

1998

The Nature And Provision Of Instruction In Summary Writing For Students From Years 7-9

D. A. Bergin
Edith Cowan University

Follow this and additional works at: <https://ro.ecu.edu.au/theses>



Part of the [Educational Methods Commons](#)

Recommended Citation

Bergin, D. A. (1998). *The Nature And Provision Of Instruction In Summary Writing For Students From Years 7-9*. Edith Cowan University. Retrieved from <https://ro.ecu.edu.au/theses/1445>

This Thesis is posted at Research Online.
<https://ro.ecu.edu.au/theses/1445>

Edith Cowan University

Copyright Warning

You may print or download ONE copy of this document for the purpose of your own research or study.

The University does not authorize you to copy, communicate or otherwise make available electronically to any other person any copyright material contained on this site.

You are reminded of the following:

- Copyright owners are entitled to take legal action against persons who infringe their copyright.
- A reproduction of material that is protected by copyright may be a copyright infringement. Where the reproduction of such material is done without attribution of authorship, with false attribution of authorship or the authorship is treated in a derogatory manner, this may be a breach of the author's moral rights contained in Part IX of the Copyright Act 1968 (Cth).
- Courts have the power to impose a wide range of civil and criminal sanctions for infringement of copyright, infringement of moral rights and other offences under the Copyright Act 1968 (Cth). Higher penalties may apply, and higher damages may be awarded, for offences and infringements involving the conversion of material into digital or electronic form.

USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.

**THE NATURE AND PROVISION OF INSTRUCTION IN
SUMMARY WRITING FOR STUDENTS FROM YEARS 7-9**

BY

D.A. Bergin, B Ed (Hons), Dip Teaching.

**This thesis is submitted in fulfilment of the Requirements for the
Award of Master of Education
At the School of Education, Edith Cowan University.**

Date of Submission 12/10/98

ABSTRACT

As students progress through our education system they are increasingly asked to independently comprehend and compose informational material to show evidence of their ability to use and learn from texts. One skill which facilitates students' abilities to learn from texts is summarizing. Research into summarizing suggests it is a complex skill needing explicit and systematic instruction. However, materials to which teachers turn to for advice on strategies and instruction do not always reflect the findings of research. This being the case, this study set out to investigate what teachers understood about the nature of summarizing and the extent to which instruction was being provided in summarizing. With the need for increased independent learning from texts in secondary school settings, this study also aimed to investigate the difference between upper primary and lower secondary teachers' understandings and knowledge about the nature and provision of instruction in summarizing.

A descriptive/analytical study was conducted with eleven teachers from Western Australian primary and secondary schools. Teachers were asked to individually plan and administer an 'ideal' lesson involving summarizing. Following the administration of the 'ideal' lesson, teachers were interviewed and responses transcribed. Data from the teacher's lesson plan, interview and students' marked summaries were triangulated to present case scenarios. The case

scenarios were analysed to describe the nature and provision of instruction in summarizing.

The study found that teachers' instructions and activities implied an awareness of the use of selection, condensing and transforming skills, however teachers did not deliberately and consciously make these skills explicit to their students. Teachers' knowledge about the nature of summarizing and subsequently their provision of instruction were directly influenced by their purposes for asking students to summarise. In addition, four teaching orientations emerged which describe a developmental trend in which systematic instruction and opportunities to practise summarizing appear to decrease as students progress through the education system. This developmental trend is manifested in upper primary teachers tending to have an integrated process and task orientation to summarizing whilst secondary teachers demonstrated content and assessment orientations.

DECLARATION

I certify that this thesis does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any institution of higher education; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text."

Signature

Date.....22/2/99.....

ACKNOWLEDGMENTS

I wish to acknowledge the people who assisted me in this course of study. To Tony Pullella, my original supervisor for your guidance in the initial stages of this project. To Judith Rivalland, my supervisor, thank you for your professional advice and encouragement. To my fellow colleagues who acted as participants in this study, thank you for taking the interest and time to be involved. To Les Puhl, who assisted in the final drafts of this thesis, thank you for your time and expertise. To my family for your support and understanding over the past four and half years, sincere thanks.

TABLE OF CONTENTS

Abstract	3
Declaration	5
Acknowledgments	6
Table of Contents	7
List of Tables	10
List of Figures	11
Appendix	11
CHAPTER ONE	12
Introduction	12
Statement of the Problem	13
Successful Instruction in Summarizing	14
Purpose of the study	15
Overview of the Study	16
Significance of this Study	18
Terminology	20
CHAPTER TWO - LITERATURE REVIEW	24
Introduction	24
The Nature Of Summarizing	25
Definitions Of Summarizing	25
Research Purposes For Summarizing	28
Diagnostic Purposes	29
Intervention Purposes	29
Practice Purposes	31
Product-Driven Purposes	31
Content-Driven Purposes	31
Combined Purposes	32
Types Of Summaries	33
Writer Based Summaries	33
Reader Based Summaries	36
Summarizing Skills	38
Selection Skills	38
Condensing and Combining Skills	40
Transformation Skills	40
Development OF Summarizing Skills	41
Provision Of Instruction In Summarizing	42
Variables Involved In Summarizing Instruction	43
Strategy Related Variables	43
Definition & Questioning	43
One Step Procedures	45
Prescribed Writing Procedures	45
Set Of Rules Procedures	47
Combined Approach Procedures	47
Text Related Variables	51
Task Related Variables	54

Length Of Summary	55
Learner Related Variables	55
Instructional Models In Summarizing	56
Metacognitive Instruction	57
Direct Instruction	60
Collaborative & Co-operative Instruction	63
Combined Approaches To Teaching Summarization	67
Methods Of Evaluating Students Summaries	69
Product-Driven Evaluation	70
Process-Driven Evaluation	71
Integrated Product And Process Driven Evaluation	72
Coding Evaluation	72
Frequency and Regularity of Summarizing	75
Length of Lesson and Subject Area	76
The Significance Of The Literature Review To This Study	79
Research Question One	81
Research Question Two	81
Research Question Three	82
Chapter Three -Methodology	83
Introduction	83
Design	84
Qualitative Data Collection	85
Participants	91
Instruments	93
Structured Interview	93
Case Scenarios	94
Reliability And Validity of Data Collection Methods	96
Limitations of This Study	98
Chapter Four - Data Collection	101
Case Scenario One- Leonardo	101
Case Scenario Two- Marie	112
Case Scenario Three- Tom	120
Case Scenario Four- Alice	129
Case Scenario Five- Sian	137
Case Scenario Six- Josephine	146
Case Scenario Seven- Victoria	153
Case Scenario Eight- June	160
Case Scenario Nine- Jade	163
Case Scenario Ten- Fiona	170
Case Scenario Eleven- Bill	178
Chapter Five - Data Analysis	185
Introduction	185
Nature Of Summarizing	188
Definitions Of Summarizing	188
Purposes For Summarizing	190
Types Of Summarizing	192

Overview Of The Nature Of Summarizing	195
Provision Of Instruction In Summarizing	196
Summarizing Skills and Their Development	197
Development of Summarizing Skills During the 'Ideal' lesson	197
Conclusions from The Use of Summarizing Skills During 'Ideal' Lesson	201
Development of Summarizing Skills Prior to the 'Ideal' Lesson	202
Development of Summarizing Skills Proposed in Follow Up Lessons	204
Conclusions from the Development of Summarizing Skills	205
Manipulation And Control of Variables Involved In Summarizing	206
Strategy Related Variables	207
Text, Task and Learner Related Variables	211
Instructional Models Used By Teachers	213
Method And Criteria For Evaluating Students' Summaries	217
Frequency and Regularity of Summarizing	220
Overview Of The Provision Of Instruction In Summarizing	225
Differences Between The Nature And Provision of Instruction For Upper Primary And Lower Secondary Classes	229
Difference Between the Nature of Summarizing in Upper Primary and Lower Secondary Classes	229
Difference Between the Provision Of Instruction in Summarizing in Upper primary and lower secondary Classes	232
Chapter Six - Discussion	239
Introduction	239
Integrated Orientation	244
Task Orientation	245
Content Orientation	247
Assessment Orientation	248
Links With Past Research Studies	249
Limitations of this Study	252
Appendices	257
References	265

LIST OF TABLES

Table	Description	Page
1	Words Used To Define Summarizing From Research Studies And Teacher Reference Materials	26
2	Research Purposes for Investigating Summarizing	32
3	Types Of Summaries Suggested By Research Studies And Teacher Reference Materials	37
4	Summarizing Skills Suggested By Research Studies And Teacher Reference Materials	41
5	Summarizing Strategies Suggested By Research Studies And Teacher Reference Materials	50
6	Text Related Variables Involved In Summarizing	54
7	Instructional Models As Suggested By Research Studies And Teacher Reference Materials	69
8	Criteria For Evaluating Summaries As Suggested By Research Studies	74
9	Time & Subject Area Variables	79
10	Descriptions Of Participating Schools	92
11	Descriptions Of Teachers Involved In This Study	93
12	Teachers Words Used To Define Summarizing	188
13	Teachers Purposes For Asking Students To Summarize	191
14	Types Of Summaries Used By Teachers	193
15	Development Of Summarizing Skills During 'Ideal' Lesson	198
16	Development Of Summarizing Skills Prior To 'Ideal' Lesson	203
17	Development Of Summarizing Skills Proposed In Follow Up Lesson	204
18	Summarizing Strategies Encouraged by Teachers	208
19	Text, Task and Learner Variables	212
20	Instructional Models Used By Teachers	214
21	Criteria For Evaluating Students Summaries	218
22	Regularity, Frequency, Length of Lesson And Curriculum Areas In Which Summarizing Was Used	223

LIST OF FIGURES

Figure	Description	Page
1	Inquiry Framework	80
2	Basic Design Of Study	85

APPENDIX

I	Letter to Participants	258
II	Structured Interview Questions	260
III	Lesson Plan Proforma	261
IV	Triangulation of Data Pertinent to the Nature of Summarizing	262
V	Triangulation of Data Pertinent to The Provision of Instruction in Summarizing	263
VI	Characteristics of Four Teaching Orientations	264

CHAPTER ONE

Introduction

As students progress through the education system, much of what they are expected to learn will involve processing written, media and computer texts. Gaining information from printed texts, is commonly referred to as 'reading to learn' and/or 'study skills'. Generally, study skills encompass a range of strategies which assist students to access, select, interpret and synthesize information from a range of texts for a variety of purposes. One study skill which incorporates all of these tasks is summarizing.

Students in school are frequently asked to summarize for many reasons in a variety of situations. One reason students are asked to summarize may be to recount or recall events over the week-end, holidays, excursions, or from stories they have read or heard etc. These summaries take the form of oral news telling, written recounting and retelling. Other reasons involve students researching and developing topics as evidence of their understanding about a given topic or as evidence of their ability to comprehend or write. These take the form of assignments and/ or projects and they usually include teacher directed inquiry questions generated from and about a given text.

Summarizing was chosen as the topic of this thesis because it is a complex skill which requires the orchestration of a number of comprehension and composing skills and provides an opportunity to

study the unique relationship between reading and writing.

Summarizing is also believed to be an important skill for tertiary learning as students progress through our education system there is an increased demand for students to be able to comprehend and compose informational material independently.

Statement of the Problem

Research suggests many students have difficulty with summarizing (Brown, Campione & Day, 1981; Winograd, 1984; Hahn & Garner, 1985; Hill, 1991) because it is a complex and multi-disciplined task, involving high order cognitive operations (Hidi & Anderson, 1986; Winograd, 1984; Pressley, Johnson, Symonds, McGoldrick & Kurita, 1989). The cognitive operations involved in summarizing include knowing the purpose for summarizing; what information to select to achieve that purpose; how to condense, combine and transform information; and how to present the information in a way that reflects the original purpose.

In addition to the skill demands of summarizing, there are a number of variables which further influence and contribute to students' difficulties in summarizing (Brown & Day, 1983; Armbruster & Ostertag, 1989). These variables include the procedure for summarizing as well as characteristics related to the text, task, and the learner. Research studies suggest that manipulation and control of characteristics related to these variables can make the summarizing task more or less difficult for students (Taylor, 1982; Pincus, Geller &

Stover, 1986; Hidi & Anderson, 1986; Armbruster, Anderson & Ostertag, 1989; Bransford, Stein, Shelton & Owings, 1980; Ambruster & Brown, 1964).

Successful Instruction in Summarizing

As indicated above, a number of research studies have manipulated and controlled strategy and text related variables and reported success in terms of the amount and type of ideas being recorded. However, many of these studies attribute success to the instructional design for teaching summarizing. That is, some studies have taught strategies, rules or text structures using metacognitive, direct and or collaborative instructional models. Generally, these studies found that when and where explicit instruction and practice were provided students' strategies and summaries improved (Kintsch & Van Dijk, 1978; Brown & Day, 1980; Taylor, 1982; Taylor & Beach, 1984; Berkowitz, 1986; Armbruster & Ostertag, 1989; Mann & Volet, 1996).

A synthesis of the research would seem to indicate that students' abilities to summarize are influenced by the type and amount of instruction they have received. However, a review of materials readily available to teachers, such as teacher's guides and curriculum syllabi, suggest little evidence of explicit instructional guidelines for summarizing (Hidi & Anderson, 1986; Bergin, 1992). Most teacher's guides and syllabi define a summary rather than providing explicit teaching strategies or procedures for students to follow. This sort of

information and lack of strategic instruction implies a view that summarizing is a skill which students automatically attain as a consequence of developing other, more 'difficult' comprehension skills, such as implied main ideas and identifying top level structures of texts.

Purpose Of The Study

To date research suggests summarizing involves high order skills which require not only an awareness of the nature of summarizing, but also instruction and practice. Several studies support the idea that summarizing is not simply an outcome of comprehension or recall, but instead, involve additional and deliberate processing strategies (Brown & Day, 1993, Brown Day & Jones, 1983). Sjostrom and Hare (1984) claimed that the difficulty many secondary students experience in selecting main ideas is directly related to the lack of systematic instruction. Further, Goetz, Alexander and Ash (1992) emphasize the importance of intervention by claiming that the more teachers encourage summarizing, model strategies and provide feedback to their students the better students will learn to apply these strategies independently. Finally, Tabberer (1987) suggests summarizing activities should be integrated into everyday lessons in a variety of subject areas in order for students to develop effective skills.

The complex nature of summarizing, recommendations from past studies to provide explicit instruction and practice, the lack of strategic instructional guidelines in teacher reference material and the discrepancies between the amount of instruction and practice in

summarizing provided motivation to find out how summarizing was taught in classrooms. The purpose of this study was to investigate teachers' understandings about the nature of summarizing and the extent to which teachers provided instruction in summarizing. With past research suggesting that strategic instruction decreases as students progress through the education system and recommendations that summarizing strategies be encouraged, modelled and practised in order to further develop effective skills, this study also aimed to investigate the difference between upper primary and lower secondary teachers' knowledge about the nature and provision of instruction in summarizing.

Overview of Study

Chapter two describes the nature of summarizing by identifying definitions of summaries, summarizing purposes, types of summaries, summarizing skills and their apparent development as described by past studies. The provision for instruction describes the control and manipulation of strategies, text, task and learner variables, instructional models involved in past studies, criteria for evaluating summaries, and the frequency and regularity of summarizing. An analysis of the literature resulted in the development of an inquiry framework which assisted in the collection and analysis of data.

Chapter three describes the methodology used to gather data for this study. In order to capture and describe what really goes on in classrooms with regard to summarizing, this study asked eleven

teachers to plan, prepare and administer an 'ideal' lesson involving summarizing. The 'ideal' lesson method gave teachers the opportunity to consider what they knew to be effective instruction in summarizing and therefore demonstrate what they believed to be 'best practice'. The 'ideal' lesson allowed teachers to teach in their natural setting taking into consideration the unique and individual nature and dynamics of their class. Such variables as teacher familiarity, rapport with students, prior knowledge and experience, students' interests and abilities, subject, and time of day were within the teacher's control to further support teachers' attempts to demonstrate 'best practice'. "Ideal" lessons were not audio or video taped in an attempt to lessen the intrusion factor. Following the administration of this lesson, teachers were interviewed in order to provide data relevant to their understandings about the nature and provision of instruction in summarizing. Lesson plans, students' samples and structured interview transcripts were used to write up case scenarios.

Chapter four describes the data collected and presents the eleven case scenarios. Chapter five analyzes the data from the case scenarios in order to determine the current nature and provision of instruction in summarizing and to determine the difference between upper primary and lower secondary teachers in this regard.

Finally, Chapter Six discusses the implications of these results, concluding with limitations of this study and recommendations for future research.

Significance Of The Study

Summarizing is commonly used in classrooms and it is a skill required in many workplace environments. Research indicates summarizing is a complex skill requiring strategic and systematic instruction if students are to develop effective skills in this area. The delivery of effective instruction in summarizing means teachers need to understand the nature of the task and the most effective method of instruction to facilitate the development of skills. This study attempts to describe the current state of affairs with regards to the nature and provision of instruction in summarizing and the difference between upper primary and lower secondary in this regard, therefore this study is significant for four reasons.

Firstly, summarizing is a common task asked of students in both primary and secondary schools. The primary vehicle for presenting information in the school curriculum is through printed texts. Students need to be able to comprehend, compose, recall, and apply content from books. The ability to comprehend or compose informational text is essential for success at school and in further education. Summarizing is one task teachers often ask students to do as evidence of their ability to learn from such material.

Secondly, summarizing is a complex but important skill. It involves selecting, extracting, condensing, combining, transforming and reorganizing information. The ability to summarize texts

effectively enhances students' understandings about text structure and writing, and improves students' abilities to recall, retrieve and apply learned knowledge. Independent learning is facilitated by the ability to read and extract relevant and important information, which are aspects of summarizing. Teachers need to have a sound understanding of the nature of the summarizing task in order to provide effective instruction on how to summarize.

Thirdly, this study attempts to provide current information about what teachers know and understand about summarizing and how this is manifested in the form of instruction or intervention. Past research has tended to take place in artificial environments and provided students with artificial purposes for summarizing. This study is qualitative in design as it attempts to capture teachers' understandings about the nature and provision of instruction in summarizing in a realistic context. The type of information gained from such research has not been well documented in the past.

Finally, this study examines and describes the difference between the nature and provision of instruction in summarizing in upper primary and lower secondary school settings. It shows the way summarizing is taught in the transition from primary to secondary school settings where summarizing appears to play a particularly significant role in student's learning independently from texts.

Terminology

Summary - a concise reconstruction of main ideas of a given text or dialogue

Selection skills - skills employed in order to select appropriate ideas or information from a given text or dialogue. Such skills include identifying a purpose for summarizing, identifying textual or contextually significant information, deleting trivial and redundant information.

Condensing skills - those skills employed in order to reduce ideas or information. Such skills included identifying subordinate terms, collapsing lists or events.

Combining skills - those skills employed to link information. Such skills include identifying topic sentences, use of text's headings or imposing headings or topic sentences.

Transforming skills - skills employed to reconstruct or reproduce the meaning of a text or dialogue. Such skills include paraphrasing, use of abbreviations, note taking, linking own knowledge with information extracted or received.

Text related variables - features of the text which have an impact on students' abilities to summarize. Such variables include style, structure, language complexity, length of text and absence or presence of text during summarizing.

Task related variables - refers to the design aspects of summarizing.

Such variables include purpose for summarizing, type of summary, and stipulated length of a summary.

Learner related variables - refers to those aspects of learners which will affect their abilities to summarize. Such variables include, students' background knowledge of the topic, experience or familiarity with summarizing, interest, motivation, perceptions of themselves as readers/ writers and their ability to read and write.

Strategy related variables - refers to the strategies or processes used whilst summarizing. Such variables include various summarizing procedures, regularity and the frequency of which summarization takes place.

Writer based summary - a summary written for the benefit of the writer. It is usually written to facilitate recall of content and is characteristically in note form. For example; main idea and supporting information, graphic organizers, top level structures, genre frameworks, graphic metaphors, semantic grids.

Reader based summary - a summary written for an audience who may not have read the original text. It is characteristically in full sentences as opposed to notes format. Examples of this kind of summarizing include a precis, abstract, synopsis, review, recount, retell.

Instructional model - a model which describes a theoretical perspective for providing instruction.

Graphic organizer - blank overview of a text's structure using title, headings, subheadings, diagrams, illustrations, paragraphs to which is added predicted and confirmed content.

Writing framework - a writing plan with specific headings related to writing purpose and from which predicted and confirmed information can be organized.

Graphic metaphors - a pictorial representation of the hierarchical order of ideas in a text. Pictorial representation may be in the shape of an umbrella or pyramid shape.

Topic sentence - is the sentence which tells the main idea of a paragraph. In a good paragraph the main idea is often stated in the first sentence.

Secondary school - traditionally secondary school in Western Australia usually includes students from year 8, (13 years of age) to year 12 (17 years of age).

Upper primary school - traditionally refers to students from year 6, (11 years of age) to year 7 (12 years of age).

Narrative texts - texts which tell a story, often written in personal or colloquial language.

Informational texts - texts written to provide factual information.

Structure may be less familiar and predictable to students as the structure varies according to purpose.

Top level structures - the organizational structure within and between sentences. e.g problem/solution

Genre - overall framework or organizing structure of a text. e.g. recount, report.

Studies of society - commonly referred to as the humanities such as geography, social studies, history, archaeology.

Sciences - traditionally subjects such as biology, chemistry, physics, geology.

Inquiry Framework - a overview or plan from which an inquiry or investigation is made.

'Ideal' lesson - a lesson in which teachers believe most of the variables are within their control so that the lesson is as close to a 'best practice' as can be obtained.

Structured interview - an interview in which a set of prepared questions are asked of each participant in the study.

Case scenario - a narrative description of a participant's knowledge and understanding about summarizing

CHAPTER TWO

LITERATURE REVIEW

Introduction

In order to investigate the current status of summarizing this study reviewed literature from research studies and examined teacher reference materials such as syllabi, handbooks and commercially produced materials. The following chapter reports on the results of this review and examination. The chapter itself is divided into two parts.

The first part of the chapter reports on the literature related to the nature of summarizing. There are four main elements in this literature which are relevant to this part of the chapter: definitions for summarizing; purposes for summarizing; types of summaries and; summarizing skills and their development.

The second part of this chapter reports on literature pertaining to summarizing instruction. Four topics are described as: variables which influence summarizing; instructional models for teaching summarizing; methods of evaluating summaries and; the frequency and regularity of summarizing.

At the end of each part of the chapter a table is presented which provides a summary of the relevant research. Finally, the literature review concludes with a summary of the literature and its significance to this study.

The Nature Of Summarizing

Definitions of Summarizing

A review of the literature was carried out by analysing the definitions provided by research studies and teacher reference materials (Hidi & Anderson, 1986; Hill, 1991). From an examination of researchers' descriptions of a summary, the following framework emerged. This framework is described below:

A summary (term) is a statement (description) of the main ideas (contents) from a given text in order to convey (action) the gist (product) of the original text.

Definitions were reviewed using terms, descriptions, contents, actions and products. A number of studies referred to a summary as a precis, abstract or synopsis. The descriptions used adjectives such as concise, brief, succinct and short, and nouns such as reconstruction, overview and outline. The contents of the summary were described using adjectives such as main, central or significant and nouns such as details, facts, points or ideas. The actions involved in summarizing were described using verbs such as glean, reflect, convey, reduce, select and condense. The product was described using nouns like gist, essence or macrostructure of the original text. A summary of the vocabulary used in defining a summary appears in Table 1.

Table 1
Words Used to Define Summarizing from Research Studies and Teacher Reference Material

Terms for a summary	Summary Precis Abstract Synopsis
Description - adjectives	Concise Brief Succinct Short
Description - nouns	Reconstruction Overview Outline
Content - adjectives	Main Central Significant
Content - nouns	Details Facts Points Ideas
Product	Gist Essence Macro Structure
Action	Glean Reflect Convey Reduce Select Condense

The review suggested little variation in the definitions of summaries. Generally, researchers agree that a summary is a concise reconstruction of the most important ideas in a text (Johnson, 1983; Winograd, 1984; Hidi & Anderson, 1986). The key words *concise*, *reconstruction* and *main ideas* and their various synonyms were consistently mentioned in definitions reviewed in the literature. Research studies suggest the most important ideas are those ideas which fluent, adult readers identify as textually significant

(Winograd, 1982). Interestingly, little of the literature takes into account the purpose for which people summarize and how this influences the selection of information in any one reading of a text. This issue will be discussed later in the literature review.

Whilst there appears to be substantial agreement amongst writers about what a summary is, Hidi and Anderson (1986) argue there is still some difficulty in defining summarizing. This difficulty arises because of the cognitive operations involved in summarizing and the variety of terms used by different writers to describe a fundamentally similar process. For example some investigators refer to summarizing as 'macrostructure abstraction' whilst others refer to it as main idea comprehension. This distinction in terminology relates to specific theoretical perspective's and in particular whether or not summarizing is viewed as a reading, writing or integrated task.

Most definitions describe summarizing as having both a reading and writing component, however, Hare (1992) suggests some definitions display bias towards summarizing as a reading task because of a belief that the summary is conceptualised whilst comprehending. Kintsch and Van Dijk (1978) suggest a set of rules in which students select, delete and generalize important information as they are reading. Others, such as Brown and Day (1983), believe summarizing is a writing task because it occurs after comprehension when students make decisions about what to include and what information can be combined and condensed in a written summary.

Hayes (1989) describes the integrated nature of the task when he says:

one's reading focuses attention on significant text information and forces reflection on that information as it is encoded into a summary. The written product expected is a statement of the information gleaned from reading, cast in the student's own words. (p. 96)

This view is supported by Hare (1992) when she says "we typically think of readers as constructing a summary or macro-structure from the text and writers as constructing a text from the macro-structure". Hare concludes that summarizing may be both a reading and writing task. She suggests summarizing "is a recursive process that begins around the time of encoding and ends when the desired summary is complete". Encoding is described as a retelling or recounting whereby summarizers use key selection and condensation processes which are largely automatic. Hare suggests comprehending may well be summarizing, however she believes summarizing entails more deliberate and continued selection and condensing to 'get to the point' which is especially the case with written summaries. Therefore, she concludes "the nature of summarizing makes it difficult to judge when reading ends and writing begins."

Research Purposes for Investigating Summarizing.

A synthesis of the relevant literature indicates a range of research purposes. This section reviews those reasons or purposes for which researchers asked students to summarize. The research revealed ten purposes for asking students to summarize. These categories are not conclusive nor exclusive and indeed a number of studies shared more than one purpose.

Diagnostic Purposes

The first research purpose for the study of summarizing involved identifying the summarizing strategies used by students. This category of research is characterised by its lack of intervention. In other words, the research purpose was to identify strategies or procedures used by students when they summarized, without prompting or instruction. This involved observation of what students did whilst summarizing (use of highlighters, writing in margins), prompting students to tell what they were doing (questionnaires, interviewing, reflections, journals) and /or analysis of students' summaries to determine the type or amount of information recorded.

Kintsch and Van Dijk (1978) attempted to describe the system of mental operations that underlie text comprehension and the production of recall on summary protocols by analysing the type of information in students' summaries. Brown and Day (1983) and Winograd (1984) identified the summarization strategies used by adults and experts. Brown and Smiley (1978) compared the summarizing strategies of younger and older students, whilst Brown, Campione and Day (1981) compared the summarizing strategies of various reading ability groups (Brown, Campione & Barclay, 1979).

Intervention Purposes

As a consequence of earlier studies which investigated what students did when they summarized, more recent studies investigated the effect of intervention on students' abilities to summarize. Intervention appeared in

the form of imposing various strategies for summarizing, teaching styles or instructional models and investigating the effects of this on students' abilities to summarize.

Studies where students received intervention reveal a range of intervention techniques. These strategies, which are discussed in more detail later in the chapter, include simple one step instructions, sets of instructional rules (Kintsch & Van Dijk, 1978; Brown and Day, 1983; Hahn & Garner, 1985; Hare & Borchardt, 1984), use of text structure (Taylor, 1982; Baumann, 1984; Berkowitz, 1986; Bartlett, 1984; Bergin, 1992) and other diagrammatic forms including graphic metaphors, acronyms, and structured overviews.

Studies which investigated the style of intervention or the actual instructional model or approach used to teach students summarizing strategies included those involved in metacognitive instruction (Brown & Day, 1983), direct instruction (Hare & Borchardt, 1984; Archer & Gleason, 1989), collaborative learning models (Stevens, 1989) and combined approaches (Palincsar, 1984; Bergin, 1992). Such studies either tested one group of students before and after intervention, or two groups of students were used in a control and experimental group situation. In this situation both groups of students were pre-tested and post tested, however, one group received one type of instructional intervention whilst the other group received no intervention.

Practice Purposes

Another instructional purpose for summarizing was to practise a particular strategy. In this category, intervention or instruction was gradually reduced while students were required to apply the strategies with increasing independence. This category is characterized by teacher/expert prompting, peer or small group collaboration and immediate feedback (Stevens, 1989; Bergin, 1992).

Product Driven Purposes

Other instructional purposes again involved procedures and instructional models which emphasised the summary product. Studies in this category looked at the effect of training or instruction on the qualities of summaries in terms of either the type of information recorded or the organization/structure of their writing (Taylor & Beach, 1984; Bergin, 1992; Mann & Volet, 1996). In these studies the desired effect of training was to improve the quality of the written summary.

Content Driven Purposes

Some research studies investigated the effect of a particular strategy or instructional model on the amount of content recalled. The desired outcome in such studies was to increase the amount of information which could be recalled by the reader. Bean, Singer, Sorter & Frazee (1986) sought to determine the effect of two different strategies on student's ability to recall. One group of students were instructed to use a graphic organizer whilst a second group were instructed to use outlining. It was hypothesized that the graphic organizer would provide greater links

between ideas and therefore students would recall more information. This was found to be so.

Combined Purposes

The remaining purposes for summarizing suggested by research literature were more likely to appear in conjunction with the major purposes outlined above. These instructional purposes included summarizing as a means of:

- a) integrating reading and writing (Armbruster, Anderson & Ostertag, 1989; Taylor & Beach, 1984, Bartlett, 1978; 1984),
- b) developing vocabulary,
- c) monitoring comprehension (Cohen, 1993)
- d) improving students' self control and awareness of their own learning processes (Palincsar, 1984).

A summary of research purposes for investigating summarizing appears in Table 2.

Table 2:
Research Purposes for Investigating Summarizing.

Diagnostic Purposes	To determine what strategies students are using (pretest/ post test)
Intervention Purposes	To investigate the effect of a new strategy To investigate the effect of a particular instructional model To practice a summarizing strategy To assess or improve writing To determine the amount and type of information recalled , understood or learnt
Combined Purposes	To intergrade reading and writing To develop vocabulary To promote critical thinking To apply summarizing independently

Types of Summaries

Summaries may be constructed from information experienced, heard, or seen (read). They may be presented orally or in a written mode and they may be formal or informal. Despite the variety of summaries the literature classifies summaries according to audience and purpose. Hidi and Anderson (1986) suggest summaries are classified according to who they are written for and because of this they have different functions and are produced under different conditions.

Writer Based Summaries

The first category is described as a writer based summary. This type of summary is usually written for personal use, such as study notes. The purpose of this type of summary is to help facilitate and monitor the writer's comprehension. The summary takes the form of a condensed, external record of the important segments of the original text. The original text is often new or unfamiliar information that the writer wishes to recall.

Writer based summaries are characteristically in note form and often contain symbols and/or diagrams. Little attention is paid to grammatical rules and sentence cohesion. This is largely to reduce the risk of memory overload and to facilitate recall.

The research suggests that the way students naturally or intuitively extract information for a writer based summary depends on their experience and maturity as a reader and the instruction they have received. Younger

and less experienced readers tend to read sentence by sentence and select information based on personal significance (Hare & Borchardt, 1984; Brown & Day, 1983, Johnson, 1983; Brown Day & Jones 1983). Instructions on writer based summaries generally encourage extraction of information based on the original text's structure.

In its simplest form teachers often encourage students to select information based on the ideas presented in each paragraph. They ask students to identify and state the idea in the topic sentence first followed by the supporting details (Archer & Gleason, 1989). For example the following structure might be used:

MAIN IDEA

- supporting information
- supporting information
- supporting information

Other more complicated writer based summary formats use graphic organisers (Taylor, 1982), top level structures, (Meyer, 1982), genre frameworks (First Steps, 1992; Sloan & Latham, 1989) and graphic metaphors (Baumann, 1984; Berkowitz, 1986).

Graphic organizers use the exact structure of the original text. That is, a blank overview of the original text's headings, illustrations, diagrams and paragraphs are used to facilitate the extraction of main and supporting information.

Structured overviews can be used to help students identify the top level structure relevant to the given text. This is followed by information being selected and extracted according to a particular top level structure.

Although the terms may vary, the literature suggests there are five top level structures found in informational texts (Meyer, Brandt & Bluth, 1980; Bartlett, 1978). These include problem/solution, cause and effect, comparison and contrast, listing or sequence, and description.

Top level structures may be used to help select and organise appropriate ideas for a summary. For example, in a problem/solution text, a piece of paper is divided into two columns. One column is entitled 'Problem' and the second column is entitled 'Solution'. The reader extracts and records the problem as identified in the original text and then searches for and records the corresponding solution in the second column. Texts with a cause and effect structure follow a similar outline. The 'Problem' column is substituted with 'Causes' and the 'Solutions' column becomes 'Effects' (Armbruster, Anderson & Ostertag, 1989). Texts which follow a comparison and contrast structure also encourage students to extract using a semantic grid. The vertical axis of the grid lists the features to be compared, whilst the horizontal axis of the grid lists the concepts which are either similar or contrasting. For example, if the text is comparing the eating habits of animals, the table may be organised with features such as teeth and feet listed vertically, and concepts such as herbivores and carnivores listed vertically. Descriptive texts tend to identify and list features with supporting information being organized around the features.

Instruction involving genre frameworks requires students to select information to match the various stages of a genre. For example work sheets with blank boxes and headings are used to direct the selection of

information related to any particular genre. Notes from information provided in the original text are extracted and placed in the appropriate boxes.

Graphic metaphors include pictorial representations of facts according to the hierarchical order of information in the original text. Pictorial representations include pyramids and umbrellas to represent information ranging from the least to the most important.

Reader Based Summaries

In contrast, a reader based summary is produced for the benefit of an audience. This type of summary is characterised by its formal, full sentence descriptions. To produce a reader based summary, the writer needs to be very familiar with the original text. The original text is re-read several times in order to produce a summary based on the whole text or at least large chunks of it. The writer must pay attention to grammar and sentence cohesion because the purpose of the summary is to provide information for a reader who has not read the original text. In many cases the reader based summary is often written from a writer based summary and therefore uses a similar writing framework. The function of this type of summary is to demonstrate one's ability to extract and condense the important ideas of a text by providing the gist of the original text to enable a reader to ascertain the main ideas in the original text.

Examples of reader based summaries include: abstracts, preces, synopses, reviews, recounts and retellings. Abstracts, synopses and preces are characteristically succinct in length and give a general summary of the

type of information to be found in the original article. They are traditionally associated with research studies and informational texts.

A review tends to be more detailed than an abstract and is characterised by a structure similar to the original text with critical or emotive statements. Reviews are more traditionally associated with critiques of literature, films, and/or entertainment.

A third differentiation can be seen in a recount. Recounts are recall orientated and writers are often asked to recall verbatim from the text. They tend to follow closely the sequential order of the original texts.

Retellings are the oral version of a recount.

Table 3
Types of Summaries Suggested by Research Studies and Teacher Reference Material

Writer Based	Point Form Symbols Topic Sentence/ Supporting Details Diagram Graphic Organizer Graphic Metaphor
Top Level Structure	Description List/ Sequence Contrast/ Comparison Problem/ Solution Cause & Effect
Writing Frameworks	Narrative Description Recount Report Procedure Explanation Thesis/ Argument
Reader Based	Abstract Synopsis Precis Review Recount Retell (Oral)

Table 3 describes the types of summaries suggested by research studies and teacher reference material.

Summarizing Skills

Researchers agree that summarizing is a multi-disciplined task which involves high order cognitive operations (Hidi & Anderson, 1986; Winograd, 1984; Pressley, Johnson, Symonds, McGoldrick & Kurita, 1989). However, unlike other writing tasks, when summarizing, the content and structure are already present. The reader must decide on which information is important, which information can be combined, and which information can be omitted. Although research studies use different terminology to describe the skills involved in summarizing, there is general agreement that summarizing involves three main skills; selection, condensation (sometimes referred to as combining), and transformation (Kintsch & Van Dijk, 1978; Brown & Day, 1983; Hidi & Anderson, 1986).

Selection Skills

Selection skills involve deciding which information from the text should be included in the summary. This is done as readers evaluate the ideas being presented in terms of importance. Ideas can be contextually important, that is, of interest or significance to the reader, or ideas can be textually important such as main ideas and supporting information. The literature suggests that the type of information usually deemed as important and therefore expected to be present in a summary, is information adult readers regarded as important. This information tends to be information which is of textual significance rather than of personal

interest or intrigue to the reader (Winograd, 1984). In this regard, the reader is required to remain subjective and keep in mind the perceived writing purpose of the author. Strategies involved in choosing textually important information include learning to delete trivial or unimportant and redundant information.

It is interesting to note that research studies have only recently moved from being interested in cognitive considerations to more socio-cultural factors. This shift challenges the assumption that texts have one single meaning. Bull (1993) goes further to suggest that literacy teaching is both political and ideological. Political because it is driven by the power of the relationships of individuals communicating in the literacy environment, and ideological because the views that particular individuals hold about literacy influence their literacy practices.

In a practical sense research in critical literacy theory would suggest that teachers/experts need to be aware of how their personal meanings and interpretations may affect student's meaning making and reality construction. Knobel's (1993) research into the role of the teacher as a mediator of text suggests that unless teachers/experts are conscious of their power to affect students constructions of meaning, they are playing a 'Simon says' pattern of interaction as opposed to obtaining 'authentic' student responses. Clearly, past research in summarizing has not allowed for multiple interpretations of texts' meanings. Instead it appears to encourage a 'Simon says' approach to selecting information from a text

because it advocates only the ideas 'experts' would include as being the 'right' ideas to record.

Condensing and Combining Skills

Condensing information involves classifying information for the purpose of reducing the size of the text. The reader must reduce the information in the text to super-ordinate terms. This usually involves combining or collapsing lists of nouns, verbs or events into two or three words (Brown & Day, 1983). Other strategies which involve combining information include identifying main ideas and supporting information, rating and reorganising ideas using concept maps, structured overviews and top level structures.

Transforming Skills

Transformation or constructivism skills are concerned with attempting to reproduce the author's intended meaning and structure. This skill is often difficult because it involves inference, invention and interpretation by the reader. Strategies involved in transforming include identifying topic sentences and relating these to one another in an attempt to understand the top level structure and the thesis contained within the text. In the case of a writer based summary the transformation rule might be to re-arrange facts into a diagram or table.

Table 4 highlights the three main skills of summarizing and a number of corresponding strategies identified by research studies.

Table 4
Summarizing Skills Suggested by Research Studies and Teacher Reference Materials.

Selection Skills	Delete trivia Delete redundant information Identify contextually important information Identify textually important information Identify supporting information
Condensing/Combining Skills	Collapsing lists Combining information Finding subordinate terms Rating ideas Linking information using a concept map Linking information using a structured overview Extracting information using top level structures
Transforming Skills	Inferring/inventing topic sentences Inferring top level structures or writing frameworks Interpreting author's position Rearranging information into a table

Development of Summarizing Skills

Knowledge about how summarizing skills develop has predominantly been investigated through the analysis of students' summaries (Kintch & Van Dijk, 1978; Brown & Day, 1980; Hidi & Anderson, 1986). Students' summaries were analysed in terms of the type of information extracted, the amount of information manipulated or reorganized and the amount of inference or interpretation evident. Results from these studies indicate clear developmental trends in the use of summarizing skills. Strategies for selecting information appear first, followed by the emergence of strategies to help condense ideas. Combining ideas across paragraphs and transforming

appears to be the most difficult skill. The research suggests that without instruction or intervention such skills evolve gradually and may not be achieved at all by some adults (Brown & Day, 1980, 1983; Hare & Borchardt, 1984; Winograd, 1984; Anderson & Hidi, 1989).

Garner (cited in Hidi & Anderson, 1986) proposed three stages in the development of summarization skills. In the first stage, the 'deficiency' stage, Garner suggests students perform like novices, in that information is selected on the basis of personal interest or intrigue and shows little or no relationship to what is textually important. In the second stage, referred to as the 'inefficiency' stage, students begin to employ strategies to help them select information. However these strategies are only mildly effective. The delete and copy strategy identified by Brown and Day (1980) is an example of such a strategy. The third stage is called the 'efficiency' stage. In this stage readers use text structure to select or eliminate information. Information is condensed by identifying redundant information or using super-ordinate terms. Topic sentences are invented and information is reorganised. These are all deliberate strategies employed by the reader. In short, the development of summarizing skills is consistent with the amount of text manipulation required.

Provision Of Instruction In Summarizing

The second part of the chapter reports on four issues derived from the research studies and teacher reference materials relevant to the provision of instruction in summarizing. The issues include: control and manipulation of the variables associated with strategy; text; task; learner; instructional

models; methods of evaluating students' summaries; and time allocation for summarizing.

Variables Involved in Summarizing Instruction

While summary writing skills have been identified as developmental, there are other variables which influence students' abilities to summarize. Awareness of the influence of other variables is important in order to provide instruction which best suits the needs of students. These variables are broadly referred to as strategy, text, task and learner variables.

Strategy Related Variables

Strategy related variables refer to procedures for summarizing. Bergin (1992) carried out a review of 18 research studies and teacher reference materials in order to identify and classify the procedures. This review involved 11 research studies and 7 teacher reference materials. From this review Bergin identified five groups of strategies. She classified these procedures as follows:

- 1 definition and/or questioning
- 2 one step
- 3 use of a prescribed structure
- 4 a set of rules
- 5 combined procedures

Definition and questioning.

This procedure is characterised by lack of instruction or explanation by the teacher and a relatively passive role of the student. It assumes the

student has a purpose for summarizing and knows how to go about summarizing. In this category students are usually asked to summarize by reading and answering questions or having been told what a summary is. Instructions involving definitions include "read the article and summarize the main points". Variations include substitution of main points for main ideas, key words or most important information. Instructions to students may be written or verbal.

The questioning aspect of the strategy usually occurs after students have read the given text. Questions relevant to the main ideas are asked and students either respond verbally or in writing. Below is an example of the questioning strategy (Reading to learn in the secondary school, 1987, p. 125):

1. The teacher needs to study the text carefully to:
 - select the main ideas and important information
 - write questions that will direct students to these main points
2. Students read silently through the given text to make notes to answer the questions.
3. In pairs or small groups students use the text to make notes to answer the questions.
4. Text books are put away and groups write long answers, ie. they use their own words in complete sentences. This is the student's summary.

This strategy also appears in basal reading schemes and published comprehension texts (Josephs, 1986). It assumes the student will connect answers to the main points in the story.

Another version of this approach involves the author of the text presenting a written summary for the student at the conclusion of a chapter. Presumably this is for the purpose of studying or recall and therefore is most commonly found in text books (Anderton, 1990).

One step.

This procedure is again characterised by its simplicity, however in this category a strategy is suggested to students. The most common strategy is that the student is told to write one phrase or sentence for each paragraph. For example the following guideline is provided to teachers (Reading K-7 teachers notes, 1983, p 81):

... give children time to read a paragraph silently then as a group summarize the passage. Before going on to the next paragraph, blackboard a phrase which captures the essence of the paragraph. When all the paragraphs have been treated in this way, the blackboard phrases should present a summary. (p. 81)

Another example of this strategy is suggested in a study carried out by Doctrow, Wittock and Marks (1978), in which students were asked to construct a sentence which captures the meaning of each paragraph in the given text. Doctrow, Wittock and Marks reported students were able to recall information more readily than those who were not given this instruction.

Prescribed writing structures.

In the third procedure the structure of the text is used as an aid to summarizing. Taylor (cited in Pressley et al., 1989) encouraged students to

use the headings and subheadings in a text to develop an outline of that text. Students were asked to identify main ideas and important information from the paragraphs under each heading or subheading (Taylor, 1982; Taylor & Beach, 1984).

A similar approach is to represent information visually (Armbruster & Anderson, 1980; Baumann, 1984; Berkowitz, 1986). Baumann (1984) used graphic metaphors such as an umbrella or a table top to demonstrate the relationship between main ideas and supporting details in a text. The efficiency of such approaches is uncertain, however as Taylor's study claimed students improved their recall of main ideas, yet Baumann found no difference in the recall of main ideas, but some improvement in the organization of students' summaries. Some publications suggest a similar graphic representation of main ideas and supporting details by suggesting students set work out by numbering main ideas and indenting supporting information (Archer & Gleason, 1989).

A more elaborate version of text structure was designed by Armbruster, Anderson and Ostertag (1989) in which students were taught to identify the problem/solution top level structure, take notes by using a visual problem/solution framework and write their summary from this framework. Using this approach they found students improved their comprehension of the text and their ability to write well organized summaries.

Set of rules.

The fourth category involves the application of a given set of rules. These procedures were used more often in research studies. The use of a set of rules was initially designed by Kitsch & Van Dijk (1978) and has been adapted by several other researchers in an attempt to provide information which was more student friendly (Day, 1980; Brown & Day, 1983; Bean & Steenwyk, 1984; Pressley et al., 1989; Hare & Borchardt, 1984; Bean, Singer, Sorter & Frazee, 1986; Bromley & McKeveny, 1986). The set of rules procedure includes strategies which enable students to: (a) delete information, namely information which is either unimportant and/or redundant; (b) condense information by collapsing and combining, and (c) transforming information by selecting or inferring topic sentences. This procedure has been found to improve the number of main ideas being identified (Bergin, 1992; Hare & Borchardt, 1984; Brown & Day, 1980), enhance recall (Doctrow, Wittrock & Marks, 1978; Taylor & Berkowitz, 1980), and help students learn content material (Bromley, 1985 cited in Bromely & McKeveny, 1986).

Combined approach procedures.

The fifth category is described as a combined approach to summarizing because this procedure involves strategies from more than one of the above mentioned groups (Hahn & Garner, 1985; Gambrell, Kapinus & Wilson, 1987; Rhinehart, Stahl & Ericson, 1986; Archer & Gleason, 1989; Hayes, 1989; Bergin, 1992). The range of procedures in this category is wide and

often involves many different instructional strategies and characteristics from a range of methodologies.

A number of research studies and teacher reference materials suggest using various strategies such as before, during and after summarizing strategies (Bergin, 1992; Archer & Gleason, 1989; Hayes 1989). Such procedures involve the use of checklists. Bergin (1992) taught year six students to summarize using a Combined Approach to Teaching Summarizing (CATS procedure). This involved five modules of summarizing activities, at the completion of which students had a checklist process to follow when independently summarizing. The checklist suggested 'before' summarizing strategies in which students activated their own prior knowledge by predicting content and the text's structure. 'During' summarizing strategies included using Brown and Day's set of rules. 'After' summarizing strategies related to self checking for understanding, logical and clear links between one idea and another, use of abbreviations and proof reading for spelling and grammar.

Archer and Gleason (1989) used a similar idea in their procedure called RCRC. In this procedure students 'warm up' by predicting content from pictures and headings. This is followed by reading, covering, reciting and checking, prior to writing. They also suggested self questioning as a means of checking understanding whilst reading, followed by proof reading as an after summarizing strategy.

Hayes (1989) suggested a Guided Reading and Summarizing Procedure. In this procedure teachers prepare students for the lesson by

establishing the purpose for summarizing and the purpose for reading a set article. Secondly, students were taught strategies for recalling. This included reading, recollection, re-reading and adding pertinent information which was missed on the first reading. Thirdly, students were taught to group information in terms of categories, headings, and supporting details. Finally, grouped details were converted into a prose summary.

K-W-L Plus is another combined procedure suggested by Carr and Ogle (1987). This procedure builds on what the learner knows about the topic. Students were given a piece of paper divided into three columns. In the first column students brainstormed what they already knew about the topic, prior to reading. In the second column students formulated questions based on what else they wanted to know about the topic. After reading students attempted to answer their own questions. The answers to the questions were reordered, much the same as a graphic organizer, to form a summary. Carr and Ogle claim this procedure helps students with the most difficult aspect of summarizing that is, selection and organization of relevant information. It also allows for students to construct their own views about the meaning without influence from adult/experts.

Gambrell, Kipinus and Wilson (1987) used mental imagery as a strategy for summarizing. Students discussed a 'good summary', prior to summarizing and as they read they were encouraged to make symbols or notes in the margin of the text related to the information associated with each paragraph. After they have made their annotations, students selected

a topic outline and used their margin notes and symbols to create a summary.

Table 5
Summarizing Strategies Suggested by Research Studies and Teacher Reference Material.

Definition & questioning	Given a definition of a summary Given questions to guide inquiry Given an expert's summary
One step	Identify one idea per paragraph
Prescribed structures	Extract according to graphic outlines Extract using a graphic metaphor Use of a given writing framework Extract using top level structure Extract using a concept map
Set of rules	1. Identify purpose Delete trivia and redundant information Combine / condense lists/ events Select a topic sentence 2. Recognize a 'good' summary Delete unnecessary information Collapse lists/ events Use a topic sentence Integrate information Polish summary Compare with an expert's
Combined approach procedures	1. Activate known information Formulate questions Search for answers 2. Establish summarizing context Read & Brainstorm recall Re-read to add/ delete information Discuss an appropriate writing plan- Classify and organize information into a writing plan 3. Skim and predict content Read, cover, recite, check Identify topic sentence - supporting information Identify a 'good' summary Read and draw symbols Make an outline from notes Use a suitable writing framework 4. Identify key words related to topic Classify words Identify purpose for summarizing Classify information in text with previous categories. Write summary from notes

Other combined approaches to summarizing include combining the use of four rules with text structure identification (Rhinehart et al., 1986; Hayes, 1989), combining the use of four rules with self-questioning (Casazza, 1993) and Palincsar's Reciprocal Teaching model (1984). This section has outlined the range and scope of procedures used in research studies and teacher reference materials, Table 5 outlines these procedures and their characteristics.

Text Related Variables.

Text related variables refer to the nature of the original text. That is, its style and structure, language complexity, length, and whether the original text is absent or present when students are writing their summaries.

As summarizing is a task commonly associated with studying and learning in the content areas, usually students are asked to summarize informational texts. Generally students find informational texts more difficult to summarize. This is largely the result of students being less familiar and experienced with the structure and content of the text (Hidi & Anderson, 1986; Pincus, Geller & Stover, 1986; Armbruster, Anderson & Ostertag, 1989). This factor is further complicated by the variety of top level structures associated with informational texts as opposed to the more familiar, sequential nature of narrative texts. Armbruster et al. (1989) describe five top level structures for informational texts as: description; sequence; cause and effect; compare and contrast; and problem/solution. They found that comparison and contrast top level structures were easier to

summarize than others and, therefore, recommended the use of these texts when introducing summarizing.

A review of the types of texts used in research studies revealed most studies used informational text types. Comparative studies have looked at the difference between students' abilities to summarize narrative and informational material and these suggest students find narrative text structures easier to summarize (Spiro & Taylor, 1980).

Research on language complexity within texts refers to the vocabulary, sentence structure and complexity of ideas being presented in a text. The processing load for a reader is increased by texts which contain: low frequency vocabulary; lexically dense and elaborate sentence structure; vague organizational structure; and contain abstract or unfamiliar concepts. Interestingly, Brown and Day (1983) found that as texts increased in difficulty and length, even older and more experienced readers reverted to summarizing using a linear, paragraph by paragraph approach. In the literature, only two studies were concerned enough about the text's complexity to determine the readability levels of the original texts (Taylor, 1986; Brown & Smiley, 1978). In contrast, most of the other studies tended to choose texts which were aimed at the target groups. For example if the subjects were in year four the text was selected at year four readability level (Winograd, 1984).

Another text related condition is the length of the original text. Hidi and Anderson (1986) suggest shorter paragraphs are easier to summarize because they involve the selection of one or two ideas. In contrast longer

passages increase the processing load and students have to integrate a number of deliberate strategies in order to select, condense and transform information. In the research studies reviewed as part of this investigation, the length of the original text varied from 200 words (Hahn & Garner, 1985) through to 2500 pages (Taylor & Beach, 1984). However, this variation is related to the age of the students in the particular studies. In most studies the original text is between 200-500 words (Taylor, 1986; Winograd, 1984; Brown, Smiley & Day, 1978; Armbruster, Anderson and Ostertag, 1989).

A final text related variable involves the absence or presence of the original text during the act of summarizing. Hidi and Anderson (1986) suggest a different set of cognitive operations are required when the original text is present. For example, when students have access to the original text they are able to re-read and scan for information, whereas when the text is absent the writer must rely on memory. In this regard the absence of the text during summarizing places additional burdens on the processing load.

Hidi (cited in Hidi and Anderson, 1986) conducted a study on the effects of the original text being absent and present during summarizing. She found that students who had the text removed were able to recall more information seven days after summarizing, that their summaries showed greater deviation from the original text and they were more likely to combine information than students who had the text present during summarizing. She concluded that students who had the text removed were more actively engaged in processing and thus their long term retention was better than if the text was present.

In reviewing the literature, most studies allowed students to have the text present during summarizing. This was particularly the case when students were given training in summarization strategies (Brown & Day, 1983; Palincsar, 1984; Hare & Borchardt, 1984 ; Bean, Singer, Sorter & Frazer, 1986; Golden, Haslett & Gaunt; 1988). The main text related variables are summarized in Table 6.

Table 6
Text Related Variables Involved in Summarizing

Structure	Narrative Informational
Familiarity	Structure Content
Structure for extracting information	Text's structure Top level structure Writing frameworks
Complexity of original text	Readability level Year level appropriateness Presence of original text Length - 1 paragraph - 200 words - 300 words - 400 words - 500 words - 1000 words - 1500 words
Length of summary	20 words 40 words 60 words paragraphs

Task Related Variables

Task related variables refers to the procedural aspects of the summarizing task. This includes identifying the type of summary, purposes for summarizing and stipulating the summary length. The summary type and purpose were discussed earlier. In general, students find it easier to

complete writer based summaries than reader based summaries because they can pay less attention to writing style.

Length of summary

A number of studies stipulated the expected length of the summary in terms of the number of words or the number of sentences (Brown & Day, 1982, 1983; Brown Day & Jones, 1983; Winograd, 1984). The number of words ranged from 20 -60 and the number of sentences ranged from 1-6. The summaries were described as constrained and unconstrained, with the constrained summary being limited to a number of words or sentences. The effect of constrained summaries on students' abilities to summarize is unknown at this point in time.

Learner Related Variables

Learner related variables refers to: student's knowledge of the content, and experience or familiarity with summarizing; their interest or motivation; their perceptions of themselves as readers and writers; and their reading and writing skills. Students are often asked to summarize in order to read and learn, therefore, often the content is also unfamiliar. However, to create understanding it is important to relate new knowledge to what is already known. In this regard some studies have reported success in activating students' background knowledge prior to reading (Bransford, Stein, Shelton & Owings, 1980; Ambruster and Brown, 1984). This activation serves two purposes. Firstly, the use of a reader's existing knowledge allows him/her to predict the story content and vocabulary and reject or confirm his/her predictions about the content of the text. Secondly,

background knowledge helps make new material more meaningful and memorable as it is related to what is known.

Students' experiences with summarizing and their reading and writing abilities are also variables which teachers need to be aware of when asking students to summarize. As indicated by Garner's summarizing stages, little or no experience with summarizing will lead to students employing ineffective strategies. In addition, the task demands of summarizing may be overwhelming if students are still coping with decoding. Likewise, reading and writing skills will need to be considered in selecting appropriate texts to match students' abilities. These learner variables will have important ramifications in that teachers may need to control variables such as length of the text or the content in an effort to further develop summarizing skills.

Instructional Models in Summarizing

In addition to describing various procedures for summarizing, the literature appears to have three distinct theoretical perspective's. These perspectives include: metacognitive instruction; direct instruction; and collaborative and co-operative instruction. This division is some what arbitrary because whilst some studies claim to be driven by only one theoretical perspective, others share or borrow characteristics from each type of instruction. In this regard, this study acknowledges the addition of a fourth theoretical perspectives being a Combined Approach to summarizing.

Metacognitive Instruction

Metacognition refers to knowing what skills and knowledge are needed to perform a task and actively engaging those skills and knowledge in order to learn. In addition metacognition involves self monitoring of understanding in order to employ compensatory strategies if needed.

Metacognitive instruction refers to instruction which involves students taking 'deliberate conscious control over their own thinking' (Flavell, 1976). This includes increasing a student's awareness about what skills and resources are needed to perform a task effectively and how to monitor aspects of the task by employing self regulatory strategies such as checking, planning, evaluating and remediating (Brown & Baker, 1984).

Translated into instructional terms metacognitive instruction requires teachers to recognise what learner characteristics may influence the planned activity. In addition, teachers need to make explicit the strategies needed to perform a given task, the conditions of the text, and develop an awareness of the task parameters. Research studies and teacher reference materials which claim to be based on a metacognitive perspective are characterized by the following :

- explicit and clear instructions which include what it is that is to be achieved and with what skills and knowledge, when and where to apply the skills and knowledge, and understanding why particular skills and knowledge are more or less appropriate;

- expert modeling of the appropriate task including specific behaviours and strategies to bring into play when comprehension is lost;
- opportunities to perform the task with an 'expert' providing regular and informative positive feedback in the form of encouragement and advice;
- instruction which proceeds logically. For example working from known skills, strategies, and content to new ones, or beginning with shorter texts and proceeding to longer texts;
- self monitoring of understanding and the employment of effective strategies;
- gradual release of responsibility from the 'expert' to the learner.

Whilst metacognitive skills are believed to develop slowly and appear later, a number of studies have reported success in adopting metacognitive instruction for teaching summarizing (Brown, Campione & Day, 1981; Brown & Day, 1983; Garner, 1984; Hare & Borchardt, 1984).

Day (1980) trained junior college students to check their application and use of six rules. Training was administered using four instructional conditions. The first group were instructed using self management. That is, students were given encouragement to write a good summary in order to capture the main ideas and dispense with trivia, but were given no rules. A second group were given explicit instruction and modeling in the use of the rules. The third group received rules plus self management strategies such

as a checklist. This meant these students received instruction from both group one and two, but the students were left to integrate the information for themselves. The fourth group received the rules plus explicit training on control of these rules. This involved modeling of self checking strategies such as 'Do I have a topic sentence for each paragraph? Is all trivial information removed? and so on.

Results of Day's study indicated that all students performed better as there was an increase in the use of rules following training. However, the effectiveness with which these rules could be applied without training was affected by ability. This study found less able students benefited more from explicit training. Without explicit training these students were not able to integrate rules and self management strategies. Average students benefited from all the training procedures and the more able students did not require explicit instruction. The results of this study suggest lower ability students require more explicit instruction.

Palincsar (1984) used the reciprocal teaching model to teach students to comprehend informational texts. The reciprocal teaching model involves extensive modeling and practice in: (a) formulating questions about the main ideas of the text; (b) summarizing; (c) prediction or hypothesising about what will occur in the text; and (d) clarification and discussion about difficult parts of the text. In this study students were given the opportunity to discuss reasons for texts being difficult to understand, followed by 20 days of 30 minutes of instruction and practice in the four activities, and

corrective feedback. Finally, students identified useful strategies for school related tasks.

Palincsar found there was an improved ability to answer comprehension questions and a greater success in implementing summarization rules. In particular there was an increased awareness of main ideas and the ability to extract topic sentences with significant gains in the ability to identify material about which teachers ask questions.

The success of metacognitive instructional techniques is based on training which generalizes skills so that they may be applied to a variety of situations. In contrast, training students in specific skills can often isolate skills from the whole task to the extent that students may not relate the specific skills to the whole task. This in turn may influence a student's ability to recognise other situations in which the strategies can be applied. Metacognitive instruction aims to train students to consciously recognise the versatility of a skill or strategy so that it can be generalised and applied to appropriate situations. In short, metacognitive instruction should provide students with the knowledge, skills and monitoring strategies necessary to enable them to consciously monitor and regulate their own summarizing.

Direct Instruction

According to Hare and Borchardt (1984) direct instruction is 'having academic focus, academically engaged time, controlled practice, all of which can be linked to academic achievement and goals'.

In instructional terms direct instruction refers specifically to breaking up a whole task into smaller and more manageable components. Students

work at one component at a time. Once mastery is attained in the first component, the next aspect of the whole task is introduced, so that eventually the student completes the whole task.

Research studies and teacher reference materials which claim to be direct instruction models are characterized by:

- a prerequisite to the instructional design is an explicit outline of the known components of the task, for example Brown and Days (1983) rules for summarizing.
- a clear sequence of lessons dealing with each component of the summarizing task. This should proceed from the simple to the complex.
- teacher explanation and modeling of task specific behaviours
- provision of regular informative feedback
- mastery of ordered components governing progression
- an instructional design in which responsibility for task completion is gradually relinquished from the teacher to the learner.

The teaching strategy may be either deductive or inductive by nature. Deductive strategies proceed from general rules and deduce specific steps. Inductive strategies proceed from specific rules and induce general rules.

Several studies in summarization instruction utilise direct instruction techniques which activate students' prior knowledge about both content and the way texts are constructed. Taylor (1982) and Taylor and Beach (1984) successfully taught students to use format cues such as headings and sub-

headings as indicators of text structure. Students used the original text structure to predict content and vocabulary. This was followed by reading the text to confirm predictions and make amendments to main ideas selected.

Armbruster and Anderson (1980) and Berkowitz (1986) used a similar approach. Students were taught to use a visual representation of a text's organization to recall important information. This approach was particularly useful when summarizing texts without headings.

Bartlett (1978) and Armbruster, Anderson and Ostertag (1989) successfully taught students to identify and recognize top level structures such as description, sequence, problem-solution, and cause and effect. This approach was particularly useful because it provided students with a framework for extracting (reading) and organizing (writing) information.

Hare and Borhardt (1984) tested the effects of deductive and inductive direct instruction in summarizing on eighty-four college students. They found no significant difference between the type of direct instruction. However, the direct instruction groups performed significantly better in terms of their use of rules than the control group who participated in pre and post tests but received no instruction. These results were found to be durable two weeks after instruction had ceased.

The significance of direct instruction lies in the breakdown of a process into smaller components or skills. The use of this approach which involves explicit modeling, group and individual practice of these skills as they build up to the whole task is reported to be successful particularly with less able

students (Brown, Campione & Barclay, 1979). This is most likely a consequence of the task demands being made more manageable and students experiencing success as their skills build up to the eventual whole task. One disadvantage of this instructional approach is that sub-skills may be isolated to the point whereby students are not able to link them to the whole task. It may also be difficult for students to understand how skills lessons relate to the more integrated tasks of the curriculum areas.

Collaborative and Co-operative Instruction.

Collaborative and co-operative learning theory is based on the fact that natural learning is a communal activity which takes place when students observe, engage and interact with the expert as they carry out the task at hand.

In applying collaborative and co-operative learning to the classroom it is important to consider Vygotsky's (1978) theory of learning. Vygotsky claims that knowledge is acquired unconsciously and automatically followed by a gradual increase in the active conscious control of that knowledge. Vygotsky suggests that language is acquired through modeling, providing practice and giving feedback. Initially, this means the expert is responsible for the completion of the task, while the novice observes. This is followed by a gradual increase in participation from the observer with support from the expert until such time as the task is performed by the novice independently from the expert. This second phase is referred to as the "metacognitive aspect of performance. Renshaw (1990) refers to this as 'cultural apprenticeship'.

This 'cultural apprenticeship' suggests that students do not simply learn from others but rather through their interactions they begin to internalize and transform what is learned into knowledge. It is this internalization and transformation of knowledge and experiences that builds up a student's tools for thinking and problem solving (Renshaw, 1990).

In applying collaborative and co-operative learning to the classroom, Vygotsky made the distinction between 'spontaneous concepts' such as language acquisition, in which time and practice are not controlled, and 'non-spontaneous concepts', such as mathematics and science. Vygotsky warned against simply delivering knowledge about non-spontaneous concepts and suggested teachers need to provide or create a 'zone of proximal development'. Renshaw (1990) refers to this as a zone of growth.

This zone is the point at which the spontaneous concepts are mixed with the non-spontaneous concepts in order to gain knowledge, skills and strategies which could be internalized and transformed. In this regard, Vygotsky suggests non-spontaneous concepts develop down through the spontaneous concepts and the spontaneous concepts develop up through the non-spontaneous concepts, in a form of cultural interchange. Whilst lacking personal meaning, non-spontaneous concepts are useful for organizing thinking. On the other hand, the spontaneous concepts are meaningful but not particularly useful for developing knowledge outside of oneself. Collaborative and co-operative learning situations provide the opportunity

for non-spontaneous concepts to be used in conjunction with spontaneous concepts which in turn develop thinking and problem solving skills.

Research studies and instructional procedures which claim to be collaborative and co-operative by nature are characterized by the following attributes:

- explicit attention is paid to the development of interpersonal skills such as small sharing, leadership, roles and responsibility, decision making, conflict/ resolution strategies.
- group dependence because of goal similarity.
- resource interdependence
- positive interdependence in which all individuals have a role and /or responsibility to participate in order for the group to complete the task.
- face to face interaction which maximises the opportunity to question, discuss, justify and learn from one another.
- individual accountability and personal responsibility for the achievement of the groups goals.
- team recognition as the end result is assessed as an entity
- self reflection and evaluation to monitor progress and establish trust.

As indicated earlier, many of the research studies borrow characteristics from all the instructional models. For this reason it is

difficult to find research studies which use collaborative and co-operative methods alone.

One study which claims to have investigated the effect of collaborative/co-operative instruction on summarizing was conducted by Stevens et al.(1989). Stevens took 486 third and fourth grade students and exposed them to three instructional treatments on strategies for identifying main ideas. The treatments included cooperative learning with direct instruction, direct instruction alone and a traditionally instructed control group. The direct instruction with co-operative learning strategies involved teacher direct instruction preceding teams of four or five who practised material presented by the teacher. Teams were involved in doing practical activities independently but drilling each other for recall, discussing answers and reaching a consensus and assessing each other to ensure each team member was successful. Students scores on their ability to learn skills and content from each lesson were combined to form a team score.

The results of this study indicated that both the direct instruction and the co-operative direct instruction groups performed better in terms of identifying main ideas than the traditional control group. Students who used co-operative learning strategies plus direct instruction performed significantly better in terms of the strategies they used. The researchers go on to explain that when students are given a structured way to collaborate they are more likely to remain on task and engaged. Subsequently, when students provide elaborate explanations to peers they are required to reflect upon the information or strategies learned and to make generalizations

about the knowledge or skills. This increases both the depth of processing and the information presented. It was concluded that the effect of co-operative learning had a measurable impact on students' learning.

Collaborative and co-operative instructional models have been found to achieve greater academic success than other instructional methods because students have a more positive attitude to school, improved self esteem and improved relations with others (Stevens et al., 1989; Slavin, 1983).

Advocates of this learning theory suggest that giving incentives and working as a group enhances performance. Risk of failure is reduced and 'on task' behaviours are more likely to occur because peers share zones of proximal development. The whole group responsibility makes the task more manageable. It reduces the "risk" of failure and increases self esteem. In addition, this type of instruction utilises peer pressure in a positive way because every student has a role to play and is therefore dependent and responsible.

Combined Approaches to Teaching Summarization

As indicated previously, some studies do not have characteristics predominantly influenced by one of the above methodologies. Instead they share or borrow characteristics from other previously described methodologies. In this study these are described as Combined Approaches.

Bergin (1992) designed a procedure for teaching students to summarize which combined metacognitive and direct instruction with collaborative and co-operative learning. She taught 25 year six students to summarize using a 6 week intervention program. The intervention program developed

summarizing skills using five modules. Module one introduced students to summarizing by defining and identifying purposes for summarizing. Modules two-four developed strategies for students to use before, during and after summarizing. Module five provided students with the opportunity to practice the whole procedure in a guided and independent practice situation. The collaborative and co-operative nature of this intervention involved students collaboratively defining a summary by brainstorming definitions and eliciting common elements to describe a summary. Students brainstormed answers to questions relevant to the purpose for and uses of writing summaries. The development of before, during after strategies involved small group work in which students had specific roles and responsibilities for carrying out summarizing tasks. The five modules concluded with both personal and whole class evaluation and reflections in the form of a personal learning journal and a class journal. Practice at writing summaries was achieved by small groups and progressed to pairs and finally individual responsibility for summary writing. Evaluation and feedback were regularly given to students at the start of each lesson.

Table 7 outlines the main characteristics of each of the three instructional models described in the previous section. A combined approach to summarizing is not described as its characteristics are unique to each research project which combines characteristics. The combinations of characteristics are almost limitless and dependent on various purposes and control of variables.

Table 7

Instructional Models Suggested by Research Studies and Teacher ReferenceMaterial

Metacognitive Instruction	clear explicit instruction on strategies modeling of strategies by an expert modeling of compensatory strategies opportunity to practice whole process each lesson regular and informative feedback logical instructional design self monitoring/ checklists gradual move from dependent to independent generalizability of strategies
Direct instruction	academic focus explicit instruction accumulative skill acquisition deductive instruction (general-specific) inductive instruction (specific to general) checklist
Collaborative / co-operative instruction	explicit instruction teacher directed instruction team practice goal similarity resource interdependence role interdependence face to face interaction individual accountability self reflection / evaluation team recognition

Methods of Evaluating Students' Summaries

An integral part of any form of instruction is evaluation. Effective delivery of the curriculum is cyclic in that future teaching is often based on the degree to which student outcomes match the intended teaching objectives. Therefore the form of assessment and evaluation needs to clearly demonstrate the scope of students' skills and knowledge.

In 1992, Bergin conducted a review of the relevant literature and found the assessment practices with respect to student summary writing either focussed on the product and/or on the process. Generally, the summary product refers to the content or more specifically the amount and type of information presented in the summary. Process focussed evaluation refers to the procedures and strategies students engage in as they attempt to select, condense and transform information from a text.

Product Evaluation

Product evaluation refers to the content or type of information contained in a student's summary. Most studies which evaluated the summary product used a mechanism for rating ideas. That is, the ideas in a passage were rated by experts or adult readers. Students were awarded points for the inclusion of information the experts had deemed very important and important. In other words students' summaries were graded according to their ability to replicate an expert's summary (Garner, 1984; Hare & Borchardt, 1984).

Hahn and Garner (1985) suggested an 'efficiency rating' for students' summaries. The efficiency rating is achieved by asking experts to rate each sentence in a given passage as very important, important and not important. A score of three was assigned to very important ideas. The total number of very important ideas as indicated by the experts is added to the total number mentioned by the student. This becomes the numerator and the denominator is the total number of words in the students summary. The higher the rating the better the summary.

The emphasis on the 'expert's' choice of main ideas being the only method of rating ideas alienates the student from the purpose. The 'expert's' choice of important information may not reflect the original purpose for summarizing. The purpose dictates the selection of main ideas. Presumably an expert would not need as much of the same type of information as a novice. Secondly, relying on an expert's decision to include or exclude certain information suggests that the information gleaned from any one reading of a text will remain consistent.

Process Evaluation

Process refers to the student's ability to process information. That is, what students do when they select and record certain information. This generally relates to rules such as those suggested by Day (1980) in which students select, condense or combine and transform information. Evidence of these processes are apparent when students copy information verbatim, condense, combine or reorganize ideas and or make inferences based on the information in the text. In this regard summaries are compared by their resemblance or not to the original text (Kintsch & Van Dijk, 1978; Brown, Day & Jones, 1983; Winograd, 1984; Garner, Belcher, Winfield & Smith, 1985).

Evidence of the process being evaluated appears in Brown and Day's (1983) study. In this study Brown and Day wrote texts to help students apply a given set of rules. The rules included: deletion of trivia; deletion of redundant information; generalization of lists; topic sentence selection; and

invention. Students' summaries were collected and marked according to their abilities to apply the appropriate rule to the information in the text.

Integrated Product and Process Evaluation

Other research studies integrated both process and product evaluation methods. For example in Bergin's (1992) study, students pre and post test summaries were marked according to both product and process and the total number of words. In terms of product, each sentence in students' summaries were analysed according to the number of very important, important and unimportant ideas present in the summaries as compared to those suggested by eight experts. In terms of process, each sentence was analysed according to whether or not the phrase was copied verbatim, the sentences represented more than one main idea and supporting idea, and if sentences suggested an inference.

Coding Evaluation

Golden, Haslett and Garnett (1988) developed a slightly different approach to evaluating summaries in their study. The main purpose of their study was to develop a data driven model for analysing expository texts based on text organization and semantic content. Golden et al, developed a coding system which involved the superstructure (text organization) and macrostructure (semantic content) level. In the superstructure students gained one point each for stating the orientation of the original text and providing the context or background information about the topic. If students identified the top-level structure they were awarded five points. Inclusion of main ideas scored two points with one point for

each supporting facts. Finally, if students acknowledged the theme they were awarded an extra point. The researchers claim their system of coding essays provided teachers with the opportunity to probe deeper into student's strengths and weakness, and it allowed teachers to assess qualitative differences between students' essays.

There were a number of less common methods of evaluating students' summaries. Sometimes these were used on their own but generally these methods were used in conjunction with either product or process methods. Some studies used a quiz or multiple choice test to determine students' abilities to identify main ideas (Stevens et al., 1989; Bean, Singer, Sorter, Frazee, 1986). Other studies used the brevity of the summary or the number of words as an indicator of student's ability to condense (Bergin, 1992; Taylor, 1986). Another method of evaluating summaries was either individual or whole class learning journals in which students recorded the strategies they used whilst summarizing (Bergin, 1992). The use of self checking or checklists was quite a popular tool for students to use as they practised summarizing (Archer & Gleason, 1989). A modified version of self checking appears in the form of self questioning (Casazza, 1993; Palincsar, 1984).

While the above methods of evaluating summaries tended to appear in the form of a pretest or post test, other forms of evaluation took place during practice and instruction. The forms of evaluation used whilst summarizing represent the type of feedback students received. Feedback reported during lessons tended to be verbal in the form of advice or encouragement. Some

studies used peers or group to advise or evaluate (Bergin, 1992; Stevens 1989). Feedback after the lesson was usually given in the form of grades or points, short commentaries and/or feedback from a checklist.

Table 8 summarizes the criteria for evaluating students summaries.

Table 8

Criteria For Evaluating Students Summaries As Suggested by Research Studies

Product focus	<ul style="list-style-type: none"> Included the same main ideas as an expert's main ideas supporting information inclusion of trivia Recall of content <ul style="list-style-type: none"> by answering quiz by answering questions
Process focus	<ul style="list-style-type: none"> Use of rules <ul style="list-style-type: none"> reproduction(copied verbatim) combination (ideas from 2 or more sentences) run on combinations (careless combinations) inventions/ inferences Writing Framework structure <ul style="list-style-type: none"> use of a given writing framework to extract ideas accuracy and clarity of details uses writing framework to organize information length and ability to condense use of own words Text's structure <ul style="list-style-type: none"> states orientation states context uses top level structure includes main ideas
Miscellaneous	<ul style="list-style-type: none"> number of words/ sentences abbreviations makes sense/ logical/sentence structure spelling neatness provide a checklist (self or peer checklist)

Frequency And Regularity Of Summarizing.

The extent to which summarizing is used in schools varies according to frequency and regularity and lesson time. Bromley & McKeveny (1986) suggest American schools currently enjoy more widespread use of summarizing than in the past, however it is not integral to the curricula. In contrast, British and European countries report summarization as being central to curricula and it is considered an important ingredient of a sound education. In the past, British schools claimed to use precis writing at least twice a week, beginning in year 3 through to year 9 (Squire & Applebee, 1969). In addition, British students receive instruction on the analysis of both narrative and informational texts, and precis writing traditionally provides a basis for teaching students to read and write (Squire, 1983).

Although the use and frequency of summarizing in Australian schools remains largely undocumented, Australia does appear to follow trends similar to the United States. In Western Australia, Bergin (1992) found social studies and reading syllabi recommended teaching summarization skills from as early as year 4, however there were no accompanying teaching guidelines to explain what summarization and note-taking involves nor how these skills can be developed. Recently, curriculum documents such as the First Steps Project (1992) have outlined a sequence for developing note-taking skills from pre-primary through to upper primary. However the regularity with which students experience the explicit teaching and practice of these skills is not documented.

One difficulty with trying to establish the frequency and regularity with which summarizing is carried relates to its application across various subject areas. Whilst the curriculum scope for using summarizing is wide, summarizing is a skill more commonly associated with 'reading to learn' or study skills, therefore it is more likely to dominate content areas such as Studies of Society and the Sciences (Taylor & Beach, 1984; Kintsch & Van Dijk, 1978; Bartlett, 1984; Hare & Borchardt, 1984; Winograd, 1984; Golden, Haslett & Gaunt, 1988; Bean, Singer, Sorter & Frazee, 1986; Brown & Day, 1983).

Length of Lesson and Subject Areas

The amount of time given to summarizing, in terms of actual lesson time is problematic because it is not necessarily within the control of the teacher/researcher. In addition to the influence of variables mentioned earlier, schools have external constraints such as timetables. Bean, Singer, Sorter and Frazer (1986) prescribed 10 minutes for reading, 25 minutes for applying a summarizing strategy and 15 minutes to write produce a written recall. Golden, Haslett & Gaunt (1988) gave their students unlimited time as the summary was to be completed as a homework task. Taylor & Beach (1984) used regular class time to complete the summary, the total time of which was not stated. Winograd's (1984) study asked students to summarize six articles over eight 40 minutes sessions. She allowed reading time, asked for a 60 word summary and tested students recall by a 5 item multiple choice questionnaire. Palincsar (1984) conducted 35 minute

sessions. Thus the research literature suggests the total time spent on summarizing ranges from 35 minutes to unlimited time.

According to Sjostrom and Hare (1984, cited in Mann & Volet, 1996) secondary school students experience difficulty with note taking or summarizing because of the lack of systematic instruction. Hill (1991) suggests many secondary teachers believe students should already know the skills for summarizing. Many content area and some primary school teachers, expect students to write essays and research assignments which implicitly assume students have the necessary skills to summarize effectively. Durkin (1979) investigated the provision of comprehension instruction in 24 elementary schools in years 3, 5 and 6. She observed teachers as they taught reading and social studies lessons and she concluded that less than one percent of the time was devoted to study skills instruction. Generally, teachers believed the social studies lesson was not the time to give instruction in reading.

Garner (1984) asked 12 teachers from kindergarten to year 12 to devise a summarization lesson and audio-tape the lesson. Her analysis of the taped lessons lead her to conclude that only 2 of the 12 teachers discussed more than 1 of the 5 summarization rules suggested by Brown and Day (1980). The remaining teachers provided instruction that emphasised words and facts. She concluded that summarization received 'meagre amounts of instruction'.

In addition, and most likely as a consequence of the lack of explicit teaching, students appear unaware of the use of summarizing as a tool for

learning from texts. Bean, Singer, Sorter and Frazee (1986) surveyed 58 average and above average tenth grade students on strategies for studying world history. Only two strategies were reported as useful, that of outlining and re-reading.

The time taken to provide instruction, practice and evaluation in summarizing also varies and appears to be influenced by the instructional purpose. For example, research studies in which the purpose was to identify summarizing strategies used by students, tended to ask students to summarize only once. Studies whose purpose was to provide students with instructional strategies or training procedures varied considerably. Brown and Day (1980) trained students every day for several days; Hare & Borchardt (1984) had three two hour sessions; Stevens et al. (1989) trained students for four days a week over four weeks; Taylor & Beach (1984) had one hour per week for seven weeks and Palincsar (1984) conducted twenty 35 minute sessions. In addition, where research studies were attempting to determine if summarizing skills were transferable, instruction and practice tended to stop with re testing 8 weeks after the last lesson (Palincsar, 1984). For this reason not a great deal is known about the endurance effects of training studies.

Researchers and educators alike believe summarizing is an essential communicative skill needed for gathering information. Some go as far as to say summarizing must be a naturally occurring ability because much of what we expect students to learn comes from texts and therefore summarization is a mechanism for managing one's learning from texts

(Brown & Smiley, 1978). This provides support for the idea that summarizing should be explicitly taught, however these research studies have had little immediate impact on classroom practice. Teachers' reference materials in Australia, such as syllabi, teacher's guides and commercial publications are only just beginning to provide guidelines for teaching students to write summaries (Beriter, Scadamatia, Brown, Anderson, Campione & Kitsch, 1989, cited in Anderson & Hidi, 1989). Table 9 summarizes the time and subject area variables effecting summarizing.

Table 9
Time and Subject Area Variables

Regularity/ frequency	-all the time - daily -regularly- 2 per week -regularly- 1 per week -regularly- 1 per fortnight -regularly 1 per month - regularly -1 per term (10 weeks) -regularly - per topic (6 weeks) - irregularly - 2/3 times in one week - irregularly - every day for one week - irregularly - once per week for four weeks - irregularly - once a week for seven weeks
Lesson time	- 35 minutes - 45 minutes
Curriculum area	Studies of Society (history, geography Sciences English - language, reading, writing, literature Across curriculum areas Library Projects/ assignments/ homework/ study

The Significance of the Literature Review to this Study.

Although much of the research about summarizing has been conducted under experimental conditions the literature review provided an inquiry framework for understanding the nature and provision of instruction in

summarizing. In addition, the summary tables at the conclusion of each section provided categories for potential data analysis. The information summarized in the tables provided a framework for the development of the research questions for this study. The inquiry framework shown in Figure 1 demonstrates how the research questions were generated from what is already known about the nature and provision of instruction.

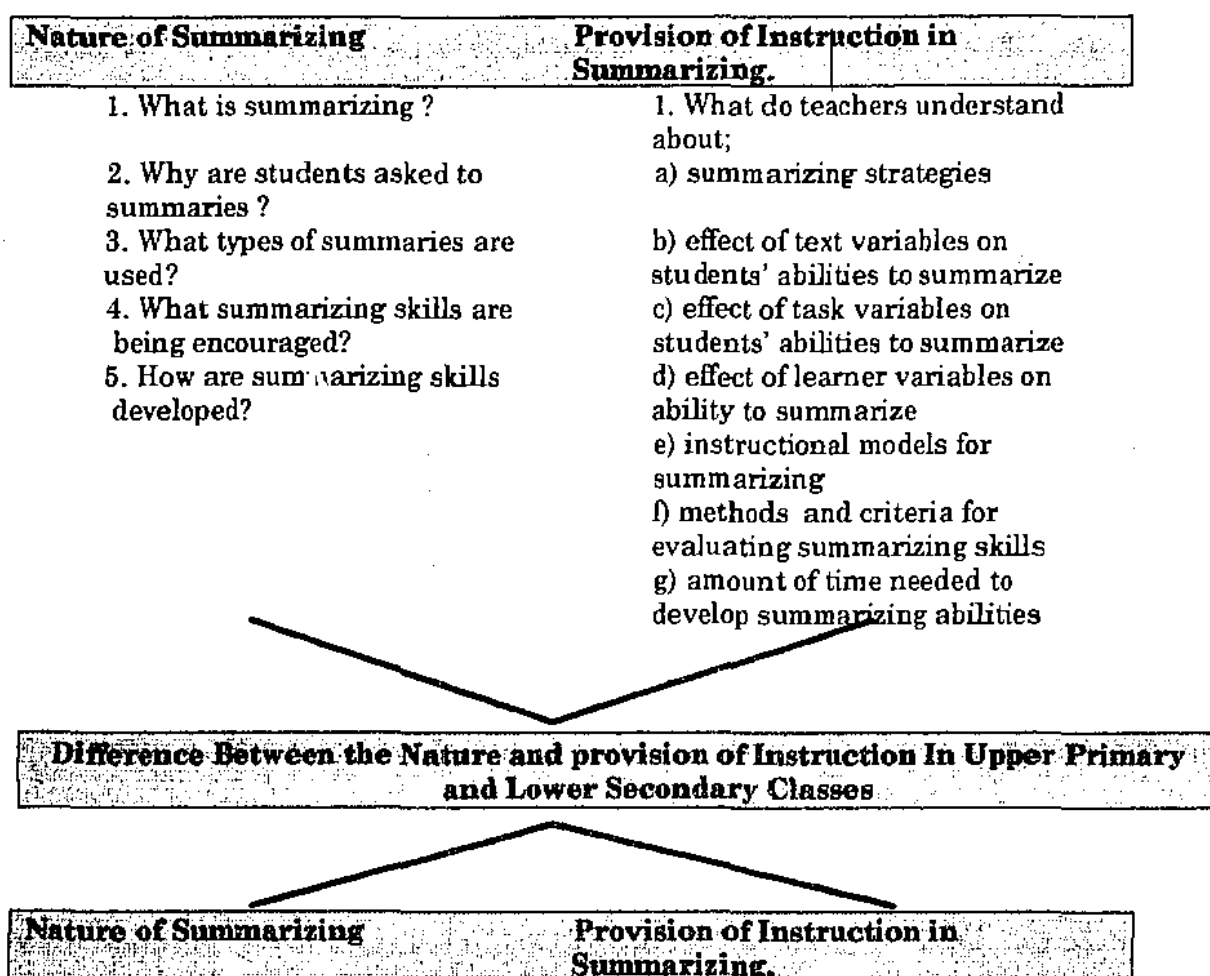


Figure 1. Inquiry Framework

From the inquiry framework three major research questions have been derived. They are as follows:

1. What is the nature of summarizing which takes place in upper primary and lower secondary school classrooms?
2. How are teachers providing instruction in summarizing in upper primary and lower secondary classrooms?
3. How does the nature of summarizing and the provision of instruction differ between the upper primary and lower secondary school classrooms?

Research Question One

The first research question sought to investigate the nature of summarizing in the upper primary and lower secondary classrooms. This literature review suggested the nature of summarizing involved identifying teachers' definitions of summarizing, their purposes for asking students to summarize, the types of summaries requested, and the types of summarizing skills being encouraged and developed.

Research Question Two

Research question two sought to investigate the extent to which instruction in summarizing is provided to upper primary and lower secondary students. The provision of instruction involves identifying teachers' understandings and knowledge about the influence of instructional variables such as procedures, texts, task and the learner, instructional models for teaching summarizing, methods and criteria for

evaluating students' summaries and their summaries and the time and place in which summarizing is carried out.

Research Question Three

Research question three sought to investigate the differences between upper primary and lower secondary school in terms of the nature and provision of instruction in summarizing.

CHAPTER THREE

METHODOLOGY

Introduction

Summarizing was chosen as a topic for investigation because it is a common but difficult task which students are asked to perform as evidence of their ability to learn from texts. Summarizing is used in a variety of situations for a variety of purposes in every day experiences, education and work place environments. Whilst past research studies suggest students find summarizing difficult because it is a complex, high order cognitive operation, there are also a number of variables related to procedures, texts and learners which impact on and influence a student's ability to summarize effectively. In this regard, teachers of summarizing skills need to be cognisant of and develop an awareness of the nature of summarizing as well as providing instruction and practice that is both explicit and strategic.

In the past, research studies have tended to investigate summarizing under experimental conditions. That is, summarizing has taken place in unnatural settings and removed from the realistic context in which summarizing usually takes place. Generally, research purposes have endeavoured to determine which strategies students use as they summarize, or they have attempted intervention in the form of manipulation and control of variables related to the strategies, task, text or learner. Nevertheless the results of these

research studies confirm the need for explicit and systematic instruction.

To date only a few studies have investigated the provision of instruction in summarizing and they indicate very little explicit instruction is provided (Durkin, 1979). In addition, the materials to which teachers turn to for advice on summarizing instruction, such as teachers' guides and syllabi, do not appear to suggest instruction that is explicit or systematic.

Therefore the purpose of this study was to investigate the nature and provision of instruction in summarizing. This study differs from previous studies because it aimed to describe qualitatively, the current nature and provision of instruction in summarizing as it occurs in the upper primary and lower secondary classroom. The researcher was not intervening but simply reporting on what occurred in various classrooms at a given point in time.

Design

In this study the collection of data involved both nonverbal and verbal techniques. The nonverbal techniques included analysis of the lesson plan from an administered 'ideal' summarizing lesson and samples of students' finished summaries. The verbal techniques included a structured interview following the administration of the 'ideal' lesson. Information from the three techniques were triangulated in order to construct case scenarios for each teacher.

The case scenarios describe a 'snap shot' of the nature and provision of instruction in summarizing in each teacher's classroom. The categories and themes that emerged from the descriptions in the case scenarios were also used to compare and analyse the nature and provision of instruction in summarizing in upper primary and lower secondary classes.

This study involves eleven participants, five secondary and six primary teachers. The basic design of the study is described in Figure 2.

<u>WEEK 1</u>	<u>WEEK 2</u>	<u>WEEK 3</u>	<u>WEEK 4</u>	<u>WEEK 5</u>
Teachers prepare an 'ideal' lesson	Teachers administer the 'ideal' lesson	Teachers evaluate students' summaries	Teachers attend a structured interview	Teachers are presented with case scenarios to member check and edit

FIGURE 2. Basic Design of Study

Qualitative Data Collection

Qualitative data collection methods include variations of participant observations, questionnaires, interviews and case studies.

Participant observation involves the researcher conducting observation in the natural classroom setting. Observation methods include interviews, checklists, anecdotal notes about what takes place and audio or video-taping. Observation allows the researcher to

observe roles, responses, interactions and influences from all participants. A disadvantage of classroom observation is the effect and presence of the researcher on the subjects, particularly if lessons are audio-taped or video-taped. A second disadvantage of this approach includes time. Observing or recording classroom activity requires the researcher to be present for significant periods of time in order to capture the unique nature and perspective of the classroom. The amount of time in one classroom impacts on the researcher's ability to gather data from a greater number of sources. Alternatively, increasing the number of participants results in researchers observing for less time over a greater number of classes. However, thinner data collected over a greater number of classes limits the quality of data collected in each case study site.

One advantage of participant observation is that the researcher has the opportunity to question participants' roles, responsibilities, feelings, knowledge and understanding about a given topic or situation. This provides richer, thicker data in comparison to the use of a greater number and range of participants where details may be obvious or evident in the given observation time.

Garner (1984) devised an approach to overcome some of the disadvantages of the researcher being present in the natural setting. Garner was investigating the likelihood of explicit summarization instruction being provided in classrooms. For this reason she used an 'ideal' lesson method. She asked twelve teachers to prepare an audio-

tape of an 'ideal' lesson. Audio-tapes were transcribed and coded for explicit instructions given to students.

This approach highlighted a number of advantages which made it particularly appropriate and suitable for this study and its participants. Firstly, it gave participating teachers the opportunity to consider what they knew to be effective instructional strategies in the context prescribed by the researcher. Knowing the focus of the inquiry allowed teachers to prepare to demonstrate what they believe is 'best practice'.

Secondly, because the 'ideal' lesson was not audio or video taped this provided teachers with a less intrusive and more natural environment which recognized influential variables such as teacher familiarity with students' prior knowledge, experiences, interests and abilities; time of day; school constraints; and other variables which influence a teacher's ability to provide effective instruction.

Thirdly, the time factor was minimised because each teacher controlled when and where the 'ideal' lesson took place. The lesson was able to take place quite naturally as part of the daily teaching routine with minimum affect on content, skills, time tabling constraints and work loads. In addition, the full time employment and part time student status of the researcher meant that she was not able to afford the time to sit in classes.

This study recognised the need to gather valid and reliable information from a variety of sources in order to identify, classify,

categorise and confirm interpretations. Garner's 'ideal' lesson model provided the opportunity for teachers to understand the nature of the inquiry whilst at the same time providing teachers with the freedom and flexibility to choose the most appropriate method of delivery to suit their personal and unique situation. That is, they could construct a lesson format that best suited their class, the curriculum, the school and their personal teaching style and philosophy. Therefore the 'ideal' lesson was adopted because this method appeared to offer the opportunity to collect data from teachers in realistic contexts.

Teachers were asked to plan, prepare, write up a lesson plan and administer an ideal lesson in which summary writing or summarizing instruction took place. Participants were asked to submit copies of their lesson plan. A lesson proforma was suggested but not compulsory for participants to follow. The proforma appears in Appendix III. Teachers were asked demographic details such as name, subject, topic/theme, year and number of students. The lesson plan included teachers aims or objectives, identification of students prior knowledge/skills if known, resources, lesson procedure/format and evaluation.

It was decided not to audio-tape lessons because this was considered unnatural and obtrusive. In order to effectively tape record lessons, teachers would be required to stay at prescribed distances from the tape recorder. The use of a radio microphone was also rejected as it would restrict movements and/or result in poor sound quality.

Whilst it might be argued that Fm radio microphones reduce this restriction, it was felt that any recording device worn by a teacher would inhibit responses and reactions as it would act as a constant reminder of being taped. However, this study recognized the need to confirm and clarify the researcher's interpretation of the nature and provision of instruction in summarizing in each participant's lesson. Therefore the use of questionnaires and interviews were considered.

Questionnaires can yield results from a large sample and can be conducted at the leisure of the participant. However, the success of questionnaires as a source of data, are dependent on the recipients completing and returning them. In addition, questionnaires are restricted by space. Questionnaires which are lengthy or take time to complete will influence the number of returns. Also space limits the type of responses made by participants therefore influencing the quantity and thickness of data (Gay, 1987). For this reason it was decided not to use a formal questionnaire.

Interviews can also provide more information and they provide the researcher with the opportunity to clarify his/her interpretations. As a consequence, interviews are often used to triangulate information gained from other sources or methods of data collection. However, they are time consuming and for this reason interviews are often used with a smaller group of participants. Disadvantages include confidentiality and the need to make interviewees feel comfortable in order to receive honest and accurate responses. As well, interviews can be risky as

they have the potential to provide information which the participant believes the researcher wants to hear (Ericsson & Simon, 1980)

Taking into account the advantages and disadvantages of both questionnaires and interviews this study combined the questionnaire and interview to form a structured interview. The structured interviews were conducted within a week of the actual lesson and interviews were audio-taped with the permission of the participant.

The interview allowed teachers to discuss any changes to the original lesson plan which may have occurred as a result of external variables. It gave participants the opportunity to debrief and reflect on the lesson in a manner which was quite natural and unthreatening. It allowed the researcher to confirm the nature of the summarizing task and the provision of instruction in summarizing. The audio tapes were transcribed to provide information for data analysis.

In addition, teachers were asked to provide copies of students' evaluated summaries. Teachers were asked to submit copies of students' summaries which reflected three ability groups. That is, samples of students' summaries which the teacher regarded as typical of the majority of their class, and samples of students' work which was below and above what they expected from their class. The collection and classification of students' summaries were designed to stimulate teacher's recall of the lesson.

Participants

The literature review suggested summarizing is a high order comprehension task with clear developmental trends (Winograd, 1984; Brown & Day, 1980; Garner, cited in Hidi and Anderson, 1986). Research also indicates many students do not reach the 'efficiency' stage until well into secondary school and college (Anderson & Hidi, 1989). For this reason students between 10 and 14 years were considered the target years where instruction and practice was most likely to occur. In addition, this phase of schooling signals the beginning of learning contexts in which students are expected to carry out reading/writing tasks independently as evidence of their ability to learn from texts. Therefore teachers of years 6,7,8 and 9 were approached.

The participants were self-selected through communication with district superintendents, principals, primary head teachers and heads of departments. The principals and heads of departments suggested the names of teachers interested in participating. The researcher contacted these teachers in person or by telephone followed by a letter of explanation and confirmation of the proposed time line for each participant (see Appendix I).

Four schools were successfully approached. The school descriptions included, government and independent schools, primary and K-12 schools, single sex and co-educational school settings and low and high school fee paying schools. All schools were located in the

Perth metropolitan area. A summary of the school descriptions appears in Table 10.

Table 10
Descriptions of Participating Schools

DESCRIPTION	SCHOOL 1	SCHOOL 2	SCHOOL 3	SCHOOL 4
government				
independent low fee				
independent high fee				
primary				
secondary				
K- year 12				
single sex school				
co-educational				

Teachers were told of the nature of the research and asked to prepare an 'ideal' lesson involving summarizing. This lesson was to be administered to their students in the second week of term 2. Eleven teachers agreed to participate in the study. Six teachers were from two metropolitan primary schools. One teacher was from an independent single sex, K-12 school and the other a government co-educational K-7 school. Three teachers taught year six (11 year olds) and three teachers taught year seven (12 year olds). One teacher was a teacher librarian.

Five teachers from three metropolitan secondary schools agreed to participate in the study. They represented the 13-14 year old group. As teachers in secondary schools teach across year levels and subject levels, the sample of teachers was a little more difficult to control, however all schools were independent K-12 schools. Three teachers were from a high fee single sex school and two teachers represented

two different low fee co-educational schools. One of the low fee schools was located in a low socio-economic area. All teachers taught both year 8 and year 9 students, however all lessons were conducted in year 8 classes. One teacher was a teacher librarian.

Table 11 summarizes the teacher participants.

Table 11
Descriptions of Teachers Involved in this Study

Description	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11
government											
independent low fee											
independent high fee											
primary											
secondary											
k year 12											
co-educational											
single sex											
teacher librarian											
year 6 teacher											
year 7 teacher											
year 8/9											

Instruments

The main instruments for this study were related to the collection and presentation of data. This involved a structured interview questionnaire and a case scenario writing framework.

Structured Interview.

The structured interview questions reflected information gained from the literature review. Essentially this represented an elaboration of the questions in the inquiry framework on page 79.

Interview questions relevant to the nature of the summarizing task included: identifying the teacher's definition of a summary; type

and characteristics of the required summary; the teacher's purpose for asking students to summarize; and awareness and development of summarizing skills.

Interview questions pertinent to the provision of instruction in summarizing included: identifying summarizing strategies; evidence of control over text, task, and learner related variables involved in the summarizing lesson; the instructional model; evaluation methods; and the regularity and frequency of the summarizing task.

The interview questionnaire appears in Appendix II. Initially it may appear disjointed because a number of questions provide data which relates to both the nature and provision of instruction in summarizing. For example, asking teachers how they evaluated a student's summary gives information related to their purpose, type of summary, awareness of summarizing skills and their development, awareness of the effect of variables, and evaluation methods.

Case Scenarios.

Case studies are defined as the study of an instance in action. They provide a narrative version of what is happening in a given situation. Guba and Lincoln (1982) suggest case studies are characterized by their natural setting, human instrument, tacit knowledge, qualitative methodology, purposive sampling, inductive data analysis and grounded theory. This study demonstrates similar characteristics in that, the data was gathered from the natural setting and context of 'real' schools and classrooms. This, in turn, involved

'real' teachers and students as the respondents to the question about the nature and provision of instruction in summarizing. The methods of collecting data were qualitative in that this study used the 'ideal' lesson, a structured interview, member checking, independent reader reviews and student's samples to build up an inquiry framework. The sample of teachers and schools was purposive in that this study looked specifically at summarizing instruction in years 6-9 and that classes were selected to represent equally year levels and subject disciplines. The data analysis was inductive and based on grounded theory in that the inquiry framework was conceived from the findings of the literature review which in turn influenced the data collection and interpretation methods. All of which were integrated and drawn together to form a description of the nature and provision of instruction in each teacher's case. This study refers to those descriptions as case scenarios.

The first section of each case scenario introduced the participant by describing the demographic details. For example, each teacher was given a pseudonym, then a description of the school and their class was given, followed by personal details about the teacher's qualifications and experience. The setting was concluded with details about the actual lesson such as subject, topic, theme, time and place.

Following the introduction was a description of the nature of summarizing specific to each teacher. Essentially each teacher defined summarizing, described their purposes for asking students to

summarize and the type of summary. Finally, the prior knowledge, skills and experiences of students described teacher's awareness and development of summarizing skills.

The final section of the case scenarios described the provision of instruction. In this section discussion centred around the description of the 'ideal' lesson, control of variables, instructional model, evaluation and time variable.

Reliability and Validity of Data Collection Methods

This study recognizes that in qualitative research, reliability and validity may be seen to be problematic because such studies use variables which are difficult to control. For example, qualitative studies usually involve natural settings, human instruments, and tacit knowledge. The ability to make conclusions, transfer and replicate findings are limited by the unique and individual nature of each setting in which the research is carried out. Finally, qualitative research is based on grounded theory which aims to catch moments in time in order to build up and report on what might be happening in reality. In this regard the information will not necessarily remain static. However, as discussed earlier, there are a number of methods for obtaining reliability and validity in qualitative research in order to ensure credibility and the likelihood of representing reality.

This study chose to use multiple data collection methods in an attempt to validate the reliability of what was said to be occurring in classrooms with regards to the nature and provision of instruction in

years 6-9 classrooms. Lincoln & Guba (1985) suggest that where a study relies on the perceptions and descriptions of one researcher, the study should look at establishing credibility, applicability, consistency and neutrality. Credibility, applicability, consistency and neutrality are established through the use of multiple data sources, documentation, triangulation of data, and member checking.

Firstly, this study chose to use three data collection methods. The use of an 'ideal' lesson plan, structured interview and samples of students' summaries meant that there was several opportunities for the same data to appear in different contexts. For example: the lesson plan outlined the teaching procedure for summarizing; the structured interview asked teachers to describe the 'ideal' lesson; and the students' samples provided working examples of the strategies students were engaged in during the lesson. This study used a table format to triangulate data. The vertical axis of the table represents the inquiry framework developed from the literature review. The horizontal axis represents the data collection methods used in the study. Appendix IV and V summarize the type of information gained from the data collection methods and the corresponding inquiry framework. The ability of findings to be evident in more than one context establishes both credibility and applicability describing what really went on in classrooms.

Secondly, teachers had the opportunity to edit and member check the descriptive case scenarios. This meant that any cross referencing,

interpretations and/or assumptions made by the researcher as she attempted to reconstruct the teacher's nature and provision of instruction in summarizing, could be deleted or altered if teachers deemed it not to be representative.

Consistency and neutrality refer to how valid and or reliable findings might be. In this study, the case scenario was the result of several progressive 'drafts' and opportunity for findings to be rechecked and matched. Initially draft one was the result of data gathered from the 'ideal' lesson. Following the structured interview draft two was formulated. This provided support, confirmation and 'richer' or 'thicker' descriptions. The students' samples submitted at the interviews added further confirmation. Finally, the teacher edit/check alleviated the potential misinterpretation and resulted in a final draft.

The question of neutrality was established by providing teachers with the opportunity to edit the final draft. Also the final draft of each case scenario was reviewed by with two independent readers. These readers acted as 'critical' friends in that they questioned and asked for justifications from the raw data , for assumptions and descriptions that the researcher had made.

Limitations of Methodology

As with most research studies, an attempt is made to design a methodology which will yield data which is both accurate and representative of the 'real' world in which the subject of the

investigation is carried out. However, this study acknowledges several limitations.

Firstly, difficulty in finding teachers to participate limited the range of teachers involved in this study, therefore the participant sample is purposive. For this reason, six of the participating teachers were from one K-12 school site. It was difficult to attract secondary and primary school teachers from a wide range of schools, hence there is only one primary teacher representative of the government schools sector.

Secondly, significant trust was placed on teachers to administer an 'ideal' lesson for summarizing and reflect on that lesson in an interview situation. This meant that the 'ideal' lesson might not be truly representative of how summarizing usually takes place in that particular teacher's classroom. In addition the structured interview questions may have signalled the type of information the researcher was looking for, rather than what actually occurred. However an attempt was made by the researcher to determine the degree to which the summarizing task was typical.

Thirdly, the administration of the 'ideal' lesson took place without observation on behalf of the researcher. This meant that much significant data relevant to the nature and provision of instruction in summarizing may have been missed. As the participating teachers went about their work they may not have remembered or been aware of some of the 'extra' activities, instructions and discussions taking

place. The structured interview was designed to overcome this limitation in that the questions acted as a prompt for refreshing teachers' memories, but again the questions may have also alerted teachers to the type of information the researcher was wanting to find.

Finally, the participating teachers prepared and administered only one lesson involving summarizing. Teachers were requested to plan a lesson in which summarizing was involved. They were not asked specifically to provide instruction or practice. This was left to the discretion of the individual teacher. In this regard, teachers may have simply chosen a lesson in which summarizing took place rather than summarizing instruction. Again, an attempt was made to determine prior skills and knowledge of students and proposed follow-up lesson in order to report on the provision of instruction in summarizing.

CHAPTER FOUR

Case Scenario One

Leonardo

Introduction

Leonardo teaches a year six class in an independent single sex school. The school is a high fee religious school and his class is one of two year six classes. The school is single stream from kindergarten to year five. Year six is an intake year and therefore approximately half of Leonardo's class were new to the school that year.

Leonardo's interview took place in his classroom and took approximately one hour. Students work samples had been photocopied and they included work samples from preliminary lessons as well as the actual 'ideal' lesson.

Leonardo's classroom had an overhead projector and teacher's desk at the front of the classroom. The desks were arranged in groups of four but located around the outskirts of the classroom so as to leave a large open space in the centre. This space was used for group discussion. The classroom had a number of banners carrying the message 'We are all learners'.

Leonardo has been teaching for 18 years. He has taught in government, independent and overseas schools. He has a Teacher's Training Certificate and a Bachelor of Education Degree. In addition to full time teaching, he conducts study skills seminars for secondary school students. He is passionate about his role and responsibility in teaching his students.

He believes children have different learning styles and that his role as a teacher is to present content and skills in ways that respect children's different learning styles. In particular, he said:

I want every damn teacher in the whole world to teach in the multiple intelligences way and appreciate the types of learners in the world and the way we learn and they are different. We learn visually, internally and externally. We learn auditory, speaking and listening, we learn kinestetically, we learn PO - print orientated We learn interactively, cooperatively, competitively and independently

The Nature of Summarizing

Leonardo described summarizing as selecting and extracting important information from unimportant information. He believed summarizing was something we do all the time both visually in things we see or experience and/or in the auditory mode. His definition of summarizing indicated an awareness of the active involvement of the summarizer. He said summarizing was:

Getting the guts of the information out - the main ideas. Do you understand it - do you know what the article is about. You could recall that topic or summarize what a person just spoke about - are you able to take out the key material.

Leonardo's definition, purposes and type of summary confirm a belief that summarizing was an integrated reading and writing activity.

Leonardo indicated he had three purposes for his lesson. Firstly, he wanted to develop strategies which helped students' comprehension. In particular, this involved procedures which facilitated the selection and extraction of important information. Students were encouraged to visualize by linking new information from the text with in-head knowledge through the use of the visual/analytical work sheet. Another procedure

which helped students comprehension involved identifying key words as the 'nouns or verbs'.

A second purpose indicated a writing perspective in the summarizing act because Leonardo expected students to produce a reader based summary from the visual/analytical writer based summary. He aimed to provide opportunities for writing skills to be developed in realistic and relevant situations. His insistence on the removal of the original text meant students had to rely on their own notes to transform extracted information into a reader-based summary.

Leonardo believed the development of the reader based summary tied together the reading and writing component of summarizing. He said:

Summarizing is children being able to break out the guts of it, the main points and then he able to expand it either verbally or in a written form. So naturally the next part they learn from this is they go into writing. The advantage of this method is that without you meaning it you took on paragraphs. What is a paragraph? How do we construct one? Paragraphs come in quite naturally because they take each section, we call that paragraphs, and they say I'll need something on that and that's another one, and they immediately begin it naturally.

In addition, Leonardo evaluated both the work sheet used for extracting information as well as the actual written summary. This suggested equal importance being placed on reading and writing aspects of summarizing.

Leonardo's third purpose was to promote reading to learn. He emphasized the need for students to be able to recall and use information extracted from texts as part of the whole process of learning. He said, 'they have got to be able to remember and you have to create to remember'. He feels there is a need to recall under pressure, such as in exam situations,

and he wants his students to be able to transfer, generalize and apply summarizing skills to different learning situations. The quote below sums up his view that summarizing is an integrated reading and writing task which facilitates reading to learn.

Summarizing is a life skill. I want them to see if they understand the process so that when they go out in the big world they transfer it. They are going to be needing it next year and in the years to come.

Leonardo developed summarization skills over a period of two terms. Prior to the 'ideal' lesson, Leonardo's students have been involved in deliberate and strategically developed lessons on visualization, key word instruction, association and mind mapping.

Visualization was carried out incidentally over approximately five lessons. Visualization involved Leonardo calling out 25 words. The students were given three seconds to record a symbol to remember each word. No words or letters of the alphabet were permitted. Following the completion of the list, each student had to turn to a partner to recite the list using only their symbols. Leonardo claimed this instruction prompted students to talk and think about visual learning which improved memory and recall. He said 'what you create you remember'.

He then spent one lesson instructing students on how to identify key words. This involved defining a key word as a noun or a verb followed by Leonardo modelling the selection of key words. Students, in groups of four, practised identifying key words in a number of small passages.

Following this lesson he trained his students in 'association'.

Association involved the use of a visual/analytical work sheet. The visual

/analytical work sheet was a blank page divided in half length ways. On the left side of the page the word 'visual' appeared and on the right side of the page the word 'analytical' appeared. As students read the text they were encouraged to draw a symbol which represented the meaning of each paragraph. When the students finished reading the text, they were encouraged to use the analytical side of the paper to record facts and words related to the symbols.

Leonardo felt the prerequisite skill of visualizing described above meant his students picked up the use of the visual/analytical sheets quickly and easily, so he then moved on to training his students to use mind mapping. This involved students being given a topic and brainstorming what they knew about that topic. Ideas were recorded on paper as they were thought of, with ideas being linked to one another as appropriate. The end result was similar to a concept map in which related ideas were grouped together usually by a common name or description.

Leonardo developed summarizing skills over a series of lessons in which mastery had to be attained before the 'next' skill was introduced. This process was built up over time with previous skills being practised as part of the process.

The Provision of Instruction In Summarizing

The 'ideal' lesson was a social studies lesson of 50 minutes duration. The title of the text was "Firewalkers of Fiji". This was an informational text one page in length. The article was chosen because it relates to high interest social studies topic which was Asian Studies.

In the first five minutes of the actual 'ideal' lesson students were given a blank piece of paper folded in half. They were instructed to record the title of the article at the top and in the left hand column the word 'visual' and in the right hand column the word 'analytical'. Following this students were instructed to read the article silently and after each paragraph record a symbol in the visual column and any key words or facts in the analytical column. This took students about fifteen minutes and at this point students were working on their own.

When students had completed their own visual and analytical sheet the original text was removed. Students were instructed to fold their paper in half and chose either the visual or analytical side to help them retell or recount information to their partner. Their partner used their own visual/analytical work sheet as a reference. Partners evaluated each other by telling the other what was good about the summary and recounting and detailing any parts missed. Following this discussion, students were given twenty minutes to transform their visual/ analytical notes into a formal reader based summary. Students worked independently on their summaries, without reference to the original text.

Leonardo demonstrated awareness of variables associated with the strategy, text, task and learner. Firstly, his procedure for summarizing demonstrated a variety of strategies which constituted a 'process' for summarizing. He established a context and purpose for summarizing as he felt it was important for students to understand the whole nature of the task being asked of them. He encouraged students to draw on their own

knowledge and experience bases in order to build new knowledge and develop and generalize skills. He was insistent on a procedure which facilitated recall and memory. Finally he incorporated features of the rules model of summarizing by encouraging the development of paragraphs through the invention of topic sentences.

The type of text was informational. This was not a deliberate choice. Leonardo asked students to summarize all the time and so he used a variety of narrative and informational texts. He indicated students' interests and relevance were an important consideration when choosing texts because if the material was irrelevant, new or of no interest to students, they would be disadvantaged. In addition, he was aware the length of the text could effect a student's ability to summarize. He said; 'you wouldn't give students an overboard article because you are going by their age'.

Leonardo had a strong opinion about the influence of the learner on the summarizing task. In particular, he was cognizant of students' interest and the relevance of the topic of articles he chose. He said:

As you can see this is one of the articles. It varies in size of print and language structure and you can see the sub-headings...okay we try current issues as you can see that's what I try to use for my examples... Vandalism, Forests In Danger, there's another one on computers, Computer Power...okay things like Why Kids Get Picked On- coz we're doing a bullying issue, Pets or Pests and I try to make them on things they know ...These are just things (topics) that come up.

Leonardo's instructional model borrows characteristics from metacognitive, co-operative and direct instruction, therefore his instructional model is consistent with a Combined Approach to summarizing. The metacognitive aspect of his instructional model was

evident in the explicit and clear instruction on when, where, why and how to summarize. The direct instruction aspect of his instructional model was evidenced by the strategic development of lessons prior to and including the 'ideal' lesson. Collaborative learning was less obvious but he provided opportunities for students to collaboratively summarize, sharing visual/ analytical work sheets and he provided positive and constructive feedback to his students on a regular basis.

Leonardo's combined approach to teaching summarizing is perhaps best summed up in his comment:

What influences my teaching - I've just grown in my teaching maturity. I wish I had known about all this material when I was at teacher's college...A wide range of reading...current material that works...I did a lot of pictures myself and I've just gone on and flowed...giving kids a variety of ways of learning... I'm influenced because I want all the kids in my class to take away learning not the same 6 or 7...Here is a subject we're doing. We are doing the topic simple machines. There are six simple machines blah blah blah. There are functions, there are examples. Copy it down and go away and learn it. Now if I teach it that way and think I've done a great lesson because I've presented all the information to the class and its all correct - it may be fantastic for me an analytical learner but what about the other 20 kids. They did not want it that way. I need to have print orientated. I need to have the lego out for the kinaesthetic people to be able to make and do it. I then need to go for the other kids. I might need to go to a garage and watch a mechanic strip down an engine or cut one in half. Then they come back and they make a rap rhyme and rhythm. That rhythm and rhyme uses all the seven intelligences. My influence is that learning is fun for kids and validates everything they do.

The students' completed summaries were collected. Leonardo was emphatic that he collected everything. He collected the visual/ analytical sheets and the drafted reader based summaries. Leonardo said:

I mark all their work - every single word... to get a good picture of their understanding and about how they go about the process... I use positive reinforcement... I am evaluating and validating each student as an individual.

Leonardo felt strongly about giving students encouragement and success. He marked the written summaries with ticks and double ticks next to paragraphs. His comments reflected the degree to which the

student had selected main ideas, used their own words, used paragraphs, put in a good effort or attitude, transferred information from notes to their writing, the amount of words, relevance of words in the visual/analytical, their sentence structure and their use of key words. If the summary did not reflect a good understanding he asked the student to tell him about the article in order to validate their learning. The following quote sums up his views about which skills are important:

I collect their visual/analytical and I collect their summary. I look at this (visual/analytical) and I make comments like - you have used too many words, irrelevant words which relate to the analytical here or yes that person really understands. They have understood the process of taking material out. Then I look at the summary - and beside me I have their visual/analytical and I look at their first attempt at the paragraph... I read it, see the key words and all the different words pop up. Fantastic! Now they are able to intertwine themselves using language to write simple and complex sentences and understanding paragraphs.

Leonardo had his own article with the main ideas highlighted, however he said:

It doesn't necessarily mean that there could be some new ones they have chosen a few different from mine but they have still been able to write a very cohesive and efficient paragraph that shows a lot of understanding.

As a follow on from this lesson Leonardo indicated the need to teach and practise summarizing in relevant and realistic contexts, making explicit the purpose for learning, reading and writing skills. Future lessons would involve practice and further refining of selection and extraction skills. More specifically he said he would follow on from the 'ideal' lesson by developing students' understandings about writing genres in order to enhance writing skills.

Leonardo's opinion with regard to the difference between summarization skills of less and more able students suggests he believes a

student's learning style is a more significant influence than the actual summarization skills. Leonardo wanted to explain this in a story:

You and I are doing a science experiment and one of your multiple intelligences that works best for you is the hands on and doing - okay- so you like doing the science experiment, putting the chemicals in the test tube and heating it up ...me I shy away from that -okay because what I want to do is to go find a book, read it and take notes and learn them. You don't need to go to a book to take notes because you understood it, you may just jot down a few things to satisfy the teacher or whatever. In our current education system, the test that you understood is usually print orientated test like an exam. Now because I've gone to a book, taken notes, learnt it by rote, regurgitated it all I get 90%, even though I haven't really understood about the material in the experiment. But you have understood but you don't really like writing that much... you get 60% even though you have 100% understanding... success at school does not mean success in the big world.

Leonardo acknowledged the different learning styles of students and the need for the education system and teachers to respect, recognize and validate students' individual ways of learning. In applying this to summarizing, he felt the task could be made easier for students if their dominant learning styles were respected and utilised. He said:

They (students) say this is not exciting - and I say well if its not exciting lets make it exciting for you...Gloria that article I've given you, you are relating to it in a positive way but Julie over here is - and when we look at it and I go back over my material I know Julie is a high print orientated learner... but Gloria doesn't like reading or writing much, she doodles and symbols, now you transfer that reading and writing into doodles. Lets see what happens... She looks at her visuals and tells me all about it and she's got it just like that... So instead of being turned off learning they get turned on.

As indicated earlier, Leonardo believed summarizing occurred all the time.

We do it all the time. I don't really take a formal lesson on it. It is on all the time. When ever it come up. If we're doing language and we're doing explanations. In maths. During science its a bit more structured, social studies. They go to the library they come away with things. It on all the time.

He asked students to summarize informally such as oral retelling and/or in note form for personal reference, and formally as was the case in this

lesson. He did not want to divide the lesson into instruction, practice or evaluation times because he said:

The whole lesson is instruction, practice and evaluation. I can see it as a teacher - I'm involved with them on the floor. I'm evaluating each person as an individual as the lesson is going on and I tie all these three things together. Very rarely do I separate them.

However the lesson plan suggested 10% of time spent on instruction, 70% on practice and 20% on evaluation.

Leonardo recognized that he had more valuable teaching experience and knowledge than when he first began teaching over 18 years ago. He puts this down to personal maturity, experience with different school environments, personal reading and further studies both academic and through professional development courses. His teaching style was influenced by his personal learning philosophy (multiple intelligences and helping students to succeed), the importance he places on the ability to summarize effectively, the need to read to learn under our current education system and his desire to make learning both meaningful and memorable.

Case Scenario Two

Maria

Introduction

Maria teaches a year six class in an independent single sex school. The school is a high fee religious school and this class is one of two year six classes. The school is single stream from pre-primary to year five. Year six is an intake level and therefore approximately half of Maria's 28 students are new to the school.

The interview took place in the classroom and took 30 minutes. Maria submitted her lesson plan, marking criteria and four photocopied samples of students' work. Maria's classroom was organised in four rows of eight desks. Maria's desk was situated at the back of the room facing the rows. There were samples of students' work and electricity posters around the room. The chosen lesson was conducted halfway through second term.

Maria has been teaching for 16 years. Her training and early teaching experiences were in secondary school, in the mathematics content area. She has a four year Bachelor of Education degree.

The Nature of Summarizing

Maria suggested summarizing was something you do when you read texts for the purpose of using the information in the text. Sometimes that purpose may be to recall, learn or for a writing purpose. Maria believed summarizing was a very important skill for future studies and being able to learn content. She said 'so much of the rest of their education is going to be based on informational texts'. She sees summarizing as a tool for writing

and in this regard views summarizing as an integrated reading and writing task.

Maria asked her students to produce a reader based summary. Her main reason for choosing a reader based summary was to provide a realistic learning context and to demonstrate the link between reading, writing and learning. Reading and writing skills were developed by students sharing their procedure for selecting and extracting main ideas and application of the report writing framework, in a biographical writing style, to help plan and structure their writing.

The topic was chosen because it related to the term's theme of electricity and Maria felt it provided a meaningful and realistic purpose for demonstrating the summarizing process whilst at the same time providing relevant content or background knowledge. Maria said:

I tried to make it a meaningful end product and at the same time cut down on the time because you can get the benefit of the two - the language skills of writing a report and also you can sum up the content and its relevance'

Students' previous knowledge and experience with summarizing centred around a writing task. Pre-requisite lessons included identifying features and structures of informational writing frameworks and reading to select information to match each section of the writing framework. In this regard, Maria did not specifically develop summarizing skills. She relied on students knowing the purpose for summarizing and sharing their methods of selecting and extracting information according to that criteria rather than a lesson in which she modelled or demonstrated a particular strategy.

She suggested summarizing was an easy task which could be broken into a procedure and that this procedure needed to be practised in order to develop summarizing skills. In addition, she suggested the summarizing process was easily broken into manageable steps which can be accomplished within a lesson. Therefore she advocated a whole task approach to summarizing rather than skills developed over time. She said:

I think as long as you take it in steps and really break it down into procedures I think its relatively easy. But I mean you've got children who find it difficult and that's the challenge.

The Provision of Instruction In Summarizing

The chosen lesson was conducted in Maria's science period which is a 110 minute time block. The article taken from an encyclopedia was entitled 'Thomas Jefferson'. It was an informational text with an autobiographical structure. The article was chosen as it related to the science topic 'Electricity' but Maria also wanted to integrate the content knowledge of the text with writing skills.

Maria's procedure for summarizing related to a combined approach to summarizing. The summarizing procedure she encouraged acknowledged the use of before, during and after summarizing strategies. The first five minutes of the lesson involved establishing a context for reading and summarizing. Maria lead discussion and revision on the 'bulb'. She introduced Thomas Edison as the person who invented the bulb and explained the purpose of the lesson was to learn about his life and contribution to science.

The 20 minutes following the introduction involved the students extracting information using headings from the text. Groups of four students were allocated a section of the text to summarize. The group collaboratively discussed which information was important. The group summary was then written on the white board so that once all groups had recorded their summary, the whole text had been summarized.

The text was then removed and the next ten minutes were taken up with Maria facilitating discussion on an appropriate writing plan for organizing the information. The class considered the report writing plan and adapted this in order to report on Thomas Edison's life.

With the organizational framework in place, Maria asked students to classify the facts from the white board into the appropriate headings suggested by their adopted report writing framework. This was done collaboratively by assigning a letter code to signal which section corresponded with which piece of information. The whole class contributed to the writing of the first paragraph as a model of how to go about writing the report. The next paragraph was written up with a partner and these were shared with other partners. Following the second paragraph, students were instructed to work individually to complete the report. This involved approximately three paragraphs.

The last five minutes of the lesson were taken up sharing reports in small groups, where students selected a 'good' report to be read out to the whole class. Students were instructed to hand the finished summary in the following day.

In her 'ideal' lesson Maria controlled text related variables. She was aware that students would more likely to be asked to summarize informational texts in the future therefore she chose an informational text to familiarize students with this type of text processing. She felt the length of the text would influence the time it took for students to summarize. She suggested that the original text was removed after note taking to enable students to realise the importance of effective selection of important information and in order to facilitate the production of a report which was written in the students own words. Her topic choice was deliberate because she wanted to provide a realistic learning context for reading and writing.

Maria's instructional model shows characteristics which incorporate a combined approach to teaching summarizing. In particular, Maria combined characteristics from co-operative/collaborative instruction with a procedural approach to summarizing. Co-operative learning took the form of sharing procedures for selecting and extracting information, group/ team responsibility for summarizing a paragraph and negotiation of a suitable writing plan. The procedure suggested is similar to Effective Reading In the Content Areas (Morris & Stewart-Dore, 1986) in which before, during and after summarizing strategies are encouraged. In this regard the lesson was organized into three parts - activation of students' prior knowledge and experience, selection and extraction of information and organizing or writing up of that information.

Evaluation took place during and after the lesson. During the lesson Maria facilitated discussion, ensuring students were on task, answered

queries and offered advice. Peer evaluation also took place during the lesson when students worked collaboratively as they extracted important information from the text, listened to each others completed summaries, and listened to a number of 'best' summaries.

Maria's main form of evaluation occurred after the lesson in the form of written feedback. Therefore Maria's evaluation was largely product driven. The students' reports were collected to determine writing ability and the inclusion of relevant content. Maria gave an alphabetical grade and made comments on student's work. The grade was allocated according to the number of facts Maria had assessed as being relevant and worthy of inclusion and writing structure such as logical order, making sense and spelling. Maria said:

Well I look for overall structure. I suppose I didn't have a checklist other than verbal instructions. I looked for overall structure and the quality of their writing. I think because we have done quite a lot of structure as a class generally structure was quite good.

The view of summarizing as a whole task process rather than a developmental process was again confirmed when Maria was asked to differentiate between the less able and more able students. She believed the difference between less and more able students lay in the quality of their writing. She said:

Well I was quite impressed with even the less able students because they had reasonable structure so they had the content of the autobiography in chronological order. So it was more the quality not the content that's different.

As a follow on from this lesson Maria again confirmed the idea of summarizing as a whole task which needed practise from time to time. Maria indicated she would be unlikely to further develop summarizing

skills because she was quite satisfied with students' performances.

However, she said future summarizing would likely take place in literature and social studies topics in which she wanted to integrate reading and writing tasks. She said:

I probably wouldn't follow this on specifically but if we were doing something next term. You know like novels or something like that. I mean in first term we did a lot of report writing. They do a reading journal which is a response. A creative response I suppose.

Maria indicated summarizing took place all the time, but the formal reader based summary was more often used in social studies and reading. The lesson took 110 minutes however Maria felt this depended on the actual text. Maria said:

It took 2 hours and some of them actually finished it off at home but I figured most of them had done it at school. I suppose my science, I have two double period blocks and I suppose I was limited by the end of the school day. (Prompt - Is one hour fairly typical ?) ..It depends on the text.

In this lesson the time spent on instruction was 23%, practice took 68% and evaluation 4% of the total time. Maria felt the breakdown of instruction and practice was typical however the instructions were not all at the one time. She says:

It was instruction first, then notes. We discussed how to write up on the board, then a bit more instruction on the actual report writing framework... And more revision on editing.

Maria's teaching style was influenced by her recent training in First Steps and her belief that summarizing is a skill students need and apply all the time. In addition Maria is keen to integrate content and skills in order to facilitate meaningful and realistic learning situations but also to make up

for time lost in extra curriculum and specialist teaching areas such as physical education and religious instruction.

Case Scenario 3

Tom

Introduction

Tom teaches a year 6 class in a government co-education primary school. The school is a coastal metropolitan primary school in a predominantly middle class area. This class is one of two year six classes. Tom has 30 students in his class, with the number of boys being slightly more than the number of girls.

The interview took place in Tom's classroom during a lunch hour and so took 60 minutes. Tom had briefly written up three lessons in which summarizing was a focus. He photocopied 11 student samples which were taken from the three lessons. A marking key was not included.

Tom's classroom was arranged with his desk at the front left hand side and desks arranged in rows of approximately eight. The room was bright and well decorated, particularly with students' work but also with display tables of books and objects. This room had a concertina door which was open about 2 metres at one end. The other year six class was located behind this. Tom said he worked closely with the other year six teacher especially sharing ideas.

Tom has been teaching for just over 10 years. He holds a three year Diploma of Teaching and has spent most of his teaching experience in Years 5 - 7.

The Nature of Summarizing

Tom describes summarizing as a teaching/learning strategy. He suggested there were a variety of situations and contexts for using summarizing which were influenced by the teaching focus. For example he said:

In 'Behind The News', I think its very factual and really looking to see how much the children had absorbed, and then how accurately they're giving it back to me. And also how much of themselves as writers is coming through. That's not particularly easy with 'Behind The News'. Some of the other things I have asked them to do have allowed the children more creativity... It doesn't always have to be factual ... I think there's a few ways you can go about it.

When he first introduced *Behind The News* to his students Tom modelled note taking by emphasizing finding a title and focusing on key words rather than lengthy explanations. This suggested Tom believed summarizing involved reading or viewing in order to select and extract main ideas (title) and supporting information in the form of key words. In addition, he expected students to be able to organize the main idea and supporting details into paragraphs which made up a formal reader based summary. In this regard Tom appears to see writing as an outcome of the reading task which demonstrated knowledge, understanding, and writing skills. This view of summarizing suggests an integrated reading/writing perspective.

Tom's purpose for asking students to summarize was influenced by his teaching focus. Essentially this lesson was an opportunity for his students to practise and apply the summarizing process. Tom's purpose for asking students to summarize was to further develop and refine summarizing or note taking skills for future use. He said:

Going back to Behind The News I wasn't particularly concerned with the knowledge that I wanted to test at the end. I was particularly interested in trying to develop their summary skills particularly note taking side of things as I said before its paying dividends. I am seeing it coming through from comments from the librarian, that she was very pleased with the research techniques they're using and I suppose I've done it in previous years because I've been aware of the need for it leading up to things... Like doing research... I found it very handy to have them use something like television as a medium instead of a book because they are then forced to restrict themselves to picking up key words... Also its no good them watching a film or whatever unless there is a sort of follow up. Sometimes I have a quiz... And sometimes if the interest is there it is worth pursuing it as a writing task.

In addition, Tom evaluated students' abilities to learn new knowledge and demonstrate understanding by continually quizzing students in an attempt to model self checking strategies.

In between that (watching and writing) we would have a discussion again to give them the opportunity to make sure they have the information fairly early or correct. Sometimes you get those things and its obvious they haven't really understood. So I find that its better perhaps to have a sort of quiz just to make sure they have not been confused.

Tom's awareness of the development of summarizing skills was evident in his pre-requisite lessons. In the lessons leading up to this 'ideal' lesson Tom had explicitly modelled how he listened and selected important information.

We didn't really begin straight away with children actually writing summaries. I did begin with the children taking notes and revising note taking strategies, those sorts of things, just to make sure they had the idea of notes not just trying to take too much information. I usually show them how I would take notes and I usually have the blackboard next to the video and just let them see what I am doing. Then I set out particular sections of the program, put a title for it, then just try to put in the key words rather than write out lengthy explanations. So they get the pattern of doing that. I think that's just reinforcing what they're doing with their library research. Brief notes and then develop their own work rather than plagiarism and taking large swathes of things out of books.

Initially, students focused on producing writer based notes and shared information in an oral recount. This was followed by the introduction of reader based summaries using writing frameworks to organize information

into a cohesive piece of writing. These prior lessons presented the process for summarizing which Tom expected his students to follow.

The subsequent development of summarizing skills was achieved through practice. Tom believed summarizing needed to be practised in a variety of different contexts so that skills could be generalized and applied independently.

The Provision of Instruction in Summarizing

The chosen lesson was conducted in the middle of second term. It was a social studies lesson in which students viewed a 30 minute television program on current events and issues in Perth, Australia and world wide. The program was entitled *Behind The News* and represented the text from which students extracted information in order to write a summary.

Prior to the 'ideal' lesson Tom viewed the television program in order to summarize the content for himself and to determine the relevance and potential students' interests in the topics under discussion.

The first five minutes of the lesson were spent watching the introduction of the program. During this part of the program viewers were given an outline of the issues that would be discussed. Tom drew attention to the outline and format and noted this on the blackboard. The next 30 minutes were viewing time. Students watched and recorded key words as they listened.

Once the program was finished the next 10 minutes involved Tom leading discussion as to the main points of each section. Students were encouraged to add any key points they had missed. Tom reviewed the First

Steps recount writing framework and reminded students about the need for paragraphs. The next 20 minutes was spent writing and polishing the summary.

The total lesson time was 70 minutes but Tom said this varies according to the type of summarizing, integration and the topic. Of the 70 minutes, 14% of the time was spent in instruction, 71% time was spent practicing and 14% of the time was spent evaluating.

Tom believes summarizing is difficult for students. In particular, Tom's lesson and procedure for summarizing suggest he controls text and task variables.

I think the most difficult aspect of that (summarizing) is gaining information. As I said earlier children have this book on their desk and unless you are on the ball... it is just too easy you have the book there and you just copy things. So think its awareness. You really need to make children aware of when they are following procedures properly and to that end when I've done research topics in the past I ask to see the notes and things, the rough notes just to indicate to me if they are going through those initial stages, gathering information properly and then trying to put it into their own words. That's the difficult thing.

The text variables he usually considers are the length of the text, its readability and the absence of the original text during writing. Tom suggested students find smaller texts easier to summarize and that something like a television program is a good starting point because each article is very short and students receive information through sight and sound. He suggested that short informational texts without headings were easier for students and that the readability of the text needed to be considered. Tom felt encyclopedias contained very difficult language and he tended to allow students to choose their own reference books because they tended to choose easier texts.

Tom chose the original text to be absent during writing in order for students to recognize the importance of the selecting stage of summarizing and the need to select enough important and relevant information. Tom liked a reader based summary as he saw this as a opportunity to integrate content knowledge with writing skills.

Tom was aware of that a writer based summary was harder than the formal reader based summary as he allowed students to write notes in his initial introductory lessons on summarizing. Whilst students were using writer based summaries Tom allowed the text to be present. Tom encouraged a one step strategies such as one idea per paragraph as an indicator of how much information students should be selecting. As students progressed to reader based summaries Tom provided students with a writing framework in an attempt to provide a scaffold for writing.

Tom appears to employ an instructional model that is metacognitive by nature. This was determined by the prerequisite lesson involving 'expert ' modeling of strategies, the establishment of a set process or procedure for students to follow, a gradual release of responsibility from being dependent on the expert, to peer dependence and finally increased independence in carrying out the summarizing task. The 'ideal' lesson was an example of the students practising their independence in carrying out summarizing. Students were encouraged to self monitor and check information by group discussions and sharing times.

Tom believed feedback was important in the development of summarizing skills. His methods of assessment reflect the procedure

students go through during the lesson and the product after the lesson.

Firstly, he questioned students about the relevance of selected information.

Secondly, he questioned students about the most appropriate method of

organizing the facts. Finally, the finished product, a reader based summary, was collected for marking.

Tom indicated he was more interested in the quality of writing rather than the content. Sometimes Tom uses a template to assess the content of students' summaries, however in this lesson his comments reflected writing structure, cohesion and logical order. To a lesser degree comments reflected attention to presentation, spelling, and sentence structure.

Tom indicated less able summarizers appeared to have the greatest difficulty selecting and gathering enough information. In addition, Tom felt less able summarizers had difficulty writing cohesively and logically.

In summing up his lesson Tom felt he would most likely spend less time on summarizing using *Behind The News* and move into other forms which require more creativity and challenge. He was conscious that not all of his students were good at summarizing but he felt this would be rectified with regular practice. He said:

I think not all the students are that skilful at summary writing so I probably need for them to continue to do it at a simpler level like *Behind The News*.

Tom expressed a strong opinion on the importance of summarizing. He believed it was essential for both students and teachers. For students he sees it as a tool for learning and researching which needed constant

practice. For teachers, a student's summary gives information about what content has been learnt and their writing ability.

At this level, I think it is absolutely an essential part of their work. I just see it as a tool that has to be used constantly no matter what they're doing. Certainly summarizing, even if its oral, it has to be a summary and there has to be feedback. It is a great tool for finding out what children are. Without it how would you ever really know if they've learnt anything or not.

With this view in mind Tom provided many opportunities for his students to practise and apply summarizing. Tom indicated the more formal reader based summaries probably occur once a week. However, Tom hesitated because he said it was dependent on the subject and topic. Some topics were more concerned with mapping and diagrams whilst others such as history orientated topics lent themselves more to reading and researching.

Going away from the more mundane and just trying to explore different avenues, point of view is one, they're getting plenty of summaries when they're doing project work... I think it's important that children do that. They're going to high school very shortly and we have to make sure that they are not going there and falling into bad habits of plagiarism. So I think its very important to keep it going but I think at the classroom level its also fine to give them a chance to be a bit more creative like writing newspaper that sort of thing... Well they do have a library period, the purpose there was to teach them those sort of skills in summary writing. News in the morning session... they have to follow a particular structure and they have to say what their news item is, why they have selected it... Its an oral summary. Book reviews... again that's part of our morning session and reading program. I just see summaries really as being across the board

Since the initial instruction Tom's class have written about 6 summaries based on information from the television program. In addition, students summarize orally in their telling of morning news, reviewing books and during the class' library time. The teacher librarian, in consultation with Tom, used the Inquiry Process to teach research strategies related to the themes/topics related to Tom's teaching programs.

Tom had received professional development in First Steps writing and he indicated that he had been developing students' familiarity with the writing frameworks of recounts, reports and exposition. Students had used the writing frameworks as plans for writing and for organizing information. Tom also encouraged students to use writing plans when preparing to make oral presentations. Students use palm cards which summarize the points to be made in their presentations.

Tom was influenced by what works and what other teachers have suggested works. His school had recently been in-serviced in First Steps writing and school policy dictates a focus on exposition writing this year.

I guess because it is tried and tested. First Steps are strategies is something we're being asked to focus on and so whenever you do any activity now one of the things you try and do is you have a look around and think we're covering this area of the curriculum, there's a limit of time, can I squeeze, can I somehow get around to bringing this into an activity where the children are going to do an exposition because that is what we're focusing on this year. So we've have constraints as well.

Case Scenario 4

Alice

Introduction

Alice is administration relief for a year seven class in an independent single sex school. The school is a high fee religious school and this class is one of three year seven classes. The school is single stream from pre-primary to year 5. Year seven is an intake year and therefore approximately one third of Alice's class are new students. Alice has 28 students in her class.

Alice is largely responsible for teaching mathematics and social studies in this particular class. When Alice is not teaching in the year seven room she is the teacher librarian. Alice's interview was conducted in her class and it took approximately 30 minutes. She submitted a lesson plan on the example format provided and included her marking key and 3 photocopied samples of students work.

The shared classroom had desks organized in groups of four. The teacher's desk was to one side of the class. Mathematical equipment and charts were displayed around the room.

Alice had been teaching for 15 years. She had taught in this school for half of that time. She holds a Diploma of Teaching and Post Graduate Diploma in Applied Science.

The Nature of Summarizing

Alice suggested summarizing involved selecting the most important information. She said summarizing was, 'telling what the main points are

that we're trying to focus on.' Alice did not indicate how important summarizing was but she did recognize students' summaries as a useful form of evaluating students' learning and understanding.

In this lesson, the content of the summaries was not generated from a text. Instead, Alice used the summary as a form of self reflection and record of student's knowledge. The resulting reader based summary suggests Alice views summarizing as a writing task.

Alice asked her students to summarize because she wanted to impose a particular strategy on students and investigate its effect on their learning. She was in fact, carrying out her own action research on how effective Effective Reading In Content Area (Morris & Stewart-Dore, 1984) strategies could be if they were applied to the content area of mathematics.

In addition, Alice wanted to evaluate students' understandings using the summary product. She wanted her students to actually learn and recall knowledge and to recognize the value of self evaluation and reflection in the learning process. She said:

I had a few aims of this lesson. One was to look at different sorts of triangles, but it was also to get them to use the protractor in a practical sort of way rather than just drawing angles. I also thought I would pass on ERICA strategies to reinforce what they were learning and to use that as an evaluation... It was to focus on the teaching of the value of evaluation. It was to focus on an evaluation of the procedures we use in maths... I wanted to see, I use that form of evaluation a lot to see what they actually understand. Getting them to write themselves I feel well it gives me a greater insight into how much they take in.

Prior to this lesson she had asked students to reflect on their learning on a daily basis, however she decided to use ERICA strategies in an attempt to improve the quality of students' summaries by developing vocabulary and mathematical understandings. The use of ERICA strategies was strategic

in that she was providing her students with strategies to enhance their ability to communicate their understandings.

Provision of Instruction in Summarizing

The normal mathematics lesson does not usually use a text or if it does it is more likely to be examples and exercises rather than explanations and details. In fact, Alice felt that between herself and her students they tended to generate their own text by recording vocabulary and making daily self reflections and explanations on solving mathematical problems.

No, there is no text, but then they had all their original information in front of them. They had their drawings, they had the table and the vocabulary. So I suppose basically you could call that a text. They had that background information to use. But it was student generated or teacher generated. It wasn't out of a book.

The 'ideal' lesson was a geometry lesson on triangles. It was conducted over two 50 minute lessons. A text was not used, instead the summary was generated from knowledge and experience gained from the practical activities. Alice was very keen for students to record explanations, examples of working procedures and jargon in a maths journal.

Prior to this lesson students had been working with polygons. They had identified polygons and two and three dimensional polygons by their characteristics and made comparisons. It was apparent to Alice that her students had poor practical skills when using a protractor, hence the 'ideal' lesson focus emerged.

In the first 10 minutes of the lesson Alice modelled how to use a protractor and students practised using their own protractors. Alice circulated around the class offering advice and help as needed.

When students' skills were adequate she modelled drawing an equilateral triangle. The students constructed their own equilateral triangle. Alice instructed students to measure each angle and draw conclusions about that triangle. Alice repeated this demonstration with isosceles and scalene triangles. Each time asking students to construct, measure and comment on the angles. This practical part of the lesson took 30 minutes.

Nearing the end of the lesson Alice wrote 'What I know about triangles?' on the white board for students to answer. Maths journals were collected at the completion of the reflection time.

In the following lesson the first fifteen minutes was taken up creating a vocabulary chart. Alice led a whole class discussion in which jargon relevant to the previous lesson was identified and meanings were discussed. Whilst students recorded their definitions Alice drew a semantic grid on the white board.

Following a brief explanation of how the semantic grid worked, students were instructed to work in pairs to complete the information needed on the table. Alice circulated amongst students offering advice and help, and maintained task orientation. Students worked in pairs for approximately 20 minutes.

When most of the partners had finished, Alice facilitated whole class discussion about the information in the table. This lesson again concluded with a reflection time and students were instructed to use their vocabulary

lists, semantic grids and constructions to write a summary about triangles. Their journals were collected at the end of the lesson for marking.

The nature of Alice's 'ideal' lesson meant that text variables were not considered, however Alice demonstrated an awareness of learner and strategy variables. Alice was concerned about student's background knowledge. It was a new topic and skill and therefore Alice was keen to identify what her students already knew about triangles and protractors and built up knowledge and experiences. She did this by providing a variety of strategies in which the same content knowledge was presented. This included practical construction of triangles, listing and defining vocabulary specific to geometry, comparing and contrasting different triangles using a semantic grid and finally self reflection in the form of a reader based summary. Alice appeared to employ learning strategies consistent with metacognitive instruction. She described her lesson as:

There was a fair amount of modelling in the beginning because of the fact that a lot of them weren't familiar with using protractors. Those that were, were good, because they assisted those that were not. So it was like a co-operative activity as well. Creating the table, I basically gave them the headings for the table myself because I didn't know if they created anything like this in the past. They added to it and then we went through as a group and decided what should be on the table. We filled the table in together. But the summary from that they had to do on their own.

Although Alice follows the syllabus she indicated she deliberately chose topics based on the needs of her students. This together with her overall purpose suggests a learner driven model of teaching. In addition, she indicated she wanted to provide a realistic and meaningful context for learning how to use the protractor:

I used the protractor because a lot of them had either forgotten or had never used one before... At first I got them to try and write a paragraph on what they had learnt about those triangles and I found that some of them were very brief and some hadn't looked at all the different aspects of the triangles so then the next lesson we went back and we created the table.

Alice felt self evaluation was an important component to learning. She regularly provided her students with time to reflect on what they have learnt during the lesson. She monitored students' work consistently during her lesson and always collects students' journals for marking each lesson. She evaluates her own lesson based on the information in students' journals and she structures her learning program around the needs of her learners. She says this about her lesson:

I look at all the evaluations. From what I've seen I'm happy with the results that we've got and I'd probably tend to use this procedure more, because it's been so successful... I haven't used the glossary as much this year and I think that I should be using it more because I think it tends to focus on what they're doing... I think the table needs more developing.

Alice emphasized the summary should give a clear picture of the students' understandings and include the points from the semantic grid as well as accurate constructions. Students' journals showed constructions had been ticked, spelling of labels corrected, and any misused or inappropriate jargon corrected. Semantic grids were ticked and corrections made to information in tables and the spelling of jargon. Comments reflected accuracy of facts and constructions, effort and advice given to less able students.

Alice believed summarizing was easier for students when content was presented in a variety of strategic teaching approaches.

I think if you've got a framework like taking some of these ERICA strategies made it a lot easier. Using the table was great, using the vocabulary made them think about the terms of this and they were using those terms in their summaries quite naturally and freely. It wasn't anything thrown at them.

Alice felt informal writer based summaries in note or table form were easier for students to do than reader based summaries. Alice noted her less able students wrote their summaries in note form even though she had asked for a paragraph. In addition, she noted her less able students tended to list the characteristics of each type of triangle, whereas the more able students compared and contrasted triangles.

I'd say probably the fact that some of them had only put it in point form, but that would probably be a developmental thing anyway, but I'd say they would be the weaker students that would do that... and probably listing them going through each triangle to another like me talking about the equilateral and then go on to the isosceles, and then the right angle, whereas the better students tended to just group it all as one and highlight the differences between the triangles. I think the better students tend to look at that more globally.

In evaluating her lesson and possible follow up lessons, Alice was happy with the students' understandings and skills. Remembering part of her aim was to investigate the effect of using ERICA strategies in mathematics, she indicated it was successful and that she would use this method more often. She felt that students needed more practice with the semantic grid, however she felt the reason some students had not finished their summaries was more to do with students' personal work habits rather than ability or lack of understanding.

In discussing the time spent summarizing, at first Alice did not consider her students' self reflective journals as a summary. She said:

I wouldn't call it a summary. I would say more of a focus on the lesson we're doing the evaluation on the focus not necessarily so much a summary even though I might indicate on the blackboard that these are the sorts of things I want you to consider in your evaluation because there are some that have trouble focusing. But we always write down what the lesson's about.

However when asked about indirect summarizing Alice felt she probably asked students to summarize at the end of most of her lessons. The summary provided an opportunity for her students to reflect on their learning.

The total lesson time was 110 minutes spread over two days. The amount of instruction time was 30%, practice time was 50%, and time spent in evaluation tasks was 20%. Alice said the time spent on a topic varies but generally the amount of instruction, practice and evaluation is typical of her maths lessons.

Alice is a teacher librarian and as such study skills such as ERICA strategies and Inquiry Method are an integral part of her work with children. She indicated that this influenced her teaching because she wanted to present the skill of using a protractor in a meaningful way and one which the children would remember. As previously indicated the mathematics journal suggests Alice values language as an important component of learning and she is conscious of the need for children to reflect on their learning. Her student orientated approach to teaching is summed up in this quote:

Initially I chose to use the protractor and angles in context. It meant more to the students to actually see it forming a shape because we were doing shapes, so they focussed on angles and because I had used ERICA strategies before I suppose I tended to go back to that and have a look and see what I thought would work to assist the students with their summary writing and I know in the past focusing on the language that is used gives a greater understanding of what they are doing. And the table that was a bit of an experiment.

Case Scenario 5

Sian

Introduction

Sian teaches a year 7 class in an independent single sex school. The school is a high fee religious school and this class is one of three year seven classes. The school is a single stream from pre-primary to year 5. Year seven is an intake year and therefore approximately one third of Sian's 28 students and are new to the school.

Sian's interview took place in her classroom and took approximately 30 minutes. Sian supplied her own brief lesson plan, marking criteria and student samples.

The students' desks were arranged in groups of four to six. Students usually chose groups. Sian's desk is currently situated at the front left hand side of her classroom. There is a large mat space at the front of the class. This space is used for group work or when Sian reads to the students. Around the pin up boards are posters of current themes but generally students' written work and some posters are displayed.

Sian has been teaching for under 20 years. She has taught in a number of independent schools including a Montessori school, and she has been a remedial reading teacher at one school. She holds a Diploma of Teaching and a Graduate Diploma in Reading Education. Sian has also lectured in Reading Education earlier in her teaching career. Recently she has been involved in teaching study skills to secondary students.

The Nature of Summarizing

Sian believed summarizing to be selection of relevant information from a text and wording it concisely. In addition she indicated it was important to be able to use and understand the selected information. Sian believed summarizing was a useful study skill but she felt students experienced difficulty with summarizing because they did not know how to use and organize their information.

Yeah I mean when I'm helping students in secondary school and you know that's one of the biggest areas of problems that they have if they're writing essays, and they're having to use the information that's been handed out to them. OK this is some information you could use, but just how do I use it so that the teacher will know that I have understood it. How do I use it? what do I do?

Sian has both general and specific purposes in mind. Firstly, she was reading her students a novel which dealt with Cambodia. Sian felt her students had little or no knowledge of this country and she wanted to develop their background knowledge in order to help them visualize whilst reading. Sian wanted to provide a realistic context for learning about Cambodia. Secondly, and more specifically, Sian wanted her students to experience the process involved in summarizing. Sian had taught her students to take notes in first term and she wanted to see whether they would apply this knowledge.

I wanted to use it so they had the background knowledge so they could perhaps visualise more with their reading to build up their general knowledge that is really lacking in all areas in that way. But also to take them through the process to use something that was relevant in class to take them through the process of I suppose what you would call note taking in summary writing that it is really something they are going to be able to use so the skills are being taught but it is relevant and in its context.

Sian's definition and purposes for summarizing suggest she viewed summarizing as an integrated reading and writing task. She expected

students to select and extract information by underlining and writing notes, but she emphasized the need to organize that information in ways which facilitated recall and demonstrated understanding.

Sian believed summarizing was not difficult to teach if the teacher provided a purpose but she recognized that it may be difficult for students to learn because it was a developmental skill.

I don't think it is difficult to teach providing you have a purpose for summarizing and that you don't just say 'there's a piece of thing, I want you to summarize it'. They don't have a purpose, they can't see how they are going to use it and no skills are being taught... For students to learn I think it is - I don't think some students are ready for it yet and I feel sorry for the kids in rooms 3, 4 & 5 who are doing projects and they think they are summarizing. Because its not, its not the real thing to me.

She indicated that without instruction students selected information inappropriately. She suggested students tended to select a book simply because it contained one or two of the key words relevant to their topic. She indicated students photocopied large chunks of information with no organised or set writing plan in mind and thus they generally copied verbatim. In this regard Sian consistently referred to the need to go back to oral processing which indicated she perceives this as a prerequisite skill. Sian inferred that the organizing of key words into a logical and cohesive piece of writing was perhaps the most difficult part of summarizing. She said:

When I next do a summary I would use more discussion. There would not be more instruction from me but perhaps more suggestions as to you really need to talk about what that means. You really need to put that in your know words before you even write the key words down. You highlight them, but before you write them down, unless you understand what it means, you need to discuss it with someone. So I would do more of that so they get used to the type of style in those texts.

Prior to this lesson her students had received training in mind mapping, identifying key words and activating background knowledge as a

pre-reading activity. Mind mapping occurred in first term in which students brainstormed information they knew about a particular topic and then organized this information into like categories. Sian indicated students had received one lesson on identifying key words and note taking. Sian emphasized her use of pre-reading strategies in order to activate students' background knowledge. These strategies included predicting from the title, skimming and scanning for words or dates that stand out, and guessing the type of information and vocabulary that might be in the text. Pre-reading activities were a consistent element whenever Sian worked with a text. Sian said:

Before this lesson, last term we'd done some working with summarizing. It was more looking for key words and note taking looking at what a structured overview of certain types of texts so they know what to predict, predicting from titles, making a list of the type of vocabulary that they would expect to read or actually read, so a lot of pre-reading, a lot of oral language before the actual writing stage.

The Provision of Instruction In Summarizing

The 'ideal' lesson was an integrated social studies and literature lesson which was organized over two forty minute lessons. Sian was reading her students a novel called *Little Brother* and having realized her students knew very little about the country in which the story was set she wanted her students to research information about Cambodia. The text was an informational text of one page taken from a computer encyclopaedia.

In the first five minutes of the lesson Sian asked her students a series of questions to activate prior knowledge. The first question asked students to identify the difference between informational and narrative texts.

Students discussed the different structures, and specifically the vocabulary that might be used in a text about a country. These words were listed on the white board. Next students were instructed to separate a page into two columns, one entitled, 'What I know about Cambodia?' and the other 'What I need to know?' Students completed this independently.

Sian asked students how they could gain more information. The students suggested informational texts and maps. Sian reiterated the need to remember what was read. Students listed and shared their procedures for note taking. The class discussed how the information could be organized and a summary was defined. Next the class discussed a few rules for summarizing.

Students were given a text and instructed to take notes in whatever style they preferred. After note taking students shared what they could recall from their notes. Following this the whole class discussed how they would set out the summary. A type of checklist was drawn up which included headings, and correct spelling of technical terms. As already indicated this lesson was predominantly practice in summary writing largely for the purpose of Sian evaluating previously introduced note taking strategies.

Sian tended to control strategy, text, and task related variables. She places significant emphasis on students knowing the purpose for summarizing and activated students' background knowledge. Jargon specifically related to the topic was identified and discussed. Sian gained a consensus about the type of information needed in order to build up

students' background knowledge about Cambodia. The group collaboratively decided to focus on climate and land forms. This in turn assisted students in selecting and organizing information from their text.

Sian, consistently referred to the nature of the informational text. In particular, its structure and vocabulary, as being difficult for students. She put this down to their lack of familiarity with this text type. However she indicated it is more likely to be the type of text used in further studies therefore this text structure requires more explicit teaching and practice.

Sian appears to use a combination of strategies from metacognitive, direct and co-operative instructional models. Metacognitive instruction was evident in the form of establishing a purpose and in making explicit what, why and how aspects of summarizing. Direct Instruction was evident in the prerequisite lessons on mind mapping, identifying key words, pre-reading activities and the development of summarizing skills. Collaboration was evident in deciding the purpose, the procedure for extracting information, sharing the results of the selected information and deciding how to structure their information into a logical and cohesive framework.

Evaluation particularly self assessment and reflection, was an integral part of Sian's teaching style. Firstly, she reflected on her teaching through students' work. She said:

First I'd evaluate my teaching. The actual lesson because after I have looked at the summaries I can see the areas I could have changed so I'd probably do more modelling lessons on how to do it. They need more joint construction on texts, perhaps more discussion, more emphasis on oral language so I'd change my teaching sequence or I'd emphasise more.

Secondly, she modelled self questioning thus forcing students to think about what it is they do, why and when they use these strategies. She said, 'the lesson was a division between practice and students evaluating their own memory. How much do I remember? How much can I apply? How effective has it been? In addition she provided situations in which students shared and recalled ideas which lead to 'better practices'.

Sian evaluated students' performance through out the lesson as well as in the final product. During the lesson she notes, 'how well they predicted from the title? What sort of structures, so I want to know if they are actively reading'. In addition, Sian collected and looked at the types of words highlighted on the original text. She looked at their symbols or notes. The summaries were given comments which reflected effort, sentence construction, definition of the technical terms and overall structure or organization. She offered advice which connected notes/symbols with the final written summary. For example, the importance of simple symbols to aid recall and not highlight large chunks of text.

Sian identified three distinct ability groups within her class. She characterized her weaker students as those needing help in selecting and extracting key words. Her middle group needed help organizing and writing summaries from their notes and the other group were confident with the selecting, organizing, and were beginning to transform by using linking words.

The weaker ones aren't note taking properly, aren't understanding the content so what they write doesn't make sense. The middle ones are... What they're writing, their note taking is good. What they're writing kind of makes sense. They are not really understanding some of the technical terms but they're almost there. The other group is, they have picked up the style of informational text and they're not afraid to use it. And they're using cause and effect and linking words.

Sian also felt her group varied in their ability to handle different types of summaries. She felt they were better able to tackle narrative summaries probably because they had read more of this type of text and therefore were more familiar with its structure. In addition, she indicated her students were quite capable of writing up procedures in science, but it was the informational texts that seemed to be the most difficult. In particular she felt the jargon or technical terms confused students.

Sian suggested the whole group had a misunderstanding about the idea or concept of a summary. Many students had previously indicated summaries were for resumes and for later in life. She felt this misconception need to be addressed in the next lesson through discussion. In subsequent lessons involving summarizing she would need to work personally with her weaker group.

They will need a lot of instruction because after looking at what they've done I know this group requires a lot of modelling, a lot more group work, a lot more creative writing and joint construction for a long time. They are really going to work with me for a long time.

Sian believed summarizing was probably being taught incidentally every day because students read and write daily. She suggested summaries took the form of recounts, procedures in science or book reviews. She believed summarizing was involved in all subject areas, but she suggested she would probably do a formal reader based summary once a fortnight.

Where they're writing a summary. They wouldn't write once or more a week. Perhaps once a fortnight... Teaching skills for summarizing. Probably daily in the things that we do because we read daily and we write daily, so these incidental skills are coming in, whereas I might do something like well that's one of the skills of summarizing. Whether it is a skill that will help you or whether its an important skill.

Sian felt the time taken to summarize was probably typical but she would not normally worry about how long it took. In this particular lesson, she felt there was very little instruction because she wanted to see how much they remembered about note taking. This was mainly practice. In an analysis of the time approximately 31% of the time was spent instructing and 69% of the time practising.

Sian indicated her teaching style or choice of summary teaching strategies were most likely influenced by her experience, professional reading and different model or teaching frameworks:

Probably my experience, you know teaching this year level for a while, helping older students who are having trouble in seeing what they should have had before they got to year 11 and 12 having children of my own brings me down to size, also probably a lot of things you read - um -through PETA, ARA just informational text, concept mapping, any frameworks that can be used to help them get from one stage to the next instead of jumping straight into summarizing.

More specifically Sian felt her purpose for summarizing was influenced by the desire to provide skills and content teaching in a meaning context.

Case Scenario 6

Josephine

Introduction

Josephine teaches one of three year seven classes in a high fee religious school. The school is an independent single sex school which caters for students from kindergarten through to year 12. In addition, to her classroom role Josephine is deputy principal of the primary school.

Josephine's interview took place in her office and took approximately 30 minutes. Josephine chose not to submit a lesson plan but was happy to describe her lesson. Students' samples were also not available.

Josephine has been teaching for just under 20 years. She spent most of her teaching career in education department schools. The last five years have seen her teaching part time and lecturing in education at a local university. She holds a Teachers Higher Certificate, Bachelor of Education, Graduate Diploma in Curriculum and Education Technology, and a Master of Education.

The Nature of Summarizing

Josephine describes a summary as, 'concise note taking written out in prose.' Her use of the words *concise*, and *note taking* alluded to the need to be selective about extracting information and therefore reduce the content. Josephine sees summarizing as an integrated reading/writing task

Josephine felt summarizing was a useful study skill. In particular she felt writer based summaries were useful for remembering information for

an exam or test. The writer based summary was used in her 'ideal' lesson in order to facilitate recall. Josephine stated that usually she asked students to write reader based summaries.

She had three purposes for asking students to summarize. Firstly, she wanted her students to learn content from the material being summarized. Secondly, she wanted to provide a realistic purpose for practising and applying summary writing.

Basically it was linked to their writing program. I wanted them to edit more carefully and to take responsibility for their editing. I took an article from the newspaper which was on editing and we actually used that to summarize so that they could put it into their own writing file and underneath it I had the photocopy of the article and their summary so that they could refer back to that while editing.

Finally she wanted her students to design a checklist they could use when editing their own work. For this reason Josephine expected students to produce a writer based summary. That is, a checklist of points relevant to successful editing.

Prior to the 'ideal' lesson, Josephine had worked extensively on a writing program emphasizing paragraphing skills and a reading program emphasizing main ideas. She indicated there were a number of ways of summarizing and the method chosen in the 'ideal' lesson was one of a number she used. She believed students needed to experience different ways of taking notes in order to generalize. She said:

It was very structured, and I wrote up the steps on the board. I look on summarizing as a way of taking concise notes and so if they are reading something in the future that they're going to be studying then I ask them to summarize it so its one way of taking notes, its done in context we've already done structured overviews of the concept perhaps and a semantic grid so its just another way or a different purpose of taking notes so it's one section of the whole note taking program.

In this regard Josephine had developed summarizing by practice. She said this lesson was not typically the way she asked students to summarize. A more typical summarizing task was her Current Affairs session described below:

They (students) take turns in orally presenting something of their choice on Current events and there's two parts to it. As a speaker and presenter their responsibility is to make sure they have 3-4 key points or key ideas that they are going to get across, 3 ideally, maximum of 4. And they have to be clearly identified in their presentation as this is part of their oral language and then they tell them what they are going to tell them, tell them again, and they know how to do that and then the other girls have a sheet and they have to write down the key points the presenter was giving. They have to write up the key point as a summary. So the person doing the current affairs doesn't actually present anything in writing except if they want to have supporting material like charts or maps. So they don't actually have to write a summary, they see it as a bonus all the others do and then I'm collecting those. They have a half a page and they have a format that I write up on the board.

The Provision of Instruction In Summarizing

The 'ideal' lesson was a language lesson of 30 minutes duration. The lesson focus was for students to read and summarize an informational text on editing. The article was taken from a newspaper editorial and was one page in length.

Josephine expected her students to skim the article to predict content. Students were expected to extract one idea per paragraph and organize these key words into a writer based summary. Josephine would expect her students to use this summary as a checklist when editing their own writing.

In the first five minutes Josephine instructed students to skim the article in order to get an impression. She suggested looking at the title, first sentence in paragraph and then asked students to think of an alternative title. Students were instructed to share predictions about what they thought the text was going to be about.

Following this Josephine facilitated a short whole class discussion to confirm and justify predictions. Students were instructed to read each paragraph and write one word or phrase which captured the essence of the paragraph. Students were encouraged to write on or in the margins of the text. This task took about ten minutes.

After recording key ideas students used only their key ideas to write a sentence in their own words. When they have finished recording sentences Josephine reminded students to check their summaries specifically for main ideas and grammar. Students summaries were not collected as Josephine wanted students to retain these for personal use when editing their own work.

Josephine believed summarizing was difficult to teach and learn and she felt sympathetic to students trying to learn how to summarize because she recognized summarizing was also a difficult task for adults. Josephine was well aware of the variety of methods of summarizing and she felt summaries involving structured overviews and mind maps were easier for students. In this regard she controlled strategy and task variables in her 'ideal' lesson.

Josephine indicated her choice of summarizing strategy and the type of summary were influenced by her perception that summarizing was a pre-requisite for further studies. There was also a suggestion of obligation to teach summarizing when she said:

I think it summarizing is something they need to know and although I might not personally prefer it, it might be someone else's best learning style, so and I know they'll be asked to do it, so it's just part of the curriculum. I think they should be able to cope with it.

In addition Josephine used different methods of summarizing. The methods she mentioned ranged from the one step procedure, as was the case in this lesson, to concept and semantic grid and the use of writing frameworks.

She recognized reader based summaries as being more difficult for students. For this reason she purposely chose a writer based summary because she felt this was the first stage of summarizing. She acknowledged the importance of note-taking and re-reading because she encouraged this and allowed the original text to be present throughout the task. She gave her students a hint about the quantity of information to be extracted by suggesting one idea per paragraph.

Josephine's instructional model for summary writing was consistent with Direct Instruction. The lesson was broken into before, during and after summarizing strategies. Instruction was explicit and logical in nature with Josephine clearly directing the steps. In this way a process or procedure was described.

This bit here (this lesson) is about four steps - skim read, cue words, sentences and evaluate. That's really what we did one discrete lesson ... Instruction I would say, it was quite teacher directed. I was in control all the time by me talking, writing on the board. It would have been about a quarter I guess, the rest of the time the students were discussing what they were doing. The evaluation part was purely my observation of it at this stage.

All of Josephine's evaluation took place during the lesson. She was involved in instruction and perusal. She answered students' questions, or offered advice if she saw the need. Summaries were not collected. Josephine said, "There was no formal evaluation. It was really them going

through the processes that I was keen on, so at this point the content was important.'

Josephine suggested less able summarizers lack the ability to relate all the selected information to overall topic or aim of the text. She said less able students:

Don't get the idea behind the paragraph. So they might have mechanical ability to write the sentences but they might have lost the essence of what it's all about so its a more or less abstract.

She felt the general procedure of skim read, cue words, write was a procedure that needed to be practised so her next lesson would be less instructional. As a follow on from this lesson Josephine said she would most likely spend less time instructing. She would expect to revise the procedures but would then expect her students to carry out the summarizing task independently. She said:

The bulk of the class would get on and do it. I might revise it. We would talk about it and then they would get on with it and then those students who wouldn't have a clue or still haven't grasped it they would have a mini lesson with me. I would take it on a more personal level with them.

Future lessons would likely involve varying the type of strategy, text, the task and moving students towards independent research. She said:

To follow on we would look at big books and notes and I was really looking at it from the term of persuasive writing so we'd do a series of sessions on it and that would be basically calling up information so key ideas, and what they do then is have their own topics, put in key words and then they write that out

In addition, she mentioned the need for such skills to be applied to realistic learning contexts. She planned to use summarizing with the introduction of another writing framework.

We looked at a big book and notes and I was really looking at it from the term of persuasive writing, so we'd done a series of lessons on it and that was basically calling up information so key ideas and then they have their own topics, put in key words and then they're going to write that out.

Josephine indicated that a lesson like her 'ideal' introductory lesson would not take place very often. However, she emphasized the need to practise summarizing and to this end she provided at least two opportunities per week for her students to summarize. This opportunity was in the form of the current affair lesson. She also mentioned the use of structured overviews and concept maps as other forms of summarizing she uses particularly in social studies. She felt language lessons were where teaching points occurred and social studies topics were where summarizing skills were applied.

In terms of the lesson breakdown, Josephine felt this lesson was not typical particularly with respect to the amount of time spent on instruction. Instruction took up 40% of the 'ideal' lesson. Josephine suggested this was because it was an introductory lesson. Normally, she would expect to spend only 20% of the lesson on instruction.

In summing up, Josephine felt summarizing was not something students enjoyed doing but rather it was an arduous task which they had to know how to do in order to succeed in future studies. She indicated different students would find summarizing more pertinent to their particular learning style.

Case Scenario 7

Victoria

Introduction

Victoria teaches in an independent secondary school. Her school is a single sex high fee religious school which caters for students from kindergarten to year twelve. In particular she is responsible for year 8/9 history. Her class is one of five year eight form classes.

The interview took place in the Social Sciences staff office. Victoria submitted a lesson plan on the format provided, a copy of the text and three samples of students work. Victoria has been teaching for 10 years and has a Bachelor of Education degree.

The Nature of Summarizing

Victoria believed summarizing to be selecting the main ideas of a given text with a structure similar to the original text. She said:

A summary highlights the main details of a certain amount of material so it would have to get over say at least a definition or an introduction in some way to say what it is you're talking about, so if it was the Black death, what is Black death as long as them materials actually went through that, and the article talks about the effects of black death so it would list the effects... Giving the crux of the information.

Victoria believed summarizing was a useful tool for teachers to evaluate students' understandings of the text. She said:

I think it shows the students have understood the work and that they're able to communicate and to really explain. It also shows an understanding.

Victoria's purpose for using summarizing was largely content driven. She wanted to evaluate students' understandings about content and to assess their ability to communicate their understanding. She said:

I've only been teaching them for four weeks so I didn't know a lot about what they had done. I talked with the English teachers just to see if they had done any summarizing and they said they had done a little. So really the purpose this time was to see how much and how good they were at doing it and how far they had got on summarizing. But largely it was content. It was to clarify in their minds the content and the objectives... I wanted to see if they (students) could do it partly and for them to get a good grasp of the information to show they have understood what I'm talking about or what the article was explaining.

Victoria's definition, type of summary and purposes for summarizing suggest she viewed summarizing as a comprehension activity because the text and subsequent reconstruction of content were her main focus. She was not concerned with the writing, she expected the summary to follow a similar structure to that of the original text.

Victoria believed summarizing was a difficult, but important skill to learn. She said:

People do not develop this skill to the extent that it should be developed because it is useful and it is something you need continually. At university students still do not know how to summarize properly and they end up writing too much.

However, she was divided in her opinion on teaching summarizing. On the one hand she said it was difficult because the nature of the task was personal. She suggested the purpose for summarizing was generally to recall and different people required different amounts of information. In addition, she suggested everyone has their own way of summarizing.

On the other hand she said teaching summarizing was easy because it was repetitive and there were some general guidelines like 'Don't write everything down, use point form, have a definition, make lists'. In this regard Victoria appeared to be suggesting that summarizing developed with practice rather than through explicit teaching of strategies.

Victoria indicated she was not aware of her students' summarizing skills and experiences. For this reason she had asked the English staff about the amount and type of instruction in summarizing. She was told her students had '*done a little*'. Prior to this lesson Victoria said she had introduced summarizing by asking students to highlight the main points on the original text and use these ideas to write a summary. In this initial lesson she provided specific modelling of how to select information to students who she perceived to be highlighting too much or too little information.

The Provision of Instruction In Summarizing

The lesson was a normal one period history lesson of 50 minutes duration. This lesson was based on the topic '*The Middle Ages*'. The text was taken from a student text book and was informational in nature. The article was one page in length and entitled 'Black Death'.

Victoria's lesson was basically content oriented in which students were required to read to learn. Very little instruction and direction was given. Victoria expected her students to read and highlight the main points from the text and organize these points into a writer based summary. In addition, students were coming up to an exam so she wanted their summary to be used as exam preparation.

Victoria's students had been working on the 'The Middle Ages' theme for several weeks. Victoria felt her students were particularly interested in learning about the plague and had become inquisitive. For this reason she chose to expand the topic based on their interest.

In the first five minutes of the lesson Victoria answered questions about an up coming test. Then she proceeded to give a verbal summary of the Black Death. Her summary included defining the plague, when it was prevalent, symptoms and treatments, number of deaths from Black Death, and its effect on the people of the time. The text was distributed and students were instructed to read, highlight the important points and write a summary in note form. At the conclusion of the lesson students were directed to a page in their text book from which to answer two questions.

Following the instruction the students set to work independently. Victoria circulated in order to maintain task orientation. Once the students were working, Victoria took up a position at a desk at the front of the room. She occasionally spoke to students to refocus them to the task or remind students they were to work independently. At the end of the lesson the summaries were collected.

Victoria acknowledged a small number of variables associated with text, task, and the learner. She felt the length of the text affected students' abilities to process. Initially, Victoria had given her students a two page article and she reported they 'flipped out - said it was too long - we can't do it', so she chose another article which was one page in length with one and half columns.

Her decision to ask students to write a writer based summary was influenced by the structure of the original text. She says she chose this type of summary because:

It didn't have too many parts to it. It had an initial bit which was a definition of sorts and then the effects were just listed so it wouldn't have worked as well with another form like a chart.

Victoria felt lists and tables were much easier forms of summarizing than the writer or reader based summary. She said her students required more guidance and practice with writer based summaries because they did not seem to know where to start. Her purpose for summarizing influenced the type of summary she asked her student to write. Victoria suggested her teaching situation had some influence on her teaching strategies. She described her class as:

Very active, very high spirited, and a different type of lesson would have gone down better perhaps using activities because it was the Black death and they were very interested in it. Summarizing was a bit tame for them.

In addition she had a time constraint. It was the last lesson before a test and therefore she had to complete the lesson in that period. She indicated students were more concerned about the test. The lesson time was the last lesson on a Thursday which she indicated was a bad time to have a formal lesson, inferring students were tired and less able to concentrate for a sustained period of time.

Victoria did not provide much in terms of instruction and therefore it was difficult to determine her instructional model. She appeared to suggest summarizing developed with practise rather than explicit and deliberate teaching strategies. She said summarizing was:

Difficult to teach. I think its more a repetitive thing. Everyone has their own way of summarizing in which they interpret information, because its for you to know, its to enable you to recall the information and some people require more information and some require a lot less and to other people it may look cryptic so in that way its difficult because I see it as a personal skill and the best way would be to practice. Set down some guidelines - point forms, we don't write down everything, things should include a definition.

Students' summaries were collected at the end of the lesson. Each summary was graded alphabetically and Victoria had corrected spelling. Her criteria for marking included the length, clarity of information, list main ideas in point form, structure similar to text, neatness and the amount of main ideas recorded by students in comparison to her own template.

I had a look, having read the article myself, I made sure they hadn't written too much, so if they'd copied it out, that's not summarizing... whether or not you could understand what it was they had written. So each point made sense. I also considered that they had covered the main points of the article. (Interrupted - did you have a list of main points?) Yes. As I went through I also considered neatness because they have got to be able to look back at it and I did tell them to list it in points not full sentences so they lost points if they'd sort of merged it all in together and whether or not they'd written enough.

Although Victoria did not write comments on her students' individual summaries she intended discussing the areas of weakness with the whole class. In her evaluation of students' summaries she felt the more able students displayed a more global understanding of the article. This was evident in their ability to comprehend and then transfer their understanding into writing so that others could understand. Victoria suggested weaker students often were not able to understand or explain their own notes.

In Victoria's evaluation of her lesson she felt the lesson did not go well, largely due to the type of class and the time of day but she was glad she had done summarizing because she discovered her students lacked confidence.

She said:

I would use summarizing as a teaching tool rather than an end in itself. So having had that type of lesson I realised that they need a lot more practice on their summaries because it is a skill that they need to develop as they go through school.

In addition, she would follow up her lesson with a ten minute discussion with her students on the areas of need in summary writing.

I will discuss with them what they need to practice. I will go over it and tell them what they need to practice and they will in the future practise alternative methods of summarizing. I will go back to the list form. So I will spend 10 minutes talking to them about it.

The type of summary produced in this 'ideal' lesson was a method Victoria used twice a term. She usually asked students to summarize in one form or another every few lessons. In this lesson Victoria asked her students to write a summary in note form. She usually asks students to do this type of summary once a topic. She usually does two topics per term.

Victoria felt she asked students to summarize indirectly at the conclusion of most lessons as a means of summing up the content objectives. She also indicated she used different methods of summarizing every few lessons. These different methods included making lists, charts, completing cloze exercises and answering guide questions.

I feel it is fairly often. I often get students to start off the lesson for me and instead of giving them a summary of what's going on I get them to tell me what's been going on. Tell me, actually basically a lot of questions, I've got what, where, why, who, how it's happening and I get them to give me in a sentence or two to start off the lesson. So it tests how much they remember, but in a way tests how much they've taken in and it's a summary of what we've been doing.

Victoria felt this lesson was a fairly typical lesson. However, sometimes the summarizing task varies or she spends more of the lesson giving explicit directions or instructions. In this lesson time was broken into 10% instruction and 90% practice.

Case Scenario 8

June

Introduction

June teaches in a high fee independent single sex school. Her school caters for students from kindergarten to year 12 and June teaches in the secondary part of the school. In particular, she is responsible for one of five, year eight English classes.

June's interview took place in the English Department offices. June did not want her interview taped. She submitted a lesson plan, copy of the student assignment and three samples of students' work.

June has been teaching for just over 15 years and has a Diploma of Teaching and Bachelor or Arts degree.

The Nature of Summarizing

June's main purpose for asking students to summarize was to assess and determine students' research skills. This specifically included their ability to select appropriate resources, extract main ideas, organize and develop a topic according to a given framework.

June demonstrated an integrated perspective for summarizing as she saw the task as a research skill. In addition she is product driven with an emphasis on both content and quality of writing.

Prior to the 'ideal' lesson June had not developed or taught summarizing skills. June suggested this type of activity occurred rarely and

was not encouraged as summarizing involved reconstruction rather than critical analysis.

The Provision of Instruction In Summarizing

June's lesson took place during a double period of 100 minutes duration. The lesson was conducted in the library. Students were able to choose their own texts. The aim of this lesson was to distribute and clarify a research assignment.

The first five minutes of the lesson involved distributing the handout. June gave a verbal explanation of the task. Students were able to clarify issues with June. The remainder of the double period (95 minutes) was spent in the library. June was available for advice and assistance. Students worked individually on their assignment which was to be submitted the following week.

June's awareness of other variables which affected summarizing were minimal. She recognized and allowed students to write on a topic that interested them. Advice about referencing and quoting suggested students were expected to use more than one text. The nature of the assignment and the types of topics suggested the text should be factual and informational. June suggested a minimum length for writing.

There was no distinct instructional model evident due to the assessment purpose.

Evaluation was largely centred around the completed assignment. The marking criteria was clearly explained in the student's handout. This included development of the topic using the structure:

Introduction:

Aspect 1:

Aspect 2:

Aspect 3:

Conclusion.

Students were told the minimum length of the assignment was 5 paragraphs. Presentation was to be eye catching and interesting. In addition, students were expected to use references and give a bibliography.

Although not compulsory June's comments on students' assignments indicated she was expecting headings, relevant illustrations with captions, and quotations.

*Paula,
You have some interesting information but you need to set it out clearly. Use paragraphs and headings to sort out the information into logical sections.*

*eg. appearance
habitat
feeding habits
resting habits
Quotes?
Bibliographical?*

Remember to correct spelling

June said summarizing was discouraged in the English department because students tended to regurgitate and copy verbatim from texts. The nature of the English course meant students were more likely to be engaged in critical analysis of literature or narrative texts. A lesson such as this would occur irregularly as students would be expected to complete assignments as part of their homework plan.

Case Scenario 9:

Jade

Introduction

Jade teaches in the secondary school and in particular year 8/9 geography classes. The secondary school is an independent single sex school which caters for students from kindergarten through to year 12. The school is a high fee religious school. This class is one of five, year eight form classes.

The interview took place in the science department offices and lasted approximately 30 minutes. Jade completed her lesson plan on the form provided, supplied a sample of the text, student work sheet and submitted three samples of students' work.

Jade has been teaching for under 5 years and has a Bachelor of Science Honours degree.

Nature of Summarizing

Jade described summarizing as putting down the main points. She suggested summarizing was useful because it was a prerequisite to other skills and activities. She said 'it leads to so many other things. Its a good way to put down the best of the information'.

Jade's primary purpose for teaching summarizing was content driven. She suggested the text was the source from which the information and learning were achieved. The summary was a secondary concern.

For students to be able to get the main points of what rocks were and how they were formed. So they had to take the information from the sources they were given and to be able to reproduce it themselves with a clear understanding of how rocks were formed by using summaries.

Jade's definition and purposes suggested she viewed summarizing as predominantly a comprehension task because she emphasized selecting and extracting content to facilitate learning rather than writing and recording.

Jade did not believe summarizing was difficult to teach. However, she conceded instruction or guidance was needed particularly in selecting, appropriate information.

If you let them summarize directly from the text they will just copy the text rather than summarizing, so they'll copy whole chunks out of it rather than specifically summarizing parts of it. Hence the approach in making lists first and then moving into it that way. Because that is something we have a lot of trouble with copying whole pieces of information instead of gaining information they need and writing that down.

Prior to this lesson Jade had given a little instruction in note taking, but no instructions had been given in summarizing.

The Provision of Instruction In Summarizing

The 'ideal' lesson was a geology lesson which took place over three single periods of approximately 100 minutes duration. Students were given two extracts from a school text book. This lesson was based on the topic *Rocks and how they are formed*.

Jade expected students to be able to describe features of three types of rocks and how they are formed. In addition she wanted her students to be able to represent the formation of a rock by drawing a diagram.

The first 10 minutes of the lesson involved activating students' background knowledge and natural curiosity. Each table contained two

rock samples. Students were instructed to observe, discuss and describe the features and differences between two rocks. At the conclusion of the 'free play time' Jade introduced the correct names of the rocks.

The next 5 minutes involved Jade leading discussion on the types of questions you would ask in order to discover how rocks were made and identify their differences. Students spent a few moments in discussion before Jade asked for questions. The questions were classified as they were recorded on the black board. Three inquiry questions resulted from student's discussion which included:

Where is this type of rock found?

How are they formed?

What is special about this rock?

In the second lesson students were given an extract on Igneous rocks. In small groups students searched for the answers to the four questions. In some groups, each member took responsibility for one question. The information found was shared in note form and students individually wrote their paragraph on Igneous rocks.

Finally students were referred to the part of the extract on metamorphic rocks and students were instructed to follow the same procedure to individually research and write a summary on metamorphic rocks.

Students were encouraged to draw diagrams to show how rocks were formed. At the conclusion of the lesson a quiz took place in order to revise

the names of rocks and how they were formed. Students work sheets were collected for marking.

Jade was aware of text, task and learner variables. She choose two texts, both informational but with slightly different presentation styles, diagrams and length. The texts were chosen because Jade believed they were 'what I thought were clearest explanations for students.'

The task variables were highlighted by Jade's work sheet preparation. The work sheet asked students to record the questions, and use that format for gathering information. In addition, the work sheet had three headings of types of rocks. In the first exercise she had incomplete sentences to help students gather information, four boxes for drawing a diagram about how the rock is formed, and 5 lines for the summary. In the second and third rock types she had a heading of main points (1-4) one box for the diagram and five lines for the summary. Finally, at the end of the work sheet was a table for examples of each rock type.

Jade was aware of her students' lack of familiarity and experience with summarizing and this influenced her choice of teaching strategy. The step by step procedure was used as an example of the summarizing process.

Jade appeared to employ teaching strategies which are more consistent with co-operative and collaborative learning theory. Jade's lesson was divided into two parts. The first part of the lesson involved selection and extraction of geological ideas. The second part involved organizing that information. Both aspects of the lesson were achieved through co-operative

and collaborative practices that alternate between whole class and small group practice.

Jade deliberately activated students' background knowledge and their natural curiosity with real rock samples as she endeavoured to move naturally from what the students knew to what they do not know. She identified and discussed correct terminology. This was followed by a discussion and formulation of questions which were then used to direct students to search for specific information. The questions also acted as a guide to organizing the information. Finally, as a summing up of the content, she encouraged students to organize information into a table. Jade gave her students a whole class practice, a small group practice and finally the opportunity for individual practice. As a consequence students were able to see the whole process repeated twice before they have to tackle the task individually.

After the lesson, students' work sheets were collected. Jade felt her form of evaluation was influenced by her purposes. Firstly, she wanted students to read to learn content and secondly to maintain writing skills.

She said:

One of the things on going to the course as well is to maintain writing skills and the works, so when I'm doing sections of work where we're working on paragraph writing in this case the attempted summary, we are also looking at those skills along side all the time because they are the things that you really come up against and not only higher up in the school, but then through the year they are doing a piece of work and are unable to write and express themselves in that way it is really quite important to have the idea and be able to put them down logically and express them to be understood.

Jade scored the work sheet with a mark out of fifteen. General comments were made regarding missed information and sentence structure.

In addition, Jade has inserted words when sentences do not make sense and ticked factual information.

Jade's awareness of the skills of summarizing were highlighted when she discussed the differences between students. She suggested her more able students were able to select, condense and transform information, whereas her less able students had difficulty selecting relevant information, therefore they cannot structure a logical and concise end product.

The stronger ones picked out all the points. They also managed to write in an organised fashion perhaps linking sentences together properly and putting them together in a sensible order. The other extreme, the weaker ones failed to gather information in fact some of them had totally misunderstood the information. They read and were unable to interpret on their own what was given to them in the text. So they were lacking the content, lacking understanding and many of them were unable to structure the content properly within their paragraphs. So it was all in bits and pieces because they were working from 2 texts. The ones in the middle had either done one or the other. They either had not structured properly or they failed to gather all the information.

As a follow on from this lesson Jade said she would use a table format to summarize and presented information in a diagram.

After this lesson, I got them to draw diagrams of rocks because it was subject rather than summary writing orientation so we then went onto drawing diagrams but filling in information in diagrams and also some questions to test their understanding on the formations of rocks.

Jade indicated formal summaries would be used generally once per term. She indicated her use of summarizing was dependent on the students in the class. She said: 'in a more able class I would have given them this sort of task more often'. However, she indicated indirect summarizing was something that happened all the time. She mentioned other situations in which she asked students to summarize were for note taking purposes, during teacher directed lessons and videos and for independent study purposes such as homework exercises.

We are often reading text and gaining information from that to answer short questions. I suppose we do it an awful lot in talking and viewing videos. I prefer videos on geography and from them we summarize the information from them and also from my particular subject that I'm talking about. They're then asked to summarize. So I suppose we are using it an awful lot really.

This lesson was typical in terms of her purpose for asking students to summarize. She always uses informational texts and students are able to select and extract information from the text before it is put to one side.

Evaluation is largely based on the amount of content reproduced.

Almost the entire part of what we are doing tends to be to do with the content side of things. Although there are many occasions when like bits we bring in like a skill that we want to do as well but it is usually through content that we want them to learn.

This lesson was not typical in terms of the time taken and the type of summary asked of students. The total time spent on instruction was approximately 30% of time, 60% of the time was spent on practice and 10% of the time was spent on evaluation. Jade suggested the length of lessons was influenced by the syllabus content to be covered in a term. Jade said: 'rocks tends to be 3-4 lessons within our Physical geography section in year 8 course.'

Jade recognized that her choice of teaching strategy and the process for summarizing were governed by her class. She said:

I've got around a very mixed ability group. Quite a few low ability students in it and it perhaps not a techniques I would use most of the time because they can't pick up the subject content so well by doing that... This was the easiest way for them to pick things out.

Case Scenario 10

Fiona

Introduction

Fiona teaches in an independent co-educational school which caters for students from kindergarten to year 12. Fiona teaches library skills to students from kindergarten to year 9.

The interview took place in a discussion room and took 20 minutes. Fiona submitted a lesson plan using the format provided, samples of students' work and a copy of the text and work sheet.

Fiona has been teaching for 10 years and has a Bachelor of Arts, Diploma of Teaching and a Graduate Diploma in Applied Science. In addition to her teaching role she is a head of year 12.

The Nature of Summarizing

Fiona believed summarizing to be 'a brief analysis of the text and the type of information and I encourage students to take out the main idea of what they are reading'.

Fiona's purposes for summarizing suggest an integrated reading and writing view of summarizing. Her first purpose related to understanding and comprehension of the information in the text. Her second purpose related to directing students to using a particular summarizing strategy (summary sheet) and determining its effect on students' abilities to select and extract content and communicate their understandings in a cohesive report.

For students to understand that what we're reading about is important that they have a good background knowledge and that is very valuable. A lot of novels are superficially treated and it's good for the kids to have a good background knowledge. I wanted a report but I did it in stages. What I did was I gave them what I would like them to report back on, so they had an idea. Then I gave them as though I was giving them spelling, a summary sheet. My biggest problem with students is plagiarism, so I gave them a framework and they jotted down the information and key words, and the only words they could put on the sheet were the words they understood. And then at the end, after the second or third lesson I took the text away and they had to write from the summary sheet.

Fiona felt her role as a teacher librarian was both easy and significant in developing summarizing skills in her students. She develops summarizing skills from year three but she felt summarizing was more difficult for secondary school students because their syllabus did not encourage a process for summarizing. Fiona felt many secondary teachers simply told students to summarize by 'taking down the main points and writing them in a report'.

Fiona had a well developed study skills program which means she is well aware of the amount and type of prior knowledge and experiences students have of summarizing. She said this about her program:

Because I have been teaching half my class note taking since year 3 and the students who have a lot of difficulty are the students that have come in from other schools, they are the ones who have difficulty identifying key words. I think the most important thing that I do regularly is read the passage and say "okay what does this passage mean to me? Do I understand what the author is trying to say?"

Fiona develops selection skills by oral reading and asking students to summarize main ideas. Later, she models highlighting and underlining of main ideas and the use of a summary sheet to select and extract information.

I don't think one type of summary is more difficult than another, but I've done structured overviews as well and I find the summary sheet works best because of the sub-headings. I tried to do a summary sheet without giving them key words and it didn't work very well. They still needed the question broken down into key words.

Fiona felt summarizing purposes should be made clear and explicit to students. She believes there is a process for summarizing and this also needs to be known and practised by students. She believes she is able to achieve this through her regular contact with students during their 12 years at school.

The Provision of Instruction In Summarizing

The 'ideal' lesson took place with year 8 students during an English lesson. Fiona's class had been studying the novel *The Cay*. The theme of the story is slavery and Fiona felt her students had little understanding and knowledge about slavery so the 'ideal' lesson presented the opportunity for students to gain more background knowledge about the topic. The text came from a computerised encyclopaedia and was one page in length.

The 'ideal' lesson went for the duration of three lessons. Fiona described the lesson as having an introductory teaching session, followed by a review and practice and finally students worked independently.

In the first lesson the novel cover was used to stimulate students' background knowledge and interest. This was done by looking at the pictures, blurb, other words on the cover with Fiona facilitating discussion and questioning. Following this Fiona moved to introducing the informational text on slavery. She again questioned students in order to stimulate background knowledge. She read the text aloud and using the first paragraph she modelled how to highlight key ideas. Students continued with the rest of the text.

In the second lesson Fiona recapped on the information highlighted from the previous lesson. This was followed by the distribution and explanation of the summary grid sheet. In this instruction time Fiona gave students the purpose for summarizing. She talked about the 'good' points of a summary emphasizing comprehension and writing. Fiona modelled answering the first guide question. Students were then instructed to read the rest of the text and search for information to complete the other boxes in the summary grid.

In the final lesson students independently completed the summary sheet. This sheet was used to write a reader based summary.

I was introducing the novel "The Cay" and in it the main character was a slave and the students needed to interpret about the Negro slave heritage. We talked about the slave trade and I found the students were very one eyed about what the slave trade was about. So before we started on the novel I took a piece of "Encarta" about slaves and got them to read it. Basically to understand it and I thought it was a good opportunity to go back and do some summarizing skills and at the end of that exercise they were able to tell me about what the main characters relationships were, the different slaves, what it was like being a slave and what the slave trade was all about.

Fiona was aware of the impact of text, task and learner variables. She chose the text from "Encarta" particularly because it was a long, verbose text which students often accessed through computers. She felt students had less experience and familiarity with this type of text and her intention was to provide an opportunity to process this type of text. In addition, the content was new and although she wanted to develop students' background knowledge she knew this would influence students' abilities to comprehend and make meaning from the text.

I chose this type of text because its one that's convoluted, very wordy on purpose because this is what they have to have. I did a survey in my classroom and I think about 6 and 7 of my kids have got access to computer accessed encyclopaedias and this is what they need. They very rarely use

non-fiction resources. Its easier to go to the multi-media and yet when you look at the multi-media style is very convoluted.

Fiona's awareness of learner variables included both the learner and the teacher as a variables. She felt teaching conditions such as the time of day, the weather and the teachers' personal interest and purpose influenced students' abilities to summarize. In addition, she felt the learner or students' background knowledge, experience with writing and interest played an important part in summarizing and these factors needed to be given consideration in developing a procedure for summarizing.

Fiona's prerequisite lessons, the 'ideal' lesson procedure and her form of evaluation suggest a model of direct instruction. Academic focus was gained by making the purpose explicit and relevant to students. Instruction was cumulative and inductive in nature. Beginning with the identification of key words, moving on to note taking and culminating in strategies to help students organize notes into prose. The use of a summary grid sheet provided a checklist approach to gathering information and a framework from which a reader based summary could be written. In this regard instruction went from specific skills to a process for summarizing which students were able to transfer and apply to a variety of different texts and tasks.

Fiona felt little evaluation took place during the lesson. Most of the evaluation was in the form of anecdotal comments about the summary product and whole class feedback.

There was no feedback as such. My weakest students finished in half the time, my top student could have put one more in. The concern that I had as I was walking around just looking over their shoulders was some of them put in a lot of subjective ideas in their reports because we were looking at the emotive topic of

slave trade. That was coming in and it was mainly the girls. It wasn't until I collected it all in and was able to sit down and evaluate their summaries. I wrote anecdotal notes about their summaries and then gave them a grade. They were evaluated on how they did their summary...on the actual report and they got a mark out of fifty... The lesson after I handed out their summaries and we went through and where I had notes some things like bits that weren't in the text they were able to tell me so we realised we had put a lot of ourselves into the report. So I was able to do some of the corrections there.

The criteria for marking the summaries tended to reflect accuracy of content and writing skills.

The criteria was, did they answer the question? Were they able to cover who, what where and how? Was it accurate? Was it in their own words? Was there continuity of the facts? Was it objective? How much objective was there in the report and just general presentation of spelling, punctuation and grammar. But I don't put too much emphasis on spelling and punctuation. To me we're still at the stage of looking at taking key facts and putting them in their own words.

Fiona submitted a handwritten anecdotal evaluation sheet. This contained students' names and a comment regarding their summary.

Example:

Brionny - very subjective

Jas - put a lot of personal insight into his report

Adam- limited notes - completed exercise in 20 minutes

She intended using these notes to discuss the summaries with her whole class the day after the ideal lesson. This was an oral evaluation intended to provide students with common pitfalls writers face as they seek to produce text.

Fiona felt less able students were not able to fully comprehend what they were reading therefore it was difficult for them to organize information logically and cohesively. They tended to highlight too much information and become emotive and subjective about the information.

My best students I can tell by their summary sheet. Before I even look at their report I looked at the summary sheet and I can tell just by the way they have asterisked or put things in order they're the ones that got the most out of it. MY weakest students were all over the place, this person here and that person's words there.. They started to formulate the idea of a report as they were doing their summary yet not as logical as the others

Fiona was pleased with the way her lesson went, particularly the reports. She felt the reports demonstrated an understanding of the main character of the novel and students were able to discuss slavery as a result of their research into slavery. As a follow on from this lesson she would continue practising the procedure. This would be accomplished in a narrative form as they were about to begin reading the novel. She felt this procedure could also be advocated and encouraged in independent research such as assignments as she felt the practice element was important in developing summarizing skills. She said her emphasis would shift from note taking to providing experiences with writing frameworks to help improve students' writing.

I wouldn't do note taking. I would leave it now because what's happening now is we'll look at our novel so students are still summarizing. In first term we looked at chapter notes, so we were summarizing each chapter, but in note form, there were no sentences so they are not used to that so we will move on to that now.

In future she would continue to provide opportunities for summarizing but these would most likely eventuate as did this lesson, from the need to develop appropriate background knowledge.

Fiona used her library lessons to teach primary school students to identify key words and information from narrative and informational texts. Fiona felt her students were involved in quite a lot of summarizing. In her role as librarian, she often reads to her classes and asks them to

Case Scenario Eleven

Bill

Introduction

Bill teaches in an independent low fee co-educational school. The school caters for students from kindergarten to year twelve, with Bill's area of responsibility being secondary science. In addition, Bill holds a key administrator's role.

The interview took place in his office and took approximately 20 minutes. Bill submitted a lesson plan according to the proforma supplied and seven samples of students' summaries.

Bill has been teaching for over 30 years in a range of schools across Australia. He has a Bachelor of Science degree.

Nature of Summarizing

Bill described summarizing as the selection of key information based on a teaching or learning purpose. He said:

A summary for me is a child's effort to gather together key information that is relevant to what I'm trying to develop into an understanding so that they can put it together in a paragraph, graph, series of short points, the main ideas of teaching.

Bill believed summarizing was a critical skill especially where large amounts of content and concepts needing to be understood, which is the case in science. He said:

I think in science where there is a huge body of knowledge, particularly now where we're trying to teach process rather than content, it's critical. It can actually show me the children who understand the principles being discussed rather than just quote the example of what happened. So a summary is important.

Bill's definition of a summary and his purposes for asking students to summarize indicated he viewed summarizing as an integrated reading and writing task. Firstly Bill was keen to use the text to complement the concept or content he was trying to teach his students. He said it was typical to follow a practical application with a reading from the text book in order to reinforce the knowledge.

In this lesson I was interested in them having the ability to talk about non-metals because most students had a good idea about what a metal is and can do but few can talk about non-metals, so in a sense a series of notes, not this, not that, is a way of saying all those things that metals can do, non-metals can not do, so we build up the concept.

In the past Bill has used a table to extract information. The use of a table in the 'ideal' lesson suggests Bill believes practice is important if students were to generalize the skills and reinforce the concept of dichotomous separation. In this regard comprehension of content was his focus.

The procedure was largely one where they had to read. They had an example on the board of the notion of dichotomous separation to refer back to as a guide. Essentially it was to read and to show understanding that certain properties describe a metal, that material had certain properties, so we gathered that information.

Thirdly he choose a writer based summary or more specifically a table format to guide students in their selection of appropriate information. He again confirmed the need for content when he indicated he wanted the properties of metal and non-metals to be listed in point form in order to facilitate recall and understanding.

Prior to the 'ideal' lesson Bill had developed summarizing skills as a result of practice of the procedure. The procedure for selecting information

remained constant over the year. Students were given the dichotomous separation criteria ie. metals and non-metals and this was used to extract relevant properties. Bill said he deliberately chose to repeat the procedure as it reinforced the concept of dichotomous separation.

The Provision Of Instruction In Summarizing

The 'ideal ' lesson was a 40 minute year eight chemistry class. The current topic being classification of matter according to properties. Bill referred to this as 'dichotomous key separation'. The text was a science text book and the extract was one page in length.

The first five minutes of the lesson were taken up with an oral revision of the properties of metals. This was followed by discussion about the use of a dichotomous key (table) as a guide to determining differences between one thing and another.

Students were given two objects which essentially represented a metal and a non-metal. Students discussed the differences and formulated appropriate questions to guide them. Bill facilitated this discussion because he particularly wanted students to understand the properties and characteristics.

Students were instructed to read an article in their text book related to metals and non-metals with the purpose of extracting more properties which distinguished metals from non-metals. Students were instructed to use the dichotomous key to record information. This was collected at the conclusion of the lesson.

We had done a lot of work in previous lessons on the dichotomous key which is separation of things into groups by looking at differences between them. We had reached the point of looking at this information in a table. A table as an example of

two different types of materials and their properties. This lesson was a combination of applying and introducing that idea.

Bill's lesson plan suggested evaluation took place when students' summaries were collected and evaluated at the conclusion of the lesson. Some evaluation took place half way through the lesson when Bill stopped students to share responses, which inevitably redirected some students or provided extra ideas for others.

Bill feels summarizing is a difficult but important skill to teach. He feels that whilst people naturally classify and categorize information this does not transfer easily to study areas. He believes it is difficult to teach summarizing because of students' interest.

Yes it is difficult for the reasons I've already sort of said. It seems to be a natural way that forever we categorise people, our friends, our work, our dislikes and likes what we wear or wont wear whatever, hot and cold, good and bad cars we always categorise so the skill is there. We do it naturally but when we turn it into specific areas to seems to me it becomes almost a question of interest. Categories of refinement we do easily. I think it is a very important skill.

Bill provided instruction which took into consideration strategy, text and task variables. Bill's strategy for summarizing was predominantly directed questioning. He began his lesson with a 'hands on' lesson in which students physically classified materials. This was followed by the formulation of questions to direct inquiry. The formulation of questions gave students a framework for organizing the information they extracted from the text. He did not have a choice about the type of text he asked students to read as it was a set student text book. However, Bill liked the text book because it had a similar text structure and style through out the

book. Bill felt this structure reinforced the concept of dichotomous separation.

I did not have a choice about the text as it is the set text. The whole text book has been chosen deliberately because it moves away from conflict based presentations to a whole lot of skill which are consistent though out the text and skill development.

In addition, Bill was aware of the influence of vocabulary and jargon on students' abilities to read to understand.

Key words are to me summarizing. You need a degree of literacy with regard to the material you're using, if you haven't got that you're lost. The text is vital to the whole thing and the simpler words. I think kids understand categories fairly well but I don't think they handle modern words and new names. They just say well that's a new I don't know what that means, Oh it's just another word for an element. So I think literacy and the quality of the text book are important

Bill indicated students found certain types of summaries easier to do. In particular he chose the writer based summary in a table format because his main objective was for his students to understand and learn the content. He felt asking students to write full sentence summaries called on writing skills which complicated his purpose.

Yes it's been my experience that summarizing data in written prose is harder. The kids were presented with two sources, one was a well written prose and the other was a table and they were given nine questions. One half of the class were given the table and the other were given the written material. So I think kids do learn that putting things into tables is easier. They can pick from written prose into a table, going the other way I find kids refuse. They don't know how to expand the information into a written form.

Bill's understanding about summarizing suggested he believed summarizing skills developed with practice rather than with explicit and deliberate teaching strategies. In this regard his instructional model did not demonstrate characteristics specific to any one model.

Bill indicated evaluation took place after the lesson in the form of collected student summaries which were scored out of 36 and received an

annotated comment. The score was determined by the number of correct properties, which Bill had identified as 36 in number.

Anecdotal comments reflected the degree to which students had been accurate in selecting properties and offers of advice for less able students. Bill felt less able students did not understand the concept of properties, however he was pleased with the lesson as he felt most students were able to distinguish properties and apply the concept to the topic of this lesson.

In discussing the difference between less and more able students, Bill signalled the difference as being their understanding and application of the task.

The best students show a clear understanding of what the task is which is to look for universal properties or conditions which lie across all categories. The weaker students show no real understanding in this particular case of the fact that metals and non-metals are different and to look for things which make these different. They simply listed the names of the elements in the table... I asked them why did you put sodium copper sulphate here? Coz it was on the paper? They just didn't understand the task.

Bill was a little disappointed with the lesson because one third of his class had found the task difficult to do.

In terms of the lesson, the majority of kids like to do it so in that sense it was a good experience, it wasn't a drudge thing for them and they were keen to show they were getting hold of the idea, particularly those who got started late and once they had heard a few good answers they picked up the notion. So I was pleased with the lesson, But I was disappointed because one third of the kids found it hard. This book requires a degree of literacy and I think it brought home to me the notion of interest.

Bill indicated the need to continuously refer back to classification and to practice applying it in different situations in order to reinforce students' understanding. He suggested that summarizing was something which was done almost daily in the form of graphs and learning journals.

This is the basis of science teaching. Rather than teach straight content knowledge we're teaching a method of separating any sort of material into categories... We would

summarize daily using graphical representations... In some ways we emphasise journal when we've worked with materials and you should be able to say what you have learnt so the conclusion would be an example of I understand this about this material.

Bill felt summarizing took place indirectly on a daily basis. This was largely accomplished by graphical representation (pie and bar and column graphs) and the conclusion which resulted from each practical experiment. In terms of the 'ideal' lesson, Bill indicated this type of lesson typically occurred once or twice a term and the theme of dichotomous separation was consistent in order to develop the concept. The break down of the lesson was 37 % instruction, 63 % practice and no evaluation took place during the lesson.

CHAPTER FIVE

Data Analysis

Introduction

The literature review looked at past research studies and teacher reference materials in order to determine how summarizing had been thought about and taught in the past. How summarizing was viewed is described as the Nature of Summarizing. The literature reviewed the nature of summarizing by considering:

- definitions and terminology for summarizing;
- purposes for summarizing; and
- types and characteristics of summaries

How summarizing was taught was described as the Provision for Instruction in Summarizing. The literature reviewed the provision of instruction in summarizing by considering:

- summarizing skills and their development;
- manipulation and control of variables related to procedures, text, task, strategy and learner;
- instructional models;

- methods and criteria for evaluating students' summaries; and
- frequency, regularity and subject areas in which summarizing took place.

This organization and information was relevant to research questions one and two. The nature and provision of instruction in summarizing as it was reviewed in the literature was summarized in a table format.

In this study the data analysis took place in a similar manner to a review of the literature. However, where the literature review used past research studies and teacher reference materials, this study used information in the case scenarios. The tables generated in the literature review provided a potential basis from which data from this study could be organized and analysed. However, where this study's participants' responses did not match the categories generated from the literature review, new categories were created. The new categories appear as *italics* in tables 12-22.

Each of the subheadings associated with the Nature of Summarizing and the Provision of Instruction in Summarizing begins by explaining the source of data. That is, either/or lessons plans, interview transcripts, and/or students' evaluated samples. Following the source of information is a table. Each subheading associated with the nature and provision of

instruction has its own table, and whilst the tables have their own unique categories, their organization is the same. For example, the first column describes the categories, and each subsequent column refers to a participant teacher. The teacher appears as a code number. For example Leonardo is represented as t1, Marie is t2 etc. Where a case study teacher shows evidence of the data categories, a shaded cell appears. Data was analysed statistically to determine patterns and trends. A description of these patterns and trends follows each table.

Research question three refers to differences between year levels in terms of the nature and provision of instruction in summarizing. In this section, characteristics and trends specific to upper primary and lower secondary participants are identified and discussed. The primary teachers in this study are represented by t1-t6 and t7-t11 represent the secondary teachers.

This chapter begins with an analysis of data pertaining the research question one which describes the Nature of Summarizing. Following the Nature of Summarizing is data analysis pertaining to research question two - the Provision of Instruction in Summarizing. A summary appears at the conclusion of each section entitled *Nature of Summarizing* and *Provision of Instruction in Summarizing*. Finally, data analysis concludes with an analysis of data pertinent to research question three -

the difference between the nature and provision of instruction in summarizing in upper primary and lower secondary school.

Nature of Summarizing

Definitions of Summarizing.

The teacher's definitions and perspectives for summarizing were predominantly collected from the structured interview. All teachers were asked: 'What is a summary?' Table 12 summarizes the data answering this question.

When explaining their understandings of a summary, ten teachers used the term *summary*. Three teachers used *note taking* and one teacher used the term *analysis*. *Note taking* and *analysis* were new terms given for a summary by teachers in this study.

Five teachers alluded to the length of a summary as being concise, brief or short. Seven teachers agreed that a summary should contain main, important or key ideas.

Three teachers described the summary product as containing the *crux*, *essence* or *guts* of the article which suggests that selection and rating of main ideas is influenced by the textual significance of that information. In contrast, three teachers used the term *relevant* which suggests selection and rating of main ideas is governed by the purpose for summarizing. For example, Sian wanted her students to learn about

Cambodia thereby directing her students' inquiry to certain information not necessarily of textual significance, but relevant to the inquiry.

Table 12
Words Used to Define Summarizing

Terms	t1- primary -t6					t 7 -secondary -t 11					
	t1	t2	t3	t4	t5	t6	t7	t8	t9	t10	11
Summary											
Precis											
Abstract											
Synopsis											
<i>Note Taking</i>											
<i>Analysis</i>											
Adjectives											
Concise											
Brief											
Succinct											
Short											
Nouns											
Reconstruction											
Overview											
Outline											
Content - Adjectives											
Main											
Central											
Significant											
<i>Important</i>											
<i>Key</i>											
Content - Nouns											
Details											
Facts											
Points											
Ideas											
<i>Information</i>											
Product											
Gist											
Essence											
Macro Structure											
<i>Guts Of Article</i>											
<i>Crux Of Article</i>											
<i>Relevance To Task</i>											

Generally, teachers appeared to agree that a summary is a concise written record of the main ideas selected from an article. The teachers' definition were consistent with definitions suggested by research studies

and teacher reference materials. In addition, most teachers in this study viewed summarizing as an integrated reading and writing task.

Purposes for Summarizing.

Information pertinent to the teacher's purposes for summarizing was gathered from the lesson plan proforma, structured interview transcripts and students' evaluated summaries. The proforma lesson plans specifically asked teachers to record aims, objectives and purposes of their lesson, however this proforma was not compulsory. In addition, teachers were specifically asked the following question in the structured interview 'What was your purpose for asking students to summarize?' Finally, teachers' criteria for assessment and evaluation of students' summaries provided further evidence of the various teachers' purposes for summarizing.

Table 13 summarizes the purposes for summarizing.

As can be seen, the teachers' purposes for summarizing were similar to those found in the literature review with only one new classification apparent. This study indicates that '*developing an awareness of learning from texts*' was an additional purpose for using summarizing not suggested by the literature reviewed for this study.

The most common purpose for asking students to summarize was assess and/or evaluate the amount of information recalled. Nine of the eleven teachers chose this purpose. Eight of the eleven teachers

suggested summarizing was used to practise summarizing. Seven teachers reported asking students to summarize in order to improve or assess students' writing abilities. Six teachers reported using summarizing to develop an awareness of learning from texts.

Table 13
Teachers' Purposes for Asking Students to Summarize.

	t1 - primary - t6						t7 secondary - t11				
	1	2	3	4	5	6	7	8	9	10	11
Observational Purposes											
Determine the strategies students use (Pretest / Post Test)											
Intervention Purposes											
Investigate the effects of introducing a new summarizing strategy											
Investigate effects of using a particular instructional model											
Practice Purposes											
To practice a summarizing strategy											
Product Driven Purposes											
Assess or improve writing											
Determine the amount & type of information recalled, understood, learnt											
Process Driven Purpose											
<i>Develop an awareness of learning from texts</i>											
Develop vocabulary											
Promote critical thinking											
Apply summarizing independently											
Develop comprehension strategies											
Is purpose typical											

All teachers had more than one purpose for asking students to summarize. Six out of the eleven teachers reported having four purposes for summarizing, one teacher reported having three purposes and three teachers reported two purposes. One out of the eleven teachers had five purposes for summarizing.

Of the nine teachers who reported recall of information as a purpose, five of these teachers also wanted to develop students' abilities to learn from texts. Of these five teachers, three teachers indicated practice as a purpose for summarizing.

Types of Summarizing.

The types of summaries used by teachers were determined by an examination of lesson plans, interview transcripts and students' samples. In these lesson plans teachers were asked to outline their lesson aims, objectives and purposes. In addition, teachers were asked to outline their methods for evaluating students' summaries and performance criteria. In the structured interview teachers were also asked about their teaching objectives, purposes and evaluation criteria. Teachers were asked the following three questions:

1. What type of summary were students asked to do?
2. Why did you choose this particular summary type?
3. How typical is it for you to ask students to produce this type of summary?

Students' samples were examined for comments which provided evidence supporting the characteristics of the summary advocated. Table 14 shows the types of summarizing found in the literature review. This study added five new categories to those found in the literature review.

Ten out of eleven teachers advocated the use of writer based summaries. More specifically, six of the nine teachers encouraged students to use a point format. The second most common format was tabling, use of symbols and guide questions.

Eight teachers chose a reader based summary as their format. Seven out of the eight teachers developed a reader based summary from a previously written writer based summary.

That is, students were required to extract information in note form first and then to produce a full sentence summary from their notes. In addition, these five teachers provided students with a writing framework to organize their notes into the reader based summary. Teachers were asked if the type of summary used in their 'ideal lesson' was typical of summarizing lessons they carried out. Seven out of eleven teachers reported that the type of summary used in their 'ideal lesson' was typical. Five out of those seven usually ask students to extract information from a text using a writer based summary (notes) prior to producing a reader based summary. The types of summaries used by teachers on other occasions included the use of oral summaries, guide questions, tables or use of a text's structure to extract information, and journal writing as a record of learning.

The types of summaries found in this study were consistent with the types of summaries found in the literature review. The data collected

from the teachers supported the literature review findings which showed the type of summary was heavily influenced by the purpose of summarizing and the prospective audience.

Overview of the Nature of Summarizing.

The teacher's definitions of summarizing were consistent with those found in the literature. Summarizing was described by participants as the selection, extraction, and organization of main ideas. The literature review suggested that main ideas referred to those ideas which an adult or expert reader would classify as textually significant. This study found teachers were divided in their opinion about main ideas. Half the teachers described main ideas as being textually significant whilst the other half referred to main ideas as having contextual relevance to the purpose. In this regard a summary is seen as a concise reconstruction of the main ideas from a given text in accordance with the purpose for summarizing which may be text based or driven by some other purpose.

The types of summaries suggested in this study were also consistent with those suggested in the literature. The most common and typical types of summaries were writer based in which the main ideas extracted from a text were written in an abbreviated form. However, most of the teachers used writer based summaries to develop reader based summaries. In particular, writing frameworks were a common method of

organizing notes from the writer based summary into a reader based summary.

The purposes for which summarizing was used were also consistent with those suggested by past research purposes. Teachers were predominantly interested in a summary as the product of comprehension and recall. This was reflected in the number of teachers who wanted students to summarize in order to develop student's awareness of how to learn from a text. This was not a purpose mentioned in the literature. Interestingly, all teachers had more than one purpose for asking students to summarize. The other purposes included the need to practise summarizing and to improve students' writing. The multiple purposes and move to a more general and realistic application for summarizing suggest a shift in teachers emphasis that was not represented in past literature.

In terms of the first research question, this study found that the teachers' knowledge and understanding about the nature of summarizing was consistent with the literature. Despite the fact that teacher reference materials provided little instructional information about the nature of summarizing, teachers were clear and consistent about the nature and context for using summarizing.

Provision of Instruction In Summarizing

This section relates directly to research question two, which describes the extent to which teachers are providing instruction in summarizing

Summarizing Skills and Their Development

In order to determine teachers' understandings and knowledge about summarizing skills and how they develop, teachers' lesson plans and interview transcripts were analysed. Both the lesson plan and the structured interview asked teachers to describe their objectives, purposes and format of each lesson. In addition, teachers were asked to describe what prior summarizing knowledge, skills and experiences they had provided for their students. The structured interview also asked teachers about their understanding of summarizing skills, their opinions about the level of difficulty of summarizing and any proposed follow up to the 'ideal' lesson. Students' summaries were analysed for comments/advice which reflected or acknowledged the development of summarizing skills.

Table 15 describes how teachers developed summarizing skills during the 'ideal' lesson. Table 16 describes how teachers developed summarizing skills prior to the 'ideal' lesson and Table 17 provides further information about how summarizing skills are developed through proposed follow up lessons.

Development of Summarizing skills During the “Ideal” Lesson

The literature review identified selection, condensing/ combining and transforming of information as the main indicators of development.

Selection Skills

In the literature review selection skills were described as being instructions which encouraged students to recognize trivial and redundant information resulting in students selecting textually significant information such as key words.

In this study, eight teachers encouraged selection skills by providing teacher directed questions or headings. Three teachers eluded to key words as being textually significant ideas. Two teachers suggested students use one word to describe the main idea in each paragraph.

In conclusion, it appears that teachers in this study did not provide students with explicit instruction or strategies for identifying the types of information within a text that would result in students selecting textually significant information. That is , students were not told how to discern trivial and redundant information.

Condensing Skills

In order to identify the use of condensing skills, this study looked for instruction which encouraged students to abbreviate and combine ideas

presented in a given text. Four condensing skills were identified, two of these were not identified in the literature review.

Table 15
Development of Summarizing Skills During 'Ideal' Lesson

	t1 - primary - t6					t7 - secondary - t11					
	t1	t2	t3	t4	t5	t6	t7	t8	t9	t10	t11
Selection											
Delete trivia											
Delete redundant information											
Identifying textually important main ideas- key words											
Identify supporting information											
Use of texts headings to extract											
Given guide questions or headings to extract											
Main idea of each paragraph											
Condensing											
Collapsing lists											
Combining information											
Finding subordinate terms											
Rating ideas -discuss importance of ideas											
Linking information using a concept map											
Linking information using a structured overview											
Extracting information having identified top level structures											
Organize information given a writing framework											
Condensing information into a table											
Transforming Information											
Inferring/ inventing topic sentences											
Inferring top level structure or writing framework to transform information											
Interpreting author's position											
Rearranging information into a table, diagram											
Writing a summary from a table											
Retelling / recounting information											
Transform guide questions/ writing Framework notes into your own words											

The most common condensing skill, which was also new, was the use of writing frameworks. Four teachers encouraged students to use

predetermined writing plans such as a report framework to select and organize information extracted from a text. For example the report writing framework asked questions relating to the three categories:

GENERALIZATION - Define what it is?

DESCRIPTION - Describe the important features.

SUMMARIZING COMMENT - What makes it unique?

Three teachers acknowledged the use of rating ideas as a strategy for including and combining ideas. This was achieved primarily through students engaging in oral discussion about the relevant importance of selected ideas.

A third strategy, which was also new, was the use of a table or semantic grid to condense information. Students were given a chart with predetermined headings along the axis. For example, Jade gave her students a chart with the horizontal axis having three columns for each of the types of rock (metamorphic, sedimentary, and igneous). The vertical axis was organized into three columns which stated *description, where found, how it was formed?* The intention was to guide the student's selection of information relevant to each rock type. The use of a table to condense information was not mentioned in the literature review.

The fourth strategy encouraged by two teachers was the use of a symbol or a diagram to represent information and ideas. Presumably this method of condensing information was used to link ideas, facilitate memory or recall and in recognition of different learning styles.

Transforming Skills

Transformation skills were identified as instruction which encouraged students to infer or invent topic sentences and/or the top level structure of the original text. In this study five transformation skills were encouraged, three of which were new categories used by eight of the teachers.

The most popular skill encouraged by four teachers was the use of guide questions. Through the guide questions, three teachers used the structure of the original text in order to focus on the gist of the text and supporting information. Three teachers encouraged students to write summaries in their own words by removing the original text and making students rely on their own summaries. Other teachers either encouraged students to retell the text in their own words, write a summary from the prepared table or invent a topic sentence for each paragraph.

One teacher, teacher one, encouraged three transforming skills, which included: inferring the text's structure; using symbols to record relevant information and; recalling the text after the original text was removed. The remaining seven teachers encouraged either the use of a table, the text's structure or guide questions. Three teachers did not encourage students to use any transformation skills.

Conclusions From the Use of Summarizing Skills During the “Ideal “

Lesson

In summing up, there were five strategies which implied teachers were encouraging selection skills, four implying condensing skills and five implying transforming skills. In this regard teachers appeared to be encouraging the three summarizing skills, however these were manifested in strategies rather than explicit acknowledgment of the skills.

The separation of summarizing skills into selection, condensing and transforming is debateable as many of the instructions or strategies assisted students to bring all three skills into play without explicit acknowledgment of these skills. The latter finding was consistent with the literature. For example teachers used writing plans, tables and guide questions to assist students in focussing attention on what information to select and how much information to include. Finally, with the original text removed, the writing plan, table and guide questions provided a structure to assist with the transformation of information.

Development of Summarizing Skills Prior to the “Ideal” Lesson

In order to further determine the development of summarizing skills teachers were asked about prior knowledge, skills and experiences they had provided students with which were relevant to summarizing. This information is summarized in Table 16.

Table 16
Summarizing Skills Developed Prior to the 'Ideal' Lesson

	t1- primary teachers -t6						t7 - secondary -t11				
	t1	t2	t3	t4	t5	t6	t7	t8	t9	t10	t11
Orientation											
Practical -hands on experience											
Identify & define key vocabulary											
Predict content											
Given purpose											
Selection											
Mind mapping											
Visualisation											
Use of a visual/ analytical sheet											
Table /chart/ grid											
Sentence by sentence (key words)											
Main idea of a paragraph											
Condensing/transforming											
Writing frameworks											
Guide questions											
Other types of summarizing											
Summarize after listening											
Summary after doing something											
Summarize after viewing											
Cloze activity											
Lists											
Book reviews											
Giving an oral summary											
Summarize in other subjects											
Opportunity											
Very little (< 4 summaries)											
A lot (5+ summaries)											

Prior to the 'ideal' lesson four teachers had introduced their students to the concept of key words. This was most commonly achieved by identifying nouns, verbs or jargon within a sentence and then progressing to the next sentence. Following the introduction of key words, teachers moved on to identifying the main idea of paragraphs by either highlighting key words or drawing a symbol to encapsulate an idea.

Although all teachers asked for a written summary in their 'ideal' lesson, five teachers reported their students had experienced other types of summarizing. The other types of summarizing included recounting information heard or viewed, such as class news, current events reports or lectures. Three teachers reported asking students to give verbal summaries. In particular, the development of informational writing skills appeared to dominate summarizing experiences of students in this study. That is, six teachers had previously provided students with writing frameworks to help them extract and organize information from a given text. Two teachers mentioned using summarizing in a variety of content areas.

Teachers varied in how much experience they had previously provided for their students in order to develop their summarizing skills. Five teachers reported students as having more than five previous experiences with written summaries, four teachers reported students having less than four experiences and two teachers reported they had not provided any previous summarizing experiences.

Development of Summarizing Skills as Proposed by Teachers in Follow-up Lessons.

The summarizing skills which teachers said they would develop in subsequent lessons are described in Table 17.

Table 17

Development of Summarizing Skills Proposed in Follow Up Lessons

	t1- primary teachers -t6					t7 - secondary -t11					
	1	2	3	4	5	6	7	8	9	10	11
Use a writing framework											
Use top level structures											
Narrative style											
Apply to other subject areas											
Practise the process											
Oral summary											
Note format											
Table											
Graph											
Whole task at one time											
Developmental											
No follow up											
Summarizing is difficult											
Summarizing is easy											

Seven of the eleven teachers felt summarizing skills developed with practice. Four teachers felt summarizing was a whole task and as such needed to be practised from start to finish in a given lesson. Two teachers, teacher one and four, felt summarizing was developed by breaking the summarizing tasks into sub-skills and teaching these skills until mastery. Interestingly, these teachers felt that their classes had mastered the process and were now in need of further practice and application.

Four teachers felt they would move summarizing into other subject areas in order to generalize and apply summarizing procedures and process. Two teachers, felt the need to move into summarizing using table formats and two teachers felt they would further develop

summarizing skills in the oral mode. Interestingly, teachers were divided in their opinions about the difficulty of summarizing. Six teachers felt summarizing was difficult for students to do and five teachers felt summarizing was easy to do.

Conclusions From the Development of Summarizing Skills

In conclusion summarizing was developed by teachers breaking up the task into steps or strategies. Firstly, teachers tended to teach strategies which implied selection skills. This involved the identification of key words at the sentence level before progressing to main ideas at the paragraph level. Following the development of selection strategies, teachers taught strategies which incorporated condensing and transforming skills. This involved writing frameworks, tables or guide questions being used to organize information. Again, condensing and transforming skills were implied in the strategies teachers were encouraging. Teachers in this study did not refer to a particular strategy being a way of 'condensing' or 'transforming' information from a given text.

In this study summarizing skills were not taught as obviously as was apparent in the research studies described in the literature review. Teachers did not deliberately plan their lesson knowing that as they used a particular strategy they were developing selection, condensing or combining skills. Nor did teachers articulate that summarizing involved

three main strategies and that as students used a particular strategy they were in fact selecting, condensing or transforming. Teachers' did not appear to know about the three summarizing skills and as a result instruction incorporated these implicitly through the use of general strategies which were part of their teaching repertoire.

Manipulation And Control Of Variables Involved In Summarizing.

The literature listed strategy, text, task, and learner related factors of the chapter as variables which impacted on a student's ability to summarize. This section aimed to identify which variables teachers were aware of and therefore controlled. In this study teachers' knowledge about these variables was obtained from an analysis of the kinds of variables which they controlled in their 'ideal' lessons. Knowledge of this control was confirmed further in the structured interview whereby teachers were specifically asked what variables influenced students' abilities to summarize.

Strategy Related Variables

The strategy related variable refers to the summarizing procedures teachers encouraged students to use as they were summarizing. Data relating to this procedure were collected directly from the 'ideal' lesson plan and confirmed in the structured interview when teachers were asked to describe what happened in the actual 'ideal' lesson and the typical nature of the procedure they used for summarizing. The information

collected from this study is summarized in Table 18. This section revealed no new categories.

Table 18
Summarizing Strategies Encouraged By Teachers

	t1 -primary - t6						t7 -secondary - t11				
	1	t2	t3	t4	t5	t6	t7	t8	t9	t10	t11
No strategy											
Given a definition of summary							2				
Given questions to answer/ direct inquiry							5	1			
Given an expert's summary							1				
One step strategy											
One idea per paragraph						2					
Using a prescribed structure											
1. Extract using graphic outline		3									
2. Extract using a graphic metaphor											
3. Extract using a writing framework											
4. Extract using a top level structure											
5. Extract using a concept map											
Set of rules											
1. Determine purpose for summarizing											
Delete trivia/ redundant information											
Combine/ condense lists/ events											
Select/ invent topic sentences											
Combined strategies											
1. Activate known information		1			1				1	1	1
Formulate questions					2				2	4	2
Search for answers in text					3				3	5	3
2. Establish a context for reading & summarizing		2	1		4					3	
Read & brainstorm recall	2		2		5						
Re-read and add/ delete information	3		3		6						
Discuss appropriate writing structure		4	4		7						
Classify and organize information according to writing plan		5	5		8						
Polish summary- check spelling grammar		6	6		9	3					
3. Skim and predict content						1					
Read, cover, recite, check											
Identify topic sentence											
Identify supporting information											
Note take											
4. Identify characteristics of a good summary										3	
Read and draw symbols in margins or highlight text	1						3				
Make an outline from notes	4						4				
Use a suitable writing framework											
5. Identify key words related to topic.					1						
Classify words					2						
Identify purpose for summarizing											
Organize information using the word classifications					3						
Write summary from notes					4				4	6	

Eight teachers used combined procedures. The combined approaches used by teachers generally involved before, during and after summarizing activities. The before summarizing activities were designed to prepare students for the type of information they would receive in the text and to activate students' background knowledge about what they already knew about the topic. Orientation tasks took the form of providing students with a purpose or context for summarizing, identifying and defining jargon and practical hands on tasks.

Five teachers activated students' prior knowledge by providing a purpose or context for summarizing. This was generally achieved by asking students to predict vocabulary, structure or organization of the text and/or content and formulating inquiry questions. For example Sian asked her students what they knew about Cambodia. She asked students to think about the sort of information necessary for researching a country

The sorts of information were grouped to form headings which were then turned into inquiry questions. Fiona conducted a brainstorming session in which students articulated their knowledge and understanding about slavery. Both activities served to activate in-head knowledge and to formulate questions which directed inquiry as they read the given texts.

Four teachers activated students' background knowledge of key words associated with the text by identifying and defining key vocabulary.

Sometimes this involved skimming and scanning the original text, other times the teacher provided a list of the vocabulary for discussion.

Three teachers provided a context for students by asking students to participate in practical activities related to the information to be presented in the text. For example, Alice gave students the opportunity for free experimental play with compasses and protractors. Jade and Bill asked students to classify rocks and scientific apparatus.

Activities carried out during summarizing were designed to assist students select and organize information. These activities included directed inquiry, and read and recall. The emphasis during summarizing was on the production of notes or facts. Four teachers used directed inquiry whilst summarizing. This took the form of questions and headings to direct students to the type of information needed. Three teachers encouraged students to read and brainstorm remembered facts from the text. This was followed by re-reading to clarify and find more relevant information. Teachers using this procedure encouraged information to be recorded in note form. The next step was the provision of a writing framework or outline from which the notes could be organized. This summarizing procedure emphasised the writing aspect of summarizing and the need to condense and transform information.

Activities carried out after summarizing included polishing the notes and information and mostly required rewriting of the summary. These

activities involved checking for cohesive structure and editing. Four teachers asked students to classify information into headings and reorganize or order information into a logical structure. Four teachers encouraged an editing format which involved checking sentence sense, spelling, grammar and punctuation. Two teachers in this study did not encourage a procedure for summarizing but simply expected students to know how to go about summarizing. One teacher combined skimming and predicting content as a before strategy, followed by selection of one idea per paragraph during summarizing, and finally the polishing of the summary.

Text, Task and Learner Related Variables.

Teachers were aware of text, task and learner related variables. Table 19 summarizes the control of other variables. Text and task related variables were controlled slightly more than learner related variables, with text and task variables registering 23 instances each as opposed to learner variables being controlled in 16 instances.

In relation to text related variables, nine teachers understood that the structure of an informational text was less familiar and therefore more difficult for students to summarize than a narrative text. Teachers choose informational texts because of the students' lack of familiarity and because this type of text was traditionally associated with learning content. Six teachers acknowledged that unfamiliar content interfered

with students' abilities to summarize effectively. In this situation teachers wanted students to summarize in order to learn new content.

Table 19
Text, Task and Learner Related Variables

	t1 - primary -t6					t7 -secondary -t 11					
	t 1	t 2	t 3	t 4	t 5	t 6	t 7	t 8	t 9	t1 0	t11
Text related variables											
Informational text structure											
Narrative text structure											
Familiar text structure											
Unfamiliar text structure											
Familiar content											
New content											
Complex language structures											
More than 1 page of print											
Less than a page of print											
<i>Relevant</i>											
Task related variables											
Writer based summary required											
Reader based summary required											
Text present during summarizing											
Text absent during summarizing											
Time to complete summary											
Learner variables											
Activate background knowledge about content & structure											
Experience with summarizing task											
Interest and attitude											
Reading skills											
Writing skills											
<i>Recognition of different learning styles</i>											

The most common task related variables were the use of writer and reader based summaries. Eight teachers indicated a writer based summary was an easier type of summary than a reader based summary. Seven teachers felt the reader based summary provided an opportunity for students to develop and practise writing skills. Five teachers indicated the presence of the text during summarizing often led to

students copying verbatim and so they chose to remove the original text in order to encourage understanding.

The most common learner related variable was the importance of activating students' background knowledge about either the structure or the content of the given text to be read or summarized. Seven teachers reported this as a deliberate strategy to orientate readers to the text. Five teachers felt students' interests and attitudes towards texts and tasks were influential and so they attempted to choose texts which reflected students' interests.

Instructional Models Used By Teachers

In order to determine the instructional model used by each teacher information was gathered from the 'ideal' lesson plan, structured interview and samples of students' summaries. The 'ideal' lesson provided information regarding purpose and procedures for summarizing, delivery style, and the development of summarizing skills. The structured interview asked teachers to articulate what influenced their choice of text and summary type, task and procedure, time allocation and method of evaluation. The sample summaries confirmed what teachers were looking for in terms of 'good' summarizing skills. Table 20 summarizes the results of this study.

In this study the teachers used one or more of the following models:

- metacognitive instruction:

- direct instruction: and
- collaborative or co-operative instruction.

Six teachers used one model only. Three teachers used characteristics from all three models and two teachers did not use any model. No teachers demonstrated all of the characteristics from each model.

Three teachers used a direct instruction model only. They were teacher six, eight and ten. The most common characteristics being:

- academic focus
- explicit instruction
- accumulative skill development
- use of a checklist to carry out summarizing task

Two teachers, teacher three and four, used only a metacognitive instruction model. The most common characteristics were:

- clear explicit instruction on when and where to use strategies
- modelling of the procedure by an 'expert'
- modelling of compensatory strategies
- opportunity to practice the whole procedure
- regular and informative feedback
- self-monitoring checklists

One teacher used a co-operative /collaborative instructional model and demonstrated the following characteristics:

- explicit instruction
- teacher directed instruction
- team practice of task
- goal similarity
- resource interdependence
- role interdependence
- face to face interaction
- individual accountability

Three teachers demonstrated characteristics from all three instructional models and thus they used a combined instructional model. The number of characteristics ranged from one to six. However between the three teachers most of the characteristics from direct instruction and all of the characteristics from metacognitive and co-operative instructional models were used.

In relation to past research studies this study suggests teachers are using instructional models similar to those involved in past research. The teachers in this study equally used characteristics from both direct instructional models and a combination of characteristics from all three instructional models. It is hypothesized that with the significant teacher in-servicing and education over the past ten years in areas such as

Effective Reading in the Content Areas (Morris & Stewart-Dore, 1984), First Steps, Stepping Out (1992) and Co-operative/collaborative learning, that many of the teachers in this study chose and used strategies because they knew them to be 'best practice' and able to produce a desirable pedagogical outcome.

This eclectic approach to teaching summarizing was not as evident in research studies largely because the scientific contexts have been controlled and contrived. Research tends to be purpose driven to test the effect of an instructional design on the summarizing skills of its participants. In contrast, teachers in this study had multiple purposes involving the development of comprehension, communication and writing skills, building students' knowledge base and with the constraints of an overcrowded curriculum. Hence the need to combine effective and efficient practices from a range of courses.

Method And Criteria For Evaluating Students' Summaries.

Information relating to the way in which teachers evaluated students' summaries was gained from the structured interview and from samples of students' summaries. In the structured interview teachers were asked for their opinions about their lesson, how evaluation was carried out during the 'ideal' lesson, criteria for marking students' summaries, an information about any differences they noted between the less and more able students, and about the content and structure of any

follow up lessons. In addition, comments on students' summaries provided further information about the criteria teachers used to assess students' work. Table 21 summarizes how the teachers evaluated the students' summaries.

Six new categories emerged from this study. The new categories included effort and attitude, the ability to transfer notes into writing, and the use of technical vocabulary. The other three categories related to how and when evaluation was carried out. In class evaluation took the form of *over the shoulder* marking and advice, collection of students' summaries and marking them in the absence of the student and no evaluation of students summaries.

In this study eight of the eleven teachers collected students' summaries and evaluated these away from the students. Two teachers indicated that evaluation took place during the lesson in the form of *over the shoulder* marking. One teacher did not assess or evaluate the students' summaries.

With regards to teachers' criteria for evaluating their students' summaries, eight teachers mentioned the need for main ideas to be recorded. Six teachers indicated the summary needed to make sense and therefore have a logical and organized sentence structure. Six teachers also indicated spelling was important. Four teachers suggested that the main ideas should be those an expert would include in a summary.

Four teachers noted accuracy of details as important and three teachers felt students should use their own words, be able to answer a quiz or recall information and summaries should be neat.

In general, this study found that teacher's tended to use anecdotal assessment rather than the criteria specific form of evaluation used in research studies. The anecdotal assessment reflects the multiple purposes of practical teaching situations. Teachers comments reflected the influence of teaching objectives from previous and current lessons, standards of expectation in terms of neatness, presentation, spelling, and school policy.

Frequency, Regularity, Length of Lesson and Curriculum Areas

The regularity and frequency of the summarizing task refers to how often summarizing is carried out. Information gathered from interview transcripts showed how often summarizing tasks were carried out in the classroom. The results are shown in Table 22.

The degree to which summarizing took place ranged from daily to irregularly. Three teachers reported carrying out some form of summarizing on a daily basis. Two teachers reported carrying out summarizing every six weeks (once per topic) and two teachers reported carrying out summarizing irregularly (perhaps once in seven weeks). The remaining teachers used summarizing: once a week: once a fortnight: once a month: and once a term.

Lesson time refers to both the total lesson time and the breakdown of the actual lesson time into time spent on instruction, practice and evaluation. As the literature review suggested lesson time is problematic because it is greatly influenced by timetable constraints which may result in the summary being completed outside of the classroom situation. However the teachers' lesson plans and interviews showed that the actual lesson times ranged from 30 - 120 minutes. The average lesson was approximately 70 minutes long, with most teachers taking lessons between 50 and 100 minutes lessons.

Other teachers reported lessons lasting: 30: 40: 70: 80: 110: and 120 minutes. Two teachers each took lessons lasting 50 minutes and three teachers took lessons of 100 minutes duration.

The length of time spent on summarizing appeared to be dependent on the text, topic and students' interests. Five teachers reported students' interest in either the text or the content as influencing the length of time spent summarizing. In this regard, length of the summarizing lesson did not appear to be a variable teachers were particularly worried about controlling. Teachers in this study indicated other variables, such as purpose, text, topic and students' interests were more influential and important.

The breakdown of the time spent on instruction, practice and evaluation, was also problematic, and affected by teachers' purposes. For

example, instruction time dominated in lessons in which students received instruction or training. In contrast, there was minimal time given by teachers to instruction in lessons where the summarizing strategy was being practised. Teacher instruction time ranged from 5-66% of the total time. The average time given to instruction in a lesson was 30%. Seven out of eleven teachers reported this as typical of the way in which they allocated time to instruction.

The amount of time spent practising ranged from 50-90% of the actual lesson time. Six teachers indicated practice times between 60- 70 % of the lesson. Eight of the eleven teachers reported the time students spent practising or actually summarizing as typical.

The amount of time spent on evaluation ranged from 0 - 20%. Three teachers indicated evaluation times of 10 % of the total time, and five teachers reported evaluation did not take place during the lesson. This was reported to be typical in ten out of eleven cases.

In terms of the curriculum areas associated with summarizing, it was important to note that although primary teachers are responsible for teaching across most content areas, secondary teachers were fairly equally represented in each of the content areas. For example there were two teachers each from Science and English/library departments and one from the Social Studies department.

In this study the curriculum areas in which summarizing took place most often were Social Studies and English, with five teachers each reporting this as the subject area where the actual summarizing lesson took place. Science was the third most popular curriculum area in which summarizing was taught. Mathematics was one area not mentioned in the literature review.

In addition, teachers were asked if there were any other subject areas in which summarizing was used. Six teachers reported summarizing was integrated across several subject areas, five reported Social Studies and English, three reported Science and Library as an additional area, and two teachers indicated homework or independent study as further area.

As this question was also influenced by the teacher's content area, it is interesting to note that only two teachers reported using summarizing in one subject area only, two teachers used summarizing in two subject areas, one teacher each used summarizing in three, four and five different areas and one teacher reported using summarizing in all areas.

Ten out of eleven teachers used informational texts. The other case was a mathematics lesson in which no text was used. Five out of the eleven teachers reported this as typical.

Overview of the Provision of Instruction in Summarizing.

The types of summarizing skills implied in this study were consistent with past research. Selection skills were the main types of skills developed in students. All teachers encouraged at least one skill for selecting information. Teachers' directed students to textually important information by using writing frameworks, tables and guide questions. Condensing and transforming skills were implied slightly less than selection skills. Condensing and transforming skills were implied when teachers imposed a writing framework, table or guide questions to assist students in organizing information. Three teachers did not provide any strategies/instruction to assist students in condensing or transforming information.

The teachers' understanding of the development of summarizing skills was interesting. Half the teachers believed summarizing was difficult to do, yet most agreed summarizing developed with practice. Summarizing skills were developed over a relatively short period of time, beginning with selection skills and building up to integrated condensing and transforming skills. Following the 'ideal' lesson most teachers felt their students were confident in summarizing and hence follow up lessons would provide opportunities to practise and apply skills rather than instruction on summarizing skills.

In terms of the procedures teachers encouraged students to follow as they engaged in summarizing, most teachers in this study used a combined approach to teaching summarizing. This finding was not consistent with the literature. Past studies tended to use either metacognitive or direct instruction approaches possibly as their purposes were to determine the effect of this type of instruction on students' summaries. In contrast, teachers in this study had multiple purposes involving the development of reading, writing and communication skills. The significant teacher inservicing and education in areas such as First Steps, Stepping Out and Co-operative learning strategies may have influenced teachers to combine 'best practice' from the approaches suggested above.

Participating teachers tended to encourage before, during and after summarizing activities. This approach is similar to the strategy Effective Reading In the Content Areas suggested by Morris and Stewart-Dore (1984). Before summarizing activities are designed to orientate students to the summarizing task. Teachers participating in this study established a purpose or context for summarizing by identifying significant vocabulary or providing practical hands on tasks. During summarizing activities are designed to assist students in the selection and organization of factual information. Teachers participating in this study provided students with either a framework for directing their inquiry or read and

recall strategies. After summarizing activities are designed to polish the summary product. Teachers in this study encouraged students to check cohesive structure of their writing and edit.

Teachers in this study were well aware of the impact of text, task and learner variables. They believed that informational text structures were difficult for students to deal with because they were not as familiar with these texts. As a consequence, teachers deliberately set about familiarising students with informational text structures. Teachers were also aware that students found writer based summaries easier than reader based summaries and so they deliberately chose to develop reader based summaries in an effort to improve writing and provide meaningful writing opportunities. Teachers in this study also recognized the importance of activating students' background knowledge and orientating students to the task. In addition, teachers recognized student interest and attitude as an influential variable and so teachers chose reading materials of interest or intrigue to students.

Again teachers participating in this study used characteristics from all three instructional models suggested by the research. However, teachers tended to combine characteristics from all three models or they used pure direct instruction approaches to teaching summarizing. Metacognitive and co-operative instruction was less apparent.

In terms of how teachers evaluated students' summaries, teachers in this study used criteria which were consistent with the literature in that teachers were mostly concerned with the number of main ideas and the quality of writing. They indicated their criteria for marking was developed by comparing students' main ideas with their own interpretation of the main ideas related to the summarizing purpose. Samples of students' summaries also indicated teachers were evaluating summaries for content, in particular textually significant facts that an expert /teacher would include in a summary.

With respect to evaluation teachers in this study used slightly different strategies from the literature. Teachers in this study tended to use anecdotal comments relevant to a wider criteria than research studies. Comments reflected past and current teaching objectives, students reading and writing skills and abilities, and standards of presentation, spelling etc expected of the various schools. Teachers felt a good summary was one that made sense, was logically developed and organized with correct spelling and punctuation.

Summarizing was carried out as often as suggested by the literature. The amount of time spent summarizing ranged from daily to irregularly, with actual lesson time ranging from 30-120 minutes. The range in regularity, frequency and lesson time was influenced by timetable

constraints, the integration of reading, writing and content focus and influence from other variables such as the text, topic and student interest.

The fact that teachers used summarizing in an integrated reading/writing context in English, Social Studies and Science could be attributable to the emphasis in WA education over the past 10 years. This emphasis has been on integrated curriculum development such as Co-operative Learning, ERICA (1984), and the influences of developmental literacy learning in the form of First Steps (1992).

Difference Between The Nature And Provision Of Instruction In Upper Primary And Lower Secondary Classes

The following section examines data relating to the differences between upper primary and lower secondary classes in terms of the nature and provision of instruction in summarizing. Data was analysed to compare the responses made by upper primary and lower secondary teachers.

Differences Between The Nature Of Summarizing In Upper Primary And Lower Secondary Classes.

Subtle differences were noted between primary and secondary teachers in the way they define summarizing. Both primary and secondary teachers agreed that summaries contained main ideas. The difference between primary and secondary teachers is more apparent in a comparison of the definitions suggested by Leonardo (upper primary

teacher) and Jade (secondary teacher). Leonardo described summarizing as:

Getting the guts of the information out - the main ideas. Do you understand it? Do you know what the article is about? Can you recall that topic or what that person just spoke about? Are you able to take out key information?

Jade described summarizing as 'putting down the main points'.

Apart from the obvious amount of description, Leonardo's definition suggests a more complex definition of summarizing with reference to self questioning and active engagement being expected of students.

Primary teachers would also have more purposes for summarizing than secondary teachers. Five of the six upper primary teachers articulated four purposes for summarizing, whilst lower secondary teachers had a range of between two and four purposes. The most common reasons used by primary teachers for summarizing were to develop an awareness of learning from texts; provide opportunities for students to practise summarizing; and to determine the amount and type of content being recalled, understood or learnt. This was followed by three of the six primary teachers expressing the need to assess or improve writing skills.

Secondary teachers used summarizing to help students recall content and to assess writing. Four out of five secondary teachers had recall and assessment of writing as a purpose for summarizing. Three teachers indicated their purpose for summarizing was to practise summarizing. This difference supports the suggestion that primary

teachers were developing and practicing summarizing skills, whereas lower secondary teachers used summarizing as a study tool.

Primary and secondary teachers emphasized different aspects of the summarizing task, with primary teachers focussing on process and secondary teachers on content. For example primary teachers viewed summarizing as an integrated reading and writing process whereby equal emphasis was placed on the selection (reading) and organization (writing) of information as part of a step by step process approach to summarizing. Primary teachers usually required students to expand the writer based summary into a reader based summary. Secondary teachers appeared to be more concerned about the type of content extracted and the ability of students to recall and use the information, therefore the summary product was often left in abbreviated note forms such as guide questions and tables.

In an analysis of the differences between the other types of summaries used both primary and secondary teachers reported using a similar number and variety of summary types. Primary teachers used writing frameworks, learning journals, oral summaries, tables, texts' structure, projects and book reviews. Secondary teachers reported using guide questions, text structure, graphs, tables, oral, book reviews and lists.

The Difference Between The Provision Of Instruction In Upper Primary And Lower Secondary Teachers

Generally, primary teachers encouraged the application of a greater number of summarizing skills than secondary teachers. In terms of the number of teachers encouraging particular summarizing skills, primary teachers encouraged almost twice as many skills as secondary teachers. The greater number of skills being developed in the primary classes reflects their emphasis on summarizing process rather than content.

In terms of orientation skills, primary and secondary teachers were similar. Ten primary teachers encouraged selection skills as opposed to five secondary teachers. Eight primary teachers encouraged condensing skills as opposed to four secondary teachers and seven primary teachers encouraged transformation skills as opposed to three secondary teachers.

The types and variety of orientation, condensing and transforming skills developed were different between primary and secondary teachers. In the orientation phase primary teachers chose identifying key words, and purpose as orientation skills; whereas secondary teachers favoured practical applications such as classifying rocks prior to introducing the text. There were differences in strategies for condensing information. Primary teachers encouraged students to rate ideas and use writing frameworks to condense and combine ideas, whereas secondary teachers encouraged students to use tables to organize information. In

transforming information primary teachers preferred to impose a top level structure or writing framework in order assist students in organizing information. Whereas, secondary teachers encouraged students to transform information by answering guide questions in their own words.

Primary and secondary teachers used similar selection skills such as guide questions and identification of textually significant ideas.

The main difference between the development of summarizing skills was the step by step process approach taken by primary teachers as opposed to the content emphasis taken by secondary teachers. The primary teachers divided the summarizing process into sub skills and taught summarizing from orientation, selecting, condensing through to transforming into a reader based summary. Whereas, secondary teachers appeared to short cut the process by guiding students' inquiries to specific information and condensing and transforming that information into readily recallable chunks of information.

The number of instances when students had been asked to summarize prior to the 'ideal' lesson suggested that primary teachers were more inclined to ask students to summarize. Five of the primary teachers indicated they had asked students to summarize prior to the 'ideal' lesson on more than five occasions. In contrast, two out of the five secondary teachers had not previously provided an opportunity for their students to summarize and the remaining three secondary teachers

provided less than four other opportunities for students to write summaries.

The analysis of teachers' proposed follow up lessons showed that both primary and secondary teachers agreed that further practice was necessary. Primary teachers tended to focus on the whole summarizing process and its application to other subject areas in order to practice the process, whilst secondary teachers suggested further practice take place with a change in style such as a narrative text, a table or a graph style. Interestingly, two primary teachers suggested summarizing was a developmental skill whilst secondary teachers did not acknowledge this suggestion at all.

The main difference between the summarizing procedures advocated by upper primary and lower secondary teachers appears to be in the variety and number of strategies encouraged within a particular procedure. Secondary teachers either did not suggest a procedure for summarizing (two teachers) or they suggested a three step procedure which involved students thinking about what they already knew about a particular topic, use of guide questions to direct inquiry and then the production of a writer based summary to facilitate recall.

In contrast, primary teachers tended to encourage combined approaches to summarizing. Three procedures emerged which had between four and nine steps.

The first procedure involved establishing a reading/ summarizing context, reading and recalling, re-reading and supplementing information, use of a writing framework to organize information extracted from the text, followed by editing and improving the summary. A second procedure involved identifying and classifying key word meanings prior to reading, and after reading organizing supplementary information into the classifications. The final procedures involved activating known information, formulating questions to direct reading and inquiry, establishing the purpose for summarizing, reading, recalling, re-reading, supplementing information and use of a writing framework to organize information extracted from the text. Most of the procedures used by primary teachers involved developing a writer based summary into a reader based summary.

The control and manipulation of other variables indicated there were differences in the number and type of variables being controlled. Primary teachers tended to control task and strategy variables as opposed to secondary teachers understanding about text and learner variables. Again this would seem to confirm and support the different emphasis with respect to process and content. Primary teachers controlled and manipulated the procedure for summarizing and integration of reading and writing skills. In contrast, secondary teachers controlled and

manipulated aspects of the text and attempted to link new information from texts with students' existing knowledge about particular topics.

This study found that upper primary and lower secondary classes used different instructional models. The main differences in instructional models were the types and number of models used. All primary teachers used one or more of the instructional models. One primary teacher used only a direct instruction model. Two primary teachers used only a metacognitive instructional model. The remaining primary teachers demonstrated characteristics from all three instructional models, therefore employing combined approaches instruction in summarizing.

In contrast, no secondary teachers employed any characteristics of metacognitive instruction. Two secondary teachers used only a direct instruction model and one secondary teacher employed characteristics associated with collaborative instructional models. The remaining two secondary teachers did not demonstrate characteristics from any of the instructional models.

This appears to suggest that in terms of the provision of instruction in summarizing secondary teachers placed greater emphasis on the content and practice of summarizing as opposed to the explicit teaching of summarizing processes and skills evident in the primary teachers instruction. Again, the use of an instructional model which emphasises explicit instruction on when, where, why and how to go about

summarizing supports a process and skills approach to the provision of instruction. This study suggests there is a significant decrease in the provision of instruction once students go to secondary school.

In terms of evaluation it appears both primary and secondary teachers indicated a similar methods and marking criteria for students summaries. However primary teachers were more detailed in their comments and were more inclined than secondary teachers to make comments with regard to sentences making sense and being logical. Generally, summaries were collected for marking in the form of anecdotal feedback to students. Primary teachers' comments reflected the need for summaries to make sense and have logical sentence structure and organization. Secondary teachers reflected the amount and type of information included by students which teachers rated as textually important.

The main difference in the regularity and frequency of the summarizing task was that primary teachers tended to ask students to summarize more frequently and regularly. Primary teachers reported using summarizing daily, weekly and fortnightly as opposed to secondary teachers who used summarizing monthly, or less frequently every six weeks and irregularly. The differences between lesson time and break down indicated primary and secondary teachers had similar lesson lengths of between 73 and 80 minutes duration. Teachers' lessons were

broken into one third instruction, two thirds practice and minimal in class evaluation.

CHAPTER SIX

Discussion

This study chose to investigate the nature and provision of instruction in summarizing because it is a general skill with wide applications both in and outside of educational settings. Summarizing is something people do as they listen to conversations, relate experiences and events to others, read and view materials and texts. As students progress through their schooling the ability to summarize becomes increasingly important as they are expected to learn independently from a variety texts.

Past research studies suggest students find summarizing difficult because it is a multi- disciplined task involving the integration of high order cognitive skills. Summarizing involves comprehension, reconstruction and composition skills. In addition, strategy, text and learner variables influence and contribute to the complexity of the task.

Experimental research has demonstrated that the number of textually significant ideas and the quality of students' writing can be affected by the manipulation and control of strategy, text, task and the learner variables. These research studies concluded that summarizing instruction needed to be explicitly taught as it involved strategic development and regular practice.

One of the reasons for carrying out this study was the fact that the conclusions from previous research were not fully reflected in teacher reference

and support documents. Very few teacher reference materials make mention of the three summarizing skills (selecting, condensing and transforming), the influence of instructional models, various strategies and the interdependence of strategy, text and learner variables on the development of summarizing skills (Hidi & Anderson, 1996; Bergin, 1992). Even successful procedures such as *Effective Reading in the Content Areas* (Morris & Stewart-Dore, 1984) and *First Steps* (1992) do not specifically mention skills involved in summarizing and how these develop. Instead these procedures tend to provide effective and practical strategies such as those mentioned in Morris & Stewart-Dore's *Extracting and Organizing* component and *First Step's* writing frameworks. With teacher reference material being somewhat elusive and implicit about background knowledge and details concerned with the nature and provision of instruction in summarizing, it is possible to hypothesize that teachers may not be cognizant of the complex nature of summarizing. This might, in turn, influence the provision of instruction in summarizing. Therefore, this study aimed to investigate teachers' understandings about the nature and provision of instruction in summarizing for students in upper primary and lower secondary schools. In addition and somewhat uniquely, this study sought to determine if there were differences between the nature and provision of instruction for teachers in upper primary and lower secondary school settings.

Teachers in this study showed similar understandings about the nature of summarizing to those suggested in the research. However, in this study

teaching purpose greatly influenced how teachers carried out instruction in summarizing. Firstly, teachers in this study tended to have multiple purposes for asking students to summarize, which suggests teachers were utilizing the components of the summarizing task to facilitate multiple outcomes. These outcomes ranged from specific reading/writing outcomes to more generalistic outcomes such as development of critical thinking and research skills.

Secondly, the multiple purposes influenced teachers' actions in the following ways: emphasis with regard to process, procedure, content and product; perceptions of summarizing as a reading, writing or integrated task; definition of main ideas as either contextually or textually significant ideas; and the type of summary to be produced.

Thirdly, particular teaching purposes tended to match with different understandings about the nature of summarizing. For example, where a teacher's purpose was to provide reading/ writing skills instruction in realistic contexts, their emphasis was on the whole summarizing process. These teachers defined main ideas as factual information relevant to the context rather than relevant to the text. They also tended to develop reader based summaries from writer based summaries. The clustering of characteristics related to the nature of summarizing is explored further in the provision of instruction in summarizing.

Finally, whilst the summarizing activities used by teachers were influenced by their purpose, the use of selection, condensing and transforming

skills were implicitly rather than explicitly evident. That is, the skills were implied in the strategies teachers encouraged their students to engage in, however the skills and corresponding strategies were not explicitly acknowledged and identified to students. In this regard teachers were not explicitly developing a metacognitive understanding about what skills were involved in summarizing.

When describing the provision for instruction in summarizing, this study found most teachers were providing instruction from a variety of instructional and theoretical models. This was consistent with the research studies. In particular, the employment of before, during and after strategies might be attributed to the Effective Reading In Content Areas strategies used by teachers in the 80's and early 90's (Morris & Stewart-Dore, 1984). Also evident in this study was the use of writing frameworks to assist students' extraction and organization of information. This influence is possibly due to professional development in First Steps and Stepping Out, which has been wide spread throughout Western Australian schools during the 90's.

As was the case with the nature of summarizing, characteristics related to the provision of instruction were again influenced by the teachers' purpose for asking students to summarize. This resulted in particular strategies, instructional models, evaluation techniques and task regularity/frequency appearing with particular purposes.

The significance of this study and therefore its contribution to new theory is the apparent clustering of characteristics related to the nature and provision of instruction in summarizing according to the various teaching purposes. Closer examination of teaching purposes and their particular nature and provision of instruction were also found to be developmental. That is, the matching of particular orientations with year level teachers suggests a decrease in the provision of instruction in summarizing as students get older. This appears to result from the nature of summarizing changing from having process and procedural purposes in the primary school to having content and application purposes in the secondary school. It seems, that once the process and procedures are in place, practice and refinement follows, until such time as teachers believe students are able to carry out the task independently. In this study, instruction in the process and procedures for summarizing tended to take place in the upper primary classes, with further practice and refinement taking place in secondary classes. That is, teachers in upper primary school tended to provide practical and generalistic knowledge and understandings about summarizing. They integrated reading/ writing outcomes and attempted to develop students' awareness of the whole process of summarizing. This was followed by a shift in emphasis to the actual procedures and strategies for summarizing. Secondary teachers, assuming the skills and procedures were in place, proceeded to apply summarizing to situations involving independent

learning from texts. Secondary teachers focussed on the content and student's ability to recall and/or utilize the information extracted from the text.

From this study, the clustering of characteristics related to the nature and provision of instruction in summarizing identified four teaching orientations. Each orientation has a different teaching purpose which subsequently influenced how teachers thought about summarizing, the context in which it was presented and the amount and type of instruction and evaluation. The four orientations were described as Integrated, Task, Content and Assessment orientated. Whilst the teacher behaviours tended to cluster into four orientations, it is important to note that these divisions could be considered somewhat arbitrary as some teachers displayed characteristics from more than one orientation.

The characteristics of the four teaching orientations found in this study are elaborated in the following section. A summary of the characteristics of the four orientations are tabled in Appendix VI.

Integrated Orientation

The Integrated orientation purpose for summarizing is to improve students' self control and awareness of learning through speaking, listening, reading, viewing and writing. Students write summaries in order to learn how to select, extract and organize information. The emphasis is on summarizing as a process of learning. Summarizing is used in a variety of contexts, therefore main ideas are factual information related to the context. For

example Sian wanted her students to learn about the geography of Cambodia, main ideas were identified as information about the landforms and climate. The type of summary also varies according to the purpose.

Summarizing skills are systematically developed and applied to many different situations. It is used in different subject areas and in both oral and written contexts. The emphasis is to provide students with the opportunity to generalize and apply the skills to independent learning situations. Students are encouraged to be active, aware and responsible for both their learning and application of summarizing skills. The teacher's role is to act as an instructor and facilitator. Evaluation involves continuous assessment/advice and support as well as opportunities for self and peer assessment. This particular orientation is driven by a metacognitive instructional model. Students are encouraged to use and apply the summarizing procedures to a variety of different situations, and therefore, summarizing is said to occur all the time. Variables are not controlled, but knowledge about the influences of texts, task, procedure and the learner are highlighted by the teacher so that students can apply and adapt the summarizing procedure to suit their purpose or task.

In this study one teacher, Leonardo, exhibited most clearly the characteristics consistent with this orientation.

Task Orientation

The teachers with a Task orientation focus on the process for summarizing. These teachers emphasize the procedures for summarizing.

Their purpose for asking students to summarize is to provide or develop strategies to assist reading, comprehension and writing or to determine the effect of training or intervention. Summaries are either reader or writer based depending on whether the strategies have a reading or writing emphasis. More summarizing skills are utilized as the strategies are developed systematically. This systematic development of skills is manifested in the form of a series of steps for which students are required to develop independent mastery before moving on to the next step. The procedure for summarizing was often developed over a number of lessons.

Instruction is concerned with the task or procedure for summarizing. Students are taught strategies for identifying key words, use of structured overviews to organize key information, and how to transform extracted information into prose. Teachers with this orientation often use direct instructional techniques, however, the same outcome can incorporate co-operative learning strategies. Assessment takes place during the lesson in the form of *'over the shoulder'* advice and support. The criteria for evaluation is related to the mastery of the procedure for summarizing. For example, teachers reward students verbally and anecdotally for the way they identify key words or use their structured overview. Once the whole procedure is known, teachers will provide students with a checklist for self assessment of their summaries. Completed summaries are marked and detailed anecdotal feed back is given to students. As already indicated in this study teachers with

this orientation develop lessons systematically and regularly. They also give students the opportunity to practise weekly or fortnightly. As teachers developed lessons strategically, they control the texts and task aspects of summarizing.

In this study three teachers, Maria, Josephine and Fiona exhibited characteristics of the Task Orientated approach. Maria and Josephine are primary teachers and Fiona is secondary teacher.

Content Orientation

Teachers with a Content orientation focus on the content or information present in the actual summary. A teacher's main purpose for asking students to summarize is that students learn and recall facts and details relevant to a particular topic. To a lesser degree teachers asked students to write summaries in order to clarify meaning or isolate important information, however, the actual information is still the significant factor. In order to facilitate recall students are usually encouraged to summarize using a note form which included abbreviations or symbols. Since recall of information is the desired outcome selecting and condensing are the main skills emphasized.

Summarizing skills are developed through practice rather than strategically developed. Instruction is characterized by its simplicity. Teachers usually suggest a one step strategy such as highlight the important information or delete unimportant information and copy remaining ideas. In addition, teachers direct inquiry by providing students with guide questions or

a table. While there is no distinct instructional model evident in this orientation, teachers will clarify students' understanding about the concept of a summary by stating what a summary is and looks like. As the recall of information is important in this orientation evaluation takes the form of a quiz, recall tests involving essays and short answer questioning. Students will write summaries as a means of revising a topic and as such this task is not often asked of students.

In this study, Victoria, Bill and Jade were representative of a content orientated teacher. Interestingly, all three teachers are secondary teachers.

Assessment Orientation

Teachers with an Assessment Orientation emphasize the product or summary as the most significant aspect of the task. That is, teachers ask students to summarize in order to assess either the type of information in the summary or the quality of writing. Summaries tended to be reader based summaries with little or no consideration given to summarizing skills or their development. Tasks tend to be 'one off' tasks with no follow up. For example, teachers may ask students to complete a summary as an assignment.

With respect to instruction, few strategies or procedures are suggested to students. Students are basically left to their own devices and understanding about a task. An instructional model is not evident. The criteria for marking is not made explicit to students as the teacher's purpose is to assess skills or knowledge. As already indicated preliminary lessons outlining the structure,

purposes and processes involved in summary writing usually have not occurred. Similarly, there are no follow up lessons to fine tune students' understanding of these aspects. As students work independently, variables such as the type of text, presence of original text, time, procedures, choice of topics are left to the student's discretion.

The case study teacher most representative of this orientation was June because she simply outlined the assignment to her students and provided them with class time to complete the task.

Links With Past Research

Past research studies have tended to investigate what students do as they summarize, how summarizing skills develop and the impact of manipulating variables on students' summary writing. Conclusions drawn from this research suggest that summarizing is a high order skill needing explicit and strategic instruction and practice. Past research further concluded that if students are left to their own devices, summarizing skills will develop slowly and emerge later. This study used the findings of past research to investigate and discover what teachers understood about the nature of summarizing, the degree to which instruction was provided and whether there were any instructional differences between upper primary and lower secondary teachers. In its approach, this study tried to capture what was really happening in the contexts of the classroom and describe this in case scenarios. An analysis of the data from the eleven case scenarios describes four teaching orientations.

The orientations represent the different nature and instructional style of summarizing shown by these teachers.

The differences between upper primary and lower secondary teachers discovered in the course of this study, suggest strategic instruction in summarizing decreases as students progress through their schooling. Primary teachers tended to be more skills orientated in their approach to summarizing and as such they provided strategic, systematic instruction and practice in summarizing. In contrast, secondary teachers tended to emphasize content and so they provided less explicit instruction in summarizing and instead focused on students being able to recall and apply content from texts.

The primary teachers participating in this study tended to use a process approach to teaching summarizing. They taught students about where, when, why and how to go about summarizing. Teachers wanted students to be aware of the strategies for extracting and organizing information from a text. To a lesser degree teachers wanted students to use texts to learn content and improve their writing. For this reason, teachers encouraged students to produce and develop reader based summaries from the shorter writer based summary. Teachers provided scaffolds for selecting, condensing and transforming skills. These skills were strategically developed until a procedure or process was in place. Teachers provided strategies which supported the development of a summarizing procedure. Students were often required to master a number of prerequisite skills such as key word

identification and note taking, before orchestrating these skills to form a procedure for summarizing. Summarizing was carried out regularly each week or fortnight and in a variety of different contexts. It is quite possible that this process approach to summarizing is an outcome of recent intensive in-servicing of Western Australian primary school teachers in First Steps.

Secondary school teachers emphasized content or knowledge. Their purpose for asking students to summarize was usually to facilitate the learning and recall of content, therefore teachers tended to use writer based summaries which emphasized selection and condensing of information. There was often little or no instruction provided to develop summarizing skills and teachers were generally not so concerned about how students went about summarizing. Such instruction as existed tended to be limited to one step strategies which involved teachers guiding and directing student's inquiry. In addition, summarizing took place infrequently as little as once per term. Students' summaries were evaluated according to the selection of appropriate content.

The disparity shown between primary and secondary teachers with respect to the provision of instruction indicates a concern if this trend is a reflection of the education system. This may mean that if students have not sufficiently learnt the skills or procedures for summarizing by the end of primary school it is unlikely that further complex instruction in summarizing will take place. In addition, it is likely that given the nature and provision of instruction in summarizing evident in this study, that secondary teachers have

and will assume that students have sufficiently and effectively developed summarizing skills and procedures by the time they leave primary school.

It is important to note that neither the primary nor the secondary teachers explicitly identified selecting, condensing, and transforming as the major skills used in summarizing. Nor did they explicitly make this metacognitive knowledge available to their students.

Thus this study serves to highlight the need for teachers to; have metacognitive knowledge about the skills of selection, condensing and transforming required for summarizing; provide both instructional strategies and explicit summarizing skills to students in order to meet the needs of their students; be able to assess the level of summarizing skills their students have developed, in order to match instruction with their students' development; and for undergraduate teacher education courses to provide student teachers with the metacognitive knowledge about skills for summarizing. A finding emanating from teachers' statements about influential and successful professional development indicated that *First Steps*, *Stepping Out*, *Effective Reading in the Content Areas* contributed to changes in teaching practices with teachers in this study.

Limitations of This Study

In carrying out this research a number of limitations were evident and therefore the following recommendations are made.

Firstly, this study may be limited by its participant sample. In particular, the small number of participants and the relatively similar geographical location of the teachers surveyed may not be truly representative of teachers from years 6-9. In addition, the upper primary classes were represented by six teachers (three year six teachers and three year seven teachers). The lower secondary teachers were represented by four teachers. Therefore statements made about the difference between the nature and provision of instruction in upper primary and lower secondary classes may also not be representative. To overcome this limitation it is recommended that a wider participant group be used in future studies.

Secondly, the use of an 'ideal lesson' meant teachers had the opportunity to put their 'best practice' forward. This might not necessarily represent their actual daily practices. However, the researcher in this study felt there was an advantage to giving teachers the opportunity to plan and implement an 'ideal lesson' in which they could control the teaching approach and style to best suit themselves and their class. Future studies in which the researcher took on the role of participant/observer would provide further validation of this study.

The type of investigation undertaken in this study was descriptive and aimed to report on the current situation with regard to the nature and provision of instruction in summarizing. The method of collecting and analyzing the data meant that the literature review provided the initial categories. The use of categories taken from predominantly quantitative

research may have unintentionally swayed the researcher into placing data into existing categories rather than generating more suitable categories from the context in which this research was carried out. However, where a participants' responses did not match existing categories this research did allow new categories to emerge.

Likewise the formulation of four teaching orientations, with regards to the nature and provision of instruction in summarizing, are also subject to the influence of research studies and the small participant sample. In order to confirm both the characteristics and descriptions within each orientation and categorizing teaching styles, future research could consider investigating the appropriateness of the descriptions and its application to a wider sample of teachers.

The general nature and wide application of summarizing made it difficult to determine exactly how often and how much summarizing was used. This study attempted to determine the amount of summarizing by asking teachers how often they conducted a lesson like the 'ideal' lesson, other types of summaries asked of students, and the typical nature of summarizing tasks. However, the resulting data was based on teachers' judgments and opinions rather than tangible evidence. Therefore future studies should clearly define the types of summarizing tasks and ask teachers to provide evidence of their use from perhaps teachers daily lesson books, teaching programs or observations over time.

As discussed previously, teachers in this study demonstrated an implied awareness of skills for summarizing, however this was not necessarily explicitly reflected in the instructional procedures. Thus it is not clear if students gained any metacognitive understanding about skills for selecting, condensing, combining and transforming information. Rather they were given steps to follow. In the practical sense, this meant teachers did not make students aware that they were using selection, condensing/combining and transforming strategies. It is recommended that future studies might investigate the impact of making such knowledge and understanding available to teachers and teacher training courses in order to provide improved instruction and thus greater understanding for students.

Finally, this study claimed teacher reference materials were limited in describing explicitly the nature of summarizing and providing instruction and advice in the teaching of summarizing. Yet the teachers participating in this study were aware of some effective strategies for teaching summarizing, albeit implicitly taught, which they attributed to professional development. Therefore the question emerges as to what types and characteristics of professional development provide the greatest impetus for change with regard to teaching practices and teachers' knowledge and understanding about summarizing. This study did not attempt to determine effects of successful professional development, hence future studies investigating teacher's knowledge and choice of instructional design about summarizing (or similar

reading and writing skills) might also consider the influence and effect of various professional development models. Knowledge about what influences a teacher could be instrumental in improving teaching practices and implementing change in schools.

APPENDIX

APPENDIX I

Ms Susan Smith

Suburban Primary School
School Address

12 March 1995

Dear Susan

Further to our conversation last week, regarding your willingness to participate in my Master of education Research Project. I have enclosed a reduced version of my research proposal. The proposal has been before two examiners and their advice and suggestions employed.

Basically, the research involves investigating teachers use of summarizing and their provision of instruction in summarizing. My aim is not to discredit teachers, but rather report on what is happening at the 'grass roots' level with regard to the nature and provision of instruction in summarizing.

In practical terms, teachers are required to prepare a typical lesson in which summary writing or summary writing instruction is involved. A proforma lesson plan is attached however this is not compulsory. After administering the lesson teachers select 1 or 2 samples of students summaries which represent a) below your expectation for this group, b) typical of what the group produce and c) above your expectation for this group. Please forward copies of your lesson plan and samples to me. I will contact you regarding a mutually agreed interview time of approximately half an hour. The interview is audio-taped in order to transcribe it, however only quotes will be used to provide 'thicker' data. Following my write up of your case scenario I will forward a copy to you in order for you to read, add/ delete interpretations. Only the final edited case scenario will be used in the thesis.

I have obtained permission from your principal to undergo research in your school. The school and your personal identity will remain anyonomous. Teachers from year 6-9 will be asked to participate in the research, however you have the right to decline involvement. If you undertake to be involved, you may withdraw at any time, and I will not use any data collected without your written approval.

I have enclosed a broad overview of my research. I would be happy to discuss any other details with you and I look forward to hearing from you.

Yours sincerely

Dawn Bergin

I.....have read the above research proposal and any questions I have asked have been answered to my satisfaction. I agree to participate in this research, understanding I may withdraw at any time.

I understand that the research data gathered for this study may be published provided I am not identifiable.

signed.....

APPENDIX II

Structured Interview Questions

Nature of Summarizing

1. What is a summary?
2. Is summarizing useful?
3. What was your purpose for asking students to summarize?
4. Is this a typical purpose for asking students to summarize?
5. What other purposes do you have for asking students to summarize?
6. Describe your lesson
7. What type of summary did you require students to produce?
8. Is this a typical type of summary you use?
9. What other types of summaries do you ask students to do?
10. What skills are activated during summarizing?
11. What knowledge, skills or experiences have your students had prior to this lesson?
12. How did your lesson go?
13. How do you proposed to follow up this lesson?
14. What were the main differences between your more and less able students?

Provision of Instruction in Summarizing

15. Is summarizing difficult to do?
16. What variables effect summarizing?
17. What type of text did you use?
18. How long was the original text?
19. Was the original text present during the summary writing?
20. How much practice have your students had at summarizing?
21. How often do you ask students to summarize?
22. How typical is the procedure you encouraged students to use?
23. What other times do you ask students to summarize?
24. How much of the lesson was instruction, practice and evaluation?
25. What influenced your choice of summarizing strategies, text, type of summary, time and evaluation?
26. How did evaluation take place during the lesson?
27. How were the students summaries evaluated? What was your marking criteria?
28. Do students find one type of summary more difficult than another?

APPENDIX III

Lesson Plan Proforma

Teacher.....

Year Level.....

Subject.....

Topic

Skills developed and experience prior to this lesson

Objectives and outcomes expected of this lesson

Lesson Plan

Evaluation

APPENDIX IV

The Triangulation of Information Regarding the Nature of Summarizing

Nature of Summarizing	Lesson Plan	Structured Interview Question	Student's Summaries
1. Definition		1. What is a summary? 2. Is summarizing useful?	
2. Purpose	-Aims and Objectives -Lesson Procedure -Evaluation	Quest 3.4.5. 6. What was your purpose for asking students to summarize? 6. Was this typical? 7. What other purposes do you have for asking students to summarize? 8. Describe your lesson	-Type of summary evaluated. -Criteria for marking
3. Type of Summary	-Aims and Objectives -Lesson Procedure -Evaluation	3. What type of summary was asked for? 4. Is this typical? 5. What other types of summaries are used?	-type of summary product - criteria for marking
4. Summarizing Skills and their development.	-Aims and Objectives -Strategies encouraged for summarizing -Lesson format -Prior knowledge, skills and experiences of students - method of evaluating lesson and students	10. What skills are activated during summarizing? 11. What prior knowledge, skills and instruction had students had prior to this lesson? 12. How did you feel the lesson went ? 13. How will you follow up this lesson? 14. What were the main differences between less and more able students?	anecdotal comments on student's summaries

APPENDIX V

Triangulation of Information Regarding the Provision of Instruction In Summarizing.

Provision of Instruction	Lesson Plan	Structured Interview Questions	Students' Samples
5. Procedure For Summarizing	Procedure	15. What strategies were encouraged to use? 16. Was this typical and why?	
6. Manipulation & Control Of Other Variables	text pre requisite lessons time given purpose	17. Is summarizing difficult to do? 18. What variables effect the ability to summarize? • text type, length, presence • students prior experience, knowledge skills, abilities, interest.	work sheets student summaries
7. Instructional Model	lesson format	19. How much of the lesson was instruction, practice , evaluation? 20. What influenced your choice of strategy, text, type of summary, time and evaluation?	
8. Criteria For Evaluation	expectations /outcomes	21. How did evaluation take place? 22. What was your criteria for marking? Quest 14 23. How would you follow up this lesson?	Comments on summaries
9. Frequency & Regularity, Length Of Lesson, Subject Area	lesson time/ subject pre-requisite lessons	24. How often do? 25. How much practice have students had ? 26. What other times do you ask students to summarize? Quest 19. 20	

APPENDIX VI

Characteristics of Four Teaching Orientations

	Integrated of Summarizing	Task	Content	Assessment
Nature Purpose	<ul style="list-style-type: none"> to improve student's self control and awareness of learning to promote critical thinking to integrate reading/ writing in realistic contexts 	<ul style="list-style-type: none"> to monitor comprehension to develop vocabulary to provide strategies for improving writing to determine strategies being used to determine effect of training/ intervention 	<ul style="list-style-type: none"> to facilitate learning content to recall content to clarify meaning and significance of discourse 	To assess : <ul style="list-style-type: none"> content comprehension research skills writing
Emphasis Definition of Main Ideas	<ul style="list-style-type: none"> whole process contextual significance 	<ul style="list-style-type: none"> procedure/ strategy contextual significance 	<ul style="list-style-type: none"> content textual significance 	<ul style="list-style-type: none"> product contextual textual
Type of Summary	<ul style="list-style-type: none"> varies to suit purpose includes oral summaries writer based precedes reader based 	<ul style="list-style-type: none"> writer and reader based 	<ul style="list-style-type: none"> writer based 	<ul style="list-style-type: none"> reader based
Provision of Instruction				
Summary Skills	<ul style="list-style-type: none"> selecting condensing/combining transforming writing extending skills from previous lesson 	<ul style="list-style-type: none"> selecting condensing/ combining transforming writing skill mastery before moving to next skill 	<ul style="list-style-type: none"> selecting condensing practice 	<ul style="list-style-type: none"> selecting writing no skills development
Procedure	<ul style="list-style-type: none"> predicting activating prior knowledge identifying known modelling structured interview concept maps integrated content/ writing collaboration with peers 	<ul style="list-style-type: none"> purpose key word identification structured overview given writing framework 	<ul style="list-style-type: none"> one step strategies highlight words delete & copy guide questions table /grid 	<ul style="list-style-type: none"> none given
Control of Other Variables	<ul style="list-style-type: none"> procedure text task learner 	<ul style="list-style-type: none"> strategy text task 	<ul style="list-style-type: none"> text 	<ul style="list-style-type: none"> none
Instruction Model	<ul style="list-style-type: none"> metacognitive 	<ul style="list-style-type: none"> Direct instruction Co-operative learning 	<ul style="list-style-type: none"> definition of a summary 	<ul style="list-style-type: none"> no instruction
Evaluation	<ul style="list-style-type: none"> continuous assessment on going advice peer advice content writing structure 	<ul style="list-style-type: none"> over the shoulder skills checklist anecdotal comments content writing quality 	<ul style="list-style-type: none"> quiz recall test teacher marks summary alone essay number of main ideas 	<ul style="list-style-type: none"> teacher grade or mark marks away from student quality of writing neatness infrequent
Frequency	<ul style="list-style-type: none"> all the time 	<ul style="list-style-type: none"> weekly/fortnightly 	<ul style="list-style-type: none"> once per term 	

REFERENCES

- Archer, A., & Gleason, M. (1989). Skills for school success (book 5). Melbourne, Australia: Hawker Brownlow Education.
- Anderson, V., & Hidi, S. (1989). Teaching students to summarize. Educational Leadership, 46 (4), 26-27
- Anderton, J.A. (Ed). (1990). Fundamentals of science (book 1). Melbourne, Australia. Longman.
- Armbruster, B.B., & Anderson, T.H. (1980). The effect of mapping on free recall of expository text. (Technical Report No 160). Urbana - Champaign: University of Illinois, Centre For the Study of Reading (cited in Armbruster, Anderson & Ostertag, (1989).
- Armbruster, B.B., Anderson, T.H., & Ostertag, J. (1989). Teaching text structure to improve reading and writing. The Reading Teacher, 43 (2), 130-137.
- Armbruster, B.B., & Brown, A.L. (1984). Learning from reading - the role of metacognition. In R.C. Anderson, J. Osborn, & R.J. Tierney (Eds.), Learning To Read In American Schools (pp.273-81) Hilldale, New Jersey: Laurence Erlbaum.
- Bartlett, B. (1978). Top level structures as an organizational strategy for recall in classroom texts. Dissertation Abstracts International, May, 7911113, Arizona State University, p 6641a
- Bartlett, B. (1984). Comprehending expository text. In J. McNeil (Ed.), Reading Comprehension. New Directions for Classroom Practice. Los Angeles, USA: Scott Foresman.
- Baumann, J.E. (1984). The effectiveness of direct instruction paradigm for teaching main idea comprehension. Reading Research Quarterly, 20, 93-115.
- Bean, T.W., & Steenwyk, F.L. (1984). The effect of three forms of summarization instruction in sixth grade summary writing and comprehension. Journal of Reading Behaviour, 16, 297-306.
- Bean, T.W., Singer, H., Sorter, J. & Frazee, C. (1986). The effect of metacognitive instruction in outlining and graphic organizer construction on student's comprehension in tenth grade world history. Journal of Reading Behaviour, 28 (2). 153-69.

- Bergin,D.A., (1992). The effects of combining direct instruction, metacognitive instruction and co-operative learning strategies to teaching summarizing to Year six students. Unpublished dissertation, Edith Cowan University.
- Beriter,C., Scadamatia, M. Brown, A. Anderson, V. Campione, J & Kitsch, W. (1989). Open Court Reading And Writing Program. LaSalle, Illinois: Open Court.
- Berkowitz,S.J. (1986). Effects of instruction in text organization on sixth grade student's memory for expository reading. Reading Research Quarterly, 21, 161-78
- Bromley,K.D., & McKeveny,L. (1986). Precis writing: Suggestions for instruction in summarizing. Journal of Reading, 29 (5). 392-95
- Bransford,J.D., Stein,B.S., Shelton,T.S., & Owings,R.A., (1980). Cognition and adaptation: The importance of learning to learn. In J.Harvey (Ed.) Cognition, Social Behaviour and the Environment. Hillsdale, New Jersey.: Erlbaum.
- Brown,A. & Baker,L. (1984). Cognitive monitoring in reading. In J. Flood (Ed.). Understanding Reading Comprehension. (pp.21-44). Newark,Delaware: International Reading Association
- Brown,A. Campione,J.C. & Barclay,C.R. (1979). Training self-checking routines for estimating test readiness: generalizations from list learning to prose recall. Child Development, 50. pp 501-512
- Brown,A. Campione, J.C. & Day,J.D. (1981). Learning to learn : on training students to learn from texts. Educational Research, 10 ,pp 14-21
- Brown, A. & Day,J.D. (1980).Strategies and Knowledge For Summarizing Texts : the Development of Expertise. Unpublished manuscript . University of Illinois.
- Brown,A. & Day,J.D. (1983). Macro-rules for summarizing texts: the development of expertise. Journal of Verbal Learning and Verbal Behaviour, 22 , pp 1-14.
- Brown,A., Day,J.D. & Jones,R. (1983). The development of plan for summarizing texts. Child Development, 54 , pp 968-979.
- Brown,A. & Smiley,S.S. (1978). The development of strategies for studying texts. Child Development , 49 , pp 3-35

- Bull, G. (1993). Focus: Learning how to sound : translating critical literacy theory into action. Australian Journal of Language and Literacy, 16 (4), pp277-279
- Carr,E. & Ogle,D. (1987). K-W-L Plus: a strategy for comprehension and summarization. Journal of Reading , 30 (7) , pp 626-631.
- Casazza,M.E. (1993). Using a model of direct instruction to teach summary writing in a college reading class. Journal of Reading , 37 (3), pp 202-208.
- Cohen,R. (1993). Self-generated questioning as an aid in reading comprehension. Reading Teacher ,36 , pp 770-775.
- Day,J.D. (1980). Training summarization skills : a comparison of teaching strategies. Unpublished doctoral dissertation, University of Illinois.
- Doctrow,M. Wittock, M.C. & Marks,C. (1978). Generative processes in reading comprehension. Journal of Educational Psychology, 70 , pp 109-118.
- Durkin,D. (1979). What classroom observations reveal about reading comprehension instruction. Reading Research Quarterly , 14 , pp 481-533.
- First Steps, (1992). Education Department of Western Australia. Curriculum Department. Perth WA.
- Flavell,J.H. (1976). Metacognitive aspects of problem solving. In L.B. Resnick (Ed.) , The Nature of Intelligence. Hillsdale, New Jersey, Lawrence Erlbaum.
- Garner,R. (1984). Rules for summarizing texts: Is classroom instruction being provided? Journal of Educational Research , 77 (5), pp 304-307
- Garner,R., Belcher,V., Winfield,E. & Smith,T. (1985). Multiple measures of text summarization proficiency : What can sixth graders do? Research in the Teaching of reading , 19, pp 140-153
- Gay,L.R. (1987). Educational research : Competencies For Analysis and Application ,London, UK, Merrill Publishing Company.
- Golden,J., Haslett,B. & Gaunt,H. (1988). Structure and content in eighth grader's summary essays. Discourse Processes ,11 ,pp 139-162.

- Gambrell, L.B., Kapinus, B.A. & Wilson, R.M. (1987). Using mental imagery and summarization to achieve independence in comprehension. Journal of Reading, 30, (7), pp 140-153
- Goetz, E., Alexander, P. & Ash, M. (1992). Educational Psychology - a Classroom Perspective, New York, USA, Macmillan.
- Guba, E.G. & Lincoln, Y.S. (1982). Epistemological and methodological bases of naturalistic inquiry, In Educational Communication and Technology Journal, 30, pp 233-252
- Hahn, A.L. & Garner, R. (1985). Synthesis of research on student's ability to summarize texts. Educational Leadership, 42(5), pp 52-55
- Hare, C.V. (1992). Summarizing Texts. In J. Irwin & M.A. Doyle (Eds.) Reading Writing Connections- Learning From Research, Newark, Delaware, International Reading Association.
- Hare, C.V. & Borchardt, K.M. (1984). Direct instruction of summarization skills. Reading Research Quarterly, 20 (1), pp 62-78
- Hayes, D.A. (1989). Helping Students GRASP the knack of writing summaries. Journal of Reading, 33 (2). pp 96-101.
- Hid, S. & Anderson, V. (1986). Producing summaries : task demands, cognitive operations and implications for instruction. Review of Educational Research, 56 (4), pp 473-493.
- Hill, M. (1991). Writing summaries promotes thinking and learning across the curriculum - but why are they so difficult to write ? Journal of Reading, 34 (7), pp 536-539.
- Johnson, N. (1983). What do you do if you can't tell the whole story? The development of summarizing skills. In K.E. Nelson (Ed.), Children's Language; Vol 4 Hillsdale, New Jersey, Lawrence Erlbaum.
- Josephs, A. (1986). Reading from the bookshelf. (Book 2). Edinburgh, Oliver & Boyd
- Kintsch, W. & Van Dijk, T.A. (1978). Towards a model of text comprehension and production. Psychological Review, 85, pp 363-394
- Knobel, M. (1993). Simon says see what I say: reader response and teacher as meaning maker. Australian Journal of Language and Literacy, 16(4), pp 295-307

- Mann, C. & Volet, S. (1996). Note-taking strategies for improving the quality of year 7 summaries of expository materials. Australian Journal of Language and Literacy, 19 (3), pp 198-211.
- Meyer, B. (1982). Prose analysis: purposes, procedures and problems, Research report no 1 (Department of educational Psychology, College of education, Arizona State University.
- Meyer, B., Brandt, D.M., & Bluth, G.J. (1980). Use of top level structures in text. Key for reading comprehension for ninth graders. Reading Research Quarterly, 16 .pp72-103.
- Morris, A. Y Stewart-Dore, N. (1986). Learning To Learn From Text - Effective Reading In the Content Areas. North Ryde, N.S.W., Addison-Wesley.
- Palincsar, A. (1984). The quest for meaning from expository texts - a teacher guided journey. In G.Duffy, L.Roehler and J Mason (Eds.) Comprehension Instruction -Perspective's and Suggestions. New York, USA, Longman.
- Pincus, A.R.H., Geller, E.B., & Stover, E.M. (1986). A technique for using a story schema as a transition to understanding and summarizing event based magazine articles. Journal of Reading, 30 (2), pp 152-158
- Pressley, M., Johnson, C.J., Symods, S., McGoldrick, J.A., & Kurita, J.A. (1989). Strategies that improve children's memory and comprehension of texts. The Elementary School Journal, 90(1), pp 3-32.
- Reading K-7 Teacher's Notes, (1983). Education Department of Western Australia. Curriculum Branch. Perth. WA.
- Reading To Learn In The Secondary School Teachers' Notes.(1987). Education Department of Western Australia. Curriculum Branch. Perth WA.
- Renshaw, P. (1990). The Psychology of learning and small group work. Unpublished Paper. Murdoch University, Perth WA.
- Rhinehart, S.D., Stahl, S.A., & Ericson, L.G. (1986) Some effects of summarization training on reading and studying. Reading Research Quarterly, 21, pp 422-438.
- Sjostrom, C. & Hare, V. (1984). Teaching high school students to identify main ideas in expository text. Journal of Educational Research, 78 (2), pp 114-18.

- Sloan,P. & Latham,R. (1989). Text Types Approaches to teaching of Informational and Narrative Texts. Unpublished Manuscript, W.A. Ministry of Education.
- Spiro,R.J. and Taylor,K. (1980). On investigating children's transition from narrative to expository discourse: the multidimensional nature of psychological texts classification. (Technical Report No 195) Urbana-Champaign,IL: University of Illinois, Centre for the study of reading.
- Squire,J. (1983). Composing and comprehending: Two sides of the same process. Language Arts , 60. pp 581-589.
- Squire,J & Applebee,R.K. (1969). Teaching English in the United Kingdom. Address at the National Council of Teachers of English. Urbana, Illinois.
- Slavin,R.E.(1989). Co-operative learning methods. In R.E. Slavin(Ed.) School and Classroom Organization, Hillsdale, New Jersey. Erlbaum.
- Stevens,R.J. and others (1989). The effects of co-operative learning and direct instruction in reading comprehension strategies on main idea identification. (Report 44) Baltimore, Centre for research on Elementary and Middle Schools.
- Tabberer,R.(1987). Study and Information Skills in Schools. Berkshire. UK. NFER. Nelson.
- Taylor,K. (1982). Text structure and children's comprehension and memory for expository texts. Journal of Educational Psychology , 74, pp 323-340.
- Taylor,K. (1986). Summary writing by young children. Reading Research Quarterly , 21(2), pp 193-203.
- Taylor,K. & Beach,R.W. (1984). The effects of text structure instruction on middle grade students; comprehension and production of expository text. Reading Research Quarterly , 19, pp 193-208.
- Taylor, K. and Berkowitz,S.B. (1980). Children's memory of narrative and expository texts after reading. Paper presented at the annual meeting of the International Reading Association, St Lois, MO.
- Vygotsky,L.S. (1978).Mind in Society: The Development of Higher Psychological Process. (M.Cole, Jsteiner, S.Scribner & E.Souberman, Eds. and Trans.) Cambridge, MA: Harvard University Press.
- Winograd,P. (1984). Strategic difficulties in summarizing texts. Reading Research Quarterly , 19(4), pp 404-425.

Winograd, P. (1982). An examination of strategic differences in summarizing texts. Unpublished doctoral dissertation. University of Illinois, Urbana.