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INPUT, UPTAKE, OUTPUT:
A STUDY OF INTERTEXTUAL SOURCE USE
IN ACADEMIC WRITING

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fulfilment of the requirements
for the degree of Master of Arts
in Second Language Teaching
at Massey University

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ABSTRACT

Research in writing has moved from writing to learn to writing from sources. This represents a move to considering writing not just as an isolated activity, but one associated with acquisition and representation of knowledge from different forms of texts. Research on sources to date has focused on a limited number of inputs, mainly one or two sources, in relation to the target product. In contrast, the present study investigates a wide range of sources students use as material for their studies. This naturalistic study investigates sources used by different groups of students, (L1 writers, L2 writers; expert L1 writers, novice L1 writers), and their ability to integrate these inputs in written text. The research was conducted within the context of an academic course and followed a pilot study trialling pedagogical and data gathering procedures. The primary data was in-class essays annotated by students to indicate source use. The essays were analysed structurally by a coding scheme adapted from the work of Christensen (1966), Mann & Thompson (1988), and Hyland (1990). Secondary data was obtained through pre-course and post-course questionnaires and included information on students' cultural and linguistic experience, their perceived usefulness of particular sources in the course, and their attitude towards writing tutorials.

Results indicated that there were differences in the way the identified groups of students accessed the varying sources. While the lecture remained the primary input for all students, the manner and extent students used personal experience was demonstrated in different ways. Results showed L1 students integrated a wider range of sources in their writing. The differing patterns of source use indicated that students followed different pathways in developing text, and that the strategies they used had consequences for their text construction. As an extension of this, a hierarchy of personal experience in writing was established: 1 personal narrative; 2 untransformed narrative; 3 integration of personal knowledge with concept and discipline knowledge. Findings also indicated the difficulties less proficient writers
had in moving beyond the writer-oriented narrative form which is consistent with other research (Leki 1995, Flower in Leeds, 1996). There are a number of factors that appear relevant to explaining the different pathways. These include language proficiency, writing expertise, content and schema knowledge, and perceived saliency or interestingness of the task and topic.

The results of the present research points to the fact that these and other affective factors deserve further research attention. Such research could possibly affect the pedagogical achievements of learning experiences in academic courses.
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CHAPTER ONE

INTRODUCTION

This study examines the relationship between course input and student uptake, and analyses how this is reflected in written argument text similar to that required of students in written examinations. The setting for the study is a level one university linguistics course entitled Language and Culture, in which students from both English and non-English speaking backgrounds are enrolled. While some of the students are taking the paper in order to complete their degree, the majority are first year students adjusting to the demands of university study. This chapter will discuss the academic expectations the university has of these students, the relationship between in-course practices such as tutorials or assignments, and final assessment, and the role writing might play in this relationship. It will also examine the value of this research in a naturalistic setting.

Universities in general, and departments within universities in particular, have specific expectations about how students will conform to the requirements of that discipline. In the course in which this study takes place, students are informed of the course aims, the course outline, important dates, assessment requirements and task expectations such as lecture and tutorial attendance and the use of the workbook. The lecturer similarly knows what content knowledge will be imparted in lectures, what handouts students will receive, what videos will be shown during tutorials, what extra readings they will be provided with; in other words, the nature and range of sources students will be exposed to in the course of their study. From this point on, these will be referred to as course inputs.

While there is considerable control over course inputs, what is more elusive and less predictable for the course controller is the degree of uptake; "what learners claim to have learned from a particular lesson" (Slimani, 1992:197). Which inputs are stored more
readily and are able to be retrieved in response to a particular task, in this instance, writing? Is primacy, the first occurrence of information, or rather recency, that which was the last input, the more significant? Which factors influence information retrieval for undertaking a writing task: the frequency with which particular ideas and concepts are expressed, or whether inputs are consistent with prior knowledge? How important are oral sources in relation to written or read ones in terms of impact on the student, and does visual input via blackboard, overhead transparencies and video have significant influence on the final output?

The assumption that the lecture remains the principal source of information has resulted in research directed towards lecture comprehension and notetaking. The work of Kiewra (1987), Dunkel (1988), Benton, Kiewra, Whitfill and Dennison (1993), Van Meter, Yokoi and Pressley (1994), and others will be examined in relation to the importance of lecture note-taking. What the above studies on lectures do not take into consideration however, are the additional materials and tasks that complement a full university course, of which lectures are just one component. In a study of intertextual influences within a natural university setting, it is important that these also be included.

Another important consideration is that lecturers can no longer assume that their students have a common language background. The present situation finds many students operating in an L2 environment, thus assumptions about lectures cannot be taken for granted. The work of Chaudron (1983), Dunkel (1988), Dunkel, Mishra and Berliner (1989), Feyton (1991), Chiang and Dunkel (1992), Flowerdew and Miller (1992), examine areas of difficulty, including the impact of modifications to lecture presentations to enhance comprehensibility of oral deliveries. Students who have difficulty with accent, speed of delivery, lecture format and simultaneous notetaking may also look to alternative sources to supplement weaknesses in this area. In terms of metacognitive strategies in particular, (i.e. understanding and arranging conditions of learning), L2 students do turn to supplementary sources and tasks with a certain deliberation, which
should not be ignored (O’Malley, Chamot & Kupper, 1989; Vann & Abraham, 1990; Flowerdew & Miller, 1992; Leki, 1995). In the present study, some of these sources are part of the course such as the workbook; others are readily available materials such as the study guides intended for extramural (distance) students. Hence any variation in source use in this group may reflect L2 adjustment to the difficulties of accessing particular sources.

Universities have traditionally used tutorials as additional class contact time but the role of these and how they can be most beneficial to students, needs closer inspection. The course in question uses a workbook which has tasks the students are to undertake out of class, and which at the same time provides the basis for discussion within the tutorial. However, research into the value of oral discussion has produced varying results. In addition, the effect of group interaction involves a number of conditions, (Cohen, 1994; Meloth & Deering, 1994; McCarthy, 1994; Allison, Berry & Lewkowicz, 1995; Webb, Troper & Fall, 1995; Franken 1997), and results are variable.

Added to the place and importance of co-operative learning through tutorials are considerations of cultural norms and expectations, especially in terms of the Asian students within the class (Flowerdew & Miller, 1992). Becoming familiar with western academic culture, along with oral confidence as opposed to competence, are some of the issues facing overseas students. One needs to consider how best to accommodate this variation within the class, along with the overall issue for all students, of how to best provide conditions for positive learning outcomes. The question then to be raised is, does regular writing have a role to play in learning, as opposed to or in conjunction with regular talking?

In changing to a regular tutorial writing programme as part of this study some of the questions about writing hope to be answered. Already there has been much research on reading to write and the writing process, including the work of Kennedy (1985), Spivey
and King (1989), Spivey (1990) and McGinley (1992). The extent to which the writing process itself contributes to cognition and learning has also been explored by Tierney, Soter, and McGinley (1989), McGinley and Tierney (1989), Newell and Winograd (1989), Schumacher and Nash (1991), Penrose (1992) and Ackerman (1993). It is an issue which is pertinent to both L1 and L2 writers and a focus on the latter has been provided by Arndt (1987), Connor (1987), Spack (1988), and Raimes (1991). Although the overseas students in the tutorial class under study are not in academic writing classes per se, their engagement in the writing process and the course content, is akin to writing across the curriculum, whereby developing writing skills and conceptual and content learning goes side by side.

Not only has the writing process itself been examined, but the way in which students use and integrate sources for writing has also been an area of study (Kennedy, 1985; Spivey & King, 1989; McGinley, 1992; Gradwohl Nash, Schumacher & Carlson, 1993; O’Brien, 1995). Investigation of how writers use sources needs to move on however from the controlled use of two or three written articles forming the basis of a new integrated composition. It is timely for a wider, more naturalistic exploration of sources actually used when students are left to write without direct access to sources at the time, as occurs in examination writing. While one could consider the types of sources used in a written assignment which entails deliberate planning and preparation, an alternative is to track sources that are integral to the course through the implementation of proscribed academic norms, i.e. lectures and tutorials. How these are represented in unprepared written essays, and the impact that particular sources have on the students undertaking extra written tasks, have not been examined to any degree. Any realistic study of intertextuality, which involves the transfer of information or meaning from one or a variety of sources to another, should include all possible sources of input. At the same time, the degree of uptake in terms of writer responses needs also to be considered. Part of the significance of such a study lies in the fact that the extent to which information is included, recombined and perhaps transformed, impacts on any assessment a student receives for
written assignments and examinations.

Furthermore, the degree of match between assigned tasks during the course, and the form of assessment used in the final examinations is a pedagogical issue. Do we in fact require the students to perform in ways they have little opportunity to practise or develop skills in? Is there a place in tutorials for this kind of writing which can benefit L1 and L2 speakers alike? The present study addresses some of these questions, by providing the students with an alternative to the speaking tutorial: argument essay writing practised under time constraints without immediate recourse to written source inputs.

In conclusion, studies of academic performance based on controlled tasks, have obvious limitations and produce a restricted picture of what actually occurs in the real situation. This has been recognised by a number of researchers in relation to specific areas of academic behaviour in which they are interested. Wilding and Hayes (1992:224) state: “Methods will also need to be devised for observing and recording the variety of processes intervening between presentation of information and its subsequent use in a test situation”. These intervening processes are not just related to additional class work, but also from outside, as the demands of other papers the student takes, compete for attention and time. Dunkel (1988), and Flowerdew and Miller (1992) also advocate the need for naturalistic studies, acknowledging problems and limitations with “in vitro procedures” and “autonomous activities in isolation” (Flowerdew & Miller, 1992:62). The research of Van Meter, Yokoi and Pressley (1994) shows that the students themselves recognise the weakness of separating out any one element from the wider course content, affirming that “notes are only one source of information in a course and that they are used in combination with other resources” (p.334).

The present research, which examines the impact of various course inputs on subsequent writing tasks within a normal academic programme, should redress the lack of more comprehensive studies of academic behaviour. It is one response to the claim that “how
notes are combined and co-ordinated with other sources of input has generally been unstudied” (Van Meter et al, 1994:334). More information should be obtained about the many variables which contribute to the notion of intertextuality, and their complex interaction with each other. This complexity however raises another issue acknowledged by Dunkel (1988) who states, “Some degree of control will be sacrificed in such a study…” (p.277).

In response to some of the issues raised in this discussion, and in light of the limited research in terms of students’ use of sources in writing in a naturalistic setting, the following research questions will be addressed in the present study:

1. Which sources did students draw upon to write in-class essays under time constraints and how were these represented in text construction?
2. Were changes observed over time?
3. To what extent did students integrate source inputs?
4. Was there any correlation between quality of students’ writing as determined by holistic scores, and source use?
5. What differences were observed between writers?

This latter question will address the issue of L1 and L2 writers constructing argument texts, but will also leave the analysis open to any other possibilities. In terms of the call to conduct research in a naturalistic setting, all work conducted with the students was undertaken in their usual assigned class tutorial time. Hence there was minimal interference with their normal programme.

The next three chapters will elaborate on the issues and questions raised above: the importance of the various course inputs, the presence of L2 students and implications for their learning, and the place of talk in learning. More specifically, the discussion will examine factors that influence uptake in academic learning, the notion of intertextuality
and source integration, and finally the role of writing in an academic context. All are critical in an examination of sources used by students in an academic context.
CHAPTER TWO

FACTORS THAT INFLUENCE UPTAKE IN ACADEMIC LEARNING

Factors which influence uptake, that information which the student encodes from the range of inputs both within and outside the academic programme (Slimani, 1992), can be divided into those which operate within the student, and those which impact from outside. Top-down/bottom-up processing and memory are examples of individual responses to information input, while mode of information presentation and task types are teacher directed applications which also influence the students’ receptivity to the information.

2.1 Language processing in listening, note-taking and reading

While processing of oral input is an internal operation and therefore might be considered difficult to measure directly (Rubin, 1994), the notion of top-down, bottom-up processing is well established and identified (Brown, 1990; Danks, Bohn & Fears, 1993; Eastman, 1993; Vogely, 1995). It should be noted that the same process occurs with both listening and reading.

2.1.1 Bottom-up processing

Bottom-up processing operates at the most basic level of language comprehension. The listener engages in bottom-up processing when s/he identifies individual components or segments of the oral text, i.e. particular phonemes, a word, phrase, an individual sentence or grammatical features such as tense markers or plurality. The type of processing that the listener engages in, is influenced by the type of text and the structure of the discourse (Danks, Bohn & Fears 1993). When the text is difficult, a listener resorts to lower level processing. Similarly, a non-native speaker with limited language proficiency will more frequently use bottom-up processing. Vogely (1995)
pointed out that when students became more advanced in their listening ability then attention to vocabulary in particular, decreased.

Listening for individual segments in the flow of speech however, provides limited cues for comprehension. H. Taylor (1981) identified five stages of listening for a second language learner, four of which can be recognised as within the bounds of bottom-up processing:
1. the stream of sound (non comprehension)
2. word recognition within the stream (minimal comprehension)
3. phrase/formula recognition (marginal comprehension)
4. clause/sentence recognition (minimal functional recognition)
5. extended speech comprehension (general comprehension)

It can be seen from the above that the listener or reader moves from isolated language units to fitting or adjusting the meaning to a wider context, thus extracting a more comprehensive understanding of the text. In addition, in recognising the range of listening skills applicable to a native speaker, it could be argued that additional levels could be added to encompass all competencies. For example, including a critical response, such as reading between or beyond the lines. This latter ability links closely to top-down processing because of its close association with experience.

2.1.2 Top-down processing

Although individuals have different levels of need, tertiary students must operate at least at stage five and beyond of Taylor’s stages, including the development of a contextual structure which is essential for any higher level processing (Danks et al, 1993). This contextual structure which links incoming information to previous experience and knowledge, implies the use of top-down processing. Listening competence can be regarded as satisfactory when the hearer has a level of language proficiency which allows the text heard, to be placed in a wider frame of reference.

Top-down processing links to script and schema theory whereby the listener draws upon prior knowledge to help cope with the reduced phonetic script of oral discourse
Because spoken language has elisions and shortcuts in pronunciation, compensatory strategies occur including drawing on prior experience. This includes using knowledge of factors such as the speaker/listener relationship including their gender, roles etc., the physical context, the genre, and the topic, all of which influence the content. Having a script in place narrows down the expectations about what is likely to be said and hence provides a predictory role. Rost (1990) calls this the principle of analogy, implying that in speech the listener can anticipate what schemata will be important in interpreting a text. He believes that there is a continuity of coreferences in spoken language, with the listener choosing the most salient gloss. That is, there is often a range of possibilities of meaning, but the speaker selects the one which in his/her eyes is the most likely interpretation. However if cultural norms are at variance, such interpretation may not be correct.

Schema theory proposes that language itself, either written or spoken does not carry meaning, but that meaning is retrieved and reconstructed from the listener’s previously acquired knowledge, and that in the course of listening the text needs to be recreated (Lebauer, 1984). As mentioned briefly above, one of the implications which arises from this is that not all experience is shared; what the hearer understands may not be the intended meaning (Di Vesta, 1974). This can particularly be a problem when speaker and hearer share different cultural experiences because inferences that are made are also based on cultural knowledge. Non-native speakers may lack culturally specific scripts (Richards, 1983). Brown (1990:158) states, “A major problem for foreign learners is developing confidence to make constrained and relevant inferences in the interpretation of spoken (and of written) discourse”.

For both native and non-native speakers alike, sufficient familiar knowledge needs to be established when new topics are introduced, and when arguments are proposed at varying levels of abstraction. This allows for the development of an adequate contextual structure into which top-down processing can be assimilated. This of course, does not occur instantly, so students develop listening skills at varying levels of proficiency. As H. Taylor (1981) notes, each new subject area causes some
regression in the student’s perceivable listening skills.

It is in the level of abstraction in academic work in particular, that can cause difficulties for both native and non-native speakers. “There is little doubt that abstract arguments, explanations, justifications, theorising, make more demands on understanding than any other genre” (Brown, in Brown, Malmkjaer, Pollit & Williams 1994:19). The author continues that following an argument requires concentrating on verbal input quite unsupported by experience in the physical world. The listener is required to pay selective attention to abstract constructs, and to accurately recall the constructs and the relationship between them. This also requires skills of inferencing which noted above can cause difficulties for those students who do not share similar cultural and experiential backgrounds. Top-down /bottom-up processing is an important concept, and continues to be a significant factor in other aspects of information processing as further discussion will demonstrate.

2.1.3 The role of memory in listening and note-taking

Memory is another important component in the processing of oral input. Di Vesta (1974) distinguished between episodic memory which is the processing of isolated, arbitrary units, and semantic memory by which new information is encoded and assimilated to what is already known. Foertsch (1995) on the other hand, proposed an instant based model. He acknowledged that "It is the ability to recall and use previously encoded information that makes all learning possible" (p.364).

The instant based model implies that every experience lays its own memory trace, and that it is the contextual cues in each situation that activates related items in memory. Rather than the notion of one form of memory replacing the other, an either/or situation, Foertsch believes context is the key factor in activating particular memory traces. If the context cues are fairly unique, then only a few episodes will be recalled, whereas if the cues are commonplace, then a larger pool of episodes will be drawn on, so contributing to semantic generalisation (Foertsch, 1995:336). While parallels can be seen with episodic and semantic memory, these are not viewed as discrete units in
the instant based model. Instead they form part of an interweaving web with all parts accessible under certain conditions or contextual cues.

In encoding incoming information, Call (1988) notes that input is held in short-term memory just long enough for the meaning to be extracted and then it is purged to make way for new incoming information. If the short-term memory becomes overloaded then the information is purged before it is organised and interpreted, even if the initial information is recognised. The implications of this for non-native speakers is significant, especially those who are still dependent to a large extent on bottom-up processing. In a lecture situation which deals with high levels of content material, often in specialised language, the demands on short-term memory can easily outstrip the students’ proficiency, thus leading to a breakdown in understanding.

In academic settings, note-taking is the outcome of listening. The distinction between native and non-native speakers showed clearly in the work of Dunkel, Mishra and Berliner (1989), who researched the relationship between memory, note-taking and lecture learning. All students were tested for memory, with the distinction made between high short-term and low short-term memory students. Results showed that note-taking in itself was not sufficient but that English language proficiency and short-term memory in this instance had a decisive effect on lecture learning. The non-native speakers appeared at a distinct disadvantage in an English speaking lecture environment, as the native speakers recalled more concepts and detailed information. The non-native speakers undoubtedly suffered from overload of their short-term memory and the native students had the advantage of top-down processing.

It has been clearly demonstrated then, that if note-taking is included in the listening task, then the call upon memory is even greater. As well as encoding the incoming information, the key elements of the passage need to be identified and transcribed simultaneously. H. Taylor (1981) introduces the concept of chunking, whereby information is heard, given meaning and interpreted for its relative importance as a segment or chunk, and this is placed in what he calls short-term memory. This
grouping occurs through the syntax. The written version however relies on long-term memory which works with meaning, not form (Richards, 1983). The chunking of new information, and note-taking from long-term memory occur at the same time in a lecture situation, hence complex cognitive processes are activated. As the size of the segments chunked depend on the student’s language proficiency and the difficulty level of the text (O’Malley, Chamot & Kupper 1989), it is clear that there will be a link between comprehension and the nature of the information recorded.

Kiewra and Benton (1988) found that learners with greater working memory profited from note-taking the most, suggesting that Peper and Mayer’s (1986) distraction hypothesis, that the student pays more attention to the writing of notes than to listening, proves to be correct in certain cases. Hale and Courtney (1994) noted that although students gave a positive view of note-taking in terms of a study and memory aid, there was less agreement amongst them that note-taking facilitated listening and understanding of lectures.

2.1.4 Information processing in reading

Kintsch and van Dijk’s (1978) model of text comprehension and production is still regarded as important in understanding how information is processed and retrieved in the written word. The recycling of propositions is one of the key elements of this model. To this end, Kintsch and van Dijk (1978), also distinguish between a short-term memory buffer and the long-term memory. The former deals with the immediate selection and processing of particular propositions which connect with new, incoming propositions. Long-term memory allows earlier propositions to be reproduced at a later time. Parallels can be clearly seen here with Di Vesta’s episodic and semantic memory, and with Taylor’s notion of chunking mentioned in the previous section.

Kintsch and van Dijk use the term processing cycles, each of which consisting of a subset of propositions selected and held over to the next cycle. Those propositions which participate in more than one processing cycle, are the ones most likely to be reproduced and which are most likely to move into the long-term memory. Repetition
therefore, is a key element here.

Text-based hierarchies are also an important element of this model. Kintsch and van Dijk developed a model presenting levels of propositions. The top hierarchy, identified as the topic or topical proposition, connected to the level below. Kintsch and van Dijk claimed that as higher level propositions are processed more frequently than lower level propositions, they are also recalled better. Therefore the repetitive nature and hierarchical placing of certain propositions should be considered when examining sources recalled in the production of a text composed from multiple sources.

Kintsch and van Dijk (1978) also contributed to our understanding of information processing by identifying the important link between input and the reader’s schema, which again corroborates schema theory raised earlier. They claimed that a reader with a restricted knowledge base would not be able to extract the same meaning from a written text as a reader with a more adequate or pertinent knowledge base. Consequently, accessing information from a written text depends to a certain extent on the knowledge the reader brings to the task. Both quality and quantity of prior knowledge are very important in reading comprehension, as well as reader attitudes to the topic and task effects (Spiro, 1980). The use of both bottom-up and top-down processing in reading has of course its parallels in listening comprehension.

2.1.5 Influences on knowledge transfer

After language has been processed, how do we know which parts will be transferred in a subsequent task? While Kintsch and van Dijk (1978) accounted for some of this movement, a further explanation was provided by Genter’s (1983) structure-mapping model which illustrated which particular types of knowledge were transferred from the base domain (the origin of the initial selection) into the target domain (the subsequent new text). This was then followed by the work of Gradwohl Nash, Schumacher and Carlson (1993) who sought to identify which, out of two sources, the students identified as the base domain. They observed that the students used their first reading
as the base text, suggesting that initial schema activation acted as a reference for subsequent information. Primacy (the first input) as opposed to recency (the last) was therefore a significant factor. At the same time the question of transparency of text, i.e. the degree of similarity of organisational structure between source texts, was considered in relation to the final written product. While high transparency made for a well organised new text, the degree of cognitive demand and effort was also less. This important aspect of a learning situation, is explored in the following section.

2.1.6 Levels of cognitive involvement

One crucial factor which affects long term memory in listening, reading, or any pedagogic activity, is the degree of cognitive engagement with that task. Hidi and Anderson (1986) observed that writing summaries in the absence of the source texts involved a more active form of cognitive processing, thus resulting in increased long-term retention. These results have implications for the students in the present study who, in a similar way, are writing from multiple sources without direct access to content material.

Similarly, fact oriented approaches to instruction can contribute to an inert knowledge problem in which students may know but not use information spontaneously because they have not been cognitively involved with that material. The Cognition and Technology Group at Vanderbilt (1990) established that a problem-oriented approach to learning on the other hand, is more likely to overcome this problem. The focus here has implications for instruction rather than writing and is the basis for Vanderbilt’s anchored instruction approach. However cognitively demanding, interaction with the material contributes not only to memory storage but also information retrieval which is vital in any academic course.

2.2 Strategy use

The types of processes engaged in, in a listening task, whether they be top-down or bottom-up or a combination of both, can be identified by the research into listening strategies. O’Malley, Chamot and Kupper (1989:422) identified learning strategies as
mental processes activated to understand new information that is ambiguous, or to
learn or retain new information. They are used consciously to enhance comprehension,
to maximise the learning situation and to retain that which has been learned. O’Malley
et al, (1989) identified significant differences between effective and non-effective
listeners, with reference to both native and non-native English speakers. Their use of
self monitoring while comprehension or production was occurring, their ability to
elaborate or relate to existing information, and their use of inferencing, using known
information to guess at meanings, all played an important role in assisting
comprehension.

Text level and language proficiency are both factors which influence the types of
strategies used. Stronger evidence of bottom-up processing has been identified with
non-native speakers, while native speakers infer meaning from the context, including
using cues of intonation, phrasing patterns and pauses. Vogely (1995) showed that
less difficult passages encouraged top-down processing, drawing upon knowledge of
the world, and that difficult passages led to bottom-up processing. It was recognised
that the most effective strategy in listening comprehension was relating the text to
what the student already knew. All students recognised that understanding the gist and
using background knowledge were effective strategies. Least perceived were those of
anticipation, being able to infer the next stage.

Vogely (1995) also distinguished between pro-active strategies, those strategies used
effectively, and reactive strategies which are engaged when there has been a
breakdown in understanding. The latter strategies include seeking clarification,
relating to the next word or guessing a word. Vogely noted that once comprehension
has broken down the student is less capable of using integrating skills or top-down
strategies, and is more reliant on discrete skills such as word recognition. Adamson
(1990) called these coping strategies.

Strategies that students used to enhance listening comprehension and identified by
Flowerdew & Miller (1992), included pre and post reading of a prescribed text, peer
help, lecturer/tutor help where deemed appropriate, (not always culturally so) and concentrating harder on the aural input, especially when it was recognised that concentration had lapsed. Students were also aware of strategies used by lecturers which aided their listening. This latter point illustrates that listening comprehension is an interactive activity, and that both parties can adopt actions to enhance listening effectiveness. In this way lecture input will be maximised and a real source to draw on in essay writing. In research on strategy use one distinction becomes clear; where there is text difficulty, native speakers are able to use multiple strategies (O'Malley et al, 1989).

2.3 The role of interaction in facilitating uptake

One of the questions to be raised in any discussion of factors influencing uptake, is whether talk brings greater benefits for students compared to the act of writing. Although the form of a tutorial may show variation across disciplines, traditionally, it has been based on discussion. Bertola and Murphy (1994:5) define a tutorial, as “a regular meeting of students under the control of a tutor to discuss a topic”, and in sociolinguistics in particular, this format has occurred. Discussion in tutorials enables various ideas to be explored and shared, to help confirm or modify the student’s point of view or understanding. Discussion makes available others’ viewpoints, experiences and knowledge thus expanding conceptual development, and can provide an opportunity to reinforce topical themes. A social constructionist view (McCarth y, 1994) in fact, proposes that sense is made of experience through interaction, through talk with others, and therefore it is an essential activity. The question however does need to be raised concerning who benefits from talk in a classroom situation.

2.3.1 What are the benefits?

Research into small group talk has come up with varied findings. Cohen (1994) raises the issue of how productivity is defined; whether by tested academic achievement, conceptual learning or higher order thinking, or through particular social behaviours such as co-operation within groups. Success therefore is defined by course objectives. In terms of achievement however, it has been shown (Swing & Peterson, 1982;
Meloth & Deering, 1994) that low and high ability students benefit more than those of medium ability. Swing and Peterson (1982:271) noted that the higher order explaining engaged in by the higher ability group contributed positively to the test performance of this group and that although the medium group did not in fact engage any less, their interaction did not contribute to achievement. When reflecting upon the composition of an average tutorial class, statistically one would assume that most students would fit into this latter bracket which leads to the issue of how best we can serve this group? Contrary to the accepted and unquestioned practice, the small group discussion tutorial may not be the best option for learning outcomes of many of our students.

The type of task that leads the student into discussion is also critical in any assessment of the value of talk. Those which led to elaboration rather than correct answers were noted important by Meloth & Deering (1994); true group tasks which could not be achieved individually were seen as important by Cohen (1994) as well as open-ended discovery tasks. She summarised it thus: an ill-structured task + a group task + interaction = productivity. All these aspects needed to be present.

Webb, Troper and Fall's (1995) observations on the relationship between receiving explanations and achievement, noted that explanations needed to be timely, relevant, correct and sufficiently elaborated, and any opportunities to apply the help received, in accordance with the constructivist view, would also contribute to learning. They similarly considered task complexity as a significant factor. Therefore it can be seen that certain conditions need to be present for small group learning and according to Cohen (1994), that these need to be arranged rather than believing particular behaviours will arise automatically. To summarise then, small group learning can be beneficial to students, particularly those in the upper and lower ability brackets when particular types of tasks are set. Nevertheless results are varied, and some students will perform better on individual learning programmes as opposed to the process learning of groups (Mercer, 1995).
2.3.2 Influences on learning outcomes

A number of other factors have been observed to impinge on learning outcomes. These include how well the members of the group know each other, the varying perceptions of the goals of a task (Webb et al., 1995), and if students talk about personal experience, it appears that the wider learning context in which it is situated is often omitted (Allison, Berry & Lewkowicz, 1995). Mercer (1995) also noted that for full benefit, discussion needed to be shared rather than dominated by particular members. These observations link with a study of high school students’ perceptions of class-based discussions which revealed their awareness of certain conditions necessary for group success: groups needed to be small to maximise interaction; the students needed to like each other; everybody needed to contribute and the group needed to stay topic focused (Alvermann, Young, Weaver, Hinchman, Moore, Phelps, Thrash & Zalewski 1996).

The place of non-native speakers, especially with mixed L1/L2 groupings, needs also to be seriously considered. Jones’ (1995) comment which would be borne out by many teachers, that L2 speakers tend to participate less actively in tutorials, could be both a consequence of less verbal confidence along with a different cultural view on the role of talk/silence and learning. For students used to a certain degree of social and power distance (Jones, 1995; Sullivan, 1996), a spontaneous informal discussion reflecting minimal social distance can be a difficult situation. In addition, incomplete communicative competence exhibited through unfamiliar turn taking and listenership skills means such students may miss cue-taking opportunities through reduced eye contact. Jones suggests that the relationship between native and non-native speakers is “not one of equality of power” and that “NS students are able to take greater advantage of learning opportunities offered them than their NNS peers” (p. 47). Writing may be one way forward to reduce this disparity in a class that has a significant proportion of non-native speakers.
2.4 Summary

There are many factors which influence the degree of uptake from the various source inputs. Some are linguistic and proficiency related as in the case of L1 and L2 speakers, others are linked to personal factors such as levels of short-term and long-term memory over which one has less control. Strategies one engages in, including whether group or individual learning approaches are preferred, as well as the degree of cognitive involvement, can affect uptake levels. All these elements come together when a student undertakes a writing task based on the course as a whole, and the current topic in particular. How these inputs interact and integrate with each other will be the subject of the next chapter.
CHAPTER THREE

INTERTEXTUALITY

Intertextuality is the term used when information transfers consciously or unconsciously, from one or more sources to a receiver of that information. It is an important notion to examine in this study because the research is based on what sources transfer most readily in an academic environment. Information representing uptake in students’ written texts comes from a variety of sources, and is influenced by a range of conditions; ways of processing information, memory, type of activity or interaction and language proficiency, as the previous chapter has demonstrated.

3.1 Background to views on intertextuality

The creation of any text cannot happen in a vacuum. Neither can any interpretation of that text similarly occur. Rather, there are influences on both the text creator and on the text receiver, which contribute to production and reception of the text message alike. These influences operate both from without and within as further discussion will explain.

The term *intertextuality* was first coined in 1967 by Kristeva, (in Moi, 1986). She referred to it as a three-dimensional textual space represented on both a horizontal and vertical plane. The point of intersection of the key elements (text, context, subject and addressee) formed the focus from which meaning was derived. It was a definition which emerged from the work of Bakhtin, a Soviet theorist whose work she was drawn to, and whose concept of text was also represented on two axes (Moi, 1986). Those elements which interact can be represented by the following diagram.
The significance of each of the above, both in general and in relation to the present study, will be further elaborated on.

**Text**

Kristeva held a wider view of text beyond the written or oral message, incorporating the notion of text into what she termed *signifying systems*, types of 'language' existing in a number of forms, and not to be confused with *la langue* of Saussure (Kristeva, 1989). Gestures, paintings, photography, cinema, dreams even, were all cited as signifying systems, or forms of communication or text. According to Kristeva, wherever there was a transposition, a transfer or change from one or more sign systems to another, then intertextuality in its fullest sense occurred. In fact Kristeva preferred the term *transposition*, because of the restricted view associated with intertextuality when it was linked with the study of sources.

In relation to the present study, the text can indeed be viewed as wider than the written or oral form. Any examination of academic inputs reveals a great range of textual forms: readings, oral lectures, discussions, video and overhead transparencies, all taking meaning through the students' prior knowledge and schema development. Behind these texts are speakers, writers, and presenters, not to mention the social interaction of those on screen representing their own sphere of action and reaction. They all have a part to play in terms of the input and hence the message, to the students.
**Context**
The context relates to where the message is received, and under what conditions. Spiro (in Spiro, Bruce & Brewer, 1980) would say that constructed meaning is a product of the interaction between the text and the context. We might say that the academic context is a formal one in which the message is important, and those present are expressly there to hear it. However, again the academic environment includes a variety of contexts marked particularly by the lecture/tutorial distinction, but the context could well include pertinent after-class discussion. On the whole these represent focused contexts in contrast to more general forms such as street advertising for example, where the message can be heeded or not.

**Subject**
A relationship exists between the one who forms the message, (the subject) and the one who receives it. The subject will relay intentions through the created text. A painter may express the perceived beauty of a particular scene, or a writer, his/her concern for the environment. The subject has some but not a total influence on how the text is to be interpreted. Within the academic environment, the use of a variety of sources implies a number of subjects, each having the same intention of increasing understanding of the topic. The students’ task is to integrate these various messages from the numerous subjects.

**Addressee**
The addressee interprets the text according to his or her own psychological disposition, according to the level of understanding through a developed schemata, through existing motivation and interest, and even through circumstances of the moment such as the level of fatigue. In other words the addressee brings a number of factors to bear on the interpretation of a text. For this study, the addressee is the student who, within the context of his or her studies, aims to gain an understanding of the topic through both interest and a desire to advance their education. However on individual days, uptake and interpretation may vary because the student has worked late on an assignment the night before, or that particular topic is less interesting, or
that student is distracted by another in the class while the lecture is being given. Although showing consistency, the situation of the addressee does not remain constant.

A textual space is a very dynamic one and can change through any variation of the elements which contribute to it. The above discussion has sought to demonstrate how conditions of the text, the context, the subject and the addressee can change at any point, and a change in one can effect a change in the others. Kristeva’s exploration of intertextuality foregrounded the work of Short (1992), and Bloome and Egan-Robertson (1993), as well as the later work of Hartman (1995), all of which contribute to a wider view of intertextuality. I will now discuss these and related views of intertextuality and how they too relate to source use.

3.2 From intertextuality to sources

Hartman (1995) demonstrates a very clear understanding and explanation of intertextuality in line with Kristeva’s views. He identifies four notions of what constitutes text (Hartman, 1985:523), and the link between these and Kristeva’s signifying systems can be easily made. First, he notes a text can be either linguistic or non-linguistic; the key is, that it communicates meaning. Secondly, while it may be tangible, it may also represent experiences, memories or ideas; anything that is in the mind. Thirdly, a text represents a chunk of meaning of variable length, from a word, a theme, to a long discourse. Finally, it is impossible for a text to exist on its own, because woven in with it are other texts which have brought it to this point. These aspects free the notion of intertextuality from a narrow view based only on reading, writing, or speaking. This is what one associates automatically with text, but Hartman presents a very fluid and open view of all those parts which contribute to the whole, akin to Kristeva’s three-dimensional description discussed above.

Although Hartman had a comprehensive notion of intertextuality, he also contributed to localising his studies by locating textual sources identified in student reading. Through this he developed a classification system of the origin of these sources:
primary endogenous (within the present reading passage), secondary endogenous, (previously read in the study), and exogenous, (those arising from outside the task environment) (Hartman, 1995:531). The acknowledgement of textual influences from exogenous sources is an important one, but perhaps through the inability of researchers to control this, it does not sit comfortably within research design. It is particularly important in relation to the present study, in which students are able to draw upon their cultural perceptions and experiences and incorporate these along with course input (endogenous sources) in the production of written text. In fact Hartman’s classification system was adopted as a useful means of identifying and classifying sources in the present study.

Under conditions of writing using only one or two written texts as the basis for ideas, (Kennedy, 1885; Spivey & King, 1989; McGinley, 1992; Gradwohl Nash, Schumacher & Carlson, 1993), the concept of intertextuality becomes restricted, hence the terminology, the narrower view. In this situation the text is only in written form, the number of inputs is limited, and because of the former restrictions, the input of ideas is also finite or contained, excluding of course those exogenous sources. In an academic setting where there is much emphasis on reading and writing tasks, this limited view can self perpetuate and be restricted in a narrow sense to only that which passes between reader and writer. It was from this view of sources that Kristeva wanted to disassociate herself.

To be fair, the term intertextuality has not been used in the studies above, and they have contributed to a much greater understanding of what happens when students use different sources. The composing process while writing from sources (Kennedy, 1985), the selection, organisation and transformation of knowledge while composing from sources (Spivey & King, 1989), the reading and writing process while composing (McGinley, 1992), and how knowledge is mapped from sources to target text (Gradwohl Nash, Schumacher & Carlson, 1993) are important studies. The implication remains however, that only those written texts used at the point of study are real sources. The wide view of intertextuality would suggest that full interpretation
of readings and the subsequent written expression that follows as a task, brings other sources and other signifying systems to bear upon the result, and these should not be discounted.

### 3.3 Sources: maintaining a wider view of sources in research

Stahl, Hynd, Britton, McNish and Bosquet's (1996) study of reading multiple source documents in history maintains the wide view of intertextuality because it acknowledges the range of written inputs or genres which a reader can be exposed to in a study situation, as an alternative to the textbook. The study made use of histories, newspaper opinion papers, autobiographies, and copies of original documents such as telegrams, all expressing a range of viewpoints. The researchers' interest in how a range of perspectives was integrated motivated this study, but the concept of intertextuality, although not expressed explicitly, nevertheless underlay the Understandings behind the research design. Not only were the students exposed to a range of genres and styles, but the materials were accessed by computer, thus representing both a different mode of delivery and a different form of interaction between reader and text.

One of the key elements in successful integration of knowledge as sought in the above study, is the formation of mental propositions cross texts, however these are represented. Those propositions which have been identified as repeated across multiple sources, are recognised as important, and are most likely to be recalled. Spivey & King (1989) present a horizontal model of multiple representation of the same or similar propositions across a range of texts, in contrast to Kintsch and van Dijk's (1978) vertical model (see Section 2.1.4) of recycling and hierarchical positioning of propositions within texts. In the integration of content from multiple sources these two models need to be brought together to understand fully the nature of proposition selection and ultimate integration in written discourse.
3.4 A view of intertextuality in the present study

Where then does the present study fit? The response is that it fits between the two extremes of the continuum, towards the wider view. The following figure demonstrates that while the study incorporates texts beyond that read, heard or spoken as is mostly the case for studies on discourse synthesis, within an academic framework it would not go so far as to include dreams or other text forms not relevant to the content of the course the students are undertaking.

Figure 2  Place of present study in relation to two views of intertextuality

The present study investigates intertextuality not as a theoretical construct, but from the point of view of multiple sources which provide the input students are exposed to in a particular course, as well as exploring some of the knowledge which students bring with them. These varied but complementing views on what constitutes intertextuality fit very well and need to be borne in mind when examining the sources (texts) that students draw upon for class writing under time restraints.

The primary endogenous sources (Hartman, 1995), lecture, workbook, video for example, represent text as spoken, read, and visual. Added to these inputs are the exogenous sources, knowledge and information from other university papers which have crossed boundaries and become integrated into the present course of study, along with varied cultural experiences which provide a social context for reaction to the various inputs. The transposition or movement of one or more of these texts to another is, as Kristeva would state, true intertextuality.
3.5 A description of sources in the present study

Although students were provided with a coding sheet of sources which were presented as a list divided into Lecture/Tutorial/Outside sources (Appendix C), these sources can in fact be conceptualised in a variety of ways:

- **The exogenous/endogenous division** (Hartman, 1995). Sources *within* the immediate topic include the lecture and components of it, the appropriate section of the workbook, the video, and the tutorial. *Outside* the immediate topic includes previous topics covered in the course, other relevant lectures from other university papers, as well as prior knowledge and experience.

<table>
<thead>
<tr>
<th>ENDOGENOUS</th>
<th>EXOGENOUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td>Previous lectures in course</td>
</tr>
<tr>
<td>Blackboard</td>
<td>Lectures outside course</td>
</tr>
<tr>
<td>OHT</td>
<td>Personal experience</td>
</tr>
<tr>
<td>Lecture Handout</td>
<td>Other e.g. TV programme, books</td>
</tr>
<tr>
<td>Workbook</td>
<td></td>
</tr>
<tr>
<td>Task</td>
<td></td>
</tr>
<tr>
<td>Video</td>
<td></td>
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</table>

**Figure 3 Division of sources according to endogenous/exogenous distinction.**

- **Oral/written/visual sources.** The lecture constitutes the major input of the oral source, whereas written sources include parts of the lecture, (lecture handout, blackboard, OHT) as well as the workbook and the tutorial reading. Visual sources consist of the video in particular, although one could argue that the OHT also contains an element of visual input. This particular classification, however, does not account for the prior knowledge a students brings to a task.
- *Lecture/tutorial/outside.* These sources represent a partially sequential input. Although the lecture is placed at the head as the primary source input, clearly outside input precedes the lecture.

All the above figures show that while most of the identified sources can be seen as input associated with the course, students also come with a less easily definable personal schema to which the other input attaches. This happens as connections are made while information processing occurs (Danks, Bohn & Fears, 1993). Lebauer (1994) defines prior knowledge as anything that acts as an inner resource from which knowledge is retrieved and reconstructed in the light of new input, thus contributing to the construction of meaning. So while course inputs and prior or personal experience are noted as sources to be tracked, both the qualitative and quantitative difference between them does need to be acknowledged. Prior knowledge is an important
component in this study. It is an aspect which has already been raised in Chapter 2 under top-down processing in particular (Section 2.1.2), and it warrants further exploration in the following section.

3.6 Aspects of knowledge relevant to the study

Knowledge can be both tacit and explicit, and it moves from one to the other when it is either retrieved or discarded. It goes without saying that explicit knowledge represents a minute part of all that a person has learned or experienced. A key component of prior knowledge is sociocultural knowledge which acts as a filter through which all experiences must pass (Alexander et al., 1991: 325). When sociocultural knowledge is directly addressed it is no different from content knowledge; at other times it forms an unconscious, attitudinal base for behaviour. The course Language and Culture upon which this study is based, provides opportunities for raising explicit awareness of sociocultural knowledge, and this can be and is used as content knowledge in written text.

Prior knowledge includes other elements. First, conceptual knowledge or one’s ideas or concepts (Alexander, Schallert & Hare, 1991) is comprised of both content knowledge and discourse knowledge. Content knowledge is hierarchically divided into domain and discipline knowledge depending on the level of expertise. It is likely that for prior knowledge to be used effectively in the course, the sociocultural knowledge needs to be represented as discipline knowledge. Secondly, metacognitive knowledge implies knowledge of text structure, as well as syntactic and rhetorical knowledge. Although weaknesses may appear in this area for L2 writers in particular, it is the content knowledge aspect of prior knowledge which is important in a study of source use.

The other major component of prior knowledge is metacognitive knowledge which includes self-knowledge, knowledge of the task and strategic knowledge, or understanding the processes to achieve a particular outcome (Alexander et al, 1991: 329). The combination of conceptual knowledge and metacognitive knowledge to
form prior knowledge meet at an interface between existing knowledge and new knowledge coming in from external sources (Alexander et al., 1991; Danks, Bohn & Fears, 1993).

Schanks (1990) also deals with the notion of the evolution of knowledge. He states, "Your views evolve, so what you say one time will not be identical to what you say the next time. But the relation between the two will be strong and will occur to you as you begin to construct your thoughts. New ideas depend on old ones" (p.25). So while Schank's statement relates closely to the issue of previously acquired knowledge, he also suggests it is developed and/or refined over time. He also agrees that certain elements or propositions stored in the long-term memory are produced later when common cues arise, linked either through the context or through the demands of the task. This again links with Foertsch's previously mentioned episodic memory in Section 2.1.3. Although Schank's comment relates to the domain of verbal behaviour, there are aspects in common with written production.

3.7 Situating the present study

Previous research (Spivey & King, 1989; McGinley, 1992; Gradwohl Nash, Schumacher & Carlson, 1993) has worked with carefully selected texts and most have been based on reading for the input. The present study on the other hand has features which have not been replicated in other work. In being a naturalistic study, it has the strength of identifying varying modes of source inputs (oral, written and visual input) as occurs in the real situation. As such, these sources have varying length. For example, the lecture represents one hour of oral input, the video about seven minutes, while length in reading tasks again is represented differently (one paragraph, or two pages etc). Low transparency (Gradwohl Nash et al., 1993) in terms of text structures (lack of similarity of text organisation across sources) are also another feature. This study also includes both L1 and L2 students whereas earlier studies have not combined these two subjects. This is a response to present day class composition. This study attempts to draw together all those inputs and influences on the students as they undertake this university course; no more or no less than what they are usually
exposed to. The role of writing in the course and the representation of uptake of knowledge or sources within it, is the subject of the next chapter.

Finally, although the study focuses on source use, taking into account knowledge, conceptual understanding, synthesis and coherence of text, it needs to be remembered that other less defined attitudinal goals of tolerance and appreciation of differences, are equally as important in this Language and Culture course. This study does not measure attitude change.
CHAPTER FOUR

THE PLACE OF WRITING

4.1 Introduction

The previous chapters have considered how uptake from the various sources to which students are exposed, is influenced by certain conditions. The way in which in-coming information is processed, the place of memory in this operation, strategies people use and the value of group work have been examined. In addition, the nature and definition of intertextuality, where the notion situates in previous writing from sources research, and the implications for this particular study have also been determined. From input and uptake, this discussion will now direct attention to output, and specifically for this study, the role of writing in present research.

4.2 Learning to write

Pedagogical models from the 1950’s through to the 1980s, focused on a mechanistic, linear, pre-determined approach which was representative of the learning to write school. Under this philosophy, the purpose of writing could be identified as reinforcement of patterns, training in manipulation of form, imitation, communication and fluency (Raimes, 1987). Although this was the way writing was taught, research into actual writing behaviour revealed that a linear approach to writing ignored the actual processes students engaged in. Researchers such as Humes 1983, Zamel 1983, Kennedy 1985, Raimes 1985, and Arndt 1987 would reveal weaknesses in this pedagogy. Raimes’ (1987) criticism was that the above five purposes were discrete and did not incorporate all the other purposes within them. What she says was missing was a “governing philosophy that connects the five purposes and provides a unified rather than a developmental-skills approach to teaching writing” (p.39). These are brought together under the label of
writing to learn. Within this study there was no direct intent to teach academic writing during the in-class writing. Nevertheless students were provided feedback on their writing to develop confidence in their writing ability (see Appendix D). Of more interest to the researcher were the outcomes of the writing process, and these will be examined next.

4.3 Writing to learn

Writing as a pathway to learning, is the position adopted in the present study. It highlights the special qualities of writing as a means to explore content areas, generate ideas, and a way to create new understandings through the integration of prior experience and knowledge during the writing task. This is so for both native and non-native speakers, novice and expert writers (Raimes, 1985). As mentioned above, studies of writers engaged in the writing task have revealed that contrary to former belief, writing is not a linear process but a highly recursive one (Zamel, 1983; Raimes, 1985; McGinley, 1992), with Zamel describing it as a “constant interplay of thinking, writing and rewriting” (p. 172).

As the writing process was better understood, it also became clear that the writer’s reasoning and thinking ability was enhanced in the actual act of writing. Applebee (1984) identified four ways in which writing contributed to thinking and these demonstrate this close relationship well. First, unlike speech, writing has a permanence to it. Gage, (in McGinley & Tierney, 1989) noted, “Writing is thinking made tangible, thinking that can be examined because it is on the page and not on the head invisibly floating around” (p. 248). Writing therefore does not have a rigidity to it, but through the writer being able to refer back to the text, s/he can think about and reform propositions. Writing requires explicitness, more so say, than speaking, and this is achieved through discourse forms through which ideas are organised and relations between ideas are demonstrated. Finally, writing is active in nature. That is, the very act of writing or composing, leads to the
generation of other ideas, this being in contrast with earlier methodologies which suggested writers needed all the appropriate information prior to starting the writing task.

This increased understanding of the writing process led to a change in focus, away from form and accuracy to an exploration of conceptual and cognitive development through various writing operations (Scardamalia & Bereiter, 1986; Newell & Winograd, 1989; Tierney, O'Flahavan & McGinley, 1989; Spivey, 1990; Schumacher & Nash, 1991). Scardamalia & Bereiter (1986) in particular, proposed a conceptual model of knowledge representation in writing. They made the distinction between knowledge telling and knowledge transformation.

Knowledge-telling corresponds to the recording of factual knowledge in which the structure of knowledge is unaltered, represented by a linear progression of ideas associated with a particular schema activated by the task. For example, a narrative, or a comparison, will trigger an expected format or outline. A student operating in a knowledge-telling mode may demonstrate little cognitive input, show little sign of goal identification, and in fact make errors at the micro-level of sentence structure because s/he is not engaged with the knowledge. It can be likened to a down-loading of information. A significant limitation for students operating under this framework is that a mental representation of the knowledge is not well defined, thus restricting access to a range of memory-node linkages during the writing process (see Section 2.1.3).

Knowledge transformation, on the other hand, is not viewed by Scardamalia & Bereiter as merely an extension of knowledge telling, but in fact at a different level of cognitive functioning. With knowledge transformation, the student engages in problem solving at both the content and the discourse level; that is, what to say, and the best way to represent that, needs constantly to be redefined. Each impacts on each other as the text evolves, and in turn reveals a newly created text. Knowledge-transforming requires a high level of
cognitive processing because it reconstructs new information built from all the varied textual inputs.

Such changes in conceptualisation and cognition cannot occur in a void. Raimes (1987) notes that writing to learn encompasses the reader, the writer and the text, thus being truly interactive and communicative. This fluid relationship links with our notion of intertextuality already discussed (Chapter 3). Raimes (1987:40) also notes that the writer needs to have knowledge of the language, how it is actually used as opposed to grammatical accuracy, along with a perception of the reader’s background, and familiarity with any constraints.

The cognitive potential of any task depends on the extent to which there are opportunities for ideas and language to be manipulated together. Inevitably some tasks more than others, call on this interplay between ideas and language. For example, on a continuum, multiple choice answers represent negligible manipulation of material as opposed to short answers; notetaking and summarisation improve recall as there is a higher level of interaction with the text, but it is through essay tasks that ideas and relationships are explored, or manipulated, thence transformed most fully. It is in this situation that writing to learn is most effective. McGinley (1992) observed that even as the text developed, the writer’s reasoning changed. Writing to learn is a means by which students develop both writing skills and content knowledge.

From the wealth of research undertaken, a number of processes have been observed and identified while students have been engaged in writing. These vary according to the nature of the task, (Applebee, 1984; Hidi & Anderson, 1986; Newell & Winograd, 1989; Schumacher & Nash, 1991), the place in the task; whether the writer is at the beginning or the end of a writing sequence for example, (McGinley, 1992; Breetvelt, van den Bergh & Rijlaarsdam, 1994), and whether the writer is experienced or novice (Zamel, 1983; Kennedy, 1985; Scardamalia & Bereiter, 1986; Spivey & King, 1989; Campbell, 1990;
Means, Chelemer & Knapp, 1991; O’Brien 1995). These variables identified above that impact upon the writing processes of students, will now be examined more fully.

4.3.1 The nature of the task

The nature of the task, as mentioned above, affects the type of processes and strategies the writer uses, as well as the cognitive outcome, especially where a distinction is made between tasks focusing on surface features of the text and those requiring a deeper level of semantic processing (Applebee, 1984). Based on an initial study by Newell (1984), Newell and Winograd (1989) re-examined the effects of note-taking, short-answer questions and analytic essay writing. Measures of learning included content units recalled, relationship units recalled and the quality of the gist of the initial reading passage in the recalls. Results showed that while students focused on content during note taking, this type of task did not allow them to consolidate their ideas or to interpret the meaning of such notes. Similarly, study questions required only fragmented information which did not help students integrate their knowledge. The analytic essay on the other hand required complex manipulation of the material, and this, along with greater planning and longer time engaged in the task, contributed to a higher level of understanding. Newell and Winograd (1989) also noted that writing led to a “qualitatively different set of writing and learning operations” (p.213) compared to the other two tasks.

In contrast Hidi and Anderson (1986) explored the relationship between reading and writing in English for academic purposes, through summary writing. This form of writing does have its own particular features in that, unlike other writing, it is based on existing discourse. Nevertheless two processes were identified; a selection process, and a reduction process, both of which being specific cognitive processes. The shorter the summary, the higher the level of cognitive processing was required so that the ability to select key ideas and to reduce them in written form made apparent differences between good and poor summary writers. Adding to this, Allison, Berry and Lewkoicza (1995) pointed out that there was a difference between a person’s ability to write a summary
where identifying the main points was one of the key issues, and the ability to use source materials in a critical way. The latter is one of the demands of an academic task which has specific application for the present research.

According to Schumacher and Nash (1991), the results of writing reflected the different types of writing tasks with different associated cognitive operations. Note taking compared with summaries or essay writing for example, made different demands on the writer. Schumacher and Nash (1991) raised the interesting question of whether the impact of writing on knowledge change was due to some inherent aspect of the writing task, or whether the writing itself provided a milieu in which certain cognitive processes were activated (Schumacher et al, 1991:72). They also suggested that certain tasks encouraged knowledge change, such as: the creation of anomalies or inconsistencies, making connections through analogies and metaphors, receiving multiple representations of material through visual, aural, and/or oral mode, or by providing a range of examples to create a flexible knowledge base. All these created situations which involved the writer in higher level cognitive activity.

It is clear then that writing has an influence on learning. Through it, new knowledge is acquired, previous knowledge is refined, and it is a means by which knowledge is restructured as changes occur in conceptualisation. The degree to which these occur however, depends on the nature of the writing task.

4.3.2 The place in the task

There are a range of cognitive activities which writers engage in, and these depend on the stage of the writing process. These have been recognised in the work of McGinley (1992) and that of Breetvelt, van den Bergh & Rijlaarsdam (1994). McGinley (1992) divided the students’ time of text production into four phases while Breetvelt et al.,(1994) identified three. It was noted that some activities were more common in the initial phase, such as
looking at the topic, and planning; the middle phase or phases showed more reading of the essay to check the writer was on track, or for clarity of meaning, and McGinley noted that as the text increasingly became the writer’s own, there was less paraphrasing and hypothesising, and an increase in the restating of issues.

Consistent with research on strategy use carried out by White (1996), it was found that the same observed behaviour within different episodes reflected different underlying cognitive processes. For example, reading the topic in the initial stages was for the purpose of verifying the requirements of the assignment whereas in the later stages, reading the topic again was for checking that the response was ‘on track’. It was through the use of verbal protocols during the task that similarities in observed behaviour became differentiated into types of purpose or motivation. These varying cognitive processes apply, whether the students write under time constraints as in the present study, or whether their writing is part of a longer planned task.

4.3.3 Writer expertise

It is an interesting finding is that students who believed they were good writers, found difficulties with writing within the academic environment (Lea, 1994). Undoubtedly familiarity with how knowledge is presented within the different disciplines is an important determinant of expertise in writing. Knowledge of specific vocabulary and terminology, as well as familiarity with how to structure an argument, elaborate, and provide examples to support points made, are also an integral part of success as a writer within the tertiary sector. Experience therefore consists of developing a range of skills which contribute to being a good writer.

Research on the writer is indeed varied. The degree to which writers were able to express new information or ideas in their own words was related to their reading ability as the basis for their writing tasks, according to Campbell (1990). Spivey and King (1989) had already made the link between writing level and the ability to organise texts. According to
Kennedy (1985), good writers used more strategies in terms of frequency as well as undertaking more planning. Other research shows that there was a concern by unskilled writers for correctness and form, and that writing energies were directed to surface structures rather than underlying meaning (Perl, 1979; Zamel, 1983). Conversely, a skilled writer could be identified by his or her attention to creating and conveying meaning from the outset, focusing on linguistic form in the latter stages of a writing draft.

One of the problems associated with unconfident ESL students writing in academic courses, is their tendency towards writer-based prose, the features of which Flower (in Leeds, 1996) identified as “following a narrative path, with privately loaded terms and unexpressed contexts” (p.62). As writing placed a burden on short-term memory, it was easier to resort to episodic memory in which personal experiences were recorded, and by unloading this, the writer did not need to adapt information for a specific purpose, nor extract the essential features. Developing a hierarchy of ideas was also seen as difficult, especially for the writer under time pressure. Compensation strategies therefore, such as resorting to one’s own background cultural experiences (Leki, 1995), or producing an unfocused printout of the writer’s memories and thoughts on the subject rather than adapting the information to the purpose required (Flower, in Leeds, 1996), were seen as means of coping with writing demands. This aspect is further discussed in Chapter 8.

Although reader-based prose is the ultimate goal, Flower believed writer-based prose was effective for these students for a number of reasons: it delayed the problem of forming complex mental concepts which is a more difficult task, it allowed the generation of a breadth of information, and by structuring one’s own ideas and removing the reader from consideration, the cognitive demands were significantly reduced. Flower saw this not as an error in writing but rather the first stage of a process, and that reader-based prose could evolve with further drafts, as well as through the benefit of further experience.
In examining the writing process of students at risk for academic failure, Means, Chelemer and Knapp (1991) similarly found that the text of such students was reduced to knowledge telling. In other words, these students wrote about what they knew of the subject. This was in place of engaging in higher level conceptual thinking, which is a necessary condition for transforming that knowledge into new mental representations. Scardamalia and Bereiter (1987) observed the same behaviour earlier in relation to 'immature' writers (Section 4.3).

Good writing requires a lot of practice and experience and B. Taylor (1981) believed that at the early stages producing writing was far more important than the product itself. Therefore one need not be overconcerned with apparent weaknesses of earlier forms. It also needs to be recalled that both skilled and unskilled writers, whether they are native speakers or not, can capitalise on the learning as outlined at the beginning of this chapter, which accompanies and can be derived from the writing process. The benefits however, are modified by some of the above conditions and behaviours.

4.4 Reading to write

The integration of reading and writing which mutually enhances learning, provides the context for and background to reading to write as a particular process within the writing to learn framework. As different researchers have engaged in various studies of reading to write, a number of different terminologies have arisen which warrant examination.

*Discourse synthesis*, initially used by Spivey and King (1989), Spivey (1990), then McGinley (1992), refers to what occurs when readers as writers create new texts through the selection, organisation and connection of content using multiple sources of reference. This act is also described by Spivey and King (1989) as *writing from sources* which Spivey (1990) viewed as *hybrid acts of literacy* (p.259). Kennedy (1985) and Gradwohl Nash et al, (1993) used the term *writing from sources* (see Section 3.2). Although
discourse synthesis reflects the product, the underlying processes and their outcome for these researchers are identified as the same; composing or writing from sources is successful to the extent that knowledge is integrated in the creation of a new text. A failure to do this links back to the problem identified by O'Brien (1995) where texts are not unified and lack coherence through the untransformed use of source materials. Therefore text recreation and text transformation are closely allied. While students create new texts through their selection and organisation of salient material as noted above, synthesising the latter into a new mental construct results in text transformation.

When either reading or writing is viewed as a separate process, in which neither contributes to the other, the potential for improved cognitive thinking is restricted. Reading was formerly viewed as a receptive skill, but opinion today considers it to be productive, in the same way as writing. When students read in an active manner, knowledge is linked into the student's schema, and relations are built between their own ideas and actual experience. Because the creation of meaning is an active process, reading is therefore productive.

When reading and writing are jointly associated, they can be seen as a powerful learning tool, referred to by McGinley and Tierney (1989:255), as the "combinatorial power of the two". Used together, they provide different ways of learning about and exploring a topic area, particularly through the use of reading to write tasks, or hybrid tasks (Spivey & King, 1989), or as Allison, Berry and Lewkowicz (1995) call them in an EAP situation, mediating tasks, which create a bridge between the reading and the act of composing. By not being restricted to reading or writing but a combination of both, they are linked with both comprehension and production.

Reading to write tasks vary, and can range from notetaking, summaries, analytic pair or group work, problem solving or whatever, all using a reading or readings as the basis or springboard for future written activity. Reading to write tasks may also include an oral
component. Reading to write, along with reading to write tasks are a very focused form of intertextuality because the information transfers from one mode to the other, (read, spoken, written), Kristeva’s idea of transposition (Section 3.1) can be seen to occur. The students in this study will read prior to writing, they will also talk to generate ideas. While other input will also be important, the tasks within the tutorials can be defined as reading to write tasks.

4.5 Influences on rhetoric

Rhetoric, defined by Purves (1988:9) as the choice of linguistic and structural aspects of texts to produce an effect on an audience, will vary according to what choices the writer makes, in accordance with accepted norms. Contrastive rhetoric, coined first by Kaplan (1966, in Purves, 1988), is used to describe consistent variation in written discourse evident in particular types of texts produced by different linguistic groups. This has implications when one group is required to meet target language norms of another, mostly English, particularly when, as in an academic environment, course assessment is mostly based on how well the student conforms to these expectations.

Requiring students to write regularly, raises the issue of what constitutes a good academic essay, when cultural variation has been shown to exist. Studies in contrastive rhetoric (Hinds, in Connor & Kaplan, 1987; Connor, 1996; Ventola & Mauranen, 1996) draw attention to cultural differences in reader/writer responsibility in text production and comprehension, including the degree of explicitness provided in written expression, as well as patterns of organisation and conventions represented in any linguistic text. Content, (what to include), and form, (how it is expressed) show variation both across languages and within languages where social variation exists. Indeed such studies acknowledge that writing is an activity which is “embedded in culture” (Connor, 1996:100) and will consequently reflect cultural norms of written discourse.
Studies in contrastive rhetoric have been undertaken in a number of languages (Connor & Kaplan, 1987; Purves, 1988; Connor, 1996). In relation to the class under study, patterns pertaining to Chinese and Japanese writing are of particular interest, as these groups are represented numerically in the class and writing in these languages manifests certain organizing principals. Both these languages contrast with the English model which, as formerly mentioned follows a linear sequence, tends to have a hierarchical structure for macropropositions, and whose writers use cohesive devices to express relationships at both the sentence level and between paragraphs.

Contrastive rhetoric implies knowledge of genre, and Connor (in Connor & Kaplan, 1996) identifies three characteristics of a ‘model’ argument text: it has a problem-solution structure; it is a succession of speech acts such as asserting or justifying a claim; the target audience needs to be borne in mind in the formulation of the argument. All these elements are present in successful argument text written in English, but cross-culturally, variations do exist. Although this study is not one of contrastive rhetoric, the analysis of text may indicate some of these matters raised.

While an ethnocentric view could be ascribed to the notion of linearity of development in an academic text, in an English speaking environment at least, the better essays will be evaluated in this light. Although Connor (1996) examined argument texts of students from four countries, (Finland, England, Germany and the United States) and found a consensus on what constituted good argument by the presence or absence of particular features, the sample does not raise the east/west dichotomy apparent in this academic environment. From the differences observed in the above studies, it would appear that it is important to raise awareness of the expectations and requirements of writing in a course which in itself is not a specialist writing course. It would seem both helpful and responsible to students, L1 and L2 alike, most of whom are beginning their academic studies.
Along with linguistic and cultural variations, there also exist differences in the culture of learning. In examining the difficulties international students have within the Australian tertiary academic setting, Ballard and Clanchy (1992) raise the issue of traditional attitudes towards the acquisition of knowledge which pervade the whole culture of learning and influence expectations within learning institutions. In a society which respects and thus conserves existing knowledge, a reproductive approach to learning, which values teacher transmission of knowledge and replicates itself through memorisation and imitation, will be dominant. On the other hand, an attitude of extending knowledge, requiring an analytical and beyond this, a speculative approach, demands a critical, questioning approach, thus encouraging skills of critical thinking, analysis, interpretation and independence or originality of thought. The tendency of societies to lean towards either conservation or extension of knowledge will influence students' academic practices and expectations, so that any change in cultural location can create a mismatch between what a student does, and what a student is expected to do, to achieve academic success.

How then, does this affect student writing? To begin with, it is not unusual for students to transfer their own cultural patterning in written expression when writing in their L2. Students operating under a knowledge conservation mode, are likely to demonstrate knowledge-telling tendencies in their written assignments, in ways similar to those identified by Scardamalia and Bereiter. However, while Ballard and Clanchy (1992) would say that producing written argument, which fits with the reasoning required in knowledge extension, is problematic for students unused to and inexperienced with such written form, further research by Chalmers and Volet (1997) into South-east Asian students studying in Australia would indicate that such students are aware of and prepared to adjust their learning styles in their new academic and cultural environment.
When L2 models or expectations have not been made explicit or familiar to the student, then writing tasks are likely to cause difficulty, or result in low levels of assessment in relation to expected norms. Such explicitness may be seen as akin to Leki’s *textual orientation* (1993), whereby text form receives focus by providing the student with appropriate text schemata. However this does not discount the role of a process orientation as well, in which a schemata evolves indirectly during the process of writing.

The argument text in particular, is accepted as a complex genre, the expectations of which are not always made clear. The following studies involving students of varying ages demonstrate some of these difficulties which need to be borne in mind, considering the writing tasks of the present study demand the creation of argument texts. This is the main genre of writing required from students under exam conditions in this first year university course.

### 4.6 The argument text

Hyland states that the “argumentative essay is defined by its purpose which is to persuade the reader of the correctness of the central argument” (Hyland, 1990:68). Because this genre has particular principals of organisation, when a student lacks this appropriate discourse schema, then problems are created for the writer.

#### 4.6.1 Studies on argument writing

Earlier studies (Bereiter & Scardamalia, 1982; McCann, 1989; Knudson, 1992a, 1992b) have drawn attention to children’s relative difficulty of developing writing skills in the argument genre, in comparison with narrative for example. Scardamalia and Bereiter (1982) believed that this resulted from the differences children experienced between the oral and the written form; that is, the lack of a conversational partner prompt in the latter, led to difficulties in generating and extending supporting ideas. Their labelling discourse as *open* or *closed* depending on the degree of social input, placed solitary written
composition into the *closed* category in which all outside cues, prompts and challenges to statements were not readily available (Bereiter & Scardamalia, in Glaser, 1982). Instead, the writer had to develop these him/herself.

The acknowledged complexity of this task, especially in terms of argument text, has continued to be raised, with Stein and Miller (in Britton & Graesser, 1996:261) putting forward the notion of *asymmetrical knowledge*. That is, arguers found it easier to put forward supporting material for their own stance but arguments that weakened their position were not so readily available. They suggested that a prescriptive view of argument was not necessarily psychologically valid in that it was difficult giving equal weight to argument when the author in reality leans towards a certain viewpoint.

Following Bereiter and Scardamalia's (1982) findings that students showed more familiarity with narrative type sentences, the work of Crowhurst (in McCann, 1989) consisted of examining the proportion of reporting, generalising and speculative sentences in 5th grade students. Reporting, or narrative type sentences were dominant. In contrast, traits of argument writing, such as claims (generalisations related to the propositions), data, warrants (explanations how data supports the claims), propositions (related to issues identified), recognition of opposition (qualification) and response to opposition were generally lacking.

McCann (1989) continued by examining work of 6th, 9th and 12th graders, and noted that the students were unable to state their claims effectively, little data was provided and consequently there was no explanation of such data. In addition these students had difficulty identifying opposing argument. The strongest elements to emerge were the making claims and stating propositions. The younger writers in particular failed to provide elaboration.
Knudson (1992a) demonstrated that more claims were evidenced with increasing grade. Again all students were strongest in making claims and stating propositions, and similar to McCann (1989) showed little support with data. Older students however were better able to generate prompts themselves in using warrants to support propositions, as well as showing an improvement in recognising audience needs. The latter, along with lack of experience, and a lack of an appropriate discourse schema, had been problems earlier identified in children's written argumentation. Knudson (1992b) further studied the value of instruction in textual features of argumentative writing through strategy use and concluded that it was not as effective as instruction in other genres.

Good written argument requires a hierarchy of ideas which link and substantiate the major claim. Ideally it requires balance, (symmetry in argument) before asserting a particular stance. In addition, it requires a sense of audience. A student who is able to fulfil all these, will inevitably score well in any form of assessment.

4.7 Summary

Our view or writing has evolved. Research has shown it is not the linear process it was once believed to be. The mental complexity involved in writing is also now apparent through the research on writing to learn, as well as through our greater understanding of reading to write processes. Research into contrastive rhetoric has revealed that cultural variations exist in terms of appropriacy in writing forms, including that of argument text which is an important academic genre. The demands and expectations of an argument text may not be held in common, nor is it an easy genre to teach.
CHAPTER FIVE

METHODOLOGY

5.1 Introduction

This study aimed to investigate which sources a group of tertiary students made use of while enrolled in a paper entitled Language and Culture, and how these sources were integrated in an examination-type writing task they were asked to respond to. Writing was chosen as the major product for data collection for a variety of reasons. First, it presents in a stable form which is both easily recorded and easily collected. Writing is also the only basis of assessment. Written assignments during the semester, and then the final exam constitute the means by which students are graded. Argument text was chosen as the discourse model as it is recognised as a genre within academic writing that students are familiar with. Nevertheless it is also acknowledged that many students have difficulty with focused argumentation (Section 4.6), with the manipulation of ideas to fit a thesis statement, and at the same time take audience needs into consideration (Bean, Drenk & Lee, 1982). There were then many reasons for using writing in general and argument writing in particular.

In this context, the present study sought to specifically address the following questions initially raised in the Introduction:

1. Which sources did students draw upon to write in-class essays under time constraints, and how were these represented in text construction?
2. Were changes observed over time?
3. To what extent did students integrate source inputs?
4. Was there any correlation between quality of students' writing as determined by holistic scores, and source use?
5. What differences were observed between writers?
This chapter deals with the approach adopted for this research, the context in which it occurred and the parameters established in its design in order to investigate the above questions.

5.2 Approach to the research

In many aspects the study was an ethnographic one, and certainly the nature of this investigation conformed to Nunan's identified characteristics of ethnographic research (Nunan, 1992:56). That is, it was contextual, carried out in a natural context; it was unobtrusive, in that there was no manipulation of phenomena being investigated; it had elements of being longitudinal; it was collaborative, requiring the participation of those involved besides the researcher; it was interpretative in the way the data was analysed; and it was organic, defined as an "interaction between questions/hypotheses and data collection / interpretation" (Nunan, 1992:56).

Ethnographic research also includes other characteristics. One which is pertinent to this research is an emic approach which takes into consideration culturally based perspectives (Johnson, 1992). The cultural and linguistic constitution of the class made this aspect particularly relevant to this study. An emic approach also takes into consideration aspects of individual behaviour, acknowledging that which sources are drawn on and why can be both idiosyncratic and complex. A quantitative analysis alone may mask this complexity and give a simplistic interpretation to the results.

In the corresponding semester the preceding year, a pilot study was undertaken, in which one tutorial class was composed of students who opted for a writing oriented tutorial. The readings, pair tasks and writing topics were trialed with these students. Listening protocols were also trialed with three students in the later sessions but from the information obtained, it was decided that self-coding of perceived sources at the end of the writing task could provide similar data more efficiently. Furthermore, all students could contribute to this data.
As a consequence of the pilot study, the present study was carried out within the students' normal academic programme and the tasks undertaken by the students were integral to that programme. Except for the students' self-coding of their written essays (see Appendix C), no tasks were changed to fit the research. The study was conducted over a period of six months, constituting a semester, so it was relatively short-term, but on the other hand it was not a one-off research investigation. The collaborative nature of this research, as defined by Nunan (1992) above, was demonstrated by the fact that all students received regular feedback on all their essays, not only the ones which were used for research purposes, hence their participation provided benefits for them which was separate from the scope of the immediate research intention. Finally, data analysis used both qualitative and quantitative measures.

5.3 The contextual base

In accordance with Nunan's criteria of contextuality, the setting for this study was the proscribed lecture and tutorial programme of a first year university Linguistics paper, Language and Culture. This course was chosen because of the number of L2 students who regularly enrolled in the paper, and also because the researcher had familiarity with the material as well as easy access to the students. The natural, unmodified setting of the lecture theatre and the tutorial classroom provided the research environment.

5.4 Sequence of activity

The students attended two lectures weekly, each pertaining to a specific topic within the course. A teacher-fronted approach was the mode of lecture delivery although some questions and comments were elicited from the students, and students were free to initiate comments at any time. The lecturer made frequent use of overhead transparencies, which mostly replicated the information presented on the lecture handout distributed to students prior to the beginning of the lecture. However, some additional information such as examples, dialogue transcriptions etc. were also
presented this way (see Appendix F1). In addition, conceptual frameworks and interlinking notions were represented graphically on the blackboard as they arose in the course of the lecture (see Section 7.3.2 Figure 2). Keywords, as well as words difficult for L2 students in particular, to spell, were also written on the board. The lecture lasted fifty minutes.

The tutorials were carefully designed to include both conventional activities and specifically designed tasks to provide practice in writing. Tutorials, also fifty minutes long, followed a particular sequence:

1. The students were shown a video sequence which corresponded to one of the weekly topics. As students were not required to take notes, this input was mostly of a visual/aural nature.

2. The students followed a sequence of reading, task, then writing. This is outlined in detail and examples are given in Figure 1.

   • The reading comprised a short passage (1-2 paragraphs) to focus the student on the topic.

   • The task, undertaken in pairs, consisted of a written response to a question after discussion between the two students. There was one response sheet per pair, upon which their names were recorded. This was collected by the tutor.

   • The students individually wrote a response to an essay question. At this point the students were not allowed access to any prompts, which were removed from sight.

   • Finally, from a provided coding sheet of sources used, the students reread their essays, underlined the relevant sections, and marked in the margin the corresponding coded sources as they perceived them. (Appendix C) The essays, with names recorded on them, along with the pair task sheets, were then collected.

Feedback was provided for all students who attended the tutorials, by way of a feedback sheet and additional personal remarks (Appendix D). This form of feedback was designed to help the students improve their writing skills without providing an
actual mark, so that no confusion arose between the in-class writing and assignment assessment in the course. It also allowed international students in particular to practise writing and essay answering techniques, free from any anxiety connected with mark related tasks.

The following figure represents the sequence of inputs and the topics within the course context for the weeks in which data was collected. Full details are provided in Appendix E, Appendix F and Appendix G.

<table>
<thead>
<tr>
<th>Period</th>
<th>Week 2</th>
<th>Week 7</th>
<th>Week 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture Topic</td>
<td>Language and socialisation</td>
<td>The spoken word and silence</td>
<td>Problems in entering another culture</td>
</tr>
<tr>
<td>Lecture Supplement</td>
<td>Lecture handout</td>
<td>Lecture handout</td>
<td>Lecture handout</td>
</tr>
<tr>
<td>Video topic</td>
<td>The wolf children of India</td>
<td>The Finns and silence</td>
<td>Chinese migrants in N.Z.</td>
</tr>
<tr>
<td>Reading</td>
<td>Language and enculturation: Saville-Troike</td>
<td>Varieties of talk: Wardhaugh</td>
<td>Acculturation: Samovar &amp; Porter</td>
</tr>
<tr>
<td>Discussion topic</td>
<td>Influence of gender, nationality, religion, and role relationships on first language learning.</td>
<td>Comparison of the !Kung and Western Apache in their use of speech.</td>
<td>Influences on acculturation.</td>
</tr>
<tr>
<td>Writing topic</td>
<td>Using examples to illustrate the points you make, provide a case for Saville-Troike’s comment that children learn the structure of their culture as they learn their first language.</td>
<td>“While the basic forms of silence may be universal, its functions and interpretations vary among cultures”. (Samovar &amp; Porter, 1994: 248). Discuss this statement using examples to support your points.</td>
<td>Cross-cultural adaptation could be described as facing challenges in a new environment and learning from them thus evolving as a person. To what extent is culture shock a part of this process?</td>
</tr>
</tbody>
</table>

Figure 6 Topic and procedure plan
The above figure demonstrates the key features of the topic as it was represented at different stages of input. The lecture topic and the lecture supplement were obviously linked with the lecture presentation; the video, reading, discussion topic and the writing task occurred in that order in the tutorial. The readings were selected from appropriate texts, chosen both for their length, (mainly short), and their potential to stimulate discussion through the provision of open-ended questions which formed the basis of the discussion topics.

The essay questions on the other hand were formulated with both Horowitz' (1986) and Dudley-Evans' (1988) typographies in mind (see Appendix H). While the three essay topics at the collection points represented a type 2 Dudley-Evans’ distinction (dealing with established theories or processes) and lay within Horowitz' general argument division, an examination of former exam papers showed that students in the Language and Culture course are exposed to the full range of argument type examination prompts. Thus within this methodology, students were provided with the opportunity to familiarise themselves with particular text schema requirements.

5.5 Research design

The pilot study from the previous year, helped to set the parameters for the design described in the section below.

5.5.1 Participants in the study

Participants in the study came from internal students enrolled in the first year Language and Culture paper. They represented an intact group; that is, linguistics students who had opted to take the paper, their self-selection incorporating both interest and timetable considerations.

In the first week, an information sheet and a consent form (Appendix A and Appendix B) were distributed by a different staff member, in accordance with the University Ethics Committee requirements. The course members who consented amounted to 41
students, of whom 15 were international students. As a result of the self-selection process for tutorial classes also, these students were to be found in all four of the tutorials offered.

Because all students were expected to engage in all aspects of the course, and to do so was perceived as most beneficial, there was no control group. However, in line with ethical considerations, no one group could have been excluded from the course. Neither would such actions fit a naturalistic study. On the other hand some students' attendance at tutorials fluctuated for a range of reasons such as ill health, or, for a minority, they failed to engage seriously with the course. Thus attrition or deselection did occur, but it did not relate to any single factor.

All students who had provided consent and were present on the occasions data was collected, including the first data collection session, formed part of the data set. Students absent on more than one occasion after the first collection were eliminated from the study, and presence at the first collection point was essential to measure any change in source use. In line with any naturalistic study, there was an early attrition rate from students who had subject clashes and who subsequently chose to withdraw from the course. Some students from whom consent was obtained, in fact never engaged in tutorials, and others who were present on most occasions, were absent sporadically for some reason such as ill health. Student absence was most evident on the last data collection session, when many students under pressure of completing assignments before the end of the semester, opted out of tutorials for that week. In total, three data sets were obtained.

Students were classified as either New Zealand students or international students, representing mainly an English L1 or L2 distinction. Within the New Zealand students group there were two students who had resided in the country over eight years and were fully bilingual, thus were placed in this category. Of the 19 New Zealand students who had provided consent and were eligible to be included in the data collection, all except four, were first year students. Two of these could be classified as
mature, older students (over 50 years of age), who had spent a number of years away from academic studies.

The international students had two identifiable divisions. First, there were those on a year's exchange who had, on average, nine years English instruction but who had minimal experience in an English speaking environment. The second group was composed of students who, apart from two exceptions, had on average six years of English study, about three of those years spent in a New Zealand school or tertiary institution (see Appendix I).

In total, 29 students provided data for the study. The divisions between the L1 and the L2 students are described in the following data sets and are presented numerically in Figure 2.

**Data Set 1** was comprised of students who were present at the first data collection occasion. These comprised 19 New Zealand students and 10 international students.

**Data Set 2** was comprised of those students who attended the first two collection sessions; 19 New Zealand students and 9 international students.

**Data Set 3** comprised those students who were present for the first and third data collection sessions but absent for the second. These numbered 16 New Zealand students, and 6 international students.

<table>
<thead>
<tr>
<th>DATA</th>
<th>SET 1</th>
<th>SET 2 (1+2)</th>
<th>SET 3 (1+3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students: N.Z.</td>
<td>19</td>
<td>19</td>
<td>16</td>
</tr>
<tr>
<td>International</td>
<td>10</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>28</td>
<td>22</td>
</tr>
</tbody>
</table>

**Figure 7** Composition of students in data collection sets

**5.5.2 Monitoring exposure to sources**

Both for the analysis of qualitative and the interpretation of quantitative data it was necessary to consider all the input that students were exposed to. In addition, as part of
the emic approach as discussed previously in Section 5.2, other contributing factors were heeded in examining the writing of the second language speakers. In particular, the cultural patterns and expectations with which they were familiar were also considered in the interpretation of data. In other words, such students brought to the writing task different learning experiences and practices which had to be acknowledged, along with their greater difficulty in writing in English. If the product per se were analysed without these considerations, (an etic analysis: Crystal, 1990) then wider intertextual influences could not have been considered.

In order to monitor exposure to sources it was important to separate the components of the course and to identify the types of input at each of the points. They were placed within three bands; lecture, tutorial and outside or exogenous sources, according to their point of input (see Section 4.1, Figure 5).

The researcher collected information regarding the range of inputs the students were exposed to in their series of lectures. Not only were the key points and all the examples noted down that were transmitted orally, but also information presented on the blackboard and via overhead transparencies. These were colour-coded to differentiate between the different forms of input. In addition, any lecture handouts distributed at the lecture, were also collected (see Appendices E,F,&G). The lecture was considered to be the primary source of input for the students because it was here that the students received the initial information for the topic.

An integral part of the course is the tutorial workbook, which incorporates tasks and questions requiring both the textbook, and excerpts and supplementary passages provided in the workbook, in order to answer them. The workbook therefore uses a range of written sources which, for the purposes of this study, are identified as the ‘workbook’ for the coding procedure. As the workbook has been designed for self-study, students are expected to complete the appropriate section of the workbook before coming to tutorials.
As opposed to the lecture in which the researcher had a more passive or background role, in the tutorials the researcher was responsible for the programme. This was in accordance with the researcher’s normal duties, and in line with naturalistic studies, whereby the gathering of information occurs unobtrusively in a natural setting (Johnson, 1992:86). The sequence of tasks in the tutorial has been previously presented in Section 5.4.

In addition, a supplementary reading handout comprising a number of journal articles which the students were to use as material for a later mid-course test, was distributed at the beginning of the course.

<table>
<thead>
<tr>
<th>Category</th>
<th>Source</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary data</td>
<td>Lecture</td>
<td>lecture key points &amp; examples</td>
</tr>
<tr>
<td></td>
<td></td>
<td>lecture handout</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OHT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>blackboard</td>
</tr>
<tr>
<td></td>
<td>Tutorial</td>
<td>workbook points, video</td>
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<tr>
<td></td>
<td></td>
<td>reading</td>
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<tr>
<td></td>
<td></td>
<td>pair work record</td>
</tr>
<tr>
<td></td>
<td></td>
<td>essay</td>
</tr>
<tr>
<td></td>
<td></td>
<td>self-coding</td>
</tr>
<tr>
<td>Secondary data</td>
<td>questionnaire A (Initial)</td>
<td>languages</td>
</tr>
<tr>
<td></td>
<td></td>
<td>experiences</td>
</tr>
<tr>
<td></td>
<td></td>
<td>time in NZ</td>
</tr>
<tr>
<td></td>
<td>questionnaire B (Exit)</td>
<td>value of writing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>sources perceived useful</td>
</tr>
</tbody>
</table>

**Figure 8 Types of data collected**

Figure 3 above summarises the components of primary data and at what point in the programme they were supplied to the students. It also includes the key information
obtained from the secondary data. Secondary data was obtained by means of a questionnaire which was distributed to all students in the class at the beginning of the course, and from which biodata was obtained (Appendix J). The purpose of this was to ascertain what cross-cultural experiences the students had had, and for the second language students in particular, how long they had studied English, as well as their length of stay in New Zealand. Similarly, a questionnaire was distributed to those students present at the end of the course (Appendix K), the aim of which was to gather information on how students perceived the usefulness of the various sources and the value of in-class writing.

5.6 Data Analysis

In the tracking of students' use of sources for writing throughout the academic programme, both qualitative and quantitative approaches were used. A qualitative approach allowed for a richer interpretation of the data, into which changing contextual factors such as a developing schema over time, acculturation of overseas students, and increasing experience in the writing process could be incorporated. On the other hand, quantitative data was also obtained as a combined approach proved complementary. Numerical data enabled measurement of frequency and the emergence of particular patterns. Statistical analysis was then used to determine the significance of these patterns, although they then needed to be interpreted in light of the wider context. The following discussion describes the paths I explored to establish a suitable means of text analysis to fit the demands of the study.

5.6.1 Establishing the unit of analysis

The students' texts were examined in relation to existing units of analysis. The notion of top-down parsing was appropriate for argument structure and provided the guiding principle in terms of the final choice.

The T-unit, a frequently used unit of analysis, "one main clause plus all subordinate clauses and non-clausal structures attached to or embedded in it." (Hunt, in Gaies,
1980:54), was not appropriate for analysing text for both argument text constituents and sources. Although McGinley (1992) used T-units with some flexibility, segmenting into clauses as well as subordinate clauses where fitting, the T-units did not, in this case, represent adequately the type of information to be analysed.

5.6.2 Analysing argument structure
More specifically, the top-down parsing of the students' texts, i.e. identifying the major propositions and topics and creating links through subordinated propositions and relationships goes back to the work of Christensen (1966, in Meyer, 1975). Christensen described these propositions as nodes within the content structure, and these nodes were analysed in the direction of a downward path. When this downward analysis was complete, the parser was to return to the higher levels of the tree structure where nodes representing a new topic or claim were to be divided up in a similar way. Although it would be expected that a new upper node would correspond with a new paragraph, in fact this does not always reflect the structure of students' ill-formed texts. It was observed in some of the students' writing, that there was not a clear delineation of ideas by formal means such as paragraph breaks, even though discussion was both logical and progressive.

![Figure 9 Pattern of text analysis according to Christensen.](image-url)
The advantage of dividing the text in this manner is that the key ideas are easily identifiable, and with the structure of the text graphically represented, a hierarchy of propositions can be readily determined.

The above procedure used by Meyer (1975) in relation to studies on prose structure and recall, has also been adopted and adapted by others (see for example Newell & MacAdam, 1987). Coe (1988) also grappled with the issue of textual organisation and his resulting discourse matrix, with strong links to the work of Christensen, was the outcome.

Idea units (Kroll, 1977) were then examined. Although the definition “a chunk of information which is viewed by the speaker/writer cohesively as it is given a surface form” initially seemed a possible solution, a more precise definition (Kroll, in Crookes, 1988:45) made it clear that this analytical unit in reality divided the written text into even smaller units. It was clear that a more flexible unit relying more on semantic meaning needed to be developed.

Content units were used in the work of Spivey and King (1990) in their examination of writing from sources. These content units however were identified from the source materials prior to the writing task so that a template of content units within and across texts was established. Similarly, Gradwohl Nash et al, (1993) in their structure-mapping model used predicates, essentially content units, in their examination of information transfer from selected texts. In both these cases content units could be easily identified because first, the sources used were limited to two or three texts so that commonality and uniqueness could be easily identified across sources, and secondly, the nature of the written texts, which had a high proportion of simple sentences involving one idea or content unit per sentence. Pre-parsing of source texts for content units is possible only when the text is written. In the case of using a range of sources presented in written, visual and aural form, the content unit used in the above works, is not a feasible measure.
An attempt to modify Bloome and Egan-Robertson’s (1993) table on classroom intertextuality provided some measure of textual sources and the functions these performed in the written product. It did not however address the issue of textual organisation nor source integration, both of which were being examined in the research programme. This was going to prove crucial as future analysis of texts would show variation in both the ways sources were used and integrated, as well as structural variation of the text (see Chapter 8).

Working backwards from O’Brien (1995) to Mann and Thompson (1988), the notion of nuclei and satellites was reconsidered, not so much as specific linguistic units for RST analysis but conceptually. What were the key ideas? Which ideas contributed to the argument through development and extension, whose meaning could only make full sense in relation to the key statements? It was this that was analogous to the nucleus and the satellite. In placing this concept alongside the key elements of structure of an argumentative essay: claims, grounds and warrants, sequences identified within the argument phase of this essay genre (Hyland, 1990), a model was developing which could meaningfully be applied to the students’ texts (see Appendix M).

The students’ essays were once again examined, this time identifying the major claims, the grounds for these claims, and the warrants or support, the latter categorised according to Mann and Thompson’s relation classification which fulfilled the identification of satellite functions (see Appendix M). The essay was now able to be mapped out, represented in structural form based on argument text constituents and including satellite functions. For ease of classification these were called content units, but they were not identical to content units existing in other research as mentioned above (Spivey & King, 1989; Gradwohl Nash et al, 1989). Upon each of the moves thus mapped, the source or sources of the information were identified, providing at the same time a ready indication of source integration as well as a visual model of the written text.
5.7 Identification of sources.

At the completion of the writing session, students reread their essays and underlined those sections for which they believed they recognised the source. The students labelled these according to the coding sheet (Appendix C). This provided some measure of reliability between students’ and the researcher’s perceived use of sources. It specifically enabled those outside sources such as television programmes and books to be traced which the researcher was unable to account for. Programme familiarity, input monitoring and students’ personal questionnaires (Appendices J and K) provided the basis for the tracing of sources in the student texts by the researcher.

In accordance with the above model, all student essays gathered at the three points of the course, were analysed diagrammatically; the researcher coding each content unit according to its text constituent and/or satellite function e.g. claim, elaboration etc., and according to what source or sources it represented (see Sections 3.5 & 5.7). The student’s own identification of sources within the text was compared and considered in attributing sources to units. Data therefore were established from the combined information. This information was then transferred to a worksheet adapted from Bloome and Egan-Robertson (1993), (Appendix N) from which the quantitative analysis of results could proceed.

5.8 Analysing texts holistically

The essays were judged for overall quality by two raters who read copied versions and gave each essay a rating from 1 (low) to 10 (high). The scoring system used was a form of general impression marking in which a score is given for quality relative to the whole sample. Hamp-Lyons (1995) notes that a single score may be adequate in research when it is used as a support measure in the research, and when the research object is not specifically writing proficiency (Hamp-Lyons, 1995:760).

Analyses of results used the combined scores of the two raters. The correlation between the two sets of marks was 0.90 for essay one, 0.84 for essay two and 0.81 for
essay three. This gives a reliability index as defined by Hatch and Lazaraton (1991:533) of 0.95, for essay one, 0.91 for essay two and 0.90 for essay three, thus indicating a relatively high level of inter-rater reliability.
CHAPTER SIX

RESULTS

6.1 Introduction

This chapter reports on the analysis of data obtained from the written texts upon which sources were tracked. The data were taken from three collection points: at the beginning, in the middle, and at the end of the course. The principle aim was to investigate which sources students used in in-class writing, whether changes could be observed over time, and the degree to which these sources were integrated in the written text. A second aim was to find out if there was any link between the quality of students' texts as measured by holistic scores and the way in which sources were used. Within these broader aims, differences between writers, in particular, L1 and L2 writers were explored.

In the identification of sources, it should be remembered that three broad groupings were established: the lecture, the tutorial and exogenous sources (see Sections 4.1 & 5.5.2). Within each of these groupings, specific components were also identified to provide a clearer understanding of the role each one played in terms of uptake (see Section 5.5.2).

The following results outline the findings concerning the relationship between:
- Source use, occasion and language background,
- Text quality and source use,
- Text quality and frequency of content units, and finally,
- The extent of source integration in writing.
6.2 The relationship between source use, occasion, and language background

The data obtained were analysed in response to the first research question *Which sources did students draw upon to write in-class essays under time constraints and did these change over time?* The intention was to establish which sources were used with the most frequency, and then to see whether there was any change as the course progressed with the students' schema more fully developed. Added to this was the question whether L1 and L2 students followed the same pattern of source use.

From the information recorded on the worksheet for tracking sources and text units (Appendix N), totals were established for analysis. A summary of the percentage of content units for the three essays is given in Table 1. As each essay showed differences in source use, these will be examined separately.

6.2.1 Essay One

The chi-square analysis of the first essay (completed during the first tutorial of the course) produced a result of $\chi^2 = 25.28$, $p < 0.01$ (see Table 2). A distinction therefore could be made between the two sets of writers in their distribution of sources used. Within this analysis, particular sources could be identified as used differently or similarly by the two groups of writers.

As can be seen in Table 1, the lecture, the OHT, the workbook, the video and personal knowledge were sources which revealed little difference in the extent to which they were used by the two groups of students. It might have been expected that the lecture would create difficulties for L2 students, at the beginning at least, but this did not appear to be so. Neither was there any difference in the extent to which personal knowledge was used as a writing source.
<table>
<thead>
<tr>
<th>Source</th>
<th>Lecture</th>
<th>Blackboard</th>
<th>OHT</th>
<th>Handout</th>
<th>Tutorial</th>
<th>Task</th>
<th>Video</th>
<th>Outside</th>
<th>Personal</th>
<th>Previous</th>
<th>Other</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Essay 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L1</td>
<td>38</td>
<td>3</td>
<td>7</td>
<td>5</td>
<td>12</td>
<td>4</td>
<td>6</td>
<td>0</td>
<td>24</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>333</td>
</tr>
<tr>
<td>L2</td>
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<td>8</td>
<td>4</td>
<td>1</td>
<td>11</td>
<td>0</td>
<td>15</td>
<td>0</td>
<td>30</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>147</td>
</tr>
<tr>
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<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L1</td>
<td>33</td>
<td>8</td>
<td>1</td>
<td>1</td>
<td>8</td>
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<td>20</td>
<td>5</td>
<td>14</td>
<td>6</td>
<td>1</td>
<td>2</td>
<td>439</td>
</tr>
<tr>
<td>L2</td>
<td>27</td>
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<td>1</td>
<td>1</td>
<td>4</td>
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<td>142</td>
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<td>6</td>
<td>7</td>
<td>0</td>
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<td>12</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>348</td>
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<tr>
<td>L2</td>
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<td>13</td>
<td>1</td>
<td>20</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>89</td>
</tr>
</tbody>
</table>

Table 1  Percentages of content units derived from different sources by L1 and L2 students for essays 1-3
Written material distributed to the students showed a difference in use. The L1 writers made more use of the handout which accompanied the lecture (5% compared with 1%). There was also a clear indication such as reference to an author, that the L1 students had started to read articles in the supplementary reading and had incorporated some of that information in the essays. L2 students, particularly those who had just arrived in the country, found this reading very difficult at this early stage (personal communication), which may account for their not using this source at all.

The blackboard was one source that the L2 students made relatively more use of than the L1 students (L2 8%, L1 3%). This may represent a higher dependence on the blackboard in accordance with patterns of usage in their countries of origin. Alternatively, the demands of listening to the lecture may have taxed L2 students, so that the blackboard represented an 'anchor' on which key concepts were hinged. The other input used significantly more by L2 students was the task completed immediately prior to writing the essay (L2 15%, L1 6%), which may indicate that recency is important for an L2 at the early stages of operating in English. Information that is either episodic or in short-term memory, may be more easily retrieved for the purposes of writing an essay.

6.2.2 Essay Two

A significant difference between L1 and L2 writers was maintained with $p < 0.001$, $\chi^2 = 53.27$, (see Table 2). Again no one source within the lecture grouping revealed any significant difference in usage; all were used by both groups to a similar degree.

The main area of difference lay in the tutorial group of sources. Again, the supplementary reading described above, provided a source which L2 students did not access at all (see Table 1). Although L2 students would need to confront this material in an up-coming test and therefore may have made some start with the reading, there was no evidence of this in their writing.
Another source accessed only by the L1 students was the video (L1 5%, L2 0%, see Table 1). As the video overall was accessed poorly by students, one can only surmise that on this occasion a topic and task effect operated for the L1 students (see Section 7.3.1 for further discussion of this issue). The congruence of the different inputs supports Spivey’s notion of horizontal representation of information (lecture, reading, video etc., see Section 3.3), and the task shows consistency with Carrell’s (1996) observation that the contrast/comparison nature of the writing task on this occasion may have also made the video information easier to incorporate into the written response.

The most notable difference of source use however was the degree to which L2 students relied on personal knowledge in the body of their essays (L2 40%, L1 14%). While both L1 and L2 students used this in similar proportions in the first essay written (Table 1: L2 30%, L1 24%), there was a dramatic decline of use by the L1 students who appeared to access more readily the range of input given in and across courses. Thus reference to information given in previous lectures as well as lectures outside this paper had started to appear, and while some reference to material in previous lectures was made by L2 writers, by far the most distinguishing factor was the high dependence on personal knowledge. Chapter 7 will discuss more fully how this particular source was represented in individual texts.

6.2.3 Essay Three
This essay indicated that there was a significant difference between L1 and L2 writers which was maintained throughout the course ($p < 0.001, \chi^2 = 30.40$). The L1 students continued to show a steady reliance on the lecture in particular as well as its associated sub-components, totaling 67% compared with L2 42%. (Table 1.). Within this grouping, the blackboard and the handout were both used more than might be expected. This contrasts with the L2 students for whom the workbook within the tutorial group of sources showed itself to be important (L1 7%, L2 20%). Once more there was an
important use of personal knowledge in the writing of L2 students (Table 1). And although not numerically significant, personal observation would suggest that again there was indication of material being integrated from previous lectures and outside sources for both groups.

A chi square analysis was undertaken, separately for each essay, to determine whether the distribution of sources used was different for L1 and L2 writers. Table 2 presents the chi-square analysis for this data.

<table>
<thead>
<tr>
<th>Essay</th>
<th>d.f.</th>
<th>$\chi^2$</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Essay 1</td>
<td>9</td>
<td>25.28</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Essay 2</td>
<td>11</td>
<td>53.27</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Essay 3</td>
<td>9</td>
<td>30.40</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

Table 2 Chi square analysis between L1 and L2 writers and source use

6.2.4 Summary

The chi square analysis (Table 2) indicated significant differences in source use. Inspection of the frequencies and percentages (Table 1) indicated that certain trends were evident in student writing over the course. Whereas both groups used the lecture similarly at the beginning, there was a tendency for it to maintain or assume greater importance for L1 students as the course proceeded. Indeed the whole grouping of lecture, blackboard, OHT and lecture handout were important forms of input for the L1 students. The blackboard interestingly showed a reversal in use, as at the initial stages it was accessed more by L2 students but from then on the trend showed greater L1 use.

The sources identified as the tutorial grouping: supplementary reading, tutorial workbook, task and video, revealed a greater variation in use between the L1 and L2 students. For
the L1 students, this seemed to be influenced by occasion. Table 2 reveals a greater consistency of source use by the L2 students.

Exogenous sources, the third group, included personal knowledge, previous lectures and other lectures. Of these, the personal knowledge factor was most significant, being used especially by the L2 students. Whereas L1 students made decreasing use of it over the course, personal knowledge maintained prominence and even dominated at times for the L2 students (see data for Essay 2, Table 2). There was a small but important indication L1 students were integrating material across the course, and in some cases drawing upon other university courses. It should be noted however that individual practice is masked by the group score and that for some students this did not occur at all.

6.3 The relationship between text quality and source use

A chi square analysis was undertaken, separately for each essay by L1 students, to determine whether the better essays, as determined by a holistic score, used a different distribution of sources than the poorer ones. While it might be assumed that better writers employ a greater variety of, or particular types of sources, only by quantifying the actual sources used, could this be demonstrated. Only the scores of L1 students were examined in this way because the number of L2 students was insufficient to divide meaningfully into two separate groups. This analysis was in response to the question *Was there any link between essay quality as determined by holistic scores and source use?* To determine this, the scores from the two raters were combined. They were then ranked and divided on either side of the median.

The chi-square test applied to the first set of data associated with essay 1 indicate a very strong association between the subjects’ holistic scores and their source use ($\chi^2 = 27.55$, $p < .001$) revealing differences between the two sets of L1 writers.
Analysis of the second set of data continued to show this strong relationship between the holistic scores and sources used ($\chi^2 = 32.16$, $p < .001$, d.f. =11). Application of the chi square test to the third set of data this time showed no significant relationship (see Table 3).

<table>
<thead>
<tr>
<th></th>
<th>d.f.</th>
<th>$\chi^2$</th>
<th>P</th>
</tr>
</thead>
<tbody>
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<td>27.55</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Essay 2</td>
<td>11</td>
<td>32.16</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Essay 3</td>
<td>9</td>
<td>15.24</td>
<td>&lt;0.10</td>
</tr>
</tbody>
</table>

Table 3 Chi square analysis between text quality as determined by holistic scores and source use

An examination of the percentage distribution of sources (Table 4) in essay 1 indicates that significant differences lay in two areas. First, the better writers made greater use of the lecture in particular, compared to the poorer writers. Second, the writers with lower assessment showed significant use of the task. No difference was observed between groups in their use of personal knowledge which was drawn on by both as an important source.

A similar pattern exists for Essay 2 but the differences are not as wide. The lower assessed essays showed greater use of the workbook whilst the task, contrary to results in Essay 1, was accessed more fully by the better students. They too, made greater use of previous lectures in their written responses (8% compared with 3%).
<table>
<thead>
<tr>
<th>Source</th>
<th>Lecture</th>
<th>Blackboard</th>
<th>OHT</th>
<th>Handout</th>
<th>Tutorial</th>
<th>supple-</th>
<th>task</th>
<th>video</th>
<th>Outside</th>
<th>personal</th>
<th>previous</th>
<th>other</th>
<th>other</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Essay 1 poorer</td>
<td>29</td>
<td>3</td>
<td>6</td>
<td>5</td>
<td>15</td>
<td>3</td>
<td>13</td>
<td>0</td>
<td>26</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>121</td>
</tr>
<tr>
<td>better</td>
<td>48</td>
<td>3</td>
<td>8</td>
<td>5</td>
<td>11</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>18</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>195</td>
</tr>
<tr>
<td>Essay 2 poorer</td>
<td>37</td>
<td>7</td>
<td>2</td>
<td>2</td>
<td>12</td>
<td>3</td>
<td>12</td>
<td>5</td>
<td>17</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>198</td>
<td></td>
</tr>
<tr>
<td>better</td>
<td>30</td>
<td>10</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>27</td>
<td>3</td>
<td>2</td>
<td>8</td>
<td>1</td>
<td>2</td>
<td>194</td>
<td></td>
</tr>
<tr>
<td>Essay 3 poorer</td>
<td>45</td>
<td>6</td>
<td>3</td>
<td>5</td>
<td>10</td>
<td>0</td>
<td>12</td>
<td>1</td>
<td>16</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>177</td>
<td></td>
</tr>
<tr>
<td>better</td>
<td>58</td>
<td>6</td>
<td>3</td>
<td>7</td>
<td>3</td>
<td>0</td>
<td>13</td>
<td>0</td>
<td>9</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>151</td>
<td></td>
</tr>
</tbody>
</table>

Table 4 Percentage distribution of sources of ideas for L1 upper and lower assessed essays
Even though Essay 3 did not manifest any significant difference between the two groups of writers, the higher scoring students recorded more use of the lecture once again, while personal knowledge remained a relatively important source for the students of the lower assessed essays.

Transforming the distribution of sources used by the identified higher and lower scoring students into percentages, indicates particular areas of difference across the essays as a whole (Table 4). It would appear that the better students have higher uptake of the lecture, defined as that information transmitted orally by the lecturer as opposed to those components such as the blackboard and OHT which showed less difference in usage. However an anomaly did appear in Essay 2, which shows a reversal of the uses of the lecture and the task by the better and poorer writers. i.e. the lower assessed essays showed greater use of the lecture and less of the task as opposed to less of the lecture and relatively more of the task in relation to the other group.

A re-examination of the structural analyses upon which the sources were mapped for this group of essays to see what may account for this change (e.g. the lecture and the task being both ascribed to a particular constituent unit, thus revealing higher numerical values for the task than usual) did not provide a ready answer. The higher score for the better students did not indicate a higher degree of integration of sources in this respect. Clearly a different factor was at work with this particular essay and this will be later examined in the discussion.

As Table 4 shows, the workbook and personal knowledge were both used more by the poorer writers throughout all the essays (compare 15 to 11%; 12 to 4%; 10 to 3% for the workbook, 26 to 18%; 17 to 12%; 16 to 9% for personal knowledge). Finally, the better students appeared to retrieve and apply information given in other lectures of the course. Their ability to link in this knowledge more efficiently, may indicate a better conceptual understanding of key issues.
6.3.1 Summary
Overall the better L1 students were able to make more effective use of the lecture, and where there was a clear rhetorical match between lecture, tutorial inputs and the task, there was evidence that these same students strengthened this connection. The students of the lower assessed essays showed consistently more use of the workbook, and personal knowledge.

6.4 The relationship between text quality and frequency of content units
Although experience with student texts would suggest I would not find any relationship between text quality and the frequency of content units, a single factor analysis of variance was undertaken to compare the L1 essays above and below the median score for the number of content units. While at the initial stages there were differences between the higher and lower scoring students in terms of content units (see Table 5), over time this difference became insignificant. Quantity was not related to text quality.

<table>
<thead>
<tr>
<th></th>
<th>Higher scoring</th>
<th>Lower scoring</th>
<th>P. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Essay 1</td>
<td>21.7</td>
<td>15.1</td>
<td>0.08</td>
</tr>
<tr>
<td>Essay 2</td>
<td>27.7</td>
<td>22.0</td>
<td>0.20</td>
</tr>
<tr>
<td>Essay 3</td>
<td>21.6</td>
<td>22.1</td>
<td>0.89</td>
</tr>
</tbody>
</table>

Table 5 Frequency of content units per essay

6.5 Integration of sources in writing
This analysis examined the ratio of sources to satellites (see Section 5.7) as an indicator of the degree of integration of information from a range of sources. The satellites comprising the functions of elaboration, exemplification and contrast were selected for this analysis, because cross source tracking was traced mostly on these three units. The
data for L1 and L2 students were compared. The ratio of sources to content units is given in Table 6 and presented visually in Figure 2.

For analysis, students' ratios of sources to content units were assigned to three groups demarcated by ratios of 1.33 and 1.66. The group < 1.33 represents less than one extra source per three content units. The group 1.33 - 1.66 indicates between one and two extra sources for every three content units. The group 1.66 represents more than two extras sources per three content units.

<table>
<thead>
<tr>
<th>Ratio</th>
<th>&lt; 1.33</th>
<th>1.33 - 1.66</th>
<th>&gt; 1.66</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>42</td>
<td>40</td>
<td>19</td>
</tr>
<tr>
<td>L2</td>
<td>64</td>
<td>28</td>
<td>08</td>
</tr>
</tbody>
</table>

Table 6 Percentage of essays demonstrating three levels of content units to source ratios.

L1 students represented a better spread in terms of integration of sources. There was a higher percentage of essays with more than two extra sources per 3 content units (19% compared with 8%). L2 were more highly represented at the lower levels of integration (64% < 1.33). That is, for every three satellites there was less than one extra source per content unit. L1 students appeared to integrate input from a range of sources more effectively than L2 students.

Although the analysis of data shows a clear distinction between L1 and L2 writers in terms of their ability to integrate sources, what is more important is the high percentage of students in both groups who, despite the range of inputs, show little indication of intertextual integration. That is, 42% of L1 and 64% of L2 had less than 1 extra source per 3 content units. Moreover, through personal observation it was noted that texts
representing a range of student scores revealed entire paragraphs linked to only one source. Quantification of data shows us only one part of the picture of source integration. While it indicates overall patterns of source integration, it does not inform us what is occurring within particular paragraphs of that text.

6.6 Conclusion

This chapter has presented quantitative results and has made observations of these results. It should be borne in mind that, as is the case with all group data, individual or idiosyncratic patterns of behaviour both within and across essays, are not revealed. The following chapter aims to interpret some of the above findings while Chapter 8 examines interesting aspects of a selected group of individual texts.
CHAPTER SEVEN

DISCUSSION OF QUANTITATIVE RESULTS

The data for quantitative analysis was obtained from the students’ identification of sources, along with the researcher’s monitoring of course input. As source identification is crucial to this thesis, I will first elaborate on this aspect of the study.

While the students’ information helped to reinforce patterns of use, their perceptions were not always reliable (see 7.1.3 on oral input). Although students had a general idea where information came from (lecture, tutorial), they found it more difficult to identify which specific components contributed to the output. On the other hand, the exogenous sources such as personal experience or other such as books, were more readily recognised by the students. Overall, L2 students had more difficulty in attributing sources to their writing, except for acknowledging personal experience. While unable to state conclusively the sources of students’ writing, I believe the patterns obtained and discussed below, do in fact reflect fairly accurately the input and uptake as revealed in their output.

The following discussion now explores more fully the quantitative results outlined in Chapter Six. Not only will it deal with aspects of the specific research questions raised in the previous chapter, but also particular issues which merit attention.

7.1 Differences between writers.

Because the lecture showed itself to be so important for all students, discussion of how students used the lecture is warranted.
7.1.1 The lecture

The lecture and its component parts is for both L1 and L2 alike, a crucial part of the students’ input and uptake. There was no significant difference between L1 and L2 lecture use in any of the essays, although L1 students tended to use it slightly more on all occasions. It might have been expected that the lecture would create difficulties for L2 students at the beginning at least, but this was not proven to be so. Such results confirming the strength of the lectures, are consistent with Gradwohl Nash et al.’s (1993) conclusions that the initial input forms the base domain, creating the framework upon which other inputs attach (Section 2.1.5). To reinforce this claim, this pattern of lecture dominance or importance continued throughout the course as demonstrated by Essays 2 and 3 collected in the middle and at the end of the course (see Table 1, Section 5).

On the other hand, differences became apparent between the higher and lower assessed L1 writers of the class identified by their ranking in relation to the mean score of each essay. The chi-square analysis revealed significant differences between these two groups in a number of areas, even when the mean score did not remain constant. Areas of distinction are highlighted below.

There were differences in the sources that the two groups accessed in their essay writing. Better writers made more use of the lecture which provided the framework of their understanding. Lecture content included both key ideas or constructs and examples to demonstrate their application, and the higher scored essays indicated a better conceptual understanding. The components of the lecture such as the blackboard, the OHT and the lecture handout were used similarly by both groups which meant the real difference lay in accessing the oral delivery.

Research by Barnett, Di Vesta and Rogozinski, (1981) showed that students scored better in a test using their own notes as opposed to teacher handouts, hence the act of encoding from the lecture and the way in which this is done, impacts on writing and recall. Kiewra and Benton (1988) observed a relationship between good working
memory and note quality, while Kiewra and Dubois (1991) noted that note completeness, including identification of topics and subtopics positively correlated to test performance.

There are many variables which can influence students' ability to record lectures: the difference may lie in note taking skills, the ability to identify and record key points and concepts, the ability to make strong mental connections with previous input (see 2.1.2), the limitations of short-term memory especially when it is overloaded through restricted language proficiency (see 2.1.3) and the ability to concentrate for the duration of the lecture. The variables here are many and were not part of this study, and students' notes which may reveal a relationship between the input and output, were not investigated. Protocol analysis may be a way forward to understanding this connection more fully. Student listening and notetaking behaviour clearly influences later performance.

It is also interesting to note that the L2 writers do not necessarily behave in identical ways to poorer L1 writers. Except for the blackboard, the L2 writers did not make much use at all of these other lecture sources, even though it was believed that lecture handouts, for example, would facilitate the notetaking task, particularly for the latter group. As Barnett, Di Vesta and Rogozinski suggest above though, the act of encoding is vital, and handouts cannot adequately compensate for this act.

7.1.2 The workbook
A common element which appeared across all the essays was the consistently higher use made of the workbook by the lower scoring students. A questionnaire distributed at the end of the course to the students to ascertain their beliefs about the sources (Appendix K) failed to account for this difference through insufficient responses. (One difficulty of a naturalistic study is that the subjects disappear at times of major assignments!) Responses received did show that the lower assessed students used the workbook on a regular basis whereas terms such as "sporadically" or "erratically"
appeared in the replies of the better students. However the data was insufficient to draw conclusively from this.

Perhaps more importantly, the workbook needs to be linked with the lectures in which the over-riding ideas are given. If students fail to select the important from the unimportant ideas in the lecture, and do not build connections across sub-topics and sources, then it is possible that the workbook source is not maximised through students failing to link in concepts covered in the workbook with generalisations from the lecture. This means that although the students may use the workbook more, the way in which such material is integrated into the written text would influence the holistic score given. It would seem that a students' mental representation of the topic is critical as to whether the sources are used effectively or not. The lecture is crucial for establishing the boundaries, for presenting an overview; the workbook underpins this and must be seen as additional, not principal input.

7.1.3 The task
The task, which was identified in the writing as one source, was in fact composed of two activities, the individual reading and the pair work discussion, each of which provided opportunity for different uptake. Although one cannot distinguish in too fine a way between sources, especially when two or more sources overlap, in this case it could be claimed that it was mostly information from the reading as opposed to the discussion, which was identified in the writing. This was particularly the case in the second essay topic, in which one reading provided content not mentioned in the lecture and opportunities for reinforcement of this content arose in the discussion. It appears that the type of reading input is an important factor to consider i.e. whether specific content is provided or whether more general ideas are presented with which students are to make their own mental connections. Results indicate that specific content is more directly accessible. This observation is supported by Franken (1997). The nature of and the configuration of textual material appears to affect use made of ideas from reading to writing.
The task was significantly more important to the poorer writers in the first essay, as it was for the L2 writers, which may suggest that at the initial stages, recency is an important component for these students, to compensate perhaps for a restricted schema. While there was no significant difference in use between L1 and L2 writers for the second essay, 20% and 18% respectively (Section 6.2 Table 1), a closer examination of the data revealing source use between better and poorer writers indicates that the better L1 writers accessed this source significantly more, 27% compared with 12% (Section 6.3 Table 4). A comparison between L1 and L2 students therefore masked this internal difference within the former group.

An examination of the essays in the second collection revealed that the better students used with higher frequency one particular example obtained only from the reading. This example provided a strong contrast to all the other examples given, both in the lecture and elsewhere. When students are asked to demonstrate a point using a range of examples, (Appendices E3, F4), these students incorporate within this range, not just different examples per se, but appear to select ones which demonstrate this range, thus illustrating at the same time a good conceptual understanding of the topic. Moreover, the better students more effectively integrated material from other lectures and outside lectures, and in this instance, the example mentioned above was included in an anthropology paper. The students taking this paper acknowledged this influence. While the type of reading is significant in terms of recall for readers generally (Carrell, 1996), results indicate that better readers and writers with a more developed schema, integrate more effectively a range of examples to fit the concepts given. That is, they have a better understanding of the complexities of the issue.

The task also included a discussion component, and traces of this discussion were monitored on the sheet that accompanied the readings. This sheet included the discussion questions and provided space for recording decisions and outcomes of the questions (Appendices E2, F3, G2). The sheet was collected. It was interesting to note that ideas generated in the task, did not on the whole transfer into the body of the essay. Although students were engaged in active conversation (personal observation),
and there were written responses relevant to the topic which could have been incorporated into the essays, such information was largely ignored. What was recorded in the pair task, and what was written ultimately, bore little correspondence, even when students attributed particular sources to the discussion component.

The oral component of the task then, was the area where a mismatch was observed between students’ self-coding and actual results. While some students ascribed part of the content of their essay to the task, and even specifically mentioned the discussion, the collected sheet did not register the information. This would suggest that either the students did not monitor their talk sufficiently by way of notes on the feedback sheet, or else they believed that their talk was more important than it really was, in relation to the essay response.

Results indicate that recency was not a factor in source use, even though this was the last task undertaken before the writing. Nor did it appear that interaction with peers made concepts more accessible for use in writing (see 2.3). Assuming that the students’ talk was on topic, it is possible that students do not perceive oral task work as an authoritative source which can be integrated into written text, compared with more traditional sources such as the lecture. Attitudes towards the significance of particular components of the course may well be demonstrated here. The response from Questionnaire B (Appendix K) concerning students’ perceived usefulness of particular sources (Appendix L) ranked reading/tasks as the third most important source by both L1 and L2 students, but as the questionnaire did not separate out the oral component, this fails to account for the discrepancy raised.

Generally however, the lack of drawing upon discussion for essay content corresponds with the varied findings from research into small group work; that one cannot assume immediate benefits from talk. (Meloth & Deering, 1994; Cohen, 1996; Franken, 1997). However Cohen also raised the issue of the varied ways productivity might be defined, e.g. whether it be seen as uptake as revealed in the essays, or remaining less defined such as developing a deeper understanding through sharing cross-culturally.
One often plans for opportunities for talk in tutorials without giving real thought to expected outcomes. Nevertheless when assessment is based on knowledge and understanding revealed in writing, then the extent to which the talk element contributes to this cannot be ignored. In this study, the effect of talk which could have been used as a source, was not important.

7.2 Source integration

Personal observation of the text structures established for each of the essays (see 5.7 and Chapter 8) indicated that the functions of elaboration, exemplification and contrast, satellites of the major grounds, provided the most significant units for source identification. Signs of multiple source use were most frequent on these content units, corroborating comments by Barnett, Di Vesta and Rogozinski (1981) that elaboration increases the number of retrieval paths. Levels of intertextuality were therefore examined using these as the base. Other functions, such as purpose and result were more important in terms of text development and cohesion.

For L1 writers, levels of source integration showed little change across the three essays indicating there was no cumulative effect as the course progressed. This was contrary to expectations. In contrast to this, L2 writers made some gains but with measures below the 1.3 threshold, levels of source integration were still not significant. An analysis of the accumulative total of all essays however reveals differences between the two groups of writers (see Section 6.5 Table 6). L1 writers integrate sources more effectively, with nearly 20% of the essays drawing on more than two extra sources for every three satellites. (One satellite equals at least one source.) In contrast, over 60% of L2 writers use less than one extra source per three content units, indicating on the whole a much lower level of source integration.

Linguistic proficiency, that is, listening, reading and writing proficiency, is what I believe contributes to this inability to integrate information from a wide variety of inputs. Student uptake is influenced by this filter of language proficiency, which can operate to impede (or enhance) the cognitive act of integration. In addition, Raimes
(1985) notes that L2 students need time to generate and present ideas. Writing under time constraints, as required in this course of study, provides the least beneficial situation to access a variety of sources. Nevertheless, the ability to select the most salient and useful material from a range of sources, and then to integrate it, is a skill required in academic institutions.

The high use of personal experience in L2 writing is another reason I believe multiple sources are less evident (see Chapter 7). In line with Raimes' (1985) observation of egocentric writing, such students following their own path of thought, give less consideration to both audience requirements and topic demands. This may also be a strategic response to time constraints. In an academic setting however, both audience and topic demands, (e.g. argument genre) call upon sources beyond the individual writer for both conceptual knowledge and content knowledge, and failing to do so means opportunities for source integration are severely limited.

Table 6 in Section 6.5 on source integration demonstrates well the patterns of use between L1 and L2 writers, but this group data fails to account for individual differences, both between writers and within writing. That is, some students integrated effectively across sources much of the time whereas other students showed less evidence of this, even within the L1 banding. A closer look at the essays also reveals that some paragraphs show a high level of intertextual integration whereas others in the same essay, represent one source only. While Table 6 also indicates a more consistent cross-source usage by L1 writers, there is also more variability within this group in these respects.

The question remains to what extent the sources ascribed to particular satellites were independent, or whether the source of the preceding grounds contributed to sources that were accessed. Although sources were counted as independent for this study in order to ascertain the overall picture, it is believed that at times the grounds did in fact influence the sources that followed. There is no doubt that on occasions students took a key point from the workbook for example, then duly down-loaded information from
that text without considering how it fitted into the wider topic demands. Remembering that students did not have access to these texts at the point of writing, clearly some cues triggered a chain within the episodic memory (Section 2.1.3), reminiscent of knowledge telling (Scardamalia & Bereiter, 1986, 1987). This is an area of source use which would warrant further exploration to understand how and why certain sources come together and reinforce each other while others do not. Spivey’s (1989) horizontal representation of sources (Section 3.3), in which input texts carry information and ideas in common, only partially explains this behaviour.

7.3 Other issues related to source use

While some sources such as the lecture and the task were very important in terms of use by students, a closer examination of both the data and the scripts, revealed interesting aspects of some of the other sources. These others will be elaborated below. The issue of personal narrative and experience on the other hand, merits more detailed examination in the following chapter.

7.3.1 Place of the video

Students viewed a segment of video every week. In the call for advancing technology in the classroom, the response in the writing of the students to this visual stimulus, or more specifically the lack of response, initially appears enigmatic. The video shown in the tutorial, represented recent input no more than fifteen minutes before the students wrote their essay. How could such carefully chosen, interesting material fail to appear in any significant way in an analysis of sources? This seemed surprising, and raises a number of questions..

Do contemporary students suffer ‘screen fatigue’? Did the students slip into ‘entertainment mode’ when the video was playing? Perhaps this media is not considered to be a serious form of input when used in an academic setting. On the other hand, did the video produce difficulties of accent and hence comprehensibility especially with the L2 students? Or, did the visual form create difficulties in transposing from one textual form to another, in accordance with Kristeva’s view on
interextuality? One student in fact made such a response, saying that she understood in her head how the video applied to the writing task, but had difficulty transferring those thoughts into words. For her, it was neither lack of interest nor the problem of relevancy, rather, it was a problem of transposition of source inputs.

Although all of the above no doubt contributed in part to the lack of representation of the video in student writing, the answer may in fact be found more in terms of pedagogic principals. A productive as opposed to a receptive viewing of the video is the key issue. Students need to be actively engaged with input materials by being provided with some sort of task regardless of the mode of presentation. Problem solving, defined by H.D. Brown (1994) as a higher order type of learning, requires a level of cognition which makes demands on both prior learning with present input. The problem may be task specific or more general, in the same way McGinley & Tierney (1989) identified content driven and issue driven tasks. From the results of the study it is imperative that a task accompanies the video to ensure a more active engagement with the input material.

Text transparency is another issue relating to video uptake. In reference to reading texts, McNamara, Kintsch, Butler Songer, and Kintsch (1996) note that although a well structured text increases comprehension, it also reduces active cognitive processing. The general principal expressed here would also apply in this instance. The videos used in the course would represent a coherent text, in which the knowledge presented remains on the surface level for most students in terms of information processing. To maximise their learning potential, videos need to be used in such a way to stimulate active processing. Merely showing a video does not suffice.

Gradwohl Nash, Schumacher and Carlson (1993) also use the term transparency, not just in textual organisation within a text but also in the degree of similarity across texts. Low transparency in texts applied where there was a different organising principal, e.g. a topical approach and a chronological approach. The degree of cognitive effort in a written task related back to this notion of transparency of source
inputs. It is probable that the variety of input texts across different source modes to which students are exposed, represents inputs of low transparency.

Evidence would suggest that under time constraints, the mental representation of information from the video was too difficult to map or lay on to the framework established by the base domain (i.e. that initial schema activation upon which other incoming information attaches). For this reason, the lecture constantly maintained a high profile in source representation, in keeping with primacy being identified as a key factor in domain establishment (Section 1.5) and the video, both in terms of transparency and recency, was poorly represented. It is believed that if a task which required some form of written response accompanied the video, then that transfer from one mode to another would have already started. Under these circumstances it is possible that mapping of ideas from the videos would have been represented more frequently in the class essays.

7.3.2 Place of the blackboard

The elements of the blackboard which were evidenced in the essays represented clear mapping of conceptual constructs. That is, what appeared in the essays were not the words placed on the board for spelling purposes nor for clarification of ideas. Rather, paragraphs were organised around concepts built up on the board with the lecturer taking ideas from members of the class.

Two good teaching principals occur with this use of the board. First, the students themselves are engaged with the material, relating it to their prior knowledge and having some responsibility for the outcome as represented on the board. Secondly, the students contribute to the model which evolves slowly, rather than being produced instantly as a fait accompli, as may occur for example with an OHT. In this case it is a task based activity which involves productive rather than receptive knowledge.

The effects of using a graphic organiser is also supported by the work of Tang (1992) who noted that the use of tree graphs both increased comprehension and led to an
improvement of the structure of students' written recall. Graphic representations were a means of organising verbal input which gave a coherence to thematically organised material, and this in turn enhanced the memory. For these reasons it should not be surprising that there were memory traces of graphic organisers in the students' texts to a lesser or greater extent.

**Meanings of silence**

![Diagram of meanings related to silence](image)

- Intimacy
- Respect
- Enjoy
- Disagreement
- Disapproval
- Sympathy
- Comfort someone
- Embarrassment
- Unsure
- Dislike
- Uncertain
- Anxiety
- Anger
- Fear
- Alienation
- Shyness
- Agreement
- Polite
- Listening
- Reverence

Meanings can be grouped
Meanings can be positive or negative

**Figure 10** Example of a concept developed on the board through class contribution

Figure 10 is an example built up on the board through students' contribution of ideas. From the examples that follow, the first essay in particular represents an almost clear lifting of the information on the graphic diagram to be inserted into the introductory stages of the essay. The sequencing of the input also remains, because after the diagram was sufficiently developed to represent the meanings of silence, the notion of groupings and positive and negative values was referred to by the lecturer. For this student, the visual impact remained strong, along with the associated elaboration of the information. Although in contrast, the diagram is not so strongly represented in the
essay of A14, the link between the examples provided on the board, and the uptake revealed in the written text is nevertheless evident. Representation of the blackboard concept in the texts follows.

*Representation of this concept in written text*

"In some cultures silence can mean shyness, disappointment, shock, anger or sadness. These 'negative' aspects of silence can also be paired up with a 'positive' effect and reason we use silence. For example, companionship can be paired up in total contrast with dislike being the reason silence is used. In the same way we can contrast the meanings of silence we can also pair the uses of silence up with an alike reason. For example anger, upset and sulkiness can all be 'lumped together and be all the reasons for silence.'" (A17)

"Silence can signify many things: agreement, disagreement, anger, an unwillingness to interfere, contempt and disgust, or it could just be a compliance to the social and cultural norm of sparse communication." (A14)

**7.4 Summary**

Results show that, consistent with other research, the lecture is the principal input source. Nevertheless the degree to which students are able to access this input varies due to a range of factors including note-taking skills, memory and general language proficiency. The workbook appeared to be used more by the lower scoring students while the task showed more variation in use, possibly due to topic and task effects having some influence.

Levels of source integration were generally low. Language proficiency appeared to be a key factor in students' ability to integrate sources. However, examination of texts showed that even 'good' writers had entire paragraphs based only on one input. Quantitative scores masked this writing behaviour.
Other sources such as the video and the blackboard revealed interesting aspects of use. Under present conditions of use in the classroom the video did not prove to be a source of uptake in terms of specific ideas appearing in the text. On the other hand, the backboard, as a vehicle for developing concepts through graphic representation, showed itself to be highly effective in terms of uptake and recall. The above clearly demonstrates that there is still a place in the classroom for ‘good’ chalk and talk. A key factor in this, as indeed for much course input, is the engagement of the students as the information and the concepts evolve. Cognitive involvement is a principal condition in the effectiveness of sources in any academic course, and downplaying student engagement with the various inputs, impacts on potential uptake and eventual output.

The following chapter will now explore and discuss issues relating to personal narrative and text construction, both of which were revealed to be important and interesting components in this study of in-class writing and associated source use.
CHAPTER EIGHT

PATHWAYS TO TEXT CONSTRUCTION

Writing remains a personal response to a given question. That is, although students have the opportunity to be exposed to the same inputs, their responses reflect differences in schema, culture, and personal orientation. In addition, differences in both linguistic and task proficiency will affect the nature of the written response, as marked in the group data obtained. The first part of this chapter will examine different patterns of source use. I will demonstrate how these were represented in text construction by providing three different cases from the data obtained. From this will proceed a closer examination of personal experience and its role in writer-based prose, because this has shown itself to be a key area of weakness in academic written responses.

8.1 Source representation in student texts.

The first research question concerns how different sources were represented in text construction (Section 5.1). The intention behind this question was to discover whether the students used the lecture as the main source of claims and grounds, with other sources fulfilling the varying satellite functions (Section 5.7 & Appendix.M) This might be the expected pattern but it was unproven. While the lecture remained the dominant source of key ideas, this result needs qualifying in terms of writing behaviour.

The lecture did indeed remain the chief source of input and uptake of the principal ideas and concepts. Additionally, reinforcement from the OHT and the lecture handout, which provided horizontal representation of knowledge and ideas, confirmed the lecture grouping itself as being the most significant. In addition, similar to Spivey & King’s (1989) observation that not only did better readers use more sources but that there was also greater evidence of intertextual references where ideas were found
across texts (p.21), the L1 students drew upon more input areas. We need to remember here that Spivey & King (1989) used only three source readings for their study in contrast to the range of sources in this research.

The following paragraph is an example of how a text was analysed and how the constituents were coded. The text was part of a response to the essay question:

"While the basic form of silence may be universal, its functions and interpretations vary among cultures." Samovar & Porter, 1994:248. Discuss this statement using examples to support your points.

**Example 1**

**Claim** Silence often signifies the same thing in different cultures

**Concession** however there are different ways of using it.

**Ground** In some cultures the use of silence will reflect different styles of resolving conflict.

**Exemplification** For example the Western Apache remain silent if they are uncertain

**Contrast** where as the !Kung will talk out and often shout to resolve differences.

**Exemplification** In N.Z. culture people often remain silent to let a person know they are displeased.

**Elaboration** In this case they have withdrawn the privilege of being spoken to from that person. (Student A 9)

The following represents the above sample text graphically and shows the range of sources used. Note that the bolded text represents the section of text above while the remainder of the diagram shows where other elements of the text fit. The dotted section does not show full textual development but only the positioning of the grounds (see Appendix C for the coding).
The above demonstrates the importance of the lecture in particular for the key ideas. The satellites on the other hand show greater intertextual influences as well as the interweaving of personal experience with lecture content.

There was nevertheless evidence from both good and poorer writers alike, of entire paragraphs based on one source. In many instances such paragraphs sat alongside those in which sources had been well integrated, which seemed to suggest that at times the writer developed one line of thought from a particular source and ‘ran with it’. This corresponds to knowledge telling (Scardamalia & Bereiter, 1986, Section 4.3) and may be a strategy response to limited language proficiency (Section 4.3.3). As results also showed, many of the L2 texts used only one source text in the course of their essay construction, even when those students did refer beyond personal experience.

The next example is a part response to the same question as in Example One. It demonstrates a different pathway of text construction, showing a strong reliance on mostly one source.
Example 2

Claim Silence is interpreted very differently across cultures.

Elaboration Just as body language is universal, so is silence, but as different gestures have different meanings cross-culturally, so does silence.

Elaboration In many situations over many cultures where silence is used, the meanings or purposes are different.

Ground This is (also) an example of positive politeness.

Elaboration In some cultures it is considered rude to be silent when guests arrive

Exemplification (an example of positive politeness)

Exemplification as in the Japanese culture

Contrast but in other cultures silence is a way of showing respect

Elaboration and providing space and privacy

Exemplification (an example of negative politeness)

Exemplification as in some western cultures. (Student A 11)

It will be seen that the entire paragraph from the ground onwards, has been based around input that occurred in a previous lecture on verbal strategies. It was interesting that this particular item was recalled in a number of student texts without any reference to it in the immediate endogenous sources. Texts were similarly constructed around other single sources, especially in relation to personal experience.
The following is the graphic representation

```
claim L
  
elab P/L (non-verbal)
  
elab L

ground T. PE
  
elab P/L
  
exemp P/L

contrast P/L
  
elab P/L
  
exemp P/L
```  

**Figure 12 Graphic representation of Example 2**

The other interesting feature demonstrating text production and source use was specifically related to the structure of the text. Argument text is represented by higher level claims with supporting statements as shown by warrants (Hyland, 1990). The hierarchical pattern is evident in the structural model, but texts which could not be accommodated by this model (narrative or writer-oriented prose) were manifest by a large number of successive major statements which did not link to any higher order claims. An indication that a student had ‘missed’ the argument genre was revealed through this pattern.
The following is a response to the topic *Using examples to illustrate the points you make, provide a case for Saville-Troike’s comment that children learn the structure of their culture as they learn their language.*

**Example 3**

**Claim** Mothers or takecarers (caretakers) look after children as a boy/girl and the children become to behave a certain boy’s/girl’s way.

**Claim** Considering nationality, religion and so on, this kind of case is almost similar to gender’s one.

**Claim** Mothers or takecarers (caretakers) are likely to put children into their own way and the children just imitate what they do, or what they are like.

**Result** So Japanese children are becoming exactly like Japanese, New Zealanders are becoming exactly like New Zealanders.

**Claim** To make children socialise, language is an essential competence.

**Elaboration** For example, teaching when speak, when not speak, or a certain cultural aspect in a certain community.

The graphic representation is as follows:

```
claim claim claim claim
T T T T
result T T
PE elab T
```

**Figure 13** Graphic representation demonstrating writer-oriented prose

While the above example shows dominance from the task, essays incorporating a number of claims may equally derive them from the personal experience source, especially when personal narrative is being used.
8.2 A strategic response: using personal experience in student writing

That students are able to use personal experience in their writing, links to the notion of schema development (Section 2.1.2). We have already noted that the initial input forms the base domain upon which all other inputs attach (Gradwohl Nash et al, 1993, Section 7.1.1). This was also raised in the previous chapter in relation to the importance of the lectures.

Students often bring to the course some relevant background knowledge and experience. Then, as conceptual and informational frameworks in lectures are being established, the process of schema development simultaneously occurs. Over the weeks during which lecture inputs are given, it is reasonable to expect that students develop an increasingly elaborate schemata in relation to the topic as a whole. Thus a parallel process is occurring. The base domain providing discipline knowledge is established through lectures, and at the same time there is an evolving schemata which is initially activated by the lecture input, but subsequently expands from it. See Figure 14 below for a representation of this process.

![Figure 14 The relationship between lecture input and schema development](image)

The establishment of a schema which includes discipline knowledge (Alexander et al, 1991, see Section 3.5) was at the initial stages for the students who undertook the
writing task in their second week of class. Their own domain knowledge (Alexander et al., 1991) however, and their use of it was evidenced through their high use of personal experience or knowledge, indicated in the self coding of their essays. Both L1 and L2 writers made use of this source in this first essay. The following are three examples from the first data collection. A students are L1 while B students are L2.

“Often when parents communicate with their children they adopt communicative norms and phrases which are used often in common speech. An example of this is my own mother’s cry of “Shut the back door”, repeated with alarming frequency. This association of words has imprinted a sociological duty in me to always shut doors behind me, and in the same way cultural values are communicated”. (A14)

“Although these days in a lot of cultures, children are taught not to speak to strangers at all for safety reasons”. (A24)

“Heroes and heroine in TV or comic have important role in children culturalization. Even though they can’t understand all of they said they would hope to be the same or similar person in behaviour”. (B5)

Superficially, using a high level of personal experience seems to be acceptable, and indeed students in this course are informed that their own cultural experiences are as valid as those in academic source texts. One of the problems in using personal experience in writing however, is that in many instances it coincides with writer-based prose; prose that takes little account of audience requirements. When this arises, there is a negative impact on the writing, both in style and in answering the question.

Writer-based prose is described by Linda Flower (1996) as “an associative narrative path of the writer’s own confrontation of the subject” (p.62). That is, the focus is on the writer’s thought processes as the writer seeks to explore the topic in relation to his or her own experiences, belief systems etc. This contrasts with reader-oriented writing
which is issue based developed with the reader in mind. While writer-based prose is a valid form in itself (personal letters, diaries etc.), its usage in an academic writing is more limited.

In examining student texts, it was observed that writer-based prose was closely associated with a high use of personal knowledge as a source. A number of reasons can be ascribed to this. First to be considered is the level of task or language proficiency of the writers in response to the writing topic. The interplay between content as transmitted via the lecture and other sources, and personal knowledge, with a leaning towards the latter, may well be a strategy response to task (L1 and L2) and linguistic demands (L2), which are perceived as difficult by some of the students. This writing style and use of personal sources was particularly evident in the first essay which for some represented their first piece of argument writing under time constraints for the year (task unfamiliarity) and for others recently arrived in the country, their first such writing in English (language complexity).

As a compensatory measure, Clarke, (1980) cited in Adamson, (1993) found for example in the area of reading, that background knowledge could compensate for low proficiency in the target language. Similarly, background knowledge based on episodic memory in particular, is more easily retrievable and can take the place of more complex information manipulation in writing which requires a lot more effort. The important distinction between whether personal knowledge is used successfully in academic writing or not, is whether information in memory is reported as it comes to mind, or whether it is transformed and expressed as discipline knowledge in the written text, which is a more demanding task.

Flower (1996) viewed writer-based prose as an effective response or strategy for dealing with information in memory. She believed it suspended the problem of forming mental concepts, allowed for a breadth of information to be generated, and acknowledged it was easier to focus only on one's own position as opposed to the reader, when dealing with the complexity of composing. It is not surprising therefore
in observing the results, that more L2 students resorted to personal experience than L1 students, and that of the latter, it was the writers of the lower assessed essays who also used it proportionally more. Nevertheless it should be borne in mind that the L2 writers did come from a writer-based tradition, especially the Japanese (see 4.5), and that this may have had some impact on the outcome.

One further feature of writer-based prose which was evident in some of the class essays, was the lack of hierarchical thinking, evidenced in the high number of claims identified in the text, as opposed to a superordinate claim and grounds expected of an argument essay. This pattern went hand in hand with the high use of personal narrative thus conforming to Flower’s observations of writers following their own narrative path. One might question whether using personal knowledge as opposed to knowledge from the lecture set up a framework for narrative writing, or whether narrative, as an easier model, meant the writers drew on their own experience. I believe that both occurred within the range of students. It is also likely that the less proficient writers were unaware of what was happening, and when personal experience remained the dominant source throughout the semester, it subsequently had a detrimental effect on their effective use of argumentation text.

On the basis of the examples identified in the students’ texts, I categorised writer-based prose in the following ways:

**DIVERSITY OF FORMS OF WRITER-BASED PROSE**

a) *Personal narrative*

The use of ‘I’. The writer directly relates his or her thoughts and experiences.

“Which do I like better to be silent or to be talkative? For my opinion I’m pretty shy, and I often keep silent. . . . . . .” (B3)

b) *Pseudo-narrative.*

The writer is not personally identified but the circumstances are. In this instance the writer had spent time in the United States and had encountered culture shock.
“Meeting something unexpected can give a person a fear of being in the cultural environment. e.g. Asian people might find the way American teenagers’ aggression to their parents scary and make them feel afraid of living with American young people.” (B4)

c) Untransformed narrative
This could be called ‘talking (or writing) off the top of his/her head’. The student makes no effort to tailor the information to fit the demands of the topic. The source in this instance was a recent television news item.

“What would also be hard to adapt to would be laws for instance in America a European woman left her baby outside in a pram unattended while she dined in the restaurant. Where she came from this was OK but the police arrested her and put her in jail for two days.” (A3)

d) Topic tangent (loss of purpose)
The student is diverted by ideas which come to mind but are not directly related to the topic.

“Sometimes children tend to rebel and tend to enter a new exposure. This may be by adopting a new fashion, new religion, or leave their education. This is done perhaps so they can create their own process to obtain their social group rather than the taught one.” (A 22)

In each of the above, the writers approached their topic from their own experiences or viewpoints, following their own train of thought rather than that defined by the demands of the topic, - their own confrontation, as formerly mentioned by Flower. Those students who tended to write from a writer-oriented focus were identified as belonging in the band of weaker students when global assessment scores were analysed. Although it is not impossible for a student to score well in an argument topic while writing from a personalised stance, nevertheless, under less controlled situations when the student is unaware what is occurring, this approach will impair the student’s overall written response and ultimately their assessment.
8.3 Hierarchy and uses of personal experience

The use of personal experience in written responses is not all negative however, and being part of top-down processing it is not possible nor even desirable to eliminate. Indeed, integrated appropriately into the discipline structure of the academic course, personal experience is a strong tool which the student can access. An examination of student texts revealed three ways personal experience was used, indicating hierarchical levels showing a close correspondence with Alexander et al.,'s (1991) discipline and domain knowledge (see Section 3.6). I provided labels to fit these categories.

HIERARCHICAL LEVELS OF PERSONAL KNOWLEDGE IN WRITTEN TEXT

1) Personal narrative
This represents highly personalised knowledge which is narrated at first hand as was demonstrated above, corresponding to the first example in the previous categorisation. It is observed in writer-based prose.

“When I went to USA a lot of people came up to me and talked to me. In Japan we can not have this kind of experience so often”. (B3)

2) General personal knowledge
Corresponding with Alexander’s domain knowledge, such examples represent generalised knowledge which need to be more formalised into the text structure for the student to benefit fully from this source.

“In most societies they are male oriented. Where boys have unconsciously learnt to be more direct than females. Females have a tendency to be consciously socialised into being more ladylike, using more elegant words - pretty dress, soft toy, lovely day”. (A3)

Examples one and two are not wrong in terms of appropriate examples to be used in an essay response, merely in the way they are expressed in relation to academic demands. The following example on the other hand, ties the experience in closely to discipline demands, showing a close link to the specialised field of study (Alexander
et al, 1991). It is at this level that we want our students to operate.

3) Personal knowledge integrated with concepts raised in the course

"Another example that shows culture learning through language is greeting and how to address the elders. In some cultures, i.e. Maori, children learn that you greet people in very different ways by listening, and being told what to say. e.g. greetings such as Harae Mai and Tena Koe are not used when greeting Mum while Kiaora is an inappropriate way to greet an Elder. This teaches children that they must always accord their elders with respect." A11

8.4 Summary

The way sources were represented in the texts showed a lot of variation, even amongst those deemed to be proficient writers. Some essays, and some paragraphs within essays showed good intertextual integration. Others relied on only one or two sources, the L2 students in particular being representative of this group. In addition, the framework established for each essay clearly identified hierarchical levels of argument or else narrative structure. The latter especially revealed a constant and close association with the use of personal knowledge which corresponds to Scardamalia and Bereiter’s knowledge-telling. Examples from the texts allowed both levels of personal knowledge, and a hierarchy of personal knowledge as expressed in writing, to be established.

In helping our students in the writing demands of specific courses, it is important to recognise that with some help, students can maximise what knowledge they do have, by fitting it into an appropriate structure or genre. The demands of argument text, and the pitfalls of untransformed personal narrative may need to be made explicit; semesterised courses are too short to hope they might pick it up.
CHAPTER NINE

CONCLUSION

The present study worked with a relatively small number of willing students and the texts they wrote in one specific academic course. The findings have led to a greater understanding of the complexities and demands of integrating sources. From the study arise a number of implications which will now be examined. First, methodological implications are discussed. Theoretical and then pedagogical implications with suggestions for associated future research complete this section.

9.1 Implications for research: methodology

The findings from this study reveal that differences existed between groups of students in the sources they used for in-class writing. Results indicated where those differences were likely to lie. Future quantitative studies with greater numbers of students could establish more precisely where the differences in source selection and use for writing are situated. The input and subsequent uptake within other academic programmes could also be examined, to establish whether the present results are influenced by factors such as content area, domain of study or topic, or whether the types of sources regardless of the academic programme, maintain their level of importance in consistent ways.

The study has used a text analysis procedure based on Meyer (1975) and Coe (1988) and a coding procedure adapted from Mann and Thompson (1988), which has been productive as a means to distinguish influences from particular sources. The combination of the two models (hierarchical and functional) proved a good match for tracking source use. The units obtained from Mann and Thompson (elaboration, exemplification, etc) also corresponded well with the psychological units students appear to operate at in terms of chunked information. Replication of this model in further research into source use would provide opportunities for further refinement.
Former studies (Kennedy, 1985; McGinley, 1992; Hartman, 1995) have used think-aloud or verbal protocol procedures in order to identify underlying processes. While the decision was made not to use such protocols in this naturalistic study, it would be feasible to add this as an extra component in the future. For example, by selecting a small number of case study students, additional information could be gained without too much interference with normal classroom procedures. Retrospective interviews would also be a means of obtaining additional information.

The present research focused on text analysis. However, from the discussion above, it is clear that more student-centred research in the area of source use is needed. Reasons for agreeing to participate in a research programme: fear of failure, seeking favour with the tutor, feeling unable to refuse, would provide information on motivational aspects and help establish a balanced profile of students. Students’ attitudes towards specific course components such as the video or group work, their past academic record, and the types of academic programme they are engaged in which may influence source selection, would also be useful, and may provide a more complex picture of uptake of sources.

9.2 Theoretical implications and future research

Further work needs to investigate the features of different sources or inputs, to determine first of all what affects their uptake, and secondly, what influences their use in the writing tasks. As we know, students will acquire more information than they will necessarily use. However, what leads students to select items from the wider pool of knowledge, for use in a specific writing task, is a most interesting area to investigate. This is a move from describing what sources students use, to understanding more fully, why certain sources are selected.

In this respect, schema theory may not be the only approach to understanding why particular sources are used. Sadoski, Paivio and Goetz (1991) offer an alternative, believing schema theory fails to account entirely for the selection and coding of a variety of text material. Sadoski et al (1991) suggest that attitudinal or emotional
responses can also affect recall and it may well be these psychological factors which account for the varying pathways students choose in response to a given question. So while the present results are interpreted in light of schema theory and include such factors as primacy and recency of inputs, another perspective which could profitably be explored is the notion of saliency: the individual’s reaction or response to input material, and how it relates to uptake.

Saliency conforms to an emic approach in the interpretation of results. Hidi and McLaren (1990), who call this factor interestingness, also note that it plays an important part in comprehension and recall, and that often it is a forgotten factor in explaining behaviour patterns. It may even interfere with retention and recall of important material when interest or saliency is associated with less important ideas. For an effective use of this factor, interest and topic knowledge need to correspond closely, otherwise irrelevant material is included in writing. This was demonstrated in the current study by certain information being included from one of the video segments. The above findings are further supported by Schraw, Bruning and Svoboda (1995), who also distinguish between situational and perceived interest. Situational interest relates to the attitudinal stance towards the task; whether it is viewed as authoritative or trivial, hard or easy, comprehensible or not. While this clearly contributes to uptake and recall, Schraw et al (1995) note that perceived or personal interest over-rides situational interest and has the stronger influence. They argue that the latter mediates the relationship between sources of interest and text recall (p.2).

Sadoski et al (1991) also argue that interest and relevancy influence recall over hierarchical levels of text which was Kintsch and van Dijk’s thesis (1978). Similarly, Scardamalia and Bereiter’s proposition that novice and expert writers function by means of genre activation, the former following a sequential patterning, the latter dialectic, also fails to account for the range of idiosyncratic responses in writing. As indicated by Chapter 8, the study points out that clearly other complexities exist. Interestingness has a role to play in uptake and use, and future research would well benefit by including it or developing it further, especially from an intertextual stance.
While the present study embodies a dynamic view of intertextuality including all the moves or parts which lead up to the point of writing, further research could profitably explore conditions which facilitate transfer or uptake within the various component parts. While reading to writing research has been well explored (see Section 4.4), there is still more that could be undertaken on speaking to writing, or on video to writing. This latter component in particular created some surprises, so there is clearly work to be done here, especially as videos become more commonly used in the teaching process.

The significance or ‘weight’ ascribed to tasks influences the degree of attention directed towards them (Doyle, 1986). Similarly, the significance attributed to sources of input within an academic setting will impact on the degree of attention and consequent uptake. It is important for the receiver to understand the value of specific input, and this requires a degree of explicitness not always provided. Consequently, the significance of particular sources and tasks are not always mutually understood between the presenters of courses and the students in them (Prior, 1991). The results of the study indicate that on the whole, the students did not take into account the video for example, as an important input and source. It was likely to be considered as additive rather than integral to the course. As indicated above, student perceptions could be included in future research in exploring a selection of sources.

An extension of significance is the role of goal setting. In the present study the students did not know their essay topic beforehand, only that it related to one of the topics of the week (Section 5.4). What would happen if the essay topic was placed at the beginning of the sequence, i.e. immediately before the lecture? How would this influence the selection and distribution of source use? Would it have an impact on the writing, including the structure of the texts that the students produced? By establishing pre-determined goals, the relationship between texts and writing may well change and the significance of the various sources could be better interpreted by the students. Differences could be determined by manipulating this variable in further research.
Goal setting could be further elucidated by determining, whether patterns of source use obtained from writing during the semester, show consistency in examinations. In the present study the students’ exam texts were not analysed but a more complete picture would be established, were this final step taken. It is questionable whether the task, or the video, or outside lectures for example, would feature. I would suggest that fewer intertextual influences are evident at this point, as students would identify their lecture notes and workbook as being the most significant content sources for their final goal - passing their examination. Indeed, their ranking of perceived usefulness of sources (Appendix L) supports this point.

Future research needs also to explore how students’ ability to integrate texts is affected by a whole range of variables as discussed above in Section 9.1. While the issue of saliency or interestingness, attitudinal factors and goal setting have already been raised above, others such as motivation, degree of engagement with the material, time constraints, writing for different purposes, having the writing assessed versus non-assessed, and the students’ academic experience, all impact on the final written outcome. This study has pointed to some of the limitations, and that other factors need to be considered as influencing uptake and output in writing.

9.3 Pedagogical outcomes

The key practical implications are now discussed in terms of what was required of the students and the applicability of this research to other disciplines.

9.3.1 The value of regular writing

One of the by-products of this research was the regular use of writing in tutorials, in which students received feedback on both content and textual features (Appendix D). This approach in tutorials was received positively by all students and was felt to be beneficial to L1 and L2 writers alike, both in terms of practising argument text and evaluating their own degree of uptake.
Responses to the question *Was regular essay writing a useful component of the course?* (Appendix K) elicited the following:

**L1 students**

"Yes, it needed material which we learnt in lectures so it jogged my memory so I wouldn’t forget what I had learnt”.

"Yes, I found essay writing very helpful in organising thoughts and answering questions within a set time frame”.

"Yes, because it improved my essay writing technique and also showed me how much I know about the subject”.

"Yes, gave confidence when I got to the essay writing test. Good practice for it too. Comments were extremely useful when getting them back - to know what you need to learn next time and include”.

**L2 students**

"It makes us understand with writing skills, such as writing speed and structure”.

"To make sure how much I could understand the lecture”.

"It has taught me how to write essay”.

The above examples indicate that writing without access to sources provided authentic practice in a context which students would encounter in the course, and this was acknowledged. In the process they were able to practise and develop their own writing skills in a non-competitive environment. For L2 students in particular, in accordance with Adamson’s (1990) recommendations, academic writing skills were being taught in a content course, and the skills developed were connected with bone fide academic material. Similarly, just as Leki and Carson’s (1994) students identified the need for “writing from reading - from multiple sources” (p.95) in an EAP course, how much more might such activities be of benefit within a specific discipline? The positive feedback from students indicates that writing is perceived as useful, both in developing and affirming content knowledge, and practising writing skills.

It would be beneficial to examine the role of non-assessed writing in a range of courses, where students can practise subject-specific writing genres, particularly at the
first year level. Is it perceived as useful to the same degree in other courses? Is there even more need of this type of exercise in courses where students spend time manipulating scientific and mathematical models for example, where there is less emphasis on writing skills? Future writing research needs to examine whether writing should be incorporated more fully into under-graduate courses, to counteract the criticism that tertiary institutions do not always produce graduates who are competent in written communication.

9.3.2 The value of tasks and inputs
Understanding more fully the respective value of each of the components (lecture, tutorial, video, OHT etc.) of a course would help in future course design and contribute to understanding the learning process. The results of this study confirmed that the students did not gain a lot from the textbook whose usefulness was already under question. The present research also calls into question the value of the video as currently used.

The value of particular tasks can also be assessed. As a result of the present study, the usefulness of the writing tasks has been confirmed and these will continue to be incorporated into the tutorial programme. How the video is incorporated into the programme needs further consideration. Future research could well replicate this study to gain a more comprehensive understanding of intertextuality, including input/uptake effectiveness in other university courses.

The results of the analysis of sources pertains to one undergraduate Linguistics course, Language and Culture. How sources are used and synthesised across a range of courses still needs to be explored. While prior knowledge, particularly sociocultural knowledge could be drawn upon as a significant component for this course, it is acknowledged that the balance of source use could well be different for other courses whose discipline knowledge is more specific and beyond the students’ area of expertise. It would be interesting to know which inputs or sources provide the most up-take in such cases. So, are the results representative of writing behaviour across
other courses or do they pertain uniquely to one course at one point of time?

The present study distinguished between L1 and L2 writers. Another group that was not accounted for in the analysis were students born in New Zealand whose parents came from non-English speaking backgrounds, and more long-term L2 students whose writing indicates lack of familiarity with academic conventions. While in this case the number was not sufficient to consider as a separate group for analysis, there will be classes in which a larger proportion of Pacific Islands or Asian students for example participate. Which sources are important for these students? Does their pattern of uptake resemble that of L1 or L2 students, or do they produce their own unique pattern? A further study could add to our understanding of the full range of students that we have in our classes.

The study of source use can be continued in a number of directions. The wider view of intertextuality includes a range of inputs which can be explored in more depth. Similarly, factors which affect uptake could be profitably explored. Differences identified between L1 and L2 students in terms of source use can lead to more effective pedagogic applications. It would be beneficial to know more of the value of writing within academic courses. The findings of the present study have drawn on all these areas of influence and provided the foundation for future studies to extend and enhance our understanding of what occurs between input, uptake and output. Intertextuality in the academic arena is extremely complex, and research in this area still has much to offer.
BIBLIOGRAPHY


Holmberg, B. (1989). The concept, basic character and development potentials of distance education. *Distance Education, 10*, 127-134.


APPENDIX A
INFORMATION SHEET DISTRIBUTED TO STUDENTS.

INFORMATION SHEET

My name is Pamela Easton. I am a Senior Tutor in the Dept of Linguistics and Second Language Teaching and will be your tutor for the 72.132 Language and Culture paper. In Semester 1, in conjunction with my Masterate studies, I will be engaged in data collection. The aim of my study is to look at how students use different kinds of information in essays they write under time constraints. This study will help us to learn about how students develop knowledge and understanding through course materials. My work is being supervised by Ms Margaret Franken and Dr Cynthia White who are also in the Linguistics Dept. We can be contacted as follows:

P. Easton  
M. Franken  
C. White

As part of the normal tutorial programme you will be required to undertake pair and writing tasks throughout Semester 1. All essays will be collected each week and you will receive feedback on them. However these tutorial writing tasks are not part of the internal assessment of the course. Assessment for the course is based on your two assignments and the end of semester exam.

What I would like to be able to do is to carry out further analysis on your writing at three points during the semester. This would mean gaining your permission to photocopy your tutorial writing. If you agree to take part in the study the only extra work for you would be to complete a short questionnaire at the beginning and at the end of the course. I would also like to say that whether English is your first or second language, or whether you consider yourself good at essay writing or not, your work is of interest to me, so please don’t decline on the grounds of not being ‘good enough’.

There are no drawbacks or risks in participating. All information given to me from the questionnaires will remain confidential to the research and any publications resulting from it. Although you will initially provide your name, this will subsequently be coded to provide anonymity in any discussion of results. You will be welcome to discuss your essays with me, either in my capacity as your tutor or as a researcher. I can make a textual analysis available to you to help you with your writing. When the data analysis is complete at the end of the year you will be able to collect your photocopied scripts if you want to, or they will be carefully stored for a time.

You have the right to decline to participate or to withdraw from the study, and you can be assured this will have no effect on course assessment.

Pamela Easton  
(Senior Tutor)
CONSENT FORM

I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

If I agree to participate, I have the right to withdraw from the study at any time and to decline to answer particular questions.

I agree to provide information to the researcher on the understanding that my name will not be used without my permission.
(The information will be used only for this research and publications arising from this research project).

I agree to participate in this study under the conditions set out in the Information Sheet.

Signed: .................................................................
Name: .................................................................
Date: .................................................................
# APPENDIX C
CODING SYSTEM OF SOURCES USED BY STUDENTS

<table>
<thead>
<tr>
<th>CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>Lecture</td>
</tr>
<tr>
<td>BB</td>
<td>Blackboard</td>
</tr>
<tr>
<td>OHT</td>
<td>Overhead Transparency</td>
</tr>
<tr>
<td>L/H</td>
<td>Lecture Handout</td>
</tr>
<tr>
<td>P/L</td>
<td>Previous Lecture (a previous 72.132 lecture)</td>
</tr>
<tr>
<td>W/B</td>
<td>Workbook</td>
</tr>
<tr>
<td>S/R</td>
<td>Supplementary Readings</td>
</tr>
<tr>
<td>T</td>
<td>Task</td>
</tr>
<tr>
<td>V</td>
<td>Video</td>
</tr>
<tr>
<td>O/L</td>
<td>Outside Lectures (from other courses, not 132.</td>
</tr>
<tr>
<td></td>
<td>Please name, e.g. Social Anthropology)</td>
</tr>
<tr>
<td>P/E</td>
<td>Personal Experience (your own cultural</td>
</tr>
<tr>
<td></td>
<td>experiences and prior knowledge)</td>
</tr>
<tr>
<td>O</td>
<td>Other (please name where possible, e.g. TV</td>
</tr>
<tr>
<td></td>
<td>programme, book)</td>
</tr>
</tbody>
</table>
APPENDIX D
FEEDBACK SHEET FOR STUDENT WRITING

Language and Culture

Name _______________________

EVALUATION

<table>
<thead>
<tr>
<th></th>
<th>V.G</th>
<th>Fair</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. You have used a wide range of sources.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. You have integrated your sources.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. You show understanding of the basic concepts.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. You have identified the key ideas.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. You have elaborated the key ideas.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Your writing is structured with an introduction, a middle and a conclusion.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. You have paragraphing of ideas.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Additional comments:
Language and Individual Development

1. All children acquire language.
2. The same linguistic system may be learnt from a variety of data.
3. First language acquisition takes place without formal instruction.
4. Equal aptitude.
5. Short acquisition period.
6. Critical period for acquisition.
7. Regular stages of acquisition.
8. Varying rates of development.
10. The development of an internal system of language rules.

Communicative Development

Teasing as Language Socialisation

Interaction and Information Exchange
APPENDIX E1
READING TEXT FOR COLLECTION 1

LANGUAGE AND ENCULTURATION

Reading Preparation

We can begin to understand how language is learned only if we examine the process within its immediate social and cultural setting, and in the context of conscious and unconscious socialisation or enculturation.

We must ask about the nature of linguistic input and sociolinguistic training, how and for what purposes children acquire particular communicative strategies, and how language relates to the definition of stages in the life cycle and to recognised role-relationships in the society.

We must seek to identify the differential influences of family, peers, and formal education, and consider such matters as the beliefs which the community itself (including its children) holds about the nature of language origin and development.

Saville-Troike 1989:220-221
APPENDIX E 2
PAIR TASK FOR COLLECTION 1

LANGUAGE AND ENCULTURATION

Working with your partner

In becoming enculturated, how might the following influence first language learning?

- gender

- nationality

- religion

- role relationships
Writing Task

Using examples to illustrate the points you make, provide a case for Saville-Troike’s comment that children learn the structure of their culture as they learn their first language.
The Spoken Word and Silence

A. Non-vocal language

1. Whistle language

2. Drum language

B. Silence

The meanings of silence.
The rules attached to the amount of talk.
The values attached to silence (proverbs)

1. Silence as uncertainty (Western Apaches)

2. Silence as the norm (Finns)

3. Silence to manage tense situations (Italy)

The acquisition of silence.
Silence

1. Meanings of Silence
A. Are you still mad at me?
B. [Silence] (Affirmative)

2. Rules attached to the amount of talking

3. Values attached to silence
   'Silence is golden' (English)
   'Because of the mouth the fish dies' (Spanish)
   'The way your eyes look can say more than your mouth' (Japanese)
   'Man becomes wise through the ear' (Farsi)

   'Whoever asks does not wander' (Serbo-Croatian)
   'The squeaky wheel gets the grease' (English)
SPEECH AND SILENCE

Reading Preparation

Varieties of Talk

!KUNG

It is instructive to look at some of the ways in which various people in the world use talk, or sometimes the absence of talk, i.e. silence, to communicate. For example, Marshall (1961) has indicated how the !Kung, a bush-dwelling people of South West Africa, have certain customs which help them either to avoid or to reduce friction and hostility within bands and between bands. The !Kung lead a very harsh life as hunters and gatherers, a life which requires a considerable amount of co-operation and the companionship of a larger group if survival is to be guaranteed. Many of the customs of the !Kung support their social need for cooperativeness and the individual need for personal acceptance. The !Kung are talkative people. Talk keeps communication open among them; it offers an emotional release; and it can also be used to alert individuals that they are stepping out of bounds, so heading off potentially dangerous conflicts between individuals.

The !Kung talk about all kinds of things, but principally about food and gift-giving. However, they avoid mentioning the names of their gods aloud, and men and women do not openly discuss sexual matters together. They have their own styles of joking, and story-telling, but, in the latter case, they do not 'make up' stories, finding no interest at all in that activity. They have one kind of talk to resolve disputes; another, which Marshall calls a 'shout', to resolve the kinds of tension that arise when some sudden, dangerous event occurs, such as the burning down of a grass hut in a village; and still another, a repetitive trance-like type of speech, to indicate a feeling of some kind of deprivation concerning food. According to Marshall, speech among the !Kung helps to maintain peaceful social relationships by allowing people to keep in touch with one another about how they are thinking and feeling. It helps the !Kung to relieve their tensions, and it prevents pressures from building up and finding their release in aggression.

WESTERN APACHE
We can contrast the need the !Kung have to talk in order to ensure that tensions do not build up with the Western Apache view of silence (Basso, 1972). Whereas the !Kung speak to prevent uncertainty in human relationships, the Western Apache of East Arizona choose to be silent when there is a strong possibility that such uncertainty exists. They are silent on ‘meeting strangers’, whether these are fellow Western Apache or complete outsiders; and strangers too are expected to be silent. The Western Apache do not easily enter into new social relationships, and this ‘silence’ is deemed appropriate to a new relationship, because such a relationship is felt to be inherently uncertain.

Children returning from government boarding schools are greeted with silence and the children themselves are expected to be silent. Silence is maintained until each person once again becomes accustomed to the presence of the others. When one is ‘cussed out’, i.e. disciplined verbally, silence is again the appropriate response, even though the ‘cussing out’ may be undeserved; the Western Apache believe that responding only serves to make matters worse. The initial stages of courting behaviour also require silence; in this case, silence is taken to be a proper indication of the shyness that is expected between two people attempting to enter into a close relationship. Talkativeness in such a situation, especially in the female of the pair, is regarded as immodest.

Silence is also used as a kind of sympathising device after someone dies: you are silent in the presence of ‘people who are sad’, and you should not further disturb those who are already disturbed by grief. Silence is also required during ceremonials if you are not to be considered disrespectful or to be interfering either with the curing process or with the person conducting the ceremonial. According to Basso, the Western Apache resort to silence when they are confronted with ambiguity and uncertainty in their social relationships: they do not try to talk their way out of difficulty or uncertainty as people with other cultural backgrounds sometimes try to do.

APPENDIX F 3
PAIR TASK FOR COLLECTION 2

SPEECH AND SILENCE

Working with your partner

In pairs identify the similarities and differences of the !Kung and Western Apache concerning their use of speech. Record these in two columns. In the third column describe your own language in relation to the functions of speech identified by the former two language groups.
SPEECH AND SILENCE

Name ................................

Writing Task:

"While the basic form of silence may be universal, its functions and interpretations vary among cultures". Samovar & Porter, 1994:248.
Discuss this statement using examples to support your points.
Acculturation

1. Enculturation and Acculturation

Acculturation is the continuous process by which people are re-socialised into a host culture, so they are more compatible with the new culture and may ultimately be assimilated—that is the highest degree of acculturation that is theoretically possible. For most people, even for 'natives', complete acculturation is a lifetime goal, and individuals vary in the degree of acculturation achieved in a given period of time. Thus, acculturation of people should really be thought of as falling along a continuum from minimally acculturated to highly acculturated.

2. Situations Involving Cultural Adaptation

3. Adaptation Processes

   Personal Communication
   a. The cognitive process
   b. The affective process
   c. The behavioural process

   Social Communication
   a. Interpersonal Communication
   b. The mass media
4. Factors Influencing the Acculturation Process

Acculturative Potential
   a. Degree of similarity or difference between the original culture and the host culture
   b. Degree of familiarity with the host culture
   c. Personality characteristics
   d. Demographic characteristics

Host Environmental Conditions
   a. Interaction potential
   b. Attitudes held by the host society
   c. Degree of rigidity of the host society
Reading preparation

As strangers participate in various forms of interpersonal and mass communication activities, they are both encouraged and pressured by the host environment as well as by their ethnic community environment. The three environmental conditions - host receptivity, conformity pressure, and ethnic group strength (size of a particular group) - help define the relative degree of "push and pull" that the receiving society offers to strangers.

An environment offering an optimal influence on strangers' adaptation is viewed as one in which the native population welcomes and supports the strangers while expecting them to conform to the local norms.

At the same time, an optimal environment includes an ethnic community that provides informational, material, and emotional support during the initial transition period, without exerting social pressure on the strangers against their adaptation of the host society at large.

In facing such environmental forces, the strangers' own readiness, ethnicity, and personality strength and openness set the initial parameters for the subsequent unfolding of their own cross-cultural experiences.

Samovar & Porter 1994:401
APPENDIX G 2
PAIR TASK FOR COLLECTION 3

ACCULTURATION

Working with your partner.

Samovar & Porter mention three environmental conditions: host receptivity, conformity pressure and ethnic group strength, which exert an influence on a stranger’s acculturation. The text mentions how these operate in general.

Note down under the above headings, specific actions which may positively or negatively affect acculturation.

HOST RECEPTIVITY

CONFORMITY PRESSURE

ETHNIC GROUP STRENGTH
APPENDIX G 3
ESSAY TOPIC FOR COLLECTION 3

ACCULTURATION

Name ............................................

Writing Task

Cross-cultural adaptation could be described as facing challenges in a new environment and learning from them, thus evolving as a person. To what extent is culture shock a part of this process?
APPENDIX H
HOROWITZ' AND DUDLEY-EVANS TYPOGRAPHIES OF ESSAY PROMPTS

Horowitz (1986) distinguished between three subcategories:

1. general argument, where argumentation is in a general domain.
2. ascribed argument, where argumentation belongs to some individual or group.
3. critical thinking, where writers are called upon to present and defend their own theses.

Dudley-Evans (1988) identified three meanings of the term “discuss” in science topics, which could equally be applied to studies in Linguistics:

1. present opposing viewpoints and conclude with own opinion.
2. deal with established theory or processes, which allows little place for opposing viewpoints or personal opinion.
3. present points in favour and against an argument which is unlikely to have established viewpoints.

Examples of argument type exam questions in Language and Culture.

1. Provide a definition of the term 'culture shock', and discuss the major factors which have been identified as contributing to culture shock.

This would be an example of a Type 2 (Dudley-Evans) question in which the theory or process of culture shock is to be examined. It would be general argument under the Horowitz classification.

2. What is the Sapir-Whorf hypothesis? How do you evaluate its significance in an examination of the relationship between language and culture?

This two-pronged answer requires in the second section a Type 1 (Dudley-Evans) application in which opposing points of view and a personal opinion are required. Horowitz would identify this as needing a critical thinking response.
Elaborate on the point made by Nida that the translator is attempting to convey 'meaning' - not words - from one language to another. What are some of the problems translators may encounter in such a process?

Again this two-sectioned question demands a Dudley-Evans Type 3 reply for the first section in which points for and against the argument are required, but no room for personal opinion. The second part provides opportunity for discussion. The first part of this question would fit under Horowitz' category of ascribed argument in which Nida has raised a debatable issue.
### APPENDIX I
COMPOSITION OF INTERNATIONAL STUDENTS

<table>
<thead>
<tr>
<th>STUDENT</th>
<th>COUNTRY</th>
<th>ENGLISH STUDY</th>
<th>TIME IN N.Z.</th>
</tr>
</thead>
<tbody>
<tr>
<td>B 11</td>
<td>Japan</td>
<td>5 years</td>
<td>2-3 years</td>
</tr>
<tr>
<td>B 12</td>
<td>Japan</td>
<td>5 years</td>
<td>2-3 years</td>
</tr>
<tr>
<td>B 14</td>
<td>Japan</td>
<td>7 years</td>
<td>3-4 years</td>
</tr>
<tr>
<td>B 1</td>
<td>Japan</td>
<td>9 years</td>
<td>less than 1</td>
</tr>
<tr>
<td>B 3</td>
<td>Japan</td>
<td>10 years</td>
<td>less than 1</td>
</tr>
<tr>
<td>B 5</td>
<td>Japan</td>
<td>9 years</td>
<td>less than 1</td>
</tr>
<tr>
<td>B 9</td>
<td>Japan</td>
<td>8 years</td>
<td>less than 1</td>
</tr>
<tr>
<td>B 4</td>
<td>Thailand</td>
<td>5 years</td>
<td>2-3 years</td>
</tr>
<tr>
<td>B 2</td>
<td>South Korea</td>
<td>10 years</td>
<td>1-2 years</td>
</tr>
<tr>
<td>B 6</td>
<td>Malaysia</td>
<td>10 years</td>
<td>3-4 years</td>
</tr>
</tbody>
</table>
APPENDIX J
INITIAL QUESTIONNAIRE

LANGUAGE AND CULTURE 72.132

Please note that answering this questionnaire implies consent and that you have the right to refuse. You also have the right to refuse to answer any specific questions on this handout.

PERSONAL QUESTIONNAIRE

Please circle where choices are provided.

1 Name: ____________________________________________

2 Male / Female

3 Languages learned: ______________________________________

4 Country of origin: (a) New Zealand (go on to Question 9)
                 (b) Other: please state ______________________

5 Time spent in New Zealand ______________________________________

6 How many years have you studied English? ______________________

7 Did you have lectures in English on a regular basis in your home country? Yes / No

8 Rate your ability to comprehend lectures in English. Circle one number only.
   5 I understand everything.
   4 I understand most of the lecture and guess at the few items of vocabulary or expressions I don't understand.
   3 I understand about half the lecture but occasionally get confused.
   2 I have difficulty identifying the main points and supporting details. I am often confused.
   1 I understand very little of a lecture in English.

9 Have you had close experience of a culture/cultures other than your own?
   (a) inside New Zealand  Yes/No
   (b) Outside New Zealand Yes/No
   If Yes please state ______________________________________

Thank you.
Pamela Easton (Senior Tutor)
APPENDIX K
EXIT QUESTIONNAIRE

QUESTIONNAIRE 72132

Name.................................................................................................

1 Please circle which applies:
L1 / L2 Year of study at Massey University: 1, 2, 3.

2 Please rank the following sources 1-7 in terms of usefulness for you in understanding the topics. 1 = most useful, 7 = least useful.
- workbook
- lecture
- textbook
- videos
- personal experience
- tutorial readings and tasks
- extra-mural study guides

3 What do you consider was your primary source for writing in tutorials?

4 Did you do the work in the workbook on a regular basis? Explain how you used this book.

5 Did you make use of the Language and Culture Study Guides in the library? Yes/ No
If ‘yes,’ for what reasons did you refer to them?
How frequently did you use them?

6 Was regular essay writing a helpful component of the course? If ‘yes’ in what way?

7 Would you have liked more talking in the tutorials? If ‘yes’ why?
APPENDIX L
RESPONSE TO QUESTIONNAIRE B. STUDENTS’ RANKED AVERAGE OF SOURCES

<table>
<thead>
<tr>
<th>Source</th>
<th>L1</th>
<th>L2</th>
</tr>
</thead>
<tbody>
<tr>
<td>lecture</td>
<td>1.4</td>
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</tr>
<tr>
<td>workbook</td>
<td>2.3</td>
<td>2.3</td>
</tr>
<tr>
<td>textbook</td>
<td>4.0</td>
<td>4.7</td>
</tr>
<tr>
<td>videos</td>
<td>3.8</td>
<td>5.0</td>
</tr>
<tr>
<td>personal experience</td>
<td>3.7</td>
<td>3.8</td>
</tr>
<tr>
<td>readings/tasks</td>
<td>3.0</td>
<td>3.0</td>
</tr>
<tr>
<td>XM Study Guide</td>
<td>6.0</td>
<td>4.8</td>
</tr>
</tbody>
</table>

**Usefulness**  Those below held in common

1. lecture
2. workbook
3. readings and tasks
4. personal experience

**L1**
- videos

**L2**
- textbook
- XM Study Guide
- videos
APPENDIX M
RULES FOR CLASSIFICATION OF TEXT

A. Claims Superordinate Claim: This introduces the major proposition and forms part of the thesis stage. Under class time limits for writing, the superordinate claim is often expressed in one sentence, often restating the essay topic.

Topic: “While the basic form of silence may be universal, its functions and interpretations vary amongst cultures”. Samovar & Porter, 1994: 248. Discuss this statement using examples to support your points.

Superordinate claim: Each culture uses and interprets silence in different ways.

Subordinate claims: These are key concepts which relate to and support the superordinate claim. They form part of the argument stage.

The basic use of silence seems to vary with the conception of what language is for.

B. Grounds Are supporting statements underpinning the claim.

As for Western Apache, they prefer remaining silent instead of talking.

Marker This introduces and/or identifies a list, either within the introduction, or within the argument phase where it heads or signals the introduction of grounds.

Religion influences can be seen on the following examples.

C. Classification of supporting relations based on Mann & Thompson (1988)

Elaboration Elaboration provides additional information or detail to that presented in previous claims or grounds. Three ways in which this is achieved have been identified by Mann & Thompson (1988).
They talk to resolve disputes, keep communication open and release tension.

The Apache people on the other hand value silence and use it frequently. *In situations such as meeting new people, courting, greeting people you haven't seen for some time and at ceremonies or times of grief, silence is expected.*

Elaboration is often conjoint, meaning additional information is situated adjacent to each other, one or both undergoing further development.

```
e.g. grounds (1)
     
elab.(2) elab.(3)
     
         exemp.(4)
```

**Evaluation**  
The subject previously presented is assessed and a value is assigned to it.

*This is important in the Italian culture because it is desired to keep peace with each other.*

**Exemplification**  
This is an elaboration, identified by Mann & Thompson (1988) as such, providing a specific case or cases in point. In contrast to elaboration, it illustrates, rather than advances the argument. According to Mann & Thompson, three ways in which this is achieved are:

1. set: member
2. abstract: instance
3. whole: part

This is reflected in some of their proverbs *For example, “One word is as good as nine”*.  

**Concession**  
The writer acknowledges the potential or apparent incompatibility between information presented in the key and supporting statements.

The !Kung people of Africa use lack of silence a lot. *Although silences may be used, talking is used more.*

**Contrast**  
Either comparability or differences are evident through the comparison made.

In the society where people are talkative, it will show up significantly, i.e. American. *In contrast, in the society where people seem to communicate with the non-verbal system like Japan silence seems to be a familiar tool of communication.*

**Purpose**  
This is recognised where any activity in the grounds or elaboration of such grounds of a text is initiated in order to realise the outcome stated.

In situations such as meeting new people, courting, greeting people you haven’t seen for some time and at ceremonies or times of grief, silence is expected. *This is for people to get used to each other at the beginning of a relationship.*

**Result**  
The situation presented in claims, grounds or elaboration of grounds could be cause for a consequent action or situation or outcome.
With the former, language is used as a device for co-operation, it is not what you say but that you say it that is important; \textit{it binds people together}.

**Restatement** The claims, grounds or elaboration of grounds are restated in a similar form.

Finnish people also value silence. \textit{Finnish people keep silent as a people}.

**Summary** This represents a shorter restatement of the preceding grounds, elaborations or exemplifications.

These are examples of formal training. \textit{i.e. teaching that is passed on, or given by another person.}
## APPENDIX N

**WORKSHEET FOR TRACKING SOURCES AND TEXT UNITS**

| Total | other | restatement | result | purpose | contrast | concession | evaluation | exemplification | Total | satellites | elaboration | Total | nuclei | grounds | claims | subtotals | ratio | lecture | blackboard | OHT | lecture handout | tutorial workbook | supplementary reading | task | video | personal knowledge | previous lectures | other lectures | other | Total |
|-------|-------|-------------|--------|---------|----------|------------|------------|-------------|----------------|-------|------------|-------------|-------|--------|---------|--------|-----------|-------|---------|-------------|------|-----------------|------------------|---------------------|------|-------|----------------|---------------|---------------|------|-------|----------------|----------------|----------------|------|-------|

| L/1/L2 | Name |