the main centres scored highest on *Breakdancing* (p40) and lowest on *Library Search* (p26). There were no differences on questions of the *Information Skills Survey* (p47).

For year 8 students, there were no differences on any of the 46 tasks, or on questions of the *Information Skills Survey* (p47).

School Type

Results were compared for year 8 students attending full primary and intermediate (or middle) schools. There were no differences between these two subgroups on any of the 46 tasks, or on questions of the *Information Skills Survey* (p47).

This year, for the first time, the NEMP samples included enough year 8 students attending year 7 to 13 high schools to permit comparisons between them and students attending intermediate schools. There were statistically significant differences ($p < .01$) on three of the 40 tasks attempted by individual students. Students from year 7 to 13 high schools scored higher on *Hens* (p17), *Atlas Y8* (p29) and *Please, Mum!* (p42). There were no differences on questions of the *Information Skills Survey* (p47).

Zone

Results achieved by students from Auckland, the rest of the North Island, and the South Island were compared.

For year 4 students, there were differences among the three sub-

groups on one of the 30 tasks. Students from the rest of the North Island (excluding Auckland) scored highest on *Library Search* (p26). There were no differences on questions of the *Information Skills Survey* (p47).

For year 8 students, there were differences among the three subgroups on five of the 46 tasks: students from the South Island scored highest on *Link Tasks 1, 2* and *3* (p18), *City Mountains* (p24), and *Please, Mum!* (p42). There were no differences on questions of the *Information Skills Survey* (p47).

Socio-Economic Index

Schools are categorised by the Ministry of Education based on census data for the census mesh blocks where children attending the schools live. The resulting index takes into account household income levels and categories of employment. It uses 10 subdivisions, each containing 10 percent of schools (deciles 1 to 10). For our purposes, the bottom three deciles (1-3) formed the low decile group, the middle four deciles (4-7) formed the medium decile group, and the top three deciles (8-10) formed the high decile group. Results were compared for students attending schools in each of these three decile groups.

For year 4 students, there were differences among the three subgroups on 17 of the 30 tasks, spread across the three task chapters. Because of the number of tasks showing differences, they are not listed here. Students in high decile schools performed better than students in low decile schools on all 17 tasks, usually with larger gaps between low and medium decile schools than between medium and high decile schools. There was also a difference on one question of the *Information Skills Survey* (p47): students from low decile schools were most positive about hunting for information (question 5)

For year 8 students, there were differences among the three subgroups on 25 of the 46 tasks, spread across the three task chapters but including 16 of the 21 year 8 tasks in Chapter 4. Because of the number of tasks showing differences, they are not listed here. Students in high decile schools performed better than students in low decile schools on all 25 tasks, usually with larger gaps between low and medium decile schools than between medium and high decile schools. There was also a difference on one question of the *Information Skills Survey* (p47): students from low decile schools were most positive about writing down what they found out (question 8).

STUDENT VARIABLES

Three demographic variables related to the students themselves:

- *Gender:* boys and girls
- *Ethnicity:* Māori, Pasifika and Pakeha (this term was used for all other students)
- *Language used predominantly at home:* English and other.

During the previous cycle of the Project (1999–2002), special supplementary samples of students from schools with at least 15 percent Pasifika students enrolled were included. These allowed the results of Pasifika students to be compared with those of Māori and Pakeha students attending these schools. By 2002, with Pasifika enrolments having increased nationally, it was decided that from 2003 onwards a better approach would be to compare the results of Pasifika students in the main NEMP samples with the corresponding results for Māori and Pakeha students. This gives a nationally representative picture, with the results more stable because the numbers of Māori and Pakeha students in the main samples are much larger than their numbers previously in the special samples.

The analyses reported compare the performances of boys and girls, Pakeha and Māori students, Pakeha and Pasifika students, and students from predominantly English-speaking and non-English-speaking homes.

For each of these three comparisons, differences in task performance between the two subgroups are described using "effect sizes" and statistical significance.

For each task and each year level, the analyses began with a t-test comparing the performance of the two selected subgroups and checking for statistical significance of the differences. Then the mean score obtained by students in one subgroup was subtracted from the mean score obtained by students in the other subgroup, and the difference in means was divided by the pooled standard deviation of the scores obtained by the two groups of students. This computed effect size describes the magnitude of the difference between the two subgroups in a way that indicates the strength of the difference and is not affected by the sample size. An effect size of +.30, for instance, indicates that students in the first subgroup scored, on average, three tenths of a standard deviation higher than students in the second subgroup.

For each pair of subgroups at each year level, the effect sizes of all available tasks were averaged to produce a mean-effect size for the curriculum area and year level, giving an overall indication of the typical performance difference between the two subgroups.

Gender

Results achieved by male and female students were compared using the effect-size procedures.

For year 4 students, the mean-effect size across the 24 tasks was 0.14 (girls averaged 0.14 standard deviations higher than boys). This difference is small. There were statistically significant ($p < .01$) differences favouring girls on 6 of the 24 tasks: *Hens* (p17), *Link Task 3* (p18), *Bats* (p21), *Link Task 8* (p34), *Oh Pussy Cat, Pussy Cat!* (p43) and *Link Task 16* (p45). There was also a difference on one question of the *Information Skills Survey* (p47): girls were more positive than boys about writing down what they found out (question 8).

For year 8 students, the mean-effect size across the 40 tasks was 0.27 (girls averaged 0.27 standard deviations higher than boys): a moderate difference. There were statistically significant differences on 24 of the 40 tasks, with girls performing better on all 24 tasks, spread across the three task chapters. Because of the number of tasks showing differences, they are not listed here. There were also differences on five of the eight questions of the *Information Skills Survey* (p47). Girls reported that they more often had a really interesting study for which they had to find information (question 2) and more often voluntarily looked up information (question 3). Girls also were more positive about hunting for information (question 5), about how good they thought they were at hunting for information (question 6), and about how much they liked writing down what they found out (question 8).

Ethnicity

Results achieved by Māori, Pasifika and Pakeha (all other) students were compared using the effect-size procedures. First, the results for Pakeha students were compared to those for Māori students. Second, the results for Pakeha students were compared to those for Pasifika students.

Pakeha-Māori Comparisons

For year 4 students, the mean-effect size across the 24 tasks was 0.36 (Pakeha students averaged 0.36 standard deviations higher than Māori students). This is a moderate difference. There were statistically significant differences ($p <. 01$) on 17 of the 24 tasks, spread across the three task chapters. Pakeha students scored higher than Māori students on all 17 tasks. Because of the number of tasks showing differences, they are not listed here. There were no differences on questions of the *Information Skills Survey* (p47).

For year 8 students, the picture was similar. The mean-effect size across the 40 tasks was 0.27 (Pakeha students averaged 0.27 standard deviations higher than Māori students). This is a moderate difference. There were statistically significant differences on 18 of the 40 tasks, spread across the three task chapters. Pakeha students scored higher than Māori students on all 18 tasks. Because of the number of tasks showing differences, they are not listed here. There were no differences on questions of the *Information Skills Survey* (p47).

Pakeha-Pasifika Comparisons

Readers should note that only 30 to 45 Pasifika students were included in the analysis for each task. This is lower than normally preferred for NEMP subgroup analyses, but has been judged adequate for giving a useful indication, through the overall pattern of results, of the Pasifika students' performance. Because of the relatively small numbers of Pasifika students, $p = .05$ has been used here as the critical level for statistical significance.

For year 4 students, the mean-effect size across the 24 tasks was 0.37 (Pakeha students averaged 0.37 standard deviations higher than Pasifika students). This is a moderate

difference. There were statistically significant differences on 14 of the 24 tasks, spread across the three task chapters. Pakeha students scored higher on all 14 tasks. Because of the number of tasks showing differences, they are not listed here. There was also a difference on one question of the *Information Skills Survey* (p47): Pasifika students reported having to find information for a study more frequently (question 1).

For year 8 students, the mean-effect size across the 40 tasks was 0.46 (Pakeha students averaged 0.46 standard deviations higher than Pasifika students). This is a large difference. There were statistically significant differences on 29 of the 40 tasks, spread across the three task chapters, but including all tasks in Chapter 3. Pakeha students scored higher on all 29 tasks. Because of the number of tasks showing differences, they are not listed here. There were also differences on four questions of the *Information Skills Survey* (p47). Pasifika students reported having to find information for a study more frequently (question 1) and more often voluntarily looking up information (question 3). They also were more positive about hunting for information (question 5), and about how much they liked writing down what they found out (question 8).

Home Language

Results achieved by students who reported that English was the predominant language spoken at home were compared, using the effect-size procedures, with the results of students who reported predominant use of another language at home (most commonly an Asian or Pasifika language). Because of the relatively small numbers in the "other language" group, p = .05 has been used here as the critical level for statistical significance.

For year 4 students, the mean-effect size across the 24 tasks was 0.16 (students for whom English was the predominant language at home averaged 0.16 standard deviations higher than the other students). This is a small difference. There were statistically significant differences on three of the 24 tasks: students for whom English was the predominant language spoken at home scored higher on *Link Task 1* (p18), *Atlas Y4* (p28) and *Oh Pussy Cat, Pussy Cat!* (p43). There was also a difference on one question of the *Information Skills Survey* (p47). Students whose predominant language at home was not English reported that they more often had a really interesting study for which they had to find information (question 2).

For year 8 students, the mean-effect size across the 40 tasks was 0.18 (students for whom English was the predominant language at home averaged 0.18 standard deviations higher than the other students). This is a small difference. There were statistically significant differences on 16 of the 40 tasks: students for whom English was the predominant language spoken at home scored lower on *Link Task 14* (p34), but higher on the other 15 tasks, spread across the three task chapters. Because of the number of tasks showing differences,

they are not listed here. There were also differences on four questions of the *Information Skills Survey* (p47). Students whose predominant language at home was not English reported that they more often voluntarily looked up information (question 3). They also were more positive about hunting for information (question 5), about how good they thought they were at hunting for information (question 6), and about how much they liked writing down what they found out (question 8)

Summary, with Comparisons to Previous Information Skills Assessments

School type (full primary, intermediate, or year 7 to 13 high school), school size, community size and geographic zone did not seem to be important factors predicting achievement on the information skills tasks. The same was true for the 2001 and 1997 assessments. However, there were statistically significant differences in the performance of students from low, medium and high decile schools on 57 percent of the tasks at year 4 level (compared to 43 percent in 2001 and 81 percent in 1997) and 54 percent of the tasks at year 8 level (compared to 71 percent in 2001 and 56 percent in 1997).

For the comparisons of boys with girls, Pakeha with Māori, Pakeha with Pasifika students, and students for whom the predominant language at home was English with those for whom it was not, effect sizes were used. Effect size is the difference in mean (average) performance of the two groups, divided by the pooled standard deviation of the scores on the particular task. For this summary, these effect sizes were averaged across all tasks.

Year 4 girls averaged slightly higher than boys, with a mean effect size of 0.14 (compared to 0.06 in 2001). Year 8 girls averaged moderately higher than boys, with a mean effect size of 0.27 (compared to 0.15 in 2001). As was also true in 2001, the *Information Skills Survey* (p47) results at both year levels showed some evidence that girls were more positive than boys about information skills activities.

Pakeha students averaged moderately higher than Māori students, with mean effect sizes of 0.36 for year 4 students and 0.27 for year 8 students (the corresponding figures in 2001 were 0.25 and 0.39).

Year 4 Pakeha students averaged moderately higher than Pasifika students, with a mean effect size of 0.37 (compared to 0.40 in 2001). Year 8 Pakeha students averaged substantially higher than Pasifika students, with a mean effect size of 0.48 (compared to 0.46 in 2001). The *Information Skills Survey* (p47) results showed that Pasifika students were more involved in and enthusiastic about some aspects of information skills.

Compared to students for whom the predominant language at home was English, students from homes where other languages predominated averaged slightly lower, with mean effect sizes of 0.16 for year 4 students and 0.18 for year 8 students. Comparative figures are not available for the assessments in 2001.

Appendix : The Sample of Schools and Students in 2005

Main Samples, Assessed in English

In 2005, 2879 children from 248 schools were in the main samples to participate in national monitoring. Half were in year 4, the other half in year 8. At each level, 120 schools were selected randomly from national lists of state, integrated and private schools teaching at that level, with their probability of selection proportional to the number of students enrolled in the level. The process used ensured that each region was fairly represented. Schools with fewer than four students enrolled at the given level were excluded from these main samples, as were special schools and Māori immersion schools (such as Kura Kaupapa Māori).

In May 2005, the Ministry of Education provided computer files containing lists of eligible schools with year 4 and year 8 students, organised by region and district, including year 4 and year 8 roll numbers drawn from school statistical returns based on enrolments at 1 March 2005.

From these lists, we randomly selected 120 schools with year 4 students and 120 schools with year 8 students. Schools with four students in year 4 or 8 had about a one percent chance of being selected, while some of the largest intermediate (year 7 and 8) schools had a more than 90 percent chance of inclusion.

Māori Immersion Sample, Assessed Predominantly in Te Reo

Details of the sample for the Māori immersion assessments will be reported separately.

Pairing Small Schools

At the year 8 level, five of the 120 chosen schools in the main sample had fewer than 12 year 8 students. For each of these schools, we identified the nearest small school meeting our criteria to be paired with the first school. Wherever possible, schools with eight to 11 students were paired with schools with four to seven students, and vice versa. However, the travelling distances between the schools were also taken into account.

Similar pairing procedures were followed at the year 4 level. Three pairs of very small schools were included in the sample of 120 schools.

Contacting Schools

In late May and early June, we telephoned the principals or acting principals of all schools in the year 8 sample. In these calls, we briefly explained the purpose of national monitoring, the safeguards for schools and students, and the practical demands that participation would make on schools and students. We informed the principals about the materials which would be arriving in the school (a copy of a 20-minute NEMP videotape plus copies for all staff and trustees of the general NEMP brochure and the information booklet for sample schools). We asked the principals to consult with their staff and Board of Trustees and confirm their participation by the end of June.

A similar procedure was followed at the end of July with the principals of the schools selected in the year 4 samples, and they were asked to respond to the invitation by the end of August.

Response from Schools

Of the 248 schools originally invited to participate, 247 agreed. A year 7 to 13 integrated high school in the year 8 sample declined to participate because of heavy external demands in the previous year. It was replaced by another integrated school. One very small school in the year 4 sample that was willing to participate was replaced by a similar school because the number of students available in the original school declined to less than the number required (eight).

Sampling of Students

Each school sent a list of the names of all year 4 or year 8 students on their roll. Using computer-generated random numbers, we randomly selected the required number of students (12 or four plus eight in a pair of small schools), at the same time clustering them into random groups of four students. The schools were then sent a list of their selected students and invited to inform us if special care would be needed in assessing any of those children (e.g. children with disabilities or limited skills in English).

For the year 8 sample, we received 103 comments about particular students. In 43 cases, we randomly selected replacement students because the children initially selected had left the school between the time the roll was provided and the start of the assessment programme in the school, or were expected to be away or involved in special activities throughout the assessment week, or had been included in the roll by mistake. Two more were replaced because they were in Māori immersion classes. The remaining 58 comments concerned children with special needs. Each such child was discussed with the school and a decision agreed. Eight students were replaced because they were very recent immigrants or overseas students who had extremely limited English-language skills. Twenty-nine students were replaced because they had disabilities or other problems of such seriousness that it was agreed that the students would be placed at risk if they participated. Participation was agreed upon for the remaining 21 students, but a special note was prepared to give additional guidance to the teachers who would assess them.

For the year 4 sample, we received 128 comments about particular students. Forty-seven students originally selected were replaced because a student had left the school or was expected to be away throughout the assessment week. Thirteen students were replaced because of their NESB status and very limited English, and two because they were in Māori immersion classes. Twenty-five students were replaced because they had disabilities or other problems of such seriousness the students appeared to be at risk if they participated. Special notes for the assessing teachers were made about 41 children retained in the sample.

Communication with Parents

Following these discussions with the school, Project staff prepared letters to all of the parents, including a copy of the NEMP brochure, and asked the schools to address the letters and mail them. Parents were told they could obtain further information from Project staff (using an 0800 number) or their school principal, and advised that they had the right to ask that their child be excluded from the assessment.

At the year 8 level, we received a number of phone calls including several from students or parents wanting more information about what would be involved. Six children were replaced because they did not want to participate or their parents did not want them to.

At the year 4 level we also received several phone calls from parents. Some wanted details confirmed or explained (notably about reasons for selection). Five children were replaced at their parents' request.

Practical Arrangement with Schools

On the basis of preferences expressed by the schools, we then allocated each school to one of the five assessment weeks available and gave them contact information for the two teachers who would come to the school for a week to conduct the assessments. We also provided information about the assessment schedule and the space and furniture requirements, offering to pay for hire of a nearby facility if the school was too crowded to accommodate the assessment programme. This proved necessary in several cases.

Results of the Sampling Process

As a result of the considerable care taken, and the attractiveness of the assessment arrangements to schools and children, the attrition from the initial sample was quite low. Less than one percent of selected schools in the main samples did not participate, and less than three percent of the originally sampled children had to be replaced for reasons other than their transfer to another school or planned absence for the assessment week. The main samples can be regarded as very representative of the populations from which they were chosen (all children in New Zealand schools at the two class levels apart from the one to two percent who were in special schools, Māori immersion programmes, or schools with fewer than four year 4 or year 8 children).

Of course, not all the children in the samples actually could be assessed. One student place in the year 4 sample was not filled because insufficient students were available in that schools. Ten year 8 students and 12 year 4 students left school at short notice and could not be replaced. Five year 8 students were overseas or on holiday for the week of the assessment. One year 8 and one year 4 student withdrew, or were withdrawn by their parents, too late to be replaced. Fourteen year 8 students and 14 year 4 students were absent from school throughout the assessment week. Some other students were absent from school for some of their assessment sessions, and a small percentage of performances were lost because of malfunctions in the video-recording process. Some of the students ran out of time to complete the schedules of tasks. Nevertheless, for almost all of the tasks over 90 percent of the sampled students were assessed. Given the complexity of the Project, this is a very acceptable level of participation.

Composition of the Sample

Because of the sampling approach used, regions were fairly represented in the sample, in approximate proportion to the number of school children in the regions.

REGION

PERCENTAGES OF STUDENTS FROM EACH REGION		
REGION	% YEAR 4 SAMPLE	% YEAR 8 SAMPLE
Northland	4.2	4.2
Auckland	33.3	32.5
Waikato	10.0	10.0
Bay of Plenty/Poverty Bay	8.3	8.3
Hawkes Bay	4.2	3.3
Taranaki	2.5	3.3
Wanganui/Manawatu	5.0	5.8
Wellington/Wairarapa	10.8	10.0
Nelson/Marlborough/West Coast	4.2	4.2
Canterbury	11.7	11.7
Otago	4.2	4.2
Southland	1.7	2.5

DEMOGRAPHY

DEMOGRAPHIC VARIABLES: PERCENTAGES OF STUDENTS IN EACH CATEGORY			
VARIABLE	CATEGORY	% YEAR 4 SAMPLE	% YEAR 8 SAMPLE
Gender	Male	51	52
	Female	49	48
Ethnicity	Pakeha	70	74
	Māori	21	18
	Pasifika	9	8
Geographic Zone	Greater Auckland	33	32
	Other North Island	45	46
	South Island	22	22
Community Size	< 10,000	14	16
	10,000 – 100,000	25	25
	> 100,000	61	59
School SES Index	Bottom 30 percent	28	22
	Middle 40 percent	40	47
	Top 30 percent	32	31
Main language at home	English	87	87
	Other	13	13
Size of School	< 25 y4 students	19	
	25 – 60 y4 students	41	
	> 60 y4 students	40	
	<35 y8 students		18
	35 – 150 y8 students		37
	> 150 y8 students		45
Type of School	Full Primary		32
	Intermediate or Middle		48
	Year 7 to 13 High School		14
	Other *(not analysed)*		6

The range and quantity of information available to us is rapidly increasing, and skill in accessing, collating, interpreting and using information is very helpful to most educational, work and leisure activities.

While there is substantial coverage of information skills in other reports, national monitoring includes this set of assessments specifically focused on information skills which are only lightly or unsystematically covered in other reports. These skills include clarifying information needs; finding suitable sources of information; searching those sources for specific information needed; gathering that information, interpreting, collating and reporting it.

National monitoring provides a "snapshot" of what New Zealand children can do at two levels, at the middle and end of primary education (year 4 and year 8).

The main purposes for national monitoring are:

- to meet public accountability and information requirements by identifying and reporting patterns and trends in educational performance
- to provide high quality, detailed information which policy makers, curriculum planners and educators can use to debate and review educational practices and resourcing.

NEMP National Education Monitoring Project

MINISTRY OF EDUCATION
Te Tāhuhu o te Mātauranga

UNIVERSITY of OTAGO
Te Whare Wānanga o Otāgo

ISSN 1174-0000 ISBN 1-877182-56-7

INFORMATION SKILLS ASSESSMENT RESULTS 2005

NEMP Report 35