ABSTRACT

Designed to be used with the New Zealand curriculum framework, this slide presentation defines "information literacy," gives an information literacy overview, proposes 10 questions that students need to ask themselves, and provides student educational objectives for information skills. The report presents an essential skills assessment formula for primary (years 5 and 6), intermediate (years 7 and 8), and secondary (years 9 and 10) grades. It offers examples of definitions and discusses persuasive language and positive, negative, and neutral writing for intermediate and secondary grades, as well as ambiguity for secondary grades. It then focuses on evaluating information in text and finding information in prose text for intermediate and secondary levels. Contains 13 references. (NKA)
Finding Details, Main Ideas, & Good Sources: How Information Literate Are NZ Students?

by Gavin Brown

Karyn Dunn
Finding Details, Main Ideas, & Good Sources: How Information Literate Are NZ Students?

A Research Report to the International Reading Association 18th World Congress, Auckland, July 11-14, 2000

Gavin Brown & Karyn Dunn

New Zealand Council for Educational Research

PO Box 3237, Wellington, New Zealand, 6000

Email:
- gavin.brown@nzcer.org.nz
- karyn.dunn@nzcer.org.nz
What is Information Literacy?

“The ability to access, evaluate, and use information from a variety of sources.” C. Doyle

Cognitive problem-solving approach to a wide variety of information needs P. Moore
# Information Literacy in School Work

## Table 1: Information Literacy Overview

<table>
<thead>
<tr>
<th>Before</th>
<th>Develop Pertinent Ideas Pertinent to Problem</th>
<th>Develop Problem-solving Goals</th>
<th>Plan Processes</th>
<th>Use Pertinent Affective Traits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use Pertinent Knowledge Bases</td>
<td>Use Pertinent Affective Traits</td>
<td>Use Pertinent Affective Traits</td>
<td>Use Pertinent Affective Traits</td>
<td>Use Pertinent Affective Traits</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>During</th>
<th>Find Sources</th>
<th>Appraise Sources</th>
<th>Comprehend Content of Sources</th>
<th>Apply Content to Problem</th>
<th>Create Solution to Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>After</th>
<th>Present Answer</th>
<th>Evaluate Answer</th>
<th>Evaluate I.L. Processes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7
Questions Students Need to Ask Themselves

- What is the problem I have that information will help solve?
- What exactly do I need to know?
- How do I get the information I need to answer my problem?
- How do I know which information to trust?
- How is the information I have found relevant to my problem?
- What does the information I have selected mean?
- How do I put all the information together with what I already know so that I can create a solution for my problem?
- How do I share my solution with others?
- How do I know that my solution is any good?
- How do I know that the processes I used are any good?

Cognitive stages: knowledge, comprehension, application, analysis, synthesis, evaluation
The NZ Curriculum Framework
Information Skills

Students will:

- identify, locate, gather, retrieve, and process information from a range of sources;
- organise, analyse, synthesise, 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.

NZ Curriculum Framework, 1993, p. 18
# Essential Skills Assessment

<table>
<thead>
<tr>
<th>Primary – Years 5 and 6</th>
<th>Intermediate – Years 7 and 8</th>
<th>Secondary – Years 9 and 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finding Information in Reference Sources</td>
<td>Finding Information in Reference Sources</td>
<td>Finding Information in Reference Sources</td>
</tr>
<tr>
<td>Finding Information in Books</td>
<td>Finding Information in Books</td>
<td>Finding Information in Books</td>
</tr>
<tr>
<td>Finding Information in Graphs and Tables</td>
<td>Finding Information in Graphs and Tables</td>
<td>Finding Information in Graphs and Tables*</td>
</tr>
<tr>
<td>Finding Information in Prose Text</td>
<td>Evaluating Information in Text*</td>
<td>Evaluating Information in Text*</td>
</tr>
<tr>
<td>Teacher Rating Scale*</td>
<td>Teacher Rating Scale*</td>
<td>Teacher Rating Scale*</td>
</tr>
<tr>
<td>Student Self-Rating Scale*</td>
<td>Student Self-Rating Scale*</td>
<td>Student Self-Rating Scale*</td>
</tr>
</tbody>
</table>

* available in September 2000

BEST COPY AVAILABLE
THE ESA:IS TESTS

- replace the PAT Study Skills.
- are designed for formative assessment.
- are group administered.
- require 30 minutes testing time.
- can be used at any time between March and November.
- contain a range of item and question types – the tests are not predominantly multiple-choice.
- cover two years at each level, so that the tests may be used to identify strengths and weaknesses and monitor progress over time.
- can be used for comparative purposes as each student's score can be converted into a stanine.
ESA:IS Descriptions

The six test modules are:

1. Finding Information in Reference Sources. Knowledge of sources, directories, encyclopedias, and dictionaries are all included in this test.
2. Finding Information in Books. Students knowledge of alphabetical order, parts of books, indexes, and table of contents are all assessed in this test.
3. Finding Information in a Library. This test focuses on locating information in a library and on the selection of relevant, current, and authoritative items.
4. Finding Information in Graphs and Tables. In this test a student’s ability to comprehend simple and complex graphs and tables are assessed.
5. Finding Information in Prose Text. The ability to rapidly scan for information and to take notes from expository text are assessed in this test.
6. Evaluating Information in Text. This test assesses skill in differentiating positive, negative, and neutral statements, facts from opinions, identifying assumptions and correct conclusions, along with other evaluative skills.

The two rating scales are:

1. Teacher Rating Scale. This rating scale is designed to complement the tests and to provide broader information for the teacher. It comprises both an observation checklist and a rating scale.
2. Student Self-Rating Scale. This enables students to evaluate themselves by determining how confident they would be or how difficult it would be for them to do a given task.
# Sub-Sections of ESA:IS

## Evaluating Information in Text

<table>
<thead>
<tr>
<th>Intermediate Test</th>
<th>Curriculum's Info Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognising Opinions</td>
<td>Fact and Opinion (4)</td>
</tr>
<tr>
<td>Positive, Negative, and Neutral Writing</td>
<td>Analyse and Evaluate (2)</td>
</tr>
<tr>
<td>Recognising Assumptions</td>
<td>Analyse and Evaluate (2)</td>
</tr>
<tr>
<td>Conclusions</td>
<td>Analyse and Synthesize (2)</td>
</tr>
<tr>
<td>Writing on a Topic</td>
<td>Identify Information (1)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Secondary Test</th>
<th>Curriculum's Info Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognising Opinions</td>
<td>Fact and Opinion (4)</td>
</tr>
<tr>
<td>Identify Persuasive Language</td>
<td>Analyse and Evaluate (2)</td>
</tr>
<tr>
<td>Positive, Negative, and Neutral Writing</td>
<td>Analyse and Evaluate (2)</td>
</tr>
<tr>
<td>Ambiguity</td>
<td>Analyse and Evaluate (2)</td>
</tr>
<tr>
<td>Recognising Assumption</td>
<td>Analyse and Evaluate (2)</td>
</tr>
<tr>
<td>Conclusions</td>
<td>Analyse and Synthesize (2)</td>
</tr>
<tr>
<td>Relevance of Information</td>
<td>Identify Information (1)</td>
</tr>
<tr>
<td></td>
<td>Interpret Views (4)</td>
</tr>
</tbody>
</table>
Examples of Definitions

Recognising Assumptions
An assumption is something that is thought to be true without proof.

Identifying Persuasive Language
Persuasive language tries to influence you to a certain course of action. For example, advertising aims to convince you to buy a product.
Intermediate
- Positive, Negative, and Neutral Writing

Underline the **one sentence which is negative** about the rugby game between the Cheetahs and the Drifters.

Saturday's weather resulted in adequate ground conditions for all the games played. The match between the Cheetahs and the Drifters was fast and intense. The Drifters showed well developed attacking tactics and played a defensive game. The Cheetahs' game wasn't to their usual standard. The Drifters' win puts them second on the points table.

Y7 – 56%; Y8 – 68%
Secondary  
-Positive, Negative, and Neutral Writing

Almost everyone on the planet loves Titanic. It already qualifies as one of the box-office champions of all time. Director James Cameron has provided the physical spectacle of the year, however, and for mere technical know-how it is mighty impressive. Beyond that, the wonder fades. There's all that potential human drama on board, but the script can only conjure up repetitive scenes with nasty Billy Zane. Why wasn't he just given a mustache to twirl? A glowing Kate Winslet does manage to light up the screen from time to time. Mr. DiCaprio pales, however, when he shares the screen with Winslet.

Overall, this review is: **positive** [negative] neutral  
*(circle one)*

- Y9 – 37%; Y10 – 43%
Approximately one hundred thousand tuatara live in about thirty islands off the coast of New Zealand. Tuatara live for up to one hundred years. The males can grow up to sixty centimetres long, and they take up to thirty years to reach their full size. Tuatara live in burrows, and their young hatch out from eggs. On sunny days, tuatara sunbathe just outside their burrows, storing heat from the sun. At night, they come out to hunt insects, such as beetles and weta. They also eat lizards, seabirds and their eggs, and even baby tuatara. Tuatara have very good eyesight, and the pupils of their eyes expand in the dark so that they can see at night.

i) “Tuatara do not have good sight in daylight.”
   Is this conclusion correct?  Yes or No (circle one)

ii) “Male tuatara can take up to approximately one third of their life to reach full size.”
   Is this conclusion correct? Yes or No (circle one)

Y7 – 45%; Y8 – 50%
Secondary - Ambiguity

According to the brochure, the house was built roughly in 1920.

This sentence is ambiguous as it has two very different meanings. One possible meaning is that the house was not very well built. What is the other possible meaning of the sentence?

The house was built in approximately 1920

- Y9 - 58%; Y10 - 69%
## Standardisation Results
### ESA:IS Evaluating Information in Text

<table>
<thead>
<tr>
<th>Year</th>
<th>Mean</th>
<th>Number</th>
<th>Standard Deviation</th>
<th>Standard Error of Mean</th>
<th>Alpha Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y7</td>
<td>47%</td>
<td>538</td>
<td>22%</td>
<td>2.25</td>
<td>0.83</td>
</tr>
<tr>
<td>Y8</td>
<td>56%</td>
<td>523</td>
<td>22%</td>
<td>2.20</td>
<td>0.84</td>
</tr>
<tr>
<td>Y9</td>
<td>48%</td>
<td>509</td>
<td>20%</td>
<td>2.23</td>
<td>0.80</td>
</tr>
<tr>
<td>Y10</td>
<td>54%</td>
<td>484</td>
<td>20%</td>
<td>2.26</td>
<td>0.81</td>
</tr>
</tbody>
</table>
## Standardisation Results

**ESA:IS Evaluating Information in Text**

<table>
<thead>
<tr>
<th></th>
<th>Intermediate</th>
<th></th>
<th>Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Number</td>
<td>Mean</td>
</tr>
<tr>
<td>Female</td>
<td>54%</td>
<td>492</td>
<td>51%</td>
</tr>
<tr>
<td>Male</td>
<td>49%</td>
<td>569</td>
<td>48%</td>
</tr>
<tr>
<td>Decile 1-3</td>
<td>44%</td>
<td>302</td>
<td>39%</td>
</tr>
<tr>
<td>Decile 4-7</td>
<td>55%</td>
<td>394</td>
<td>49%</td>
</tr>
<tr>
<td>Decile 8-10</td>
<td>59%</td>
<td>365</td>
<td>58%</td>
</tr>
</tbody>
</table>
## Difficulty of Sections

**ESA:IS Evaluating Information in Text**

<table>
<thead>
<tr>
<th></th>
<th>Intermediate</th>
<th>Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing on a Topic</td>
<td>55%</td>
<td></td>
</tr>
<tr>
<td>Opinions</td>
<td>53%</td>
<td>59%</td>
</tr>
<tr>
<td>Persuasiveness</td>
<td></td>
<td>52%</td>
</tr>
<tr>
<td>Assumptions</td>
<td>52%</td>
<td>52%</td>
</tr>
<tr>
<td>Ambiguity</td>
<td></td>
<td>52%</td>
</tr>
<tr>
<td>+ve, -ve, and neutral</td>
<td>52%</td>
<td>51%</td>
</tr>
<tr>
<td>Conclusions</td>
<td>45%</td>
<td>47%</td>
</tr>
<tr>
<td>Best Information</td>
<td></td>
<td>43%</td>
</tr>
</tbody>
</table>
# Growth Between Years

ESA:IS Evaluating Information in Text

## Overall

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intermediate (Y7-8)</td>
<td>9%</td>
</tr>
<tr>
<td>Secondary (Y9-10)</td>
<td>6%</td>
</tr>
</tbody>
</table>

## Subsections

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Intermediate</th>
<th>Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assumptions</td>
<td>12%</td>
<td>14%</td>
</tr>
<tr>
<td>+ve, -ve, and neutral</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>Writing on a topic</td>
<td>8%</td>
<td>6%</td>
</tr>
<tr>
<td>Opinions</td>
<td>8%</td>
<td>6%</td>
</tr>
<tr>
<td>Conclusions</td>
<td>6%</td>
<td>5%</td>
</tr>
<tr>
<td>+ve, -ve, and neutral</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Opinions</td>
<td>4%</td>
<td></td>
</tr>
</tbody>
</table>

39
## Correlations

<table>
<thead>
<tr>
<th>Test of Scholastic Abilities (N=129)</th>
<th>PAT: Reading Comprehension (N=79)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESA:IS</td>
<td>0.76</td>
</tr>
<tr>
<td></td>
<td>0.84</td>
</tr>
</tbody>
</table>
# Prose Texts

<table>
<thead>
<tr>
<th>Prose</th>
<th>Documents</th>
<th>Hypertext</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text books</td>
<td>Tables</td>
<td>Cd-Rom</td>
</tr>
<tr>
<td>Encyclopedia entries</td>
<td>Charts, graphs</td>
<td>World Wide Web</td>
</tr>
<tr>
<td>Journal articles</td>
<td>Maps</td>
<td></td>
</tr>
<tr>
<td>Manuals</td>
<td>Diagrams</td>
<td></td>
</tr>
</tbody>
</table>

## Importance

- Widespread, Reliable, Authoritative Sources of Information
- Information Text Genre Powerful in 'Information Age'
- Competence Requires Exposure (*Duke, 1999*)
Finding Information in Prose Text Model

Diagram:

1. **Question**
   - Create Search Terms
   - Review, Table of Contents, Index, Glossary, Random Scan/Size

2. **Locate**
   - Chapter
   - Headings, Bold Face, Italics, Boxes

3. **Extract**
   - Headings, Bold Face, Italics, Boxes

4. **Answer**

Model from Dreher, 1992
Reading Processes

Reading to Locate (Dreher, 1993; Guthrie & Kirsch, 1987)
- Not read to learn but to look up or consult, & record
- Strategic selective reading to locate specific, goal-related information

Skimming or Scanning
- Rapid location of information that matches search requirements by seeking key elements

Outlining & Organisation
- Detecting & using order of prose text to enhance location & extraction of information
## Text Cues for Finding Information

<table>
<thead>
<tr>
<th>Signaling Devices</th>
<th>Typography</th>
<th>Writing Style</th>
<th>Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Headings</td>
<td>• Bold</td>
<td></td>
<td>• Organisation</td>
</tr>
<tr>
<td>• Sub-headings</td>
<td>• Italic</td>
<td></td>
<td>• Linearity</td>
</tr>
<tr>
<td>• Titles</td>
<td>• Underline</td>
<td></td>
<td>• Supportive graphics</td>
</tr>
<tr>
<td></td>
<td>• Font face</td>
<td></td>
<td>• Sections &amp; sub-sections</td>
</tr>
<tr>
<td></td>
<td>• Capitalisation</td>
<td></td>
<td>• Paragraphing</td>
</tr>
<tr>
<td></td>
<td>• Quotation marks</td>
<td></td>
<td>• Topic sentences</td>
</tr>
<tr>
<td>• Labels</td>
<td>• Vocabulary</td>
<td></td>
<td>• Coherence</td>
</tr>
<tr>
<td>• Row &amp; column markers</td>
<td>• Syntactic complexity</td>
<td></td>
<td>• Sidebars</td>
</tr>
<tr>
<td></td>
<td>• Relative clauses</td>
<td></td>
<td>• Table of contents</td>
</tr>
<tr>
<td></td>
<td>• Passive voice</td>
<td></td>
<td>• Index</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Glossary</td>
</tr>
</tbody>
</table>
Task Requirements
Present in Assessments

Task difficulty
- declarative verbatim
- incorporation of parts
  \( (O'Donnell, 1993) \)

Question types
- Text explicit
- Text implicit
  \( (Arbruster \ & \ Armstrong, \ 1993) \)

Task Factors
- Search term given

Complexity
- Single
- Multiple
  \( (Dreher, \ 1992) \)

Distance
- Cue to Answer
  - Close= 1-3 words
  - Far= 4+ words
  - Inference= in other words
Student Requirements

- Prior Knowledge
  - Topic or Content
  - Vocabulary

- Reading Proficiency
  - Strategic Capability
    - Adjust speed
    - Notice structures
    - Analyse task requirements

- Fluency or Speed

(Arbruster & Armstrong, 1993; O’Donnell, 1993)
Using Organisation to Locate Information

**Idea/Gist** (Chambliss, 1995)
- Structure Strategy
  - Informational Text
    - Generalisation,
    - Sub-topics,
    - Evidence
  - Not same as Argument Texts

**Titles** (León & Carretero, 1995)
- Identify Principal Logical Relationship in Text

**Headings** (Lorch & Lorch, 1995)
- Signaling Aids Recognition of Organisation
Mean Results*
ESA:IS Finding Information in Prose Text

- Skim/Scan easier than Organise/Note-make
- Higher Years outperform Lower by small margin
- Girls outperform Boys by small margin
- High Decile outperform Lower Decile

Comments
- Range in every Decile is Nil to Maximum
- High Correlation with PAT Reading Comp (0.8@Y8)
- Full range not detected due to test construction

*all results statistically significant
Easy Results
ESA:IS Finding Information in Prose Text

Intermediate & Secondary
- Skimming/Scanning
- Typographic cues
- Declarative Verbatim, Text Explicit
- Single Complexity, Answer Near Clue Word

Achievement Levels
- Intermediate: 80% Avg; 7 items
- Secondary: 70% Avg; 6 items
Hard Results
ESA:IS Finding Information in Prose Text

Intermediate & Secondary
- Notemaking
- Incorporation of Parts, Text Implicit
- Multiple Complexity & Answer Inferred from Clue

Format
- Intermediate: Graphic (Linear not tested)
- Secondary: Linear (Graphic not tested)

Achievement Levels
- Intermediate: 50% Avg; 7 items
- Secondary: 40% Avg; 6 items
Implications from ESA:IS
Standardised Testing

- Teachable Structures & Strategies Exist
  - Information Texts
    - Schema Cues, Typography, Organisation, Notes
  - Evaluating Information
    - Opinions, Assumptions, Conclusions, Bias, Conclusions, Relevance

- These Info Skills have Strong Connection to General Reading Comprehension

- Students Require Practice
- Teachers Need Experience & Training
References

Information Literacy

Information Text

Search Requirements

Organisation/Outline
I. DOCUMENT IDENTIFICATION:

Title: Finding Details, Main Ideas; Good Sources! How Information Literate Are NZ Students?

Author(s): Gavin Brown + Karyn Dunn

Corporate Source: NEW ZEALAND COUNCIL FOR EDUCATIONAL RESEARCH

Publication Date: July 11-14, 2000

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Level 1

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.

Level 2A

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only.

Level 2B

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Signature:

Printed Name/Position/Title:

Gavin Brown, Project Manager

Organization/Address:

University of Auckland

Telephone: 09-3737599 x3042

Fax:

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Signature:

Gavin Brown

Printed Name/Position/Title:

Gavin Brown, Project Manager

Organization/Address:

University of Auckland

Telephone: 09-3737599 x3042

Fax:

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Signature:

Gavin Brown

Printed Name/Position/Title:

Gavin Brown, Project Manager

Organization/Address:

University of Auckland

Telephone: 09-3737599 x3042

Fax:

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Signature:

Gavin Brown

Printed Name/Position/Title:

Gavin Brown, Project Manager

Organization/Address:

University of Auckland

Telephone: 09-3737599 x3042

Fax:

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Signature:

Gavin Brown

Printed Name/Position/Title:

Gavin Brown, Project Manager

Organization/Address:

University of Auckland

Telephone: 09-3737599 x3042

Fax:
III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

<table>
<thead>
<tr>
<th>Publisher/Distributor:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td></td>
</tr>
<tr>
<td>Price:</td>
<td></td>
</tr>
</tbody>
</table>

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

<table>
<thead>
<tr>
<th>Name:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td></td>
</tr>
</tbody>
</table>

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

<table>
<thead>
<tr>
<th>ERIC / Rec Clearinghouse</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2805 E 10th St. Suite 140</td>
<td></td>
</tr>
<tr>
<td>Bloomington, IN 47408-2698</td>
<td></td>
</tr>
</tbody>
</table>

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

<table>
<thead>
<tr>
<th>ERIC Processing and Reference Facility</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4483-A Forbes Boulevard</td>
<td></td>
</tr>
<tr>
<td>Lanham, Maryland 20706</td>
<td></td>
</tr>
<tr>
<td>Telephone: 301-552-4200</td>
<td></td>
</tr>
<tr>
<td>Toll Free: 800-799-3742</td>
<td></td>
</tr>
<tr>
<td>FAX: 301-552-4700</td>
<td></td>
</tr>
<tr>
<td>e-mail: <a href="mailto:ericfac@inet.ed.gov">ericfac@inet.ed.gov</a></td>
<td></td>
</tr>
<tr>
<td>WWW: <a href="http://ericfac.piccard.csc.com">http://ericfac.piccard.csc.com</a></td>
<td></td>
</tr>
</tbody>
</table>

EFF-088 (Rev. 2/2000)