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**COOPERATIVE LEARNING:  
UNDERGRADUATE STUDENTS' PERCEPTIONS OF  
THEIR LEARNING**

A thesis presented in partial fulfilment of  
THE REQUIREMENTS FOR THE DEGREE OF  
MASTER OF EDUCATION  
AT MASSEY UNIVERSITY, WELLINGTON CAMPUS,  
NEW ZEALAND

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**DECEMBER 2000**

## ABSTRACT

This study explores undergraduate students' perceptions of their learning when working in a cooperative and collaborative learning environment. Although the literature reports on the effectiveness of these approaches, there is little research available on how university students make sense and meaning of their experiences while learning in this environment.

Forty-four participants were drawn from an *Introduction to Research Methods* course. They were asked to journal their perceptions, and send them electronically to the researcher. One hundred and ninety-seven journal entries were received over a twelve-week period. Major themes were extracted from the data drawing on a phenomenographic approach, which considers the interaction between the students, the content of the learning material, and the overall learning environment.

The major findings were that cooperative and collaborative learning groups:

- require students to shift their thinking from working independently to working interdependently;
- require more emotional energy than traditional forms of learning;
- require students to have a range of positive, interpersonal and problem-solving skills; and
- require lecturers and students to have the appropriate skills, values and attitudes to achieve their academic tasks.

This study has implications for teaching practice, in particular the development, design and planning of cooperative and collaborative course work.

## ACKNOWLEDGEMENTS

- ◆ To my first group - Mum, Dad, Judy, Gaylene, Travis, Francis, Paula, Kaye and John, because you all taught me so much about being part of a group - thank you.
- ◆ To Angie, Dave, Jeremy, Pania, Jore, Shafan, and Amon who continue to teach me - thank you all for your love and patience.
- ◆ To my wonderful friends for your editing skills, your contributions, and your love, support and encouragement – thank you.
- ◆ To my supervisors, the darling Shane, may he be resting in peace, the tenacious Nick and the insightful marg – thank you for sharing your skills and knowledge, for your constant encouragement and for being my group.
- ◆ To my colleagues in the Department of Corrections, Psychological Services - thank you for your patience and support.
- ◆ To David who trusted me with his dream – thank you.
- ◆ Last, but not least, a special thanks to all the participants who took part, directly and indirectly, in this study. Without you none of this would have been possible.

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## CHAPTER ONE: INTRODUCTION

This thesis explores teaching and learning in an academic, cooperative environment, an environment that required undergraduate students to work together in small groups to reach their own and the group's goals.

### 1.1 BACKGROUND

The thesis was born out of a personal discussion with a course lecturer who taught an *Introduction to Research Methods* course in a Criminology Department. The course lecturer changed his method of teaching, from students attending lectures to students working in small groups in an interactive learning environment. Some students were required to work across institutional and disciplinary boundaries.

The reason for this change was twofold. The lecturer wanted to increase the students' depth of understanding of research processes and he believed in the benefits of learning communities. He defined learning communities in this context as those in which students work in small groups, providing shared activities for learners from complementary disciplines, whilst linking up students in different locations, often by the Internet (Tait, 2000).

He believed that if the students had the opportunity to actively participate in learning with others from different disciplines and institutions, they would develop a more in-depth understanding of the broader issues within the discipline of criminology. He hoped, through thinking and learning about the process of research, students' writing and presentation skills would be strengthened. He also hoped that they would be able to take into account a number of varying perspectives that were different from their own. It was intended that this interactive process would be supported by an on-line

Research Writing Facility, which would enable the students to further develop skills in computer technology.

The lecturer had been introducing changes into the course over a number of years and, by 1997, the students had begun to submit their work electronically through the on-line Research Writing Facility. In 1998 the course was redesigned using workshops instead of lectures and with students working cooperatively in small project teams, across disciplines and institutions. Through personal contacts the lecturer had entered into joint ventures with individual lecturers from three other institutions, Monash University, Melbourne, Victoria University of Technology, Melbourne and Lane Community College, Oregon, USA.

During this time it was apparent that considerable developmental work would be required when integrating coursework with cooperative learning processes and new on-line systems. While an allocation of time had been received to develop the on-line Research Writing Facility, the lecturer reported a lack of success in securing funding to develop the administrative end of the computer system. This resulted, he says, in inadequate monitoring of students' progress through the course in 1998, with some problems not being identified early enough. Consequently, developmental and administrative tasks grew beyond the capacity of the available personnel.

Other concerns the lecturer identified were:

- student attendance at workshops was inconsistent;
- the collaborative exercises worked well with only some groups;
- students demanded increasingly more of the lecturer's personal time to sort out process issues and assessment tasks; and

- some students did not have sufficient computer skills to access the computer-based resources and communication networks.

The lecturer acknowledged these administrative hiccups and learning difficulties. In our discussion, however, the main concerns were:

- the amount of time he was spending with students in sorting out group processes and assessment issues; and
- the reasons why academically able students were having difficulty in adjusting to working in a cooperative learning environment.

### **Paradox in teaching**

University students undertake learning for a variety of reasons and many have expectations, based on previous experiences, which affect how they respond to and approach learning tasks. As teachers we are often unaware of the effects of using different or unfamiliar teaching methods, because students respond to situations, as they perceive them, not necessarily as the teacher intends or anticipates.

This is the paradox in teaching. Students do respond to the learning situation as they perceive it, leaving us as teachers never fully knowing what we teach and never fully able to predict what is learned because what is learned shifts and changes from context to context. Yet Ramsden in his work on 'Learning and Teaching in Higher Education' (1992) suggests that becoming aware of the difference between students' perceptions and teachers' intentions is a part of what it means to teach well.

While I live in a different country and work in a different teaching and learning environment, the concerns of the lecturer are familiar to me within that environment. The following assumptions I hold about group work have

been formed and informed through observation and experience over a number of years:

- Group processes are complex and are made up of many powerful, emotional, and productive moments; and
- The process of group work is unpredictable especially when individual members are required to change from the familiar, to practice new skills and gather new information within a different teaching and learning environment.

I now set out an outline of the research question, the research setting, some of the basic assumptions that influence and affect cooperative learning environments, plus my position as the researcher and some theoretical underpinnings.

## **1.2 THE RESEARCH QUESTION**

Cooperative and collaborative approaches to teaching and learning are enormous areas in which fruitful research can be undertaken. For the purpose of this thesis I intend to use both cooperative and collaborative learning. In general I will use the term cooperative learning. This is based on personal experience with both cooperative and collaborative learning and on the principle that students need to cooperate with one another before they can meaningfully collaborate to share and build joint ideas and produce a collective outcome. However, where the authors have stated a clear preference for a term within their own work I will honour this.

When invited by the lecturer to develop a research thesis as part of the course evaluation, I chose to focus on students' perceptions of their learning and began by asking the following questions:

- How did students in higher education make sense and meaning of the cooperative and collaborative process?
- What were the things that got in the way?
- What were the benefits and tensions in having to work with others?
- What strategies did students use when interacting with others to get their work done?

In particular, in this thesis, I undertake further examination of the effects of these approaches from the learners' perspective and ask the following question:

***'What were students' perceptions of their learning and what strategies did they use, when required to work in a cooperative and collaborative learning environment?'***

### 1.3 RESEARCH SETTING

The thesis participants<sup>1</sup> were students in the Department of Criminology at the University of Melbourne. Their single semester course, *Introduction to Research Methods (IRM)*, aims to provide a research foundation for students who want to go on and gain Honours after they have completed their undergraduate degree.

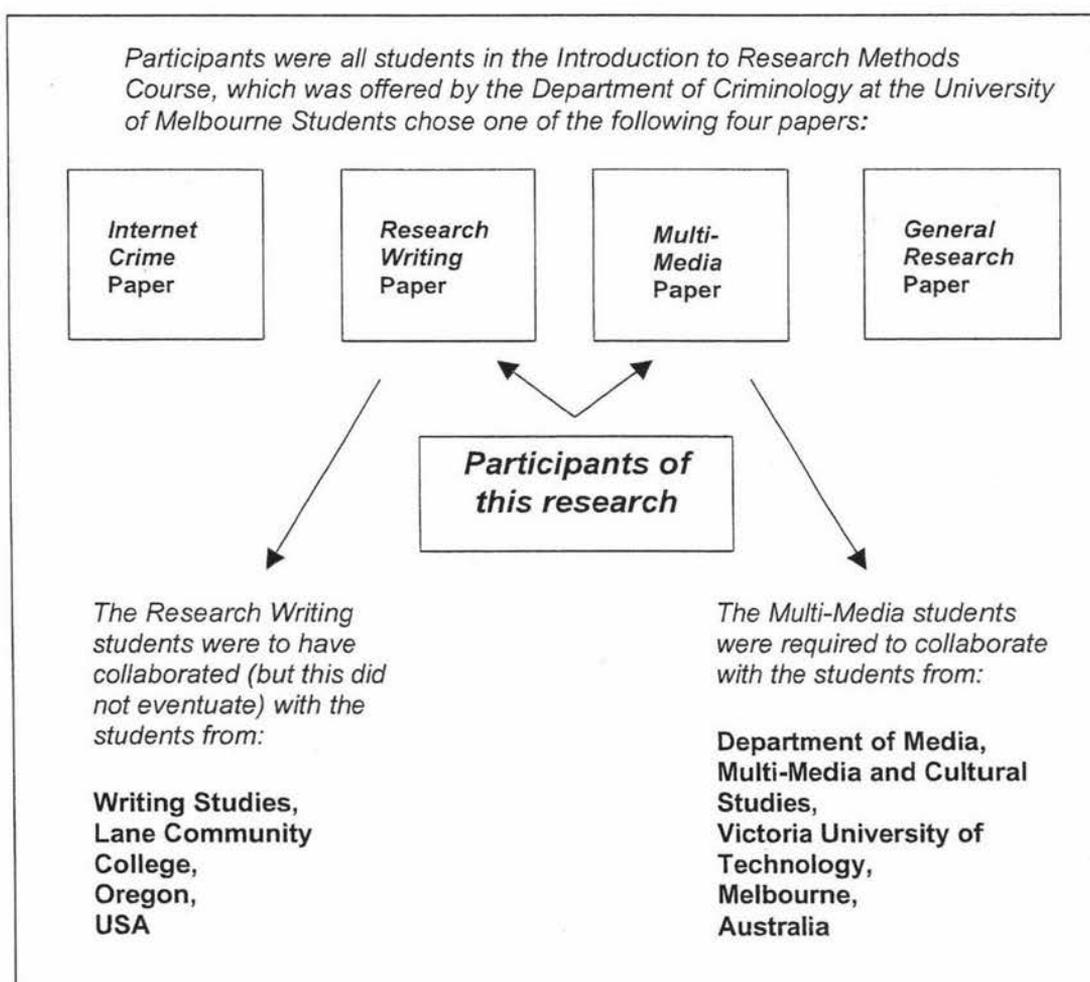
The *IRM* course is divided into four papers: *General Research*, *Internet Crime*, *Multi-Media* and *Research Writing*. (The *General Research* paper was also offered within the Police and Justice Studies Department at Monash University).

The students at Melbourne University in the *Multi-Media* and *Research Writing* papers are the participants in this research. The *Multi-Media*

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<sup>1</sup> Throughout this thesis the term "participants" refers to the students who were directly involved as participants in the research. The term "students" refers to non-participants in the research.

students were required to collaborate with *Multi-Media Studies* students from Multi-Media and Cultural Studies at Victoria University of Technology (VUT)<sup>2</sup> in Melbourne. The *Research Writing* students were to collaborate with *Writing Studies* students at Lane Community College in Oregon, USA. Unfortunately, because of teacher time and course allocations within Lane Community College, this collaborative venture was unable to take place in 1999 and the *Research Writing* students were required to cooperate with their peers only. The *General Research* paper was available to students who chose not to take part in an interactive process. For clarity, this information is presented in the following diagram.



<sup>2</sup> Victoria University of Technology caters for a wider range of students and has different entry requirements other than the high academic grades required by the University of Melbourne. According to a senior lecturer from the Department of Media at VUT, many of the students from VUT were less likely to have access to home computers, and were therefore mainly restricted to the hours on campus and access to the computer labs for online communication.

All participants were required to attend workshops, work in small groups, develop role-plays, share information, give and receive feedback on work, and develop and present individual and group research projects.

### **On-line 'Research Writing Facility'**

The lecturer also provided students with an on-line computer called the 'Research Writing Facility' which provided course outlines, assessment tasks, course reading, and specialist mentoring forums covering the areas of research, writing, computer and library skills. The facility also provided bulletin boards to post work, to receive feedback and to facilitate the sharing of ideas and carry out common tasks.

## **1.4 ASSUMPTIONS ABOUT THE NATURE OF COOPERATIVE AND COLLABORATIVE LEARNING**

Over a number of years, researchers and educators alike have become increasingly interested in cooperative approaches to student learning (Schmuck & Schmuck, 1971; Johnson & Johnson, 1987; Bruffee, 1993; Bosworth & Hamilton, 1994; Koschmann, 1994; and Johnson & Johnson & Smith, 1998). These approaches refer to learning as a process that requires students to cooperate with one another in small groups to develop academic work, that is, work based either on individual or group output or both. The teacher's role is to structure learning so that, when working together, students maximize their own and one another's learning.

A number of factors have facilitated this interest. Some lecturers have developed an interest in using collaborative and cooperative approaches in teaching because they see them as ways of enhancing students' academic work, of encouraging students to support and connect with one another thereby creating opportunities for them to further develop key life skills. The latter is important, because people are increasingly expected to work in

diverse self-managing teams, which requires similar interpersonal skills to working in cooperative learning groups.

Authors such as Bosworth and Hamilton (1994, p.2) outline some of the overarching challenges and benefits that collaborative learning brings to all involved in higher education.

*“Collaborative learning may well be the most significant pedagogical shift of the century for teaching and learning in higher education. It has the potential to transform learners’ and instructors’ views of learning, knowing and understanding as it acquaints students with the skills needed to cooperate, negotiate, and formulate productive responses to the changing demands of this increasingly complex world.”*

### **Benefits of cooperative learning to students**

According to the above authors, cooperative learning can assist in cognitive and social development. Kember (1998) also holds this view. He suggests that social interaction, the basis of cooperative learning, is essential to human cognitive development and to increasing our understanding of the world and ourselves. Vygotsky (Durkin, 1995) supports this view, arguing that learners need to be in continual interaction with the social world in order to change their perceptions of the world.

Social interaction in small groups can provide opportunities for students to develop a range of skills alongside their disciplinary knowledge. Bosworth (1994) outlines five skill categories that social interaction can assist in building; interpersonal, group building, inquiry, conflict resolution and presentation. Clearly, interpersonal skills permeate all categories.

Group work can also affect how students feel about their learning environment. The students in a study by Prescott & Wolff (1990) indicated

this when they noted that peer contact increased their sense of belonging, that learning was more enjoyable and less stressful and that the active involvement increased their learning. Reducing academic isolation and developing a sense of belonging and connectedness to others is particularly important and significant to many women (Belenky, Clinchy, Goldberger, and Tarule, 1987). Being connected to others, whether it is through common goals, values or shared feelings, can assist in building trust. When trust exists most students are more able to express themselves in their own voices.

Small groups also provide opportunities for both lecturers and students to practise group work skills. Essential group skills are found when individuals are able to engage in positive *interdependence* and effective interpersonal communication that assists them in completing tasks and reaching their academic goals.

Group work can also expose students to multiple perspectives and interpretations within their disciplines. As thinking becomes more complex this process assists students to grapple with such things as uncertainty, diversity and conflicting perspectives as they articulate and integrate their newly acquired knowledge with previously known knowledge (Koschmann, 1994, p.222). This process can assist in making new learning apparent and usable to peers.

### **Constructing knowledge**

Some lecturers and students see cooperative learning as a challenge to traditional approaches to teaching and learning in which learners are seen to receive knowledge from the lecturer for later use (for example: "I as the teacher am the expert and you as the student learn from me"). The

cooperative learning approach, whereby learners assume a more active and interactive role, draws heavily on constructivist theories of knowledge. Dart (1998, p.223) outlines a conception of learning which emphasises that learners actively construct knowledge for themselves by forming their own representations of the material to be learned, selecting information that they perceive to be relevant, and interpreting this on the basis of their present knowledge and needs. This suggests that students construct learning from previously known information, for a particular purpose, and learn new information and skills as required.

Angelo (2000, p.113) reports similar views:

*"the constructivist view of learning is that humans learn not primarily by receiving and copying impressions and information from the world, but rather by constructing and reconstructing our own mental conceptions of the world."*

These views suggest that constructivism rejects the traditional transmission of knowledge and supports what I call 'participatory learning', where working with others to challenge ideas and understandings provides learners with a chance to think and act on their own worldview.

### **Tensions and cooperative learning groups**

Cooperative learning groups can be very demanding at university level. Effective cooperative groups require conscious development to maximise group learning. It is not enough for lecturers to assign students to groups and tell them to work together because group work invariably produces tensions that are normally absent or go unnoticed in traditional classrooms. There are many ways that groups can go wrong (Hunter, Bailey & Taylor, 1997). As a result, students may well experience confusion and even anxiety about the work in a cooperative classroom and in how they will be

evaluated. Johnson and Johnson (1992) imply that group members' potential for learning is lessened if lecturers do not establish clear group structures, provide no content to reflect on or discuss, or fail to outline assessment tasks clearly. A further issue for lecturers to consider is the level of students' group-processing skills. Not all students have had the opportunity to develop group-processing skills for the purpose of achieving academic qualifications. Ross & Cousins according to Kennett, Stedwill, Berrill & Young (1996) found that many students did not know how to ask one another for help, could not identify when they needed help, when other people needed help or when to ask for explanations.

It is the lecturer's role to establish the cooperative learning environment and to assist in developing the required skills. However many of the variables that influence group dynamics, such as the grading system, student personalities and intellectual abilities are beyond a lecturer's control. In addition, it is the students themselves who must connect and develop trust to form an effective working group (Miller, Trimbur, Wilkes, 1994, p.40). Trust is built through positive social interaction and individuals working towards achieving their own and the group's goals.

As already stated, students' learning histories and their conceptions of teaching and learning influence how they go about their learning. Their past learning experiences may have been based in methods that have focused them on competing against each other or perhaps working to accomplish learning goals, goals that are unrelated to each other. Students who have had little previous experience of working cooperatively in an academic environment, may feel unsettled if moving from one lecture to another involves changing to a different learning process. Some may even feel angry when faced with cooperative learning processes and may demand that the lecturers change back to a more familiar and traditional lecturing

style. Group members can also feel hampered in their work when other group members do not attend planning meetings, frustrated over personal interaction difficulties or discouraged over lack of progress with their work.

There are, of course, multiple pathways to effectively working in cooperative learning groups. However, they all require lecturers and students to have some basic group work-process skills, which can assist them in exploring as far as they want, the depth and breadth of their disciplinary knowledge.

## **1.5 POSITIONING THE RESEARCHER**

In conducting this research, my understanding of the broader issues of cooperative teaching and learning environments is informed by my life experience, and my various roles as a group facilitator, learner and researcher and the theoretical assumptions I bring to my work.

In the past I have worked as a teacher with young children, more recently as a trainer and group facilitator of Domestic Violence Intervention programmes and now I work full-time co-facilitating therapy groups in a male prison with serious violent offenders. Many of the offenders I work with have had limited positive learning experiences and many are still sorting out issues of maturity and self-identity. They come to group wanting to change their offending behaviour, yet at the same time are reluctant to share their thinking with other group members. Therefore, offender programmes need to focus on working with group anxieties and developing a range of pro-social group skills to assist learning.

There are, of course, many obvious differences in life experience between most learners in higher education and learners in the prison and, while it is

not my intention to review or to compare programmes, there are a number of similarities:

- both are based in formal institutions;
- in both situations the learning parameters are controlled by institutions that operate under political, social and economic policies;
- both situations have procedures whereby learners select their course, then process the information so that hopefully they can use it later outside the institution; and
- usually a university lecturer or a therapy team facilitator is responsible, as disciplinary expert, for selecting the external course, supervising the process and assessing the assigned material.

Another important characteristic of both situations is that lecturers and facilitators both have their own conceptions of teaching and learning. My own conceptions of teaching and learning have been heavily influenced by critical theory, feminist theory and, in particular, Paulo Freire's (1972) philosophy on transformation learning.

Both critical and feminist theory are relevant to me because of the importance in locating my own struggle as an education practitioner in relation to larger social and economic forces that also limit and shape my actions and because I share their politics for human betterment. They also raise my awareness and the need to be alert to the potentially complex interplay between competing ideologies - such as gender, equality, race and power - within any learning environment.

## **Critical theory**

It is, of course, not a new insight that education is firmly located within the wider political and economical concerns of the State. Nor is it new that education has been a source of oppression, used to maintain the status quo. Education has also been defined as a potentially emancipatory force (Ratcliffe, 1999). Critical theory was originally born out of the need to challenge the State's use of power over individuals and groupings of people. Individuals such as Habermas, and later Mezirow (Ewart, 1991), have done much to expand on critical theory and the domains of emancipatory learning and action. However, it was Freire (1972), in his work on transformation education and literacy, who embedded critical theory in the teaching and learning arena.

Freire was a Brazilian educator who described traditional classroom teaching as 'banking education'. In Freire's traditional classroom, the teacher's role as expert is to fill the students with acceptable deposits of information. The students are not called upon to know, only to receive. He saw this process as helping to preserve the existing culture and possibly trapping learners into particular values, opinions and positions without their even being aware of this subtle, and sometimes blatant, form of indoctrination.

Freire speaks of students' ability to transform their thinking and their lives when they became aware, through interaction with others, of how ideologies have created or contributed to their dependency on others. He believed in students and teachers working together to challenge this thinking, which is reflected through their day to day life, in both the personal and political realms. Freire went on to argue that transformation in our thinking can only take place through interactions that highlight the contradictions within our personal and political lives.

The learners I work with have highlighted many contradictions within their own lives. They come to the programme (voluntarily) generally seeing knowledge as being created externally to themselves, *'You're the expert, you tell me'*. They are often wanting and claiming magical answers, *'I just know I will not be violent again'*. They often hold unhelpful beliefs and preconceived ideas about life, *'He didn't need to get hurt, I just wanted his money'* and about their offending, *'I am entitled to hit her when she does not do what I tell her to do'*. Challenging these contradictions with others and within ourselves creates the possibility of developing new understandings and a chance to think, change and act on our own worldview. Challenging contradictions helps develop skills in critical thinking, which requires both a willingness and an ability in reflection, interaction, analysis and action (Mayberry, 1998).

Freire's educational philosophy is often dubbed more political than educational (Burns, 1995). It is both. His educational views were born out of the political situation within Brazil at the time and his fundamental principles of personal transformation and political action have offered a framework to many adult educators working in learning institutions and in communities worldwide. This framework is based on a faith in adult ability everywhere to personally and politically challenge the economic, social and political forces affecting our lives. I agree with Brookfield (1986, p.15) that Freire's concept of theory, personal transformation and political action, or praxis, is central to adult learning:

*"This notion of praxis as alternating and continuous engagement by teachers in exploration, action and reflection is central to adult learning. It means exploration of new ideas; skills or bodies of knowledge do not take place in a vacuum but are set within the context of the learner's past, current and future experience."*

I do not wish to infer that the students in this research have had to face the same conditions of poverty and literacy that the students in Brazil faced. We are not all oppressed, or oppressed equally. The experience of oppression varies, even when we share common backgrounds. Transformation education is not an end in itself.

Hooks (1997, p.494) reminds us that:

*"Individuals need to focus truthfully on their own experiences without comparing them with others in a competitive way."*

### **Feminist theory**

Freire's original work has been challenged and supported by feminists such as hooks (1994). Feminist intellectual roots lie in challenging the traditional forms of disciplinary knowledge and social ideologies, in considering race, class and gender as aspects of knowledge production (Mayberry, 1998). Feminists believe that, unless this challenge is made, the socially reproductive, or transformative, aspects of what, or how, we teach will remain invisible and the diverse and multiple voices will not be allowed to be heard within the classroom.

Feminist theory has played a role in bringing the attention of many to the oppression of women in our societies and has also shed light on the phenomenon of oppression in general. Research into the lives of women has a long history, a history that has often failed to take into account the fact that many of us live in a hierarchical and patriarchal society which encompasses and enforces male ideologies, beliefs, culture and practices.

Throughout history, men and women have had very different social experiences (Babbie, 1995) and consequently have come to see things

differently. When this reality is not acknowledged in research, in classrooms, in homes and in workplaces, it results in women's voices being ignored in theory and research knowledge (Armstrong & Du Plessis, 1998). Babbie (1995) suggests that this failure is not surprising, as much research analysis has typically been written by middle class white men and the values and beliefs they examined were their own.

Given that disciplinary knowledge is derived from the same social order that constructed men and women, research that allows us to hear the patterns of women's voices more clearly will enable us to consider and appreciate the differences and similarities. Feminist theory is pertinent to this research, as the participants are mainly women in their early twenties. There are, however, as many feminist perspectives as there are definitions of feminism. Reinharz (1992) reminds us that there is no 'single feminist' way to do research. What we as feminists do know and agree on, is that women's lives are important and that women are worth studying as individuals, as a cultural collective group and from multiple perspectives.

### **Culture and research language**

Every cultural grouping is made up of a unique mesh of shared patterns and concepts, conveyed over time through language and imitation (Fellenz, Robert & Cant, 1989, cited in Barnouw, 1987). Language is but one important expression of culture, but language is much more than being literate. The literate person must be familiar with a particular configuration of meanings in context to understand appropriately the content of what is being encoded and decoded. Being literate goes beyond the transaction of symbols; it goes beyond the written word or printed page - despite learners often being limited to the written or verbal expression of language in classrooms.

Research language continues to have a powerful place in disciplinary knowledge. It produces a public voice for the discipline. Durkin (1995, p.380) suggests that it is verbal language that provides the means for making public, for transmitting, challenging, analysing, rejecting, accepting, improving and speculating. I would argue that we often fail to communicate because of differences in conceptual understanding of different cultural worldviews.

Research language has the power - intentionally, unintentionally, or through lack of understanding - to distort or reduce the ways in which values, beliefs and norms are represented in everyday lived experience. The language used can decide 'norms' or create 'what counts as difference' (Johnston, 1998, p.35). The power of language, like the power of education, can be seen as a force that has the potential to be used for creativity, to maintain the status quo, or to force subservience to ideas or people (Denzin, 1989).

Foucault (1980) has created a whole debate on power/knowledge dynamics, claiming that the two are intimately related and interweave and intertwine within the realms of our everyday personal and political interactions. He says power/knowledge can be used to mask the power relations that exist and at times allow oppression to occur. Irwin (2000, p.266), a Maori feminist academic, reports on the difference between her 'good' personal and professional relationships with her colleagues and her relationship with them at an institutional level.

*"At an institutional level, however, which speaks to issues of power relationships between groups, career development, inter-collegial professional relationships and concepts such as critical friends, the personal closeness did not translate into professional collegiality based on real partnerships, and grounded in the power sharing which derives from understanding of the Treaty of Waitangi. In the tea room I was amongst friends, in staff meetings, around the budget table, in departmental, faculty and university wide forums of curriculum,*

*pedagogy, evaluation and other policy developments, I was largely on my own advocating for the area of Maori Education, and, as judged by outcomes, ineffective at negotiating institutional change."*

Dominant cultures use language and systems in educational policies and practice to undermine indigenous cultures. Christie and Harris (1985) have reported on how Aboriginal students have a fundamentally different view of the world from the dominant white Australian view and consequently they see what is happening in the classroom differently. They report the three major areas (p.82) of difference as being:

- the phenomenological differences in perspectives, expectations, understanding and interpretation, which give rise to a fundamental breakdown in communication;
- the language difference and the way in which students refer to the classroom, its equipment, its inhabitants and the way in which they are expected to communicate with each other; and
- learning styles, which can inhibit the teacher's ability to communicate effectively.

Differences in worldviews, in thinking and in understanding past and present experiences can impede productive social interaction and empowerment.

### **Empowerment**

Empowerment means cooperating and making decisions from a position of shared strength, not from the plight of being cast adrift, left to fend for oneself or from the weak position of being forced to relinquish one's language and culture in order to participate in the mainstream. I support hooks' (1997, p.492) call for collective empowerment. Collective empowerment is built on sharing cultural codes, accepting the need for the

redistribution of wealth and resources, and respecting differences and diversity. Individual empowerment is a misnomer if it is not, in turn, also used for the betterment of others. How often as teachers do we focus on the individual empowerment of our students? What diversity do we silence while doing so? According to Ellsworth (1989), questions like these are important because being critically aware of issues that affect our lives does not seem to be enough in itself. Collective empowerment means being aware of both the social-cultural contexts that affect one's life and the potential one has to transform oneself and society. An example of this comes from the Battered Women's movement, where women are sent off to therapy so that they can feel better about themselves, while the very conditions and social structures that caused them to be battered remain unchanged and largely unchallenged. I am not suggesting that battered women should not seek help. What I am suggesting is that it is not their 'problem' alone, but one for the communities in which we live.

The notion that participants' experiences and behaviours need to be viewed through their eyes, in context and in full complexity, is supported by Hazel, Conrad, & Martin (1997) and Stone (cited in Reinhartz, 1992, p.242). Stone sums up for me the creative tension that this can bring to research.

*"Feminist belief means putting aside our conditioned responses and allowing ourselves to experience total receptivity to 'the other'. It means before subjecting previously silenced voices to our critical faculties, we need to take them in to find out how they resonate and what their truths might mean to us."*

Individually and together, feminist and critical theories inform my beliefs about the nature of research like mine. They emphasise the importance of dialogue, of working together to construct knowledge, of speaking one's own truth, and of individual and collective empowerment of people. All aspects

are known to influence social interactions. Social interaction as already stated is the basis of cooperative learning.

The following chapters outline a discussion on social and cooperative learning theories and a methodological approach that was used to collect and analyse the data. The results of the data are then presented and discussed and, in the final chapter, conclusions are drawn and implications for practice outlined.

## **CHAPTER TWO: DISCUSSION OF SOCIAL AND COOPERATIVE LEARNING LITERATURE**

There are many views of learning. This chapter considers the literature on social and cooperative learning. Social learning can influence students' beliefs and self-concepts about learning and the strategies they use to carry out their academic tasks (MacGregor, 1992; Bosworth, 1994). It also influences their social interaction, the basis of cooperative learning. The literature on cooperative learning points to impressive academic and social gains for students in higher education (Johnson & Johnson 1987; Johnson, Johnson & Smith, 1998; MacGregor, 1992; Kennett, Stedwill, Berrill & Young, 1996; & Mayberry, 1998). Despite this empirical support, cooperative learning is very demanding at university level, because the interaction that takes place within small groups anticipates a high level of resourcefulness. It requires both students and lecturers to have a level of social and cognitive learning styles and strategies that will maximise success within a cooperative learning group. People, however, differ socially and cognitively in how they want to achieve their goals, in their abilities to do so and in how they perceive the difficulties they might encounter.

### **2.1 SOCIAL LEARNING**

This thesis is about interacting and creating knowledge with others. This process requires individuals to have a range of social skills and emotional responses that will assist cooperative learning groups to carry out and achieve their tasks. Some of the skills necessary for cooperative learning are based in social learning theory.

Social learning is the developmental process of learning social skills and social meanings leading to values and attitudes that assist us in getting on with one another. Given the many possible responses and social variables, individuals are indeed unique in how they interact, while at the same time sharing common bonds with one or several cultural groupings.

Social learning is an evolving process that happens continuously. Globally, and throughout time, adults have created ways of passing on knowledge from one generation to the next. This transmission of knowledge takes place in formal and informal settings, under different climatic, physical and social conditions. Some of the methods used to pass on knowledge include language, verbal and non-verbal interactions, dress, music, art, rituals, mythologies and food.

Social psychology (Myers, 1988) and social learning theory (Bandura, 1977) research supports the view that, as social beings, we continuously construct our world every time we try to make meaning of our experiences. Over time, as we interact socially with others, we learn a number of strategies to initiate interaction and to respond to others in a variety of ways. Emotional learning is vital to our everyday interaction with others. It allows us to express and process appropriate emotions and to respond appropriately in the relevant context, for example, expressing sadness, as opposed to happiness, when someone is seriously ill. These responses are influenced by our experience of life's cultural and social rituals, based on filters such as class, gender and ethnicity within our families and communities (Marton and Saljo, 1976; Marton, 1981; Biggs, 1982, 1991; Prosser, 1993; Prosser and Trigwell, 1997; and Zepke, 1998).

### **Self-concept**

Our beliefs and our previous learning experiences shape how we attribute our academic experiences as being mainly within, or beyond, our control.

In terms of social learning, 'locus of control' implies a learned expectation as to whether rewards are controlled by internal or external factors. There is a strong correlation between locus of control and self-concept. Meyer (1998) and Evans (1991) both report that individuals vary in the degree to which they perceive causal attribution for their academic experiences to be mainly within or beyond their control. Life experiences are seldom black and white. This suggests that learners who enter into cooperative learning environments feeling in control of their learning may well feel that they can have some impact on decisions that affect them.

Goal-setting is an important task in learning as well as in everyday life. Goals are what give purpose to basic processes such as attending university, going to classes or finishing essays. The extent to which a person develops realistic goals depends on the strength of the belief that the goal can be achieved. Bandura (1977) speculated that people with a high sense of self-concept and who expect to reach their goals would act in a confident and determined manner. He further argued that people would develop universal hopes about goals and events, which would often be based on prior experiences and expectations. Bandura called this self-efficacy.

When working in cooperative learning groups, group efficacy is the expectation of obtaining successful outcomes through the joint efforts of the group members. Social interdependence promotes individuals to take care of their own learning and to support the learning of other group members. The knowledge that there is a team effort to achieve the group's goal provides the confidence for a successful outcome. Though this is not always achieved, locus of control and self and group efficacy can be important factors in determining motivation.

## **Developing positive self-beliefs**

Lecturers can assist students to develop positive self-beliefs and in doing so help them to develop better control and influence over their learning in a cooperative environment. Self-beliefs are much more than skills and abilities. They are what shape us. According to Evans (1991) and Kennett et al (1996) giving students opportunities to set realistic goals, to practise, reflect and receive useful feedback, can develop positive self-beliefs.

Hopefully, this in turn will assist students in maintaining their motivation. Without a certain level of individual motivation to obtain the group's goals, the group is likely to function poorly. The relationships within the group may also become strained and influence group members' opinions on working cooperatively. Having positive individual self-beliefs and motivation can in turn support the efforts of all group members.

## **2.2 COGNITIVE DEVELOPMENT**

Cooperative learning develops cognitive growth. Cognitive psychologists (Beck, Freeman & Associates, 1990; Young, 1994) who are interested in the development of thought-processes generally agree that when an individual learns something, they interpret it in terms of their existing thought-structures. These thought-structures are affected by the maturation of certain crucial brain structures as well as the increasingly complex system of previously learned rules that govern their thinking (Biggs, 1982). Like social learning, some of these thought-structures and rules apply in a variety of general situations, while others are specific to the subject matter being learnt.

Piaget's (1967) original work on cognitive growth in children is well known. He describes developmental stages of thinking, based on interplay between the concrete experience of the individual and their environment. The

foundation of Piaget's work was that he saw learners' thinking as moving in an orderly sequence of development, from pre-operational to formal operational and as being attached to specific growth stages, with the final stage being around the onset of adolescence. Piaget suggests that working cooperatively with more capable peers stimulates perspective taking and cognitive development.

Like Piaget, Perry (1970) also devised a hierarchy and a series of scaffolding steps to thinking and learning. Perry and his colleagues carried out their study with undergraduate students while they were at Harvard. From the yearly interviews he identified a coherent progression in the manner in which these students approached learning, experienced values, and constructed their world during the college years.

Only his interviews with men were used in illustrating and validating his scheme on intellectual and ethical development. Perry found that he could identify a sequence of positions through which most students progressed. They comprise a development from a dualistic, authority-accepting position, where there are right and wrong answers, through to a relativistic 'anything goes'-phase, to a final stage of open-minded commitment, which represents a fight for own values, respect for others, and a commitment to keep learning.

Perry later assessed women's development with the aid of his map and found it to conform to the patterns that had been observed in the male data. While feminist researchers Belenky et al (1997) found Perry's research a beginning point only, pointing out that it does not cover the territory of women's thinking, his study does seem to suggest that there are important intellectual changes during the college years.

## 2.3 LEARNING STRATEGIES

As previously discussed, adults in higher education bring with them to a cooperative learning group a history that has been affected by past learning experiences, their personalities, their family/social context, cultural filters, cognitive abilities, and motivation. The same elements influence students' conceptions of learning and teaching and the strategies they use to respond and achieve their academic aims.

### **Conceptions of learning**

According to Booth (1997) and Entwistle (1997) phenomenography as a research approach grew out of investigations into students' experiences of learning. Phenomenography aims to understand the variations in students' experiences as they interact with other students, the content of learning material and the overall learning environment. The variations portray differing conceptions of learning that offer useful insights into the wider realm of teaching and learning.

It was the initial work of Marton and Saljo (1976) of the University of Gothenburg that identified a link between the cognitive approach and academic performance. Marton and Saljo carried out a series of studies, using qualitative research methods, to describe individual students' approaches to learning. They were interested in the outcome of learning, in moving past the official pass or fail mark and what it takes to learn. They believed that a description of what students learn is more important than a description of how much they learn. They found qualitative differences in how students understand ideas and principles when presented with similar material.

In their initial studies they asked students to read an article. This was followed by specific questions about the passage to check whether the student had understood what the author wanted to say. The words used to

answer the question identified four basically different ways of understanding. The range was from providing evidence that they understood the author's argument to just repeating what the author said.

The next step in this series of studies was to analyse and ascertain the functional differences in the level of processing – the ways students approached the learning task. They recognised two distinct approaches related to qualitative differences in learning outcomes: deep and surface levels of processing. The deep approach is related to high quality learning outcomes where the students take an active approach and are concerned with understanding, comprehending and questioning the arguments. The surface approach is related to lower quality outcomes in which students take a passive approach and are concerned with learning the text, memorising, finding the right answers and assimilating chunks of knowledge (Entwistle, 1977; Trigwell & Prosser, 1991; and Ramsden, 1992).

Binary positions are never that simple. There have been times when the surface approach has been over-simplified. The surface approach strategy may not be limited to rote learning and to reproduction without understanding, as they may well be entirely appropriate strategies for certain tasks in certain contexts. For instance, it may be appropriate for actors to rote learn their lines and for chemistry students to rote learn mineral abbreviations - or for me to rote learn the road code.

One of the interesting paradoxes in the deep and surface debate is that Biggs (cited in Entwistle, 1998) drew attention to studies that recorded Asian students, who concentrated on memorising study materials, doing well in assessments designed to tap deep understanding. This suggests that rote learning needs to be understood within the wider learning context. If the intention of the learner is to understand, then understanding may come through memorisation. Rote learning in this case becomes part of a

deep approach. Tang (1993) observed such an approach in her Hong Kong students, which she described as 'deep memorising'.

Students who adopt a surface approach may well be limited by the strategies available for them to use. Students who adopt a deeper approach have been found to be more successful in exams (Biggs & Telfer, 1987) and have more versatility in the strategies available to them to achieve their goals.

Biggs (1991), from a more quantitative perspective, developed the Study Process Questionnaire (SPQ) to measure qualitative differences in learning approaches. From this questionnaire, Biggs (1979) and Ramsden (1979) added to the above descriptions of students' approaches to learning by including an achieving approach to studying. This approach is derived from the intention to obtain the best possible mark and involves organising study with assessment demands in mind. It can be linked to either surface or deep learning depending on the context, the task and the individual's understanding of what is required. The achieving approach is re-enforced when the learner achieves the grade that they set out to achieve. Many courses in higher education with high student contact hours, essay and exam pressures are likely to inhibit a deep approach, but students who understand a deep approach will be able to recognise differences in teaching styles and learning tasks and adopt relevant strategies.

There has been a suggestion by Ramsden (1992) that the learning approach students choose may well reflect their conception of teaching and learning. He suggests that many students may be prevented from approaching learning in a deep way if they have limited understanding of what a deep approach to learning consists of. If their conception of learning is about students reproducing knowledge and lecturers doing all the work and making the decisions, then they will have trouble understanding what a

deep approach to learning is. The same goes for lecturers. If they hold the view that students are only capable of regurgitating material, this can lead to a self-fulfilling prophecy. One option open to lecturers who support qualitative conceptions of teaching and learning is to make it overt to students that they have a range of learning styles, learning approaches and philosophies available to them. There is no universal prescription and changing beliefs about teaching and learning is not easy. It may not be an option that people want.

## **2.4 DEVELOPING COOPERATIVE LEARNING SKILLS**

In theory and in practice, cooperative and collaborative learning in higher education differs from traditional classroom teaching. The discipline of using cooperative learning groups involves positive interdependence and social interaction. Positive interdependence is based on every group member taking part and sharing responsibilities for their own work and also for the success of the group work. Social interaction supports these dynamics and assists in building trust, motivation and an awareness of others' interests and needs.

### **Definitions of cooperative and collaborative learning**

There is still much we don't know about cooperative learning within higher education. Few research papers even attempt to define the difference between the terms cooperative and collaborative learning. Most use one term or the other. There is rarely any reference to how a work outcome is achieved or to what actually happens beyond students forming small groups.

Authors such as Johnson and Johnson (1987), who are prolific writers on group theory and group skills, use the term 'learning groups' or 'discussion groups' when they refer to learning in an educational setting. Collaborative learning, they say, is seen as an essential part of teamwork alongside

positive interdependence, individual accountability, face to face interaction and group processing.

Dillenbourg and Schneider (cited in Curtis and Lawson, 1999) make a clear distinction between the two, defining the terms by the process that the group uses to achieve the outcome. They indicate that cooperative learning is a protocol in which the task is split in advance into sub-tasks that the partners may or may not solve independently. Collaborative learning situations are, in contrast, built on a strategy of interdependence in which two or more subjects build a joint solution synchronously and interactively to a shared problem.

Flannery (1994) takes this definition of cooperative and collaborative learning a step further by including the relationship between the lecturer's beliefs, intentions and strategies, and their personal conceptions of teaching and learning. He makes a distinction between lecturers who use collaborative learning to challenge the basis of knowledge and authority, and cooperative learning that continues to support teacher-focused learning to maintain the status quo.

He describes cooperative learning as using student learning groups to support an instructional system that has been firmly set in place by others. Teachers, he says, by way of example, introduce the material through a lecture. The students are then put into groups and given worksheets and problem solving exercises and they quiz each other to learn the concepts on the assigned material. This, Flannery says, leaves the lecturer as the central character and the students still in the role of receiving information for the purpose of reproducing it later as needed. Dougherty (1997), in his research report, provides an example of this type of learning experience. He used electronic mail and student-to-student cooperative learning groups to increase students' retention of course material in an undergraduate

organic chemistry course. He used performance contracts, which included taking part in cooperative quizzes and cooperative homework, to increase both learning and retention of large numbers of facts.

Flannery, in contrast, describes a collaborative approach. Using their control over disciplinary and pedagogical knowledge, lecturers assist students in creating their own knowledge through interactions with one another, the lecturer and the course material. While framed differently from the definitions above, the expert teacher and learner divides are still apparent in this definition. Student learning still depends on the decisions made by the lecturer, on how widely she chooses to engage the students in defining and interacting with their course work.

Bruffee (1993) and Mayberry (1998) describe collaborative learning along similar lines to Flannery. They both focus on 'collaborative learning', emphasising the social construction of knowledge and the development of students' ability to think critically, solve problems and develop personal transformation skills. Lecturers, they say, have a responsibility to engage students in critically examining social structures and to support, rather than circumvent, any meaningful conversation about the collective aspects of gender, race or the class nature of knowledge production.

It would appear that the above definitions form a continuum based on lecturers' understanding and beliefs about teaching and learning and their role in it. This is supported by Trigwell's (1994) study into teaching beliefs. He found evidence of links between teaching beliefs and the teaching strategies that lecturers adopt. The same links are reported to affect the quality of students' work. Those lecturers who believed in conceptual change and who valued student-to-student and student-to-teacher interaction adopted strategies that placed learners to the forefront.

The difference between the two is the value placed on the construction of knowledge over the instruction of knowledge. As already stated, binary positions are not always helpful but I think this one is helpful in outlining the very different values and belief systems that underpin these conceptions of teaching and learning. Values and attitudes are important in cooperative and collaborative learning. I think the extent to which we value students and their knowledge is reflected in how we interact with them in our teaching.

As already stated in the introductory chapter, I intend to use both cooperative and collaborative learning. In general I will use the term cooperative learning except where authors have stated a clear preference for a term within their own work.

## **2.5 FACTORS INFLUENCING COOPERATIVE LEARNING**

Students learn with varying degrees of structure. According to Flannery (1994) students can learn through a myriad of interpersonal stimulation and challenges. The decisions made by the lecturer, he says, are crucial in determining the ideas, skills and information that are to be presented and in determining the classroom climate in which this presentation is to take place. When using cooperative learning strategies, students work in small groups where they can individually or collectively pose questions, define problems, gather data, interpret findings and share their conclusions with one another to achieve their academic goals (Mayberry, 1998).

Learning groups function as the individuals within them interact to carry out their work. To be successful in reaching their academic goals, students need to have cognitive abilities to carry out the tasks, and interpersonal skills and attitudes to support cooperative and collaborative learning. Lecturers often underestimate this point when developing cooperative learning programmes.

Ramsden (1992) and Kennett et al (1996) both suggest that many students have had limited experience of working in academic cooperative learning groups at university. They can, therefore, lack the necessary abilities, values and attitudes to support meaningful discussion and to take on new information. University students are not alone in this. Despite spending most of our everyday lives in groups, some adults lack basic social skills, such as joining in and sharing ideas, or giving and receiving feedback appropriately. These skills are important in any group work. Durkin (1995) reports on some studies where joint activities have been found to occasionally lead to poorer outcomes than individual work. He relates the findings in these studies to interpersonal factors. Where students had a history of relationships and likes and dislikes sustained by mutual expectations, this hindered the development of social skills for effective cooperative learning.

### **Teaching cooperative learning groups**

Many lecturers in higher education have also had limited exposure to teaching in cooperative groups. There are few guidelines for those lecturers who choose to use cooperative learning strategies. Cooperative learning activities vary substantially in goals, methods and desired outcomes. Despite this, there are many reports of lecturers who, for different reasons, have included cooperative learning strategies in their course work.

The overwhelming reasons given for this are an attempt to enhance their students' learning and for it to be a positive experience for both lecturers and students. Some reported that it was their preferred teaching style, none mentioned that it might have been their students' preferred learning style.

Prescott and Wolff (1990, p.41) restructured their courses to encourage elementary and secondary teachers to develop cooperative and technical skills over a period of time. Their research showed that students in the restructured course motivated one another to produce a more thoughtful product. A more thoughtful product, in this instance, is undefined, but my best assumption is that it is a piece of work for assessment. The students did this by offering encouragement, alternate solutions, and constructive criticism. The student feedback confirmed the benefits of cooperative learning, stating it had significantly affected their ability to think at a higher level.

The report identified ten categories of positive comments and only three categories of negative comments in response to the Instructional Strategies Evaluation questionnaire.

The following positive comments are ranked by the frequency of responses in that category:

- |   |    |
|---|----|
| 1. Peer contact increased sense of belonging.             | 15 |
| 2. Learning was more enjoyable and less stressful.        | 15 |
| 3. Active involvement increased learning.                 | 14 |
| 4. Effective method for university level.                 | 9  |
| 5. Group work caused thinking at higher levels.           | 8  |
| 6. Interest level was increased.                          | 8  |
| 7. Good to see method modeled in the classroom.           | 6  |
| 8. Opportunity to assess own learning during teamwork.    | 5  |
| 9. Opportunity to be exposed to alternate points of view. | 4  |
| 10. More contact with the instructor.                     | 2  |

The categories and frequencies of negative comments were as follows:

1. Member participation and interaction can be a problem. 8
2. There was some distracting off-task behaviour. 6
3. Learning was not as efficient. 5

Prescott and Wolff were encouraged by their data and felt that cooperative learning was not only a viable instructional strategy at college level but a particularly effective one in teaching teacher education courses. More discussion on how - or if - different participants' ethnicity, age or gender differed in relation to these outcomes would have further increased my understanding of the outcomes for different groupings of people.

Rhienhart (1989, p.39), at Texas Tech University, included collaborative learning strategies into his engineering course so students could develop key life skills and social responsibility, alongside their disciplinary knowledge, in areas such as planning, communicating, interaction management, accommodating and listening for successful project management.

*"If education means developing life skills in preparation for social responsibility then it is our responsibility as professors to move beyond a technical/academic focus to incorporate life relevant experiences into the classroom."*

Crebbin, Naidu, Doherty, Francis, and Hanrahan, all lecturers in Australian universities, reported in 'Reflecting on University Teaching, Academic Stories' (1997) using teacher initiated collaborative learning in their classes to increase their students' understanding of learning and co-operation. They based this on a number of concepts: most jobs entail working with other people whom you rarely get to choose; working collaboratively supports lifelong learning; it increases participation in the classes; and it adds variety to teaching strategies.

These lecturers and others (Bosworth & Hamilton 1994; Kennett, Stedwill, Berrill, & Young 1996; Johnson and Johnson 1987; and Jaques, 1998) believe that when learning is enhanced in this way, cooperative learning can provide opportunities for students to:

- communicate with one another about ideas;
- respond to one another's work;
- make the links between theory and practice;
- devise memory joggers;
- reflect on their learning and make sense of it;
- challenge and build on one another's conceptualisations and frameworks;
- take more risks;
- summon the motivation to stay on task;
- take on added responsibility;
- express their feelings about what they are learning;
- practise and learn interpersonal communication and team work skills; and
- hear, respect and evaluate differing points of view.

### **Learning in groups**

Learning is the primary purpose of cooperative learning groups in higher education. Clearly, an important component of cooperation is the discussion that occurs while working together. The whole point in having the discussion is to promote the learning of group members so they are able to reach their shared goals. Shared goals can be agreed upon through negotiation, through similar interests, or be set by the lecturer. Most shared goals are related to course outcomes. The learning is mediated by an exchange of ideas, explorations, clarifications, shared interpretations, insights into different opinions and many other forms of communication that create an expression of interest. One central skill that underlies these

exchanges is for participants in the groups to have the capacity to communicate effectively with one another, with the lecturer, and with the curriculum material.

As described earlier, people make sense of one another through multiple communication methods. It is by using all or some of these methods that people achieve an understanding of one another and are able to influence, or be influenced by, others (Jaques 1988). Honest communication demands a degree of willingness, honesty, trust and openness among participants and, without these attributes, interaction and effective cooperation is likely to be impeded. I would argue that to be an effective group member a participant needs to understand what group effectiveness is and how individual behaviour can contribute to this effectiveness.

Johnson and Johnson (1987) have developed a model of effective and ineffective group behaviour to provide a direction for the building of productive groups. An effective group has the qualities and kind of interaction among its members that integrates the following three core activities:

1. accomplishing its goals;
2. maintaining itself internally; and
3. developing and changing its ways so as to improve its effectiveness.

These process steps need to be preceded by the conscious development of an effective group.

## Comparison of Effective and Ineffective Groups

(Johnson & Johnson 1987 p.11).

Effective Groups	Ineffective Groups
Goals are clarified and changed so that the best possible matches between individual and group goals may be achieved.	Members accept imposed goals that are competitively structured.
Communication is two way – ideas and feelings are expressed.	Communication is one way and only ideas are expressed.
Participation and leadership are distributed among group members.	Leadership is delegated and based upon authority.
Ability and information determine influence and power.	Position determines influence and power.
Decision-making procedures are matched with the situation; consensus is used for important decision-making.	The highest authority always makes decisions.
Controversy and conflict are seen as a positive key to members' involvement.	Controversy and conflict are ignored, denied, avoided or suppressed.
Interpersonal group and inter-group behaviours are stressed; cohesion is advanced through high levels of inclusion.	The functions performed by members are emphasised; cohesion is ignored and members are controlled by force.
Problem-solving adequacy is high.	Problem-solving adequacy is low.
Members evaluate the effectiveness of the group and decide how to improve its functioning.	The highest authority evaluates the group's effectiveness.
Interpersonal effectiveness, self-actualisation and innovation are encouraged.	Order, stability and structure are encouraged.

Effective group behaviour does not just happen. Crebbin and Francis (1997) and Bosworth and Hamilton (1994) believe that cooperative groups need to go through a process of evolving and working out how to work together. Francis, for instance, spends three weeks developing the concept of critical friendships for cooperative learning, friendships based on the ability to give and receive feedback that is constructive, challenging and supportive. These behaviours allow for scaffolding of thinking for the students and help create a positive social interdependence rather than an individualist and competitive work environment. When people work in relationship with one another they achieve more individually and gain mutual support and benefits from belonging to the group (Johnson & Johnson, 1987). They find that effective learning groups happen when:

- learning is accepted as the major reason for the existence of the group;
- there is active participation by all;
- there is an accepting, non-threatening group climate where ideas are put forward and challenges made;
- learning is seen as a cooperative, rather than a competitive process;
- there is an equal distribution of leadership functions;
- being in the group is an enjoyable experience;
- the course content is covered;
- evaluation is accepted as an integral part of the teaching and learning process; and
- participants attend regularly.

## **2.6 THE NATURE OF GROUPS**

A group is not just a collection of individuals. A group is an entity in itself (Hunter, Bailey & Taylor, 1997). Some social scientists put groups on a continuum ranging from a position that states groups are the basis for everything that is good in our lives through to seeing them as a destructive

influence (Johnson and Johnson, 1987). A continuum helps us understand the many puzzling contradictions that being part of a group can entail. For instance, sharing our ideas with others can, under certain conditions, create anxiety and apprehension while under different conditions it can inspire us. Allport (cited in Jaques, 1998, p.14) argues that, while groups may be made up of individuals, many groups actually respond consciously or unconsciously to such a phenomenon as if the group does exist as a separate reality. This separate reality is often supported by unspoken group norms such as the sharing of public and private thoughts and feelings of individuals, the projection of emotional feelings on to the group, the interpersonal behaviour among group members and the assumptions made about authority and responsibility within the group. There is much to learn, he says, from viewing groups from individual and group perspectives. Based on the information above, I suggest that groups need to be viewed from multiple perspectives.

Groups are never static; they constantly move on in time and space. A change in procedure, in moods, in tasks, in numbers and even in seating arrangements will affect participation, cohesion and so on. Hunter, Bailey and Taylor (1997, p.33) report a group as being:

*"a living system with its own physical form, its own personality, its own potential and its own limitation... you are joined (bonded) emotionally, intuitively, intellectually, and spiritually."*

Bonding on these four levels allows the possibility of integrating an holistic approach to learning, an approach that supports many people's collective way of being in the world. It is the bonding that often makes small group learning very powerful and which can evoke strong positive and negative thoughts and feelings.

People generally like to be a part of groups but they also like being different and distinct from others. At times being in a group is very confronting and for most of us it can bring up fears of being different and losing our identity and autonomy. Bion (1985) and later Jaques (1998) refer to the Tavistock Model, which suggests that groups work at two levels, 'work group' and 'basic assumption group'. The work group is seen to perform the specific and overt group task while the basic assumption group is seen to use powerful emotional drives to frequently obstruct or divert the tasks. The model is based on the Freudian school that sees the basic processes in a group as "outward manifestations of the inner lives of its members" (cited in Jaques, 1998, p.15). The primary task of the basic assumption group is survival, as well as carrying out the work tasks.

Johnson and Johnson (1987) have identified seven stages of development that learning groups typically move through. Before developing their seven stages, they and their colleagues first applied Tuckman's (Jaques, 1998) four stages of group development; forming, storming, norming and performing.

The forming stage of group development is when members spend time identifying one another, setting rules and procedures for the group. The storming stage is when conflicts begin to arise as members resist the influence of the group. During the norming stage the group pulls together to achieve the group's goals and finally, during the performing stage, the group develops proficiency in achieving its goals.

From these four stages they identified the following seven stages of development as:

- defining and structuring procedures and becoming orientated;
- conforming to procedures and getting acquainted;

- recognising mutuality and building trust;
- rebelling and differentiating;
- committing to, and taking ownership of, the goals, procedures and other members;
- functioning maturely; and
- productively terminating.

Hunter, Bailey and Taylor (1997, pp.30-31) describe a similar cycle of group behaviours. Their cycle is based on six stages of human development, moving from the birth stage to the fulfilment and completion stage.

- Getting started - Birth stage: Forming the group and holding the first meeting.
- Getting comfortable - Early childhood stage: Group members get to know one another, make links and establish areas of similarities, establish group roles and begin to feel warmth and friendship towards group members.
- Getting to work – School-days stage: The group begins to get down to work by allocating tasks. Group members feel willing and keen to contribute and establish their presence. Some may experience irritation with the pace of the group.
- Getting to be 'right' – Teenage adjustment stage: A stage where differences emerge, challenges are made, conflicts arise and are worked through or left to fester, and people honour or don't honour their commitments. Personalities have now become more defined, alliances have been formed and 'positions' have been taken. Some group members may feel frustrated, angry, overworked, and unappreciated. Other group members may feel powerful, that they are winning and getting their point across, others may wish that they could leave.

- Getting to synergy - Maturity stage: Group members commit to the group, allow room for their own and other people's baggage, take responsibility when something happens in group, acknowledge success and accept differences. Final outcomes are agreed upon and accepted.
- Ending – Fulfilment and Completion stage: The group's purpose is fulfilled and tasks are completed. Members may feel satisfied, nostalgic, and emotional, others may feel dissatisfied or relieved.

Not all groups move through these stages in this sequence. Many group members settle for 'this is as good as it gets' and continue to struggle on with the group to complete the work. Hunter, Bailey and Taylor call this the withdrawal stage, where the fun has gone out of the work, where group members stop challenging one another and just do what they have to do to complete the group work.

Having an understanding that groups tend to have a life cycle, and that a group can move through different stages, may be helpful to lecturers when developing and planning cooperative small group work.

### **Tensions in collaborative learning**

Cooperation is the key word in cooperative learning yet, despite good intentions it does not, and perhaps cannot, just happen. The relationships between group members and the cooperation needed to get the work done are complex. This complexity forms a web of interactions that create tensions within any cooperative learning group. The tensions created are normally absent, or go unnoticed, in a traditional class as cooperative learning requires students to participate actively and perform social and cognitive tasks that are often new and difficult. Once again students who have had little previous experience of cooperative learning in an academic environment can find the changing roles and rules unsettling.

Hunter, Bailey and Taylor (1997) call this the shadow side of cooperative learning. The shadow side reflects the interpersonal behaviours between members of the group, their teacher and their expectations. They state that this may result in behaviours such as sabotage, (for example: avoiding the task by withdrawing or dwelling in the past) scape-goating, (blaming others in order to avoid a difficult problem), and 'groupthink' where 'our group is right and your group is wrong'. They claim that the danger of the latter arises:

*"not from being different and special but from believing that difference is also better." (p.83)*

Acceptance and approval are important for any group member. We like to be accepted and valued, especially by others who hold similar goals and values as our own. However, group harmony and cohesion may prevent the open expression of different ideas. It may also prevent conflict from being openly expressed and resolved and, paradoxically, this may prevent new ideas from being created. We often give our own power away when we do not say what we want, give vague feedback or do not challenge unhelpful behaviours.

Miller, Trimbur & Wilkes (1994) in their studies of group dynamics have found that group harmony often correlates inversely with group performance but directly with satisfaction. Disruptive behaviour in groups is not uncommon in my work situation, but if one group is more disruptive than another it is common for other group members to state 'our group is better than your group'. 'Better' in this instance is no reflection on the learning that is taking place. What is valued is outward harmony. Outward harmony however can come at a cost, and does not stop group participants from feeling anxious, sullen, and negative, or from decreasing their participation.

Tensions in working collaboratively are not limited to students. Teachers who are familiar with collaborative work can still find elements of small group work distressing. The following two research groups had this to say about their experiences.

Reimer, Sorofman, Peters and Waterman (1994, p.318) found working collaboratively to be one of the most difficult scientific paths that one can walk.

*“On the one side, uniquely innovated ideas are synthesized and fresh insights into the world emerge. On the other side, conflict and frustration result from the clash of strong wills, competing ideologies and imperfect theoretical frameworks for the problems at hand.”*

In their introduction, the authors of ‘Women’s Ways of Knowing’, Blenky et al (1997, Preface to the first edition, npn) share their experiences.

*“During our working together, the four of us developed among ourselves an intimacy and collaboration which we have come to prize...In collaborating on this book we searched for a single voice – a way of submerging our individual perspectives for the sake of the collective ‘we’. Not that we denied our individual convictions or squelched our objections to one another’s point of view – we argued, tried to persuade, even cried at times when we reached an impasse of understanding – but we learned to listen to each other, to build on each others insights, and eventually to arrive at a way of communicating as a collective that we believe.”*

This suggests that when there is a commitment to the common goal and willingness for ongoing communication to resolve conflicts, groups are able to capitalise upon the controversies and enrich their productivity.

## **2.7 DEVELOPING STUDENT SKILLS FOR COLLABORATIVE WORK**

A number of factors determine whether a group will be successful in cooperative learning. For instance, students can be reluctant to take part in learning groups until they know and understand the conventions and the

expectations of themselves and the course work. They need careful briefing and definitions of the tasks involved and any assessment procedures. Many people may not, of course, recognise the skills that are required for cooperative learning in an academic setting. Where students' sole experience has been of lecturers transmitting knowledge, where students do their own work, and where questions often have only one right answer, then they are required to make major shifts in their beliefs about classroom learning behaviour.

MacGregor (1992) identifies six shifts people have to make in their thinking in order to work in a cooperative learning environment:

1. from listener, observer, note taker, to active problem solver, contributor, and discussant;
2. from low or moderate expectation of preparation for class to high expectations;
3. from a private presence in the classroom with few or no risks to a public one with many risks;
4. from attendance dictated by personal choice to attendance dictated by community expectation;
5. from competition with peers to collaboratively working with them; and
6. from responsibilities and self-definition associated with learning independently to responsibilities and self-direction associated with learning interdependently.

These shifts are included in a sourcebook that aims to provide lecturers with a framework on how to incorporate effective collaborative learning processes in their classrooms. The shifts become evidenced as learners engage in the collaborative learning process and either accommodate the shifts or use behaviours that demonstrate a resistance to them. I suggest

the shifts are a rich guide for planning and organising work in this interactive environment.

Bosworth (1994) is a strong believer in the potential of collaborative learning. She has identified five collaborative skills, some as prerequisites for quality collaborative work, others as being developed and nurtured through practice while working in a collaborative environment.

### Taxonomy of collaborative skills

(Table 3.1 p.27 Developing collaborative skills in college students)

Skills Category	Collaborative Skills
Interpersonal skills	Congenial, friendly Make clear statements Listening skills Positive communication Eye contact
Group building/management	Organise work Keep group on task Run a meeting Participate in group self analysis Show empathy
Inquiry skills	Clarification Critique Probe assumptions and evidence Probe implication and consequences Elicit viewpoints and perspectives
Conflict	Prevention Resolution Mediation
Presentation	Summarise, synthesize Speaking in front of a group Creating presentation materials Report writing

Like any skill work, the concepts need to be broken down into manageable bites. Many need to be modeled and/or demonstrated for clarity and

understanding. Misunderstandings need to be identified and clarification can come through practice, with opportunities for feedback and self-reflection. Mostly, students need to feel that they belong in the group, that they have something of value to offer and need someone to hear and acknowledge their contribution or challenge it in a useful and productive way. Sadly, alongside all the possible group tensions that we talked about above, this is generally not what university timetables, group sizes and assessment rules allow for.

Students have a number of outside pressures, among them the need to survive economically and, for many, to continue their development into adulthood. Many students are creative in the way they use their time, energies and abilities and many are also constrained by the same difficulties. Lecturers need to be aware of students' anxieties, life pressures, and their creativity. They need the ability to observe the range of thoughts and feelings that they bring, along with their students, to learning groups. I think lecturers can and must take on the initial responsibility to create the learning environment, but it is everybody's responsibility to maintain it in a way that supports all group members' needs.

### **Role of the lecturer in cooperative learning groups**

Lecturers can provide a process that helps the group to develop the necessary skills to meaningfully discuss the content in the most productive way possible so their students can achieve their goals. Depending on the course numbers, this takes time, patience and a constant belief in students' abilities - that they can learn, can be challenged and can develop the necessary skills and knowledge. Dougherty, (1997, p.726) reported that the time required to implement cooperative intervention strategies was substantial but also saw it as worthwhile both personally for the students and for the institution.

*"The amount of time for one lecture section of roughly 200 students exceeded 20 hours per week. The results in terms of students completing the course with a demonstrated ability in undergraduate organic chemistry seems cost-effective when compared to a more conventional approach that takes approximately half the time for execution."*

Lecturers also have the administrative role of collecting and passing on organisational information that mediates the course requirements so its function is clearly understood. When course expectations are open and acknowledged student anxieties will lessen around learning process and assessment procedures.

Another part of the lecturer's role is to help establish the norms or standards of the group by taking care of the task and maintenance roles within the group. The group task is the declared aims and objectives of the course. Part of this may mean creating tasks that develop the group's skills and ability to analyse statements, to question underlying assumptions and values, and to compare and synthesise understandings. It also involves having a conceptual framework that will assist in recognising when students are in difficulties and checking for any misunderstandings of the task at hand, and teaching skills to redress such things. Group maintenance aims are based on the process of determining how the group arranges its time, energy and communications. It involves lecturers using their discipline expertise, their feelings, and their intuition in a way that assists students to remain open to learning.

### **Summary**

Lecturers and students define and use cooperative learning in a number of different ways, ranging from shared group work within the classroom to gathering data and clarify understandings through to collaborating together to complete a piece of work. All cooperative learning groups require students to have positive interdependence and interpersonal skills to

support meaningful discussion to achieve their academic aims. They also demand that lecturers have expertise in conceptual frameworks, in observation skills, creativity, intuition and hunches to spark students' learning.

Learning groups are alive, full of hope, confusion and fun. Individual beliefs and self-concepts about learning affect students' motivation and the learning strategies they adopt to complete their academic tasks.

## CHAPTER THREE: METHODOLOGY

The aim of this thesis is:

- To explore students' perceptions of their learning and the strategies they used when participating in a cooperative and collaborative learning environment; and
- From this analysis contribute to the mainstream and current understanding of cooperative and collaborative learning in higher education.

### 3.1 RESEARCH STRATEGY

In this research I used a qualitative research method which is primarily concerned with lived concepts of everyday life, recognising that human situations are unique and filled with multiple meanings and interpretations (Brunner, 1996). Henwood & Pidgeon (1992) support this approach. They emphasise the importance of viewing the meaning of participants' experiences and behaviours in the context in which it took place and through their eyes.

From the outset, this research aimed to establish a cooperative partnership between the researcher and the participants. According to Cram (1997) a research partnership places the participants as experts on themselves and co-constructors of knowledge, where their story is heard and told as it unfolds over a period of time. In this thesis, participants' perceptions provided the information for analysis, and also formed the main research tool.

Other considerations that influenced the research design were the benefits and constraints of the learning environment and that the researcher and

participants lived in different countries. Questionnaire surveys, participant face-to-face interviews and focus groups were all considered, but were found not to be feasible.

Pre and post self-administered questionnaires were considered and though flexible in terms of time and content were dismissed for the following reasons. They required the researcher to apply the same definitions uniformly to all participants. Questionnaires seldom deal with the context within the participants' broader social lives, or with interactions that take place in an ongoing way. Babbie (1995) reports a low return rate for this type of questionnaire. Finally, questionnaires depend on timing and often only capture brief comments regarding participants' past experiences of cooperative learning or their experiences at that moment in time.

Face-to-face participant interviews and focus groups were also considered. They too were dismissed because they would not fully address the need to hear participants' stories as they unfolded, because of the numbers involved, the physical time available to the participants and the researcher and the financial resources that this would require. However, one-off, unstructured, individual interviews with course lecturers and administration staff were conducted for the purpose of collecting background course information.

I decided to combine journal writing and computer technology as a data collection method. This enabled me to overcome all of the above constraints and to hear the participants' stories as they unfolded over a period of time.

Journals are a form of storytelling and have often been used by researchers and their research subjects as a way of keeping an ongoing record of the subject under study. Students have also used them as a

means of self-reflection (November, 1996) and self-evaluation (MacGregor, 1993) or as part of their course work. Using journals as a form of data collection is similar to Denzin's (1989) '*personal experience stories*'. This type of storytelling narrative, he suggests, relates the self to a significant set of experiences that have already occurred. Self-stories deal with the past, present and the future. Using journals as a form of data collection, as opposed to the methods outlined above, allows the participant to tell their own story, in their own words and in their own time.

This method was appropriate because all the participants had access to an individual electronic mail address. This provided a medium for the researcher and the participants to dialogue with each other on a regular basis. There are several advantages in using such a system. The participants were able to control how much and how often they shared their experiences and because electronic mail does not need immediate action it therefore provides space for considered opinions.

### **3.2 DATA COLLECTION**

A number of methods were used to collect data over a period of four months from March to June in 1999. Using different methods in a single project recognises that research is like amoeba, going everywhere. Data was collected in the following ways:

- Participants were asked to journal over the electronic mail system to create a dialogue between themselves, their learning experiences and the researcher; and
- Unstructured individual interviews were carried out with lecturers, Deans and the Head of Department to collect background course information.

### **Journals and storytelling**

Storytelling is a way of representing truth, of representing perceptions, thoughts, feelings and actions. Different stories give different versions and approaches to truth – for there is always a diversity of truths to be heard (hooks, 1997). Storytelling that captures the lived experience of participants can help identify connections and different definitions of the problem as well as show how participants, in this study, interpreted the various aspects of the course work.

Journals are a form of storytelling. They allow an accumulation of hundreds of moments and experiences, capturing and recording the participant's perceptions about their environment, their thinking and their emotions in their natural setting (Rainer, 1978). Journals can be, and are, used for a number of purposes, such as self-guidance, reflections, to expand creativity or as an opportunity to seek different options or creative solutions to ongoing problems. Progoff (1975) who teaches intensive journal process as a method for personal growth suggests that journals can play an active role in constructing life without imposing external categories or interpretations on the individual's experience.

Storytelling is a mode of thought that has its own time, its own delights, emotions and history. Stories, while representing a moment in time, can be shared to bring memories alive, tell the present or predict the future. Brunner (1996) calls it 'humanly relevant time' where the significance of the story is given by the meanings assigned to events. Clocks, he says, do not bind time. Stories may preserve meaning in a sequence or they may involve flashbacks and flash-forwards.

### **Establishing the journalling process**

The lecturer undertook the administrative procedures for establishing journals, such as consent forms and time-tabling of workshops and

computer laboratory sessions at the first workshops. As a condition of being part of the Multi-Media or Research Writing group, the participants were required to sign a consent form (Appendix 1) for attendance at workshops, and to take part in the cooperative, research and evaluation aspect of the course.

I attended the second workshop session in the second week for the Multi-Media and Research Writing groups. Students from Victoria University of Technology (VUT) also attended this Multi-Media workshop - their first combined meeting. At these meetings I explained who I was, the purpose of the research, and the process for collecting data.

I asked the students to journal on a weekly basis about their learning experiences while working collaboratively, explaining that I was interested in any of their thoughts, feelings and reflections as they interacted with each other over their course work. I provided a handout on journal writing (Appendix 2), which included some suggestions for starting the initial journal. The handout also included a checklist of possible follow up topics. I emphasised that using the handout was a choice, that it was there as a guideline for those who wished to use it.

Following this, I introduced small group work for the purpose of getting the participants to consider a range of behaviours and interactions they might face when working collaboratively. The following issues surfaced:

- learning other people's opinions;
- getting to meet new people;
- working together;
- learning to compromise;
- conflicting viewpoints;
- extra work-load;

- getting useful feedback;
- diplomacy and honesty;
- conflicts over how to do things; and
- clash of opinions, disciplines and gender issues.

Following the small group work I facilitated a brief class discussion on ways of working with group process issues that emerged.

### **Responding to the participants' journals**

In recognition of the time and energy that participants were giving as part of their course work and this research I responded to every journal entry I received. The journals covered students' public and private lives, from opinions of other group members, to their hopes for the future, to their plans for the Easter break.

The participants' first journal entries tended to be written in a formal style. But once the relationship between the researcher and the participants was established, the style became less formal and at times 'chatty'. I found one participant's journal entry distressing. As I have previous experience working on a crisis phone line, I initially emailed back a number of suggestions for possible support, checked out safety issues and whether the participant had personal networks in place. The participant was really adamant about not contacting anyone related to the course. They were concerned that if reported, it would affect how the lecturer and fellow students perceived them. I discussed the situation with my thesis supervisor, and kept in regular contact with the participant until they assured me that the crisis had passed and that they were getting the help they needed.

However, in general, my responses to the journals were directly related to what the participants had written. I always acknowledged their journal

entry, sometimes I asked for further clarification on what they had written or I would pose further questions on a particular point. There were times when I asked for information on their thoughts and feelings about their interactions if I received a journal that just stated what they had done over the past week. When participants asked directly for advice, if I was able, I offered a range of options or suggested where they might be able to access more information on the subject.

I also responded to comments about their private lives because the public and private division may be convenient for researchers but does not give a clear reflection of these students as people and how they lived their lives. Some were friends and saw each other in and out of class, spending time at each other's places, and some talked of missing family that lived far away.

### **Unstructured interviews**

Collaborating with other institutions to produce course work that is also supported by an on-line Research Writing Facility is innovative. It requires a considerable amount of planning, resource permission and support. To further understand the background to the developmental issues that set the environmental context for this course I carried out individual, face to face, unstructured interviews with interested parties.

An unstructured interview is an interaction between an interviewer and a respondent in which there is a general plan of inquiry but not necessarily a specific set of questions (Babbie, 1995). Open-ended questions assist in soliciting the respondent's own answers. One of the strengths of this type of interviewing is its flexibility, i.e., hearing the answer to one question allows you to frame other questions by either requesting further information or by redirecting the person's attentions to an area more relevant to the inquiry. This type of inquiry is called a purposeful conversation.

### **The interview process**

A tape recorder was used to carry out eight individual unstructured, in-depth interviews, with the two senior course lecturers; two on-line laboratory workers; one previous year Introduction to Research Methods (IRM) student; one Head of Department; one Dean and another senior lecturer. Five were involved with the course work plus administrative tasks, others were involved in funding and/or policy issues in flexible learning. Five came from the University of Melbourne, one from VUT in Melbourne and two from Monash University.<sup>3</sup>

People chose where and when the interviews were to take place, in their office, at their institution or at another place. The course lecturer had provided the names of people who were involved in the course and five interviews were arranged over the email system before my arriving in Australia. Two other brief interviews on funding were arranged on arrival. The interviews lasted from 30 minutes to one hour.

### **The Interviews**

The interviews began by outlining the research to the interviewee and by asking for their comments on their area of interest for example, course work, funding, and flexible learning policies. The interview questions were designed to gain an understanding on the structural procedures, administrative frameworks, curriculum development, funding policies, and to ascertain how supportive the environment for cooperative learning was. The course was a new venture, and as outlined previously, had developed over several years. In using this approach I was able to obtain the interviewee's perspective. All initial interviews were transcribed within two

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<sup>3</sup> The University of Melbourne and Monash University had agreed to work together in developing teaching programmes for students, to avoid course duplication and to use staff resources effectively. The IRM course was taught simultaneously at Melbourne and Monash University in the Police and Justice Studies Department. This course used the Research Writing Facility. Funding in universities is competitive and the Dean and the lecturer from Monash University were included in the interviews because they were part of a flexible learning committee that assisted in setting policy for flexible learning and in making developmental funding decisions.

weeks of being recorded and the data provided a history to the development of the course, an outline of the course structure, and placed the course within the wider context of the universities within Melbourne.

The unstructured interviews were useful in providing background course information but did not contribute to the substance of this thesis.

### **3.3 THE COURSE LECTURER**

The course lecturer and I are known to each other and have been involved in previous projects together. We have a shared interest in, and commitment to, Paulo Freire's educational philosophy and in reflective experiential learning.

We have had contact via phone and email throughout the course and some face to face contact, which included interviews and ongoing discussions. The lecturer made available course outlines, mid-course focus group evaluations, and, at times, general comments about what was happening in the workshops, and information about what stage the course was up to.

The lecturer's collaborative venture was a lone one within the Department of Criminology. His allocated developmental time was used in working with a small team of post-graduate students to develop, change and maintain the on-line Research Writing Facility. His main support in establishing the cross-disciplinary and institutional ventures came through his personal contacts with the other lecturers involved.

### **3.4 DATA ANALYSIS**

The aim of this study was to explore students' perceptions of their learning when required to work within a cooperative and collaborative learning environment.

To understand the participants' varying experiences, I drew on a phenomenographic approach to data analysis. Phenomenography sees learning as relational; learning takes place through an interaction between the student and the content of the learning material and the overall environment (Entwistle, 1997).

According to Bruce (1998), phenomenography, a way of experiencing or perceiving the world, has come to be interpreted as an internal relation between people and some aspect of the world. As in social constructivism, the word internal is used to show that knowledge is constructed internally but within a process that is driven by the outside world. The internal relationships have both referential and structural aspects. The referential aspect represents the meaning attributed to the way of experiencing the world whereas the structural aspect shows how the conception was organised to give rise to that meaning. Entwistle (1997) suggests that making meaning resides within the interconnections of remembered instances which can result in a different structure of awareness. This suggests that the individual's perception and approaches to learning do not exist independently of the world around them.

In drawing on the phenomenographic approach the data analysis considers participants' prior experiences, current perceptions, and approaches to learning as an integral part of their 'making meaning'. Making meaning does not necessarily mean a causal process over a period of time but rather an individual awareness of the teaching and learning acts in which they are engaged at that moment in time.

In some situations, one or more of the above aspects may be brought to the foreground while others move to the background. The individual's

perceptions and their awareness of the world bring about the expected variations in individual responses.

### **Analysing the participants' journal data**

In order to analyse the completed journal data, I began by reading through them a number of times until I had a familiarity with them individually and collectively. On the basis of this, significant statements, key words, recurring ideas and patterns that described relevant areas of concern were identified. I made copies of the journal data. On one set I made notes in the margin relating to the subjects covered. I developed a matrix of when and how many journals were received. I generated a map of themes and evaluated them within and between each text in an attempt to unravel and record multiple meaning structures. Denzin (1989) argues for using such a process because it assumes that multiple meanings will always be present in any situation. Themes that do develop can then be mapped out visually on paper. In this way the relationship within and between can visually be examined and if need be cut across the narrative linear sequencing (Grace, 1998). Each individual text is then read and re-read and re-evaluated and compared for similarities, connections and differences.

The journals contained information that was beyond the scope of this research so I took time to retype the collaborative process notes. I included direct comments from 36 participants out of the 44. Two participants did not send journals. The input of other participants was not included in the direct comments for the following reasons:

- Their journals included only what they had done about their individual work, for example: "I've spent a bit of time running around getting some research material for my report."
- Their journals reported only on the practical side of their observation exercise, for example: "I went to the court with (another group member) this morning."

- The journals identified who the participants were.

Now while these types of journal entries were relevant to their course work and how they went about collecting information, the content is not the focus of this research. I have briefly commented on the contextual nature of what was going on for students outside their academic work because their course work does not happen in a vacuum, everything is relational. There were also times when their more private lives had a direct relevance to their academic performance, for example, being unable to complete work because of sickness or personal circumstances.

Where the participants have used the lecturer's name I have changed it to "the lecturer" to make it clear who they are talking about. I also changed participants' actual names to protect confidentiality.

Where the participants used abbreviated words, I outlined them in full, and I also corrected obvious spelling mistakes. The journal process was not meant to be a burden, and for some people, there is an inherent implication that journalling is about recording your own voice, and grammar has no place in that. One participant might also have had this in mind when she wrote these comments:

*"I must be going, please ignore any spelling/punctuation/grammar mistakes that may have occurred during this letter, I have really just written down anything that has come to mind." (Linda)*

Unlike private journal writing, this thesis is a public document and the way people write is an identifying mark. I believe these minimal changes in no way alter any of the journal's content.

The final stage of analysis involved the elaboration of themes and reflections on their relationship with one another, and the incorporation of interpretations and understanding of theoretical issues from the literature.

The very act of interpreting the data had the effect of giving yet another layer of meaning to the participants' experiences. While the journals provided the framework for the organisation and evaluation of the data, the analytical process is inductive – the patterns that are generated emerge from the data, not an imposed reality.

As already outlined in the introductory chapter, I bring many of my own understandings about learning and group work to this project. As the researcher, a social educator, a facilitator of groups and a constant learner, I found myself, at times, analysing the data from these multiple perspectives. There were times when I found myself treating the data from the individual participants as if they were truths about groups as opposed to individual opinions or perceptions. This was a similar process used by the participants, who have at times treated their opinions as if they were facts.

I grappled with how this work should not only inform theory but also practice in the learning environment. So with hindsight and wisdom I went back to listening to the data, then looking to see how it fitted with the literature, and then how they both compare and contrast with my knowledge and my experience.

What the process has also highlighted for me are the limitations of this research, in that it asked participants to write only about their perceptions. There was no follow up information sought from individuals as to how or if their perceptions affected their behaviours or their thinking. I can only hope that these perceptions will be picked up by other researchers to help them ask more poignant questions with focus groups of learners about their thinking, feelings and behaviours. This process would develop an even deeper understanding of individual and group learning.

Despite the limitations of this research it is important to me to preserve the gifts of these journals and to allow the participants' voices to stand and speak for themselves rather than be lost within the research process. Examples of the raw journal data are presented in the next chapter, and excerpts from the data are used in the discussion chapter to highlight the common themes emerging from the journals. The data relating to an individual presents a slice of their life at a particular moment in time; the collective data represents the life cycle of the group-centred learning process.

## CHAPTER FOUR: JOURNAL DATA

In this chapter I present and comment on data relevant to this research gained solely from the information the participants provided in the journaling process. Although the participants were not required to provide demographic information to the researcher, they were encouraged to begin their journals with personal information.

### 4.1 DEMOGRAPHIC INFORMATION

There were 44 research participants. Of these, 10 were from the Multi-Media (MM) group, and 34 from the Research Writing (RW) group. All MM participants were women. In the RW group 28 were women. Ages ranged from 19 to 25 years. Most participants were 2<sup>nd</sup> and 3<sup>rd</sup> year students majoring in Criminology or Psychology.

The following Table 4.1 Individual Journal Entries and Table 4.2 Journal Entries Received provide a picture of the contributions made by participants over the duration of this study.

#### **Individual journal entries**

Table 4.1 below indicates:

- The number of journal entries submitted by individual participants ranged from 0-12.
- 28 of the 44 participants (64%) sent less than 5 journals resulting in the majority of the data being provided by less than half (36%) of the participants.
- The entries were received in a fairly even pattern throughout the semester.
- Similar numbers of entries were received during each of the three stages of the group process.

Table 4.1 Individual Journal Entries (raw data)

	Week 1	2	3	4	5	6	7	8	9	10	11	12	Total
1.	Michelle												0
2.	Judy		*							*		*	3
3.	Gay	*	*	*			*	*	*				6
4.	Paula	*		*			*						3
5.	Liz	*		*	*	**	***	**	*			*	12
6.	Kaye		*	*		*		*	**				6
7.	Julie		**	*							*	*	5
8.	Cathy	*	*			*							3
9.	Cherie	*	*	*		*	*	*	***	**	*		12
10.	Kath			*		*	*	*	*	*	**		8
11.	Eileen			*			*	*					3
12.	Travis		*			*	*		*	*	*		6
13.	Frank		*		*								2
14.	Bridge				*								1
15.	Rachel		*		*	*							3
16.	Lucy			*		**							3
17.	Ester												0
18.	Mars		*						*				2
19.	Kathleen		*										1
20.	Marg			*						*	*		3
21.	Mary			*			*	**	*	*		*	7
22.	Annie	*	*	*	*		*	*	*	*	*	**	11
23.	Colleen		*	*			*						3
24.	John			*				*		*			3
25.	Linda			**	*		*	*	***	*		*	10
26.	Vanessa								*	*	*	**	5
27.	Ben								*	**			3
28.	Kerry			*			*			*			3
29.	Emma						*						1
30.	Jamie					*	*			*	*	**	6
31.	Jude		*						*				2
32.	Marie		*	*	*			*				**	6
33.	Pania								*				1
34.	Maria		*				**	**	**	*	*	**	11
35.	Dale			***			*	**		*	*		8
36.	Sarah			*	*		**	*		*	**	*	9
37.	Barbara			*	*		*			*			4
38.	Clare	*		*				*					3
39.	Lynsie		*	*									2
40.	Lynn		*										1
41.	Chris		*	*	*			*		*			5
42.	Peter	*											1
43.	Sam			**		**		**			*		7
44.	Norma			*			*					*	3
45.	Total	8	20	29	10	13	23	22	21	20	14	17	197

### **Table 4.2 Journal entries received**

Table 4.2 provides the total number of journal entries received, and a breakdown of these by the two participating groups. It is noted that the proportion of journal entries analysed by gender (11% from males) reflects the gender proportions of the participants (14% male). Greater proportions of journal entries (40% of the total) were received from the MM participants who made up only 25% of the group. However, it is interesting to note that three of the MM participants provided half of that group's data.

**Table 4.2 Journal Entries Received**

Total number of journal entries	197
Number of journal entries received from the Multi-Media group	56
Number of journal entries received from the Research Writing group	141
Number of journal entries received from women	175
Number of journal entries received from men	22

## **4.2 THE JOURNAL DATA**

In this section I present four complete sets of journal entries from four participants. The purpose of this is to present a picture of the raw data as the researcher received it, in order to familiarise the reader with the range of material provided and the evolution in thinking and attitude relating to the group process that participants underwent. Of this selected group of

four, the first journal entries have been edited to protect the confidentiality of the participants.

I have included in the verbatim journal data an example of how I responded to a participant's specific request for information. This example also includes a follow up request from the researcher for further information from the participant. Apart from following up on 'issues of safety' as outlined in the previous chapter I generally responded to the participants' journals by thanking them for their journal and hoped to hear from them again soon.

Further extracts from others' journal entries are to be found in Appendix 3.

### **Sample Journal 1**

(from Jude - a Research Writing participant who sent 2 journal entries)

#### *Journal One: 17<sup>th</sup> March*

I thought I would get this introductory email out of the way before I go to dinner. So...here I go.

My name is Jude and I am a third year Bachelor of Arts student...Hopefully, later I will enter some governmental department.

I'm originally from a town north of Melbourne and I moved to Melbourne to study.

My courses are quite interesting, although I think this will be the last criminology subject I will do as I'm getting a little sick of the department.

I have had a lot of experience in working with different teams, in committees and groups of students. IRM (Research Writing) is very confusing for me at the moment as I can't seem to determine what is the main goal of the course. After

class today it became a little clearer and hopefully over the coming weeks it will become even more apparent.

I keep a regular journal for personal use. During this course I hope to be able to learn how to actually write a research paper, as I feel that even though I have studied for over two years – I still can't write very well despite having to do so many essays. I would really like to be able to write well which is the main reason I chose this course.

I will write to you later in the week for an official journal entry of this week's class. Until then thanks for taking the time to be involved in this course. I look forward to some interesting communication.

### *Final Journal: Journal Two: 3<sup>rd</sup> May*

Things haven't been going well in the IRM class. The lecturer has led the class into an absolute shambles and we're all quite disheartened and disappointed with the class. So I'll keep you posted a little more.

### **Sample Journal 2**

(from Ben a Research Writing participant who sent 6 journal entries in 3 dispatches)

#### *Journal One: 15<sup>th</sup> March*

My name is Ben. I am a student in IRM (writing skills class).

Today we practised our observation methods, in order to get prepared for the project that is to come. We were split into groups. Each group got a specific scenario within the courtroom, and had to act it out for the rest of the class. Our task was to guess what specific issue they were relating to.

### *Journal Two: 22<sup>nd</sup> March*

We had two classes this week. We had peer feedback on the article summaries, using a question sheet. I was a bit unlucky, the friend whose work I was reviewing wrote a very long piece, by the time I had finished reading it, I barely had time to answer the feedback sheet. I was only able to answer the first three questions.

We also began to speak about the survey task, practical considerations, ethical issues, and the most important task, how to ask open ended questions. We played a fun game, where we had to go round in a circle asking open ended questions, if the question could be answered either with a yes or no you were out! I enjoy the lack of formality the class sometimes has, but at times this can stress me because I worry about the work I should be doing.

### *Journal Three: 12 April*

We (the group) were given a survey used by the government to assess levels of corruption within the workplace. We were asked to answer questions regarding its impact and success. I found the use of scenarios very interesting and useful. However, I believe that the use of questions that do not allow the participant to write something (rather than just circle) are very restrictive. I also handed in my oral history report.

We began within my group to think of a possible topic to do in our survey.

### *Journal Four: 19<sup>th</sup> April*

Oops!!! I completely forgot about the extra class we had this week...but I spoke to my group and have already caught up on the work I missed. In the other class we went through the questions of our survey. We typed the questions on the Internet forum, answered them ourselves, asked another group to answer them, we answered theirs, and then documented our collected data back on the Internet page.

### *Journal Five: 11<sup>th</sup> May*

I have really been enjoying the last two classes. Its all coming together and we are getting a chance to really put into practice what we have learned so far. I must say though there is soooo much work. Tomorrow we have the two page report, then the critiques, next week a five page draft...aaa...it really is quite stressful, but I'm actually enjoying it.

I'll keep you up to date as to how I am coping.

### *Final journal: Journal Six: 4<sup>th</sup> May*

The most confronting thing last year as a 1<sup>st</sup> year student was the size of the university and the lack of friends you have once you leave the sheltered school environment.

This subject has been great at helping me make new university friends. Firstly the size of the class is perfect. Secondly, working in-groups, although at times is stressful, it is a really fun experience. It is almost like being back in junior secondary and having to get together after class to prepare our special project. I guess being stressed together, forces us to discuss things, and ultimately reduces all our stress levels.

The fact that we got to choose which elective we wanted to attend meant that almost all the people in my IRM writing class were interested in the content after the brief presentation by the lecturer at the first lecture of the year so, I guess we all have interests in common apart from just 'criminology'.

### **Sample Journal 3**

(from Linda, a Research Writing participant, who sent 10 journal entries. Journal 6 contains a response from the Researcher)

## *Journal One: 22<sup>nd</sup> March*

My name is Linda and I am completing an Arts degree. This is my second year and I must say that I am enjoying my second year so much more than my first, I know more people. I know my way around, and I know what is expected of me by the tutors/lecturers.

As for my background, I moved to Melbourne last year for University as I am from north of Melbourne. I have always aspired to work in the criminal justice system, especially in the area of public policy.

I also work part-time, which I find very demanding.

As for my approach to study, I believe I am a very dedicated student. However I know I should be dedicating more time to my study. I am enjoying all of my subjects as they are focusing on areas I am very interested in. The course observation task that we have to do is one such example that really captures my attention and passion; hence I am quite prepared to go out of my way to make it an interesting piece of work. As for my other subjects, I am to write an essay on... They are all areas that I am very interested in and will have fun researching. If it is not fun, challenging and rewarding simultaneously, I will tune out very quickly and ignore my study altogether.

As for the IRM class, I am really, really enjoying it. I honestly never thought that it would be as good. I like it so much because the course structure reminds me of secondary school. It has a very personal, friendly feel that I assumed I would never get to experience again after high school. I am expecting to get a lot out of the course, even just the fact that we can email you to let you know how everything is, is very new and exciting.

Anyway I must be going, please ignore any spelling/punctuation/grammar mistakes that may have occurred during this letter, I have really just written down anything that has come into my mind.

I hope to hear from you!!!

## *Journal Two: 24<sup>th</sup> March*

I am afraid that I have sent you two emails the same. I am still refining my skills where the whole information technology business is concerned.

Yesterday we had an extra class for IRM, and I am just about to head off to another class.

I must say that I am really enjoying the classes. I like the classes so much because there is a real feeling of closeness and friendship that is developing. It doesn't matter how we split into groups or who I have to work with, I find that everybody is very friendly and willing to participate and it makes the class so much more rewarding.

Today I went to the magistrate's court for the observation exercise with two other people from the class. One friend whom I have known since last year but never actually socialised with, and another whom I have only just met through this class. It put a whole different spin on the exercise considering that I wasn't sitting there by myself, but actually writing notes to others. It was as if I was back in high school. I keep making references back to the fact that it feels as though this class is a flash back to secondary schooling. I feel that was because of the overwhelming feeling of closeness and friendship that seems to go hand in hand with the class. In high school group work and working collaboratively was very common, hence another reason why I find this class so easy to adapt to. In adding to the social aspect of the class, afterwards we went and grabbed a cup of coffee together and got to know more about each other.

I am really excited about the class and look forward to it every week. It is very different to the other classes that I am undertaking and I must say that I was very sceptical that all of these contracts, journal entries and collaborative work groups would work coherently. Everybody is afraid of change and differences I suppose. I was very wrong! (Thank God) I am really enjoy these classes and find that the more I enjoy them, the more I want to put into the work. I hope that the remaining classes are just as rewarding!

Hear from you soon,

### *Journal Three: 24<sup>th</sup> March*

I'm sorry to bug you again, but I just wanted to make sure that you had my correct email address...I have a couple on the go at the moment.

### *Journal Four: 31<sup>st</sup> March*

Just a quick note to let you know that everything is going well with the class.

I am on my way to the class now and have my Magistrate's Court observation sheet ready and raring to go. I found the task to be quite straightforward however the lecturer was quite vague with his instructions so I hope I have done the correct thing. I focussed on rituals within the courtroom setting, which I found to be interesting, even though the rituals themselves tend to be quite tiresome and boring. Take for example, that fact that every time the police prosecutor wanted to approach the bench she had to ask the magistrates permission. Although I understand it is a formality, she asked the same questions about ten times in half an hour!! Perhaps it is just that the techniques and language are a little outdated for my liking. Nonetheless I found the task interesting and enjoyed the break from the usual routine of finding information in the library and then analysing it (as other subjects seem to want us to do).

Have a happy Easter.

### *Journal Five: 12<sup>th</sup> April*

I am really starting to feel the effects of university. I am tired, stressed and letting my studies slip a little. My Easter break consisted of writing an essay for another subject.

As of yet, I have not completed the interview task for IRM because I have not had the time. I do plan, however to get it completed over the next two nights. I want to do the task a little differently to the suggested form of the lecturers as I want my work to stand out. Instead of interviewing one person on the topic of bullying, I wanted to interview two people and contrast their answers.

I feel that this interview would be more substantial than simply interviewing one person on their experience, however this plan will only go ahead if time permits and my endeavour remains enthusiastic.

At the moment I am feeling overwhelmed by the amount of work I have to complete during the day – not only school work but work work and house work. I know that my lifestyle is suffering and if I am not careful I will get sick.

On a happier note, I aim to go home tonight and organise a schedule for the next two weeks so I can get on top of things, and perhaps polish off some of the chocolates I received for Easter.

### *Journal Six: 21<sup>st</sup> April*

I have been working collaboratively in a group now for the past two weeks. I felt at first that it was going all right, but now, as usual, I seem to be doing more work than everybody else. I am left to type up the work that we have done for the session, or I have to post our work on the Internet. I know I should say something but they seem to come up with excuses such as 'my printer isn't working at the moment so I won't be able to do it could you?' Any other time it really wouldn't worry me, but at present I have work up to my eyebrows and every second in the day is precious to me. This is obviously the ultimate downfall of collaborative work, but really what can I do about it? I'm not a bitch and I care about getting good marks. If I don't do it, it just won't get done! Do you have any practical advice about this situation? I hope you do!

### **The researchers reply**

*Linda, I can hear your frustration in having to weigh up the work not getting done against wanting to get good marks- that is a hard one and I guess only you can decide. My experience has been that I can't make anyone do anything – I can ask, can talk about the consequences but that's all. How is all this affecting how you go about your learning? Trish*

### *Journal Seven: 28<sup>th</sup> April*

You wanted to know how the problems I am having working collaboratively are affecting my learning. On the one hand it is having a positive effect because I am completing the work and handing it in and getting feedback on it. Alternatively it is affecting my morale, as I don't think of the work in a positive manner. I tend to dread it as I know the workload is more than I should be doing. Perhaps it is character building knowing that I am capable of doing the work of three people, however with the busy lifestyle that I lead, some other aspects of my work or life may be suffering because of it.

### *Journal Eight: 3<sup>rd</sup> May*

I have some more problems with the collaborative aspect of working. This week we are supposed to have reviewed our surveys and resubmitted them on the net however as of yet nothing has been done about it so it will (again) be left up to me to organise and finish. I am finding this very frustrating as I literally have another million things I need to get done before this week is up. Honestly if I had the time to have a nervous breakdown I would!

### *Journal Nine: 10<sup>th</sup> May*

The class is still going alright, although a difficult aspect of collaborative learning from last weeks class is that one of the girls in my group really dislikes the subject therefore she is not as willing to participate in the activities. I find this to be difficult I have to motivate her and try to play down the criticisms that she has of the course. It is not so much of a problem so long as I keep my motivation and morale. It just comes down to me having to ignore most of what she says which means that I am not getting much out of what a collaborative team should offer.

### *Final Journal: Journal Ten: 18<sup>th</sup> May*

You were interested in what type of behaviour the girl in my group engages in to show that she doesn't want to be in class. In particular, it is mainly talking about how she doesn't want to be there, how much she doesn't like the lecturer, which in

itself is not that much of a problem, however it is disruptive when I am trying to finish my work as she usually wants me to say something back to her to acknowledge what she has said.

#### **Sample Journal 4**

(from Kaye, a Multi-Media participant, who sent 6 journal entries)

##### *Journal One: 24<sup>th</sup> March*

This is the first time I am actually emailing you with regards to collaborative learning in research methods. I happen to have quite a few thoughts regarding this issue. Firstly for a group to function in a joint project such as this, I think it is extremely important to have an assortment of personalities and varied roles in each group. What I mean by this is that when you have an outspoken person in a group for example, use this person as a spokesperson to trigger ideas and conflict, which brings me to another point. I think that one of the main strategies for raising really good ideas in a group is conflict. A certain amount of conflicting perspective in a group really makes each individual think about their own ideas. Some of the most useless group discussion occurs when you have a spokesperson, and the other members of the group merely sit there and agree with everything that the spokesperson says. This not only prevents the person from getting their own views across, but also adds the element of uncertainty as to what that person is thinking. A classic example of this was in our group just recently. One of the members was passive in this sense and would just nod his head at everything. The spokesperson gave him ample opportunity to express his pros and cons, but to no avail.

Last week we received an email from the other group member informing us that his colleague had decided to change groups because he preferred the other topic. This is all fair and good, but all he had to do was tell us this and we could have compromised. I think the moral of the story is 'in a group, speak up.'

##### *Journal Two: 31<sup>st</sup> March*

I haven't got as much to report back this week. Our group is still in the early stages of the project, so not a lot of collaboration has taken place yet.

Something which I did find interesting, and which might be useful to you, is the way our VUT partners reacted to wanting to establish a base at VUT. What I mean by this is, contrary to VUT thinking that they were merely responsible for the multimedia part of the project and that Melbourne University students were responsible for the 'intellectual' side of things, I put forward to them that we would like our first meeting to take place at VUT, so that we could immediately get involved in multimedia and vice versa.

### *Journal Three: 14<sup>th</sup> April*

Since my last email a great deal of progress has been made within our group. Our initial reservations about group responsibilities have been overcome as we have made responsible compromise via good communication. In terms of collaborative thinking, I have found that now that we have narrowed down topics and specified roles, we tend to think along similar wavelengths, which subsequently produced good results. Of course, each session, new ideas are brought up, but the way we go about handling these is much more constructive.

### *Journal Four: 27<sup>th</sup> April*

Our group is making real progress with our project. The concept (a group member) has generated is a great idea and I think it is going to work. We are all really starting to think on a similar level now that we have narrowed the project down to something we all agree on. At the same time, group members tend to come up with their own innovative ideas out of the blue, which is the best part. This means that so far, we have this unreal project with some fantastic finishing touches. Probably the most valuable lesson I have learned from this project to date, is how people have different perspectives on things, which allow for new concepts and variety in the things we do. Each member has a different perspective on the project for example, which provides us with new ideas. The lecturers have a different perspective, which will determine the mark that we receive. In a way, the key to a good mark is to get in tune with the marker's perspective and structure the project accordingly.

### *Journal Five: 3<sup>rd</sup> May*

I have not included this email because of the identifiable nature of the material.

### *Journal Six: 6th May*

Just emailing to you our latest collaborative drama – we deviated from the track I think due to lack of communication, or maybe too much communication. It's ironic, because our group has spent so much time together, yet we managed to let this happen. Anyway, our focus led to us getting carried away... I think we were asking the wrong questions. All it took, however, was one consultation with the lecturer and we were back on track. It's funny how ten minutes of collaboration, asking the right questions can fix things immediately. The moral of the story is that succinct collaboration is far more effective than hours of drawn out, irrelevant conversation. Sometimes it is hard to focus in a group because the meeting often turns social, and you end up having to extract from it the information relevant to the project.

### **Summary**

This chapter contains quantitative data on participants' journal entries, and associated comment. It also presents the complete journals of four participants to provide a picture of the data as it was received over a period of time.

## CHAPTER FIVE: DISCUSSION OF FINDINGS

In the previous chapter I reported on the findings from the research. In this chapter I discuss these findings in greater detail. I have organised this chapter primarily under the beginning, middle and final stages of group life. Under each of these headings, I discuss a number of themes.

Although the life stages of groups are recognised in the literature,<sup>4</sup> and feature strongly in participants' journals, they are not uniform. Not all participants moved through each stage. Those who did, did not necessarily do so at the same time. The Research Writing group and the Multi-Media group formed under different processes. I have tried to acknowledge these differences within the sections.

The first section covers the beginning of the group process and the initial impact on participants of working cooperatively in small groups in an academic setting. The Research Writing group and the Multi-Media group are discussed separately during this section because the process of forming into permanent work groups was different for these two groups. The second section discusses interpersonal communication, working interdependently, and the benefits and tensions of working collaboratively. The third section discusses the acceptance of other group members and the completion of academic work.

This chapter presents a synthesis of students' stories, which are best appreciated in the light of the developing understanding of cooperative and collaborative learning.

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<sup>4</sup> Refer to the discussion on The Nature of Groups in Chapter 2.

## 5.1 THE BEGINNING STAGE OF GROUP

*"We did these role-play things, which is something I generally hate doing, but they weren't so bad. It is really good how we get to work with different people." (Eileen)*

The major observation that I made as the groups established themselves was that the Research Writing group and the Multi-Media group demonstrated different responses to working in a cooperative learning environment.

Many participants took the opportunity in their initial journal to move beyond the traditional introductory niceties, to make a more personal statement about who they were, their course work and their hopes for the future. Participants expressed interest in achieving academically. Some had set learning goals for themselves; others saw the group work as an opportunity to meet new people and a chance to increase their interpersonal skills. A few expressed a degree of anxiety about working collaboratively, because their previous experiences had been stressful. There were also a number of participants who stated that they were shy and nervous about taking part in group work. Some, like Lynn, set themselves personal learning goals.

*"I'm sure that Research Methods will be able to help me organise myself better when researching as well as helping me overcome my shyness... I have also found that many more people are much more willing to express their opinions and try to answer questions than me. I always find it difficult to provide my ideas and thoughts, thinking that others will think them stupid. This is what I hope to develop through group work."*

### **Responses to the initial workshops**

Very few participants had previous experience of cooperative learning within higher education, and most reported a variety of responses to the

initial workshops. These included a degree of confusion about the course structure and the expected learning outcomes, a number of perceptions about the learning process and a range of emotions and thoughts about making connections and working with others.

### **Making connection with others**

When first taking part in an interactive learning process, learning has to change from a very personal and individual process to one that demands a more public presence and active participation. Participants made the transition to the public process of forming groups and making connections with others in different ways, depending on their previous learning experiences, their expectations, and how they perceived themselves as people. Through their responses participants, such as Eileen, also demonstrated that they were able to modify or accommodate different perceptions about learning when faced with a different learning experience.

*"We did these role-play things, which is something I generally hate doing, but they weren't so bad."*

This is in line with the literature. MacGregor (1992) claims that students have to make shifts in their thinking in order to work in a cooperative learning environment. The entries in the students' journals bore witness to this.

#### *'Research Writing'*

However, not all participants in the Research Writing group understood the process of cooperative learning, nor did they value the opportunity to interact with others for the purpose of seeking opinions or exchanging ideas to construct knowledge. Consequently some found the structure of the workshops confusing and the course aims unclear.

*"This week's class is kind of weird breaking into groups and doing activities that did not seem to be helping us much. I think that most of us are kind of confused about what is going on and in the general details of the course." (Sarah)*

Some participants, while still finding the process confusing, were able to accommodate different learning structures within the same learning environment, and set personal goals. For instance Marie found the workshops a welcome break from 'normal university' classes. Bridget perceived the course as unstructured, but was still able to see the links between taking part in activities and learning.

*"Sometimes I don't understand what I'm meant to be doing until after I have done it, then I can see why we have done it."*

Travis was also initially confused about the subject and regretted enrolling in the course. He later changed his mind when he saw that the workshop set-up allowed everyone to participate. He found the workshop process benefited him at a personal level as well as being enjoyable and a place where he came to appreciate different views.

*"The subject does still seem confusing but is getting clearer after every workshop... After thinking about the course I have re-evaluated my initial thoughts on it and have come to the conclusion that it will actually be enjoyable and rewarding. The set up of the workshop allows for everyone to participate which means that the range of ideas and opinions forces me to appreciate different views on the one topic, which can only help me think laterally... I do not know anyone here, the exercise is also character building in the respect that I have come out of my shell. For me this course is not just about learning at an intellectual level but also at a personal one."*

Other participants were initially less accommodating of a new learning process, and expressed frustration and a feeling of loss at not knowing what was expected of them in this unfamiliar environment. Some of these participants wanted a more traditional style of teaching. They wanted the lecturer to tell them what to do, what readings to study, and to

make all the decisions. They did not want instructions that they perceived as vague and open to interpretation. They saw their role as learning from the lecturer and handing in the assignments at a later date. Their perception of learning was something that was 'done to them' as opposed to something that they did for themselves. According to Dale, learning was judged from the results of their assignments and exams.

*"Learning for me is not something I can readily talk about, it's more of a subjective, abstract notion, in that you don't really know if you are learning or what you are learning or how you are learning it. We all rely on assignments and exams to show if we have learnt anything, but who knows where we learnt it or how we learnt it or even if we learnt it at all."*

Some participants found the discussions and role-plays difficult, because they were unable to relate them to their academic work. One general perception of these participants was that the lecturer was not teaching when he used such strategies, nor did they feel that the class was learning when they took part in them. Barbara's journal, while expressing her perceptions of teaching and learning, is representative of a number of other participants who felt confused and lost.

*"It just seems like a waste of time that we have to sit around and play charades etc., when we could be actually learning something. I feel like we are not learning much. The work we are expected to do is confusing. Most of the time we have outlines on how to write things up, what to study, but in this class you are really running on your own steam, and doing things any way we like this class makes me feel a little lost at times."*

It is uncertain at this time who was in groups with whom. But it is clear that different perceptions of learning, what it is, and how it takes place, affected the small group work. Some participants reported their frustration and annoyance at being in groups with others who they thought did not want to commit to anything or participate properly, as defined by them, in the workshops.

It is also unclear to me what the lecturer did or did not discuss with the participants in the workshops, or how clearly he explained his conception of teaching and learning and what it means to work in an interactive learning environment. It is clear that all the tasks and assignments and their due dates were outlined in the on-line Research Writing Facility, and, as reflected in the excerpt below, the lecturer created time for concerns to be heard.

*"The lecturer is good that he is always seeking input from the students as to any problems that they may be encountering or questions or worries that we might have about class."*

This clearly was not enough to allay participants' fears about the unfamiliar learning environment, teaching beliefs and structure that they had entered into. Many participants, including those who were more able to accommodate a different learning process, remained uncertain for some time what was expected of them regarding their course work. It seems that initially they were unable to integrate the links between the learning from the workshops, the research tasks and what they were meant to produce for assignments and assessment. Some reported spending time trying to find someone to help clarify the tasks and hopefully end their confusion.

Some participants really enjoyed the group work from the beginning. They welcomed the opportunity to work with others. They enjoyed the discussions and the chance to check things out. Other participants came to enjoy the group more slowly. For example, Linda perceives herself as basically a shy person, a bit of a loner, and expected the course to be stressful for her. Her major objective was simply to pass the course. Linda modified her expectations of herself once she found the classes an enjoyable experience. Her feelings of enjoyment were based on her previous experiences of closeness and friendships at school. When she perceived this developing within the class she appeared to override her

initial feelings of scepticism about the group contacts, the journal entries and the collaborative work.

Maria had similar sentiments about the class atmosphere. She expected the class to be boring with heaps of work and found herself pleasantly surprised when she perceived everyone to be open and friendly. Maria perceived this class as being 'different' because it had a different structure from what she was used to.

*"I really love the laid back casual atmosphere of the classes – it actually reminds me of school. I didn't know anyone at the beginning but everyone is open and friendly so I am finding these classes a welcome break from normal university lectures."*

The tendency of women participants to express feelings of closeness and friendship, corroborates the findings of Belenky, Clinchy, Goldberger and Tarule (1997), who identified cooperation, understanding and connectedness as especially crucial for women in evolving their own patterns of working and learning. While these domains might be crucial for women, they influence both men's and women's self-concepts, the way they perceive themselves in relation to others and, in turn, how they go about their learning. Ben was the lone male voice who commented on the isolation he felt during his first year at university. He also compared the course environment to his school days, and reported how the cooperative aspect of this subject helped him to reduce his stress level and make friends.

*"The most confronting thing last year as a first year student was the size of the university and the lack of friends you have once you leave the sheltered school environment. This subject has been great at helping me make friends... Firstly the size of the class is perfect. Secondly working in groups, although at times is stressful, it is a really fun experience. It's almost like being back in junior secondary and having to get together after class to prepare our special project. I guess being*

*stressed together, forces us to discuss things, and ultimately reduces all our stress levels."*

Sarah represents a number of participants who used their journals to outline their feelings. Some of the feelings expressed in the journals were reported as not being able to be spoken out loud. Like Sarah, some used silence to comply with other group members' wishes. Sarah's perceptions about herself appeared to inhibit her expression of her needs, which in turn led to unhappiness with her own academic performance.

*"Finally we are working in groups, but it is harder than I first imagined. I'm one of these people who likes the work they do and when someone else has a different idea, and it doesn't seem up to scratch, I can't tell them that. I just ignore my feelings and do what other group members want. I suppose it means that I don't cause friction, but it also means that I come out dissatisfied with my performance."*

Academic isolation is real for many students. Yet speaking with your own voice, out loud in class to peers, and receiving feedback from others can be an affirming process. Participants like Eileen (below) reflected on their experiences of changing the way they viewed situations just by having the opportunity to speak and discuss with others. They reported on how their interactions within the workshops created opportunities for hearing their own voices and for further understanding.

*"We started the class going over the problems and worries people were having so far about this course. I have lots, but I thought that my questions were silly and that everyone knew what was going on. Talking to the girl next to me relieved my mind – I wasn't the only one after all!...We did these role-play things, which is something I generally hate doing, but they weren't so bad. It's really good how we keep getting to work with different people. This is the only class I have where I actually speak to other people and it's really good."*

### *'Multi-Media'*

The participants in the Multi-Media group also had to shift their thinking to work in a cooperative learning environment. As demonstrated in their

journals below, their perceptions of moving from a private presence within a classroom to a public one were overlaid with some anxieties associated with the unknown.

Some Multi-Media participants reported on their expectations for the course; others reported feeling intimidated and daunted by having to speak in group; others were relieved to find that their group members were 'extremely nice'; and some expressed a range of uncomfortable feelings.

Some of the differences between the two groups were obvious. One was of gender. The University of Melbourne students were all female, the VUT students mainly male. Compared with the VUT students who had had previous course contact, the University of Melbourne participants did not know one another.

*"They all knew each other, and were very friendly with each other, whereas all of us criminology students did not know each other at all."  
(Julie)*

I have noted in my background reading<sup>5</sup> that perceptions of difference related to class, race, sexuality and gender are based in our beliefs and self-concepts. Differences can be perceived as a threat to our way of thinking and being in the world. They can portray the contradictions that Freire (1972) suggests we live with in our day-to-day lives, (such as having a pre-conceived idea of how a person or a situation will be), and heighten our emotional responses in ways that remove us from our comfort zone.

The following three participants from the Multi-Media group all report various degrees of discomfort about the first combined meeting. They

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<sup>5</sup> See discussion on Social Learning theory in Chapter 2.

sent journals over the first month of the course only. While they highlighted their perceptions of the class and gender difference in similar ways their responses to the perceived difference were not the same.

### *Paula*

Paula was a participant who wanted to go on and do Honours. She perceived the course as a challenge to herself, stating that she was not good with other people, had made no friends at university and in fact had experienced a minimal amount of interaction with other students. Because of this she preferred to be and work on her own. She reported entering the first workshop feeling tired from lack of sleep and not in the mood to work with other people. Paula went on to express her uncomfortable feelings about the intellectual class issues she perceived in the atmosphere at the initial combined workshop.

*"I found it really hard to work with the other guys from VUT, and come to any agreements on anything. I also felt like such the academic, whereas they were the creative cool ones. Sounds childish, but I felt like there was a Melbourne University upper class academic stigma attached to us that they were aware of and didn't like."*

Paula was able to modify her own perceptions a little but was still very aware of the differences. Paula's perceptions of the differences and the way in which she contradicts her feelings about class issues became more overt when she reflected on her move back into her comfort zone. For instance, Paula reports feeling more comfortable with her classmates at the University of Melbourne, perceiving them as having the same concerns, yet they too were people she had just met.

*"I don't know, maybe I was making it up. Maybe it's just me that's aware of it! I felt more comfortable doing group work there (UM)"*

*because we were all in the same boat, and had similar concerns, uncertainties etc."*

Paula continued to be worried about how the collaborative aspect was going to work out, but in her final journals she reports feeling pleased with the group's progress. The topic had been decided, roles had been defined and while Paula reports finding the VUT students 'pretty easy to get along with', she commented on the lone male student being quiet, putting this down to him being the only man in their group.

### *Julie*

Despite having concerns about her initial group, Julie perceived the divide between the VUT students and other participants as a problem that belonged to other groups and not hers. Julie had reported that she was not impressed with the VUT students in her initial group because she felt unheard and unnoticed when the ideas she had to offer were not listened to or considered. Julie believed that they would not listen to her ideas because they were friends, and had already made up their mind on their topic of interest. In her final journal a few weeks later she commented on the issues of 'us vs. them' that seemed to be affecting some groups, and hoped it wasn't going to be too much of a problem. At the time Julie could not think of any other reason as to why they would not listen to her and responded by changing groups.

### *Cathy*

By contrast, participants like Cathy demonstrated their ability to modify their own thinking and to link up behaviours with attitudes to take action.

Cathy had a mixed response to the combined meeting, initially finding it a little daunting and intimidating because VUT students already knew each other, and her class did not. It was only after talking with the other

members of her group that she was able to modify her perceptions and relax.

*"When we were told to split up into groups I was instantly uncomfortable, having to mix and share ideas with a group of complete strangers! However, after an initial 'hello', I totally relaxed, realising that everybody was in the same situation."*

Cathy was later frustrated with the VUT students about their attitudes towards developing the project. She took action by emailing her group to set up a meeting. She also engaged the lecturer's support in establishing roles and responsibilities within her group.

*"I cannot help feeling that they are both over compensating on the friendliness aspect of working in groups and I would prefer them to say we wouldn't mind doing this, this or this..."*

Some other participants in the Multi-Media group reported definite ideas on group work and what they personally wanted to achieve. They perceived that different personalities, communication styles, and different ways of working affected groups. For instance, Gay didn't see her group as a success unless the group had similar ways of working.

*"I realized that when working in a group, all the members have to have a similar way of working. Not have to, but if one is unable to conform to a particular technique of working, then the group will not be a success."*

Participants also had different perceptions of the role of conflict within groups. Some saw it as having an important role in making individuals think about their own ideas. Others judged their groups to be getting on well because there had been no disagreement.

## **Emotions**

Participants' emotions emerged as a strong theme in establishing small group work. According to Ingleton (2000), emotions are crucial in social

interaction because they tie together the individual and the social aspect of the interaction that takes place. Despite this, he goes on to say, emotions in learning often remain in the background. When emotions are recognised and understood, they can function as a signal of distance between persons, and can be seen as a strong indicator of acceptance and rejection by those one looks to for recognition. Many of the participants used their journals to express their emotional responses to what was happening as they engaged with other learners.

Emotions such as fear and anxiety could and did influence individuals' personal power within the group. Personal power was reflected in how group members thought about and behaved towards others and how they saw themselves in relation to others. Some factors that influenced personal power were age, gender, beliefs, personality, ethnicity and class.

Jude reported being overwhelmed by strong emotions when she found the course process confusing and was unable to determine what the main goal was. She had previously reported being sick of the Criminology Department and feeling that her interests lay elsewhere. Her confusion did not lessen, and Jude's final journal reflected her frustration and anger at the lecturer. Her statement not only reflects the strength of her own feelings, but her belief that if she felt this way about the course it must therefore be a disaster for everyone else too.

*"Things haven't been going well in the IRM class. The lecturer has led the class into an absolute shambles and we're all quite disheartened and disappointed with the class."*

Certainly there were others in the class who were disappointed with both the process and clarity of course aims, but Jude did not journal again. There is not enough information to determine why she chose to stay

silent, why she felt so distressed or if she continued to feel distressed. However, in my group work experience, projection or transference of strong feelings from an individual to others is not an uncommon occurrence.

### **Projection and feelings**

Projection allows group members to make sense of and quickly interpret the world. Group members are often totally unconscious of the power of projection and unaware that their experience of the world is perceived through their own version of reality. Hunter, Bailey and Taylor (1997) suggest that projection can also be a safety mechanism to aid the swift recognition of danger, whereas Jaques (1998) outlines projection as causing strong negative feelings that we attribute as coming 'at us' rather than 'from us'. His thinking, applied to the group process we are discussing, would imply that some students might have seen the lecturer as hostile, when in fact they were feeling hostile towards the lecturer, but were unable to recognise or articulate it.

Just as it is not uncommon for individuals to project their own bad feelings on to others in a group, groups can also project their collective bad feelings on to other groups or institutions. Projecting strong and uncomfortable feelings on to others, claiming that everyone feels the same 'as them,' is a common experience when people are distressed. When group trust and identity are firmly established, strong feelings can have less emotional impact on individuals within the group.

### **Similarities and differences in the initial workshops**

There are many explanations for the similar and different responses in the Multi-Media and the Research Writing classes, and for whom participants blamed for their uncomfortable, anxious and frustrated feelings. The Research Writing class projected some of their

uncomfortable feelings about the course environment and structure on to the lecturer. The Multi-Media class projected some of their uncomfortable feelings on to the VUT students.

There are diverse motivations for participants aligning themselves with peers. According to Hunter Bailey and Taylor (1992), recurring conflict in a group is often the result of unclear or unrecognised power relationships. Power is a factor in every group and individuals respond differently to the lack of power, the threat of it, or in maintaining whatever power they have.

One possible explanation for participants aligning themselves against the lecturer and with their peers is the in-group/out-group scenario. The in-group is a group of people who share, or claim to share, a sense of belonging or a feeling of common identity, whereas the out-group is perceived as distinctively different from, or apart from, the in-group (Myers 1988). Part of developing trust and group identity is to define one's own group in a good light. This self-serving bias allows members of the group to feel good about themselves, often at the expense of others or another.

The participants were also part of an academic multi-group membership, with each group having its own array of complex tasks to be completed or taken part in. What was being asked of these participants, in their day to day experience, was to change from their traditional course programme, to switch attention and align themselves with different groups of people in a different way, as Lynn suggests.

*"This course has been more challenging than any other subject I've done in the last two years because of what is expected of you, and being able to just do the work and get it out of the way, is the last thing this course is about."*

Depending on the individual participants' capacity to cope with a variety of demands, the shift in focus could have led to inspired creativity, increased flexibility, or to increasing bewilderment and anxiety.

It is possible that some of the Research Writing class chose to project their strong feelings onto the lecturer because they saw him as being responsible for putting them in an unfamiliar learning situation. It is equally possible that the Multi-Media class chose the VUT students to project their feelings onto because they perceived the VUT participants as different from themselves, and in so doing marked them as the out-group.

By indirectly labelling the lecturer's role as "out-group", the participants were able to evaluate themselves in a positive light, enabling them to cope with an unfamiliar learning environment which was not of their making. The composition of in-group and out-group depends on the context, and therefore can change over time depending on such things as personalities, time, emotions, and ideologies.

### **Summary**

By the end of this initial stage participants had got to know other group members better and were more familiar with the workshop format and the lecturer's teaching style. There continued to be some frustration over course aims and processes. However, their anxieties about starting group work had lessened and they had begun to communicate and work together to make decisions on how to tackle different tasks, to allocate responsibilities and to gather data.

## 5.2 THE MIDDLE STAGE OF GROUP

*"I discussed the observation with the other student, and found that she had noticed things that I had not and vice versa, so it proved to be a valuable incident."  
(Frank)*

During the second stage, participants began to develop patterns of working together, with issues of belonging and trust continuing to evolve. Over this period participants moved from working independently to working interdependently. Differences in thinking and in learning styles continued to arise, and the benefits and tensions of working in a cooperative environment, and of using the online Research Writing Facility were more in evidence. As participants moved from working independently to interdependently, interpersonal communication played an important role. Once again the participants' journals are used to highlight the above themes.

### **Working towards interdependence**

Learning to work with others, who are unknown to us, takes time, motivation, interpersonal skills and a willingness to do so. Being committed to developing a working and productive relationship also requires an element of risk and responsibility for one's own and others' learning. Positive interpersonal skills, which include active listening, checking information for clarification, contributing to the discussion, asking for help, offering support, challenging own and others' assumptions and the ability to solve problems, are the basis of working interdependently.

Interdependence means each and every group member taking part and sharing responsibility for their own work and also for the success of the group work. Working towards interdependence requires individuals to

shift their thinking, to move from being observers and listeners, and working independently, to being contributors and problem solvers, and committing to a group process (MacGregor,1992). Another shift in thinking is required in preparing for, and attending workshops and meetings, and in the process of operating under perceived group norms, as Frank outlines:

*"I have found that when working in groups for short tasks, you feel guilty if you do not make any valid contributions to any discussion..."*

The expectations of others also bring their weight to bear, as Mary outlines:

*"When we first started this class, and we had to sign the contract, although I didn't take it too seriously, it still reminded you that there are other people relying on you in this course, since we are working in groups most of the time."*

In my view, interdependence is a continuing process of development that is built up through purposeful interactions based on a degree of honesty and commitment to the task. Purposeful interaction is made up of many forms of communication such as intellectual, social, intuitive, emotional and physical. Communication skills may appear to be simple, but group communication is complex and can be difficult to execute, especially in an unfamiliar environment. Comments in participants' journals on the way in which they made sense of what was happening in the group appeared to be heavily influenced by how they felt about themselves, their work, their perceptions of learning and the meanings they attributed to their experiences.

Many participants reported varying degrees of awareness on how they perceived the members of their group working together. Some participants perceived their group as dysfunctional when they could not find time to meet, when they operated as separate units, when they

worked alone or when they posted ideas on the bulletin board and anxiously waited for comment from others. At other times, participants perceived their group as working together when they were getting along well, or when they had a productive planning meeting, or when they benefited from the interaction in some way. The participants who sent journals on a more regular basis presented an opportunity to see how they made sense and meaning of their experiences, and how their understanding produced a shift in their thinking and their learning strategies over a period of time.

The following two journals from Sarah and Travis, while very different, represent a range of participants' thinking on what was perceived as supporting or hindering participants working together. They are also representative of the different perceptions about learning that continue to emerge in the journals. As outlined in the literature (Marton & Saljo, 1976; Biggs, 1979), students' perceptions of learning are reflected in the strategies they use to understand and approach their learning tasks.

#### *Sarah*

Sarah continued to be confused about what the lecturer wanted the students to do. Sarah had previously reported that she was not able to tell others that their work was not up to scratch. In these second stage entries she perceived her group as not working together when they did parts of their work independently, though she was able to change her mind when the work turned out to her satisfaction and that of the group. In later journals Sarah reported on what she perceived as learning, saying she relied on the lecturer to explain what and how the class was learning.

*"Our team is not entirely working together, we are going away each writing what we think and then coming back and collating. I don't like this method. I prefer to brainstorm within the group, then work together the entire way...I'm finding learning hard in this environment, although I*

*prefer assignments and homework to exams, and workshops to lectures, it is hard to know what we are supposed to be learning. It feels not like a class but a general meeting where we have to write an assignment and the class is devoted to assisting us to do that ... We all got to express some of the concerns we had ... the group work aspect seems to be getting better. My concerns about not working together on the survey were entirely unfounded. It turned out better than I imagined. We worked together to combine our best questions for the survey, and it turned out to my satisfaction, as well as to the satisfaction of the other members of the group ... I enjoyed working in the group last week, it seemed to distribute the work well and working with others seems to make our work a better standard, as we could pick out the best bits from everyone, and discard the not so good parts. It also seems to help motivate me a lot. If I know someone is depending on me to get something done, I am more inclined to get it done straight away, instead of leaving it till the last minute, like I do with everything else... And working in groups helps you find out things about other students, and this is good, especially at this time of the year when everyone gets a little stressful."*

### *Travis*

As previously reported, Travis was initially frustrated with the group process but quickly saw the benefits of collaborative learning, such as meeting new people and hearing different opinions. He became disillusioned when group members didn't turn up for arranged meetings and when he perceived that he wasn't learning anything. He saw himself as the type of person who needed to get things done. He outlined an attempt to 'hang in' there with the collaborative work, recognising his responsibilities to other group members, but finally moved on to complete the work on his own. Having assessed the situation, Travis made his decision and closed off his journal entries at this point.

*"...the group is not going well, one member has dropped off the planet and the other girl and I have no idea about what is going on...my study is affected by shitty group work. Firstly, when working in group and there is a lack of communication I tend to get frustrated and my work suffers. As I rely on my fellow members, and in turn hope they rely on me, when there is a breakdown in communication it results in a lack of commitment to the project. I should say here that part of the problem is lack of direction. If no one in the group is sure of what is going on obviously the end result will not be achieved to its potential... In a sense I can get through this subject without giving it my all, although I would not let anyone down in the process ... the only thing that is pissing me off is that my other group members are not doing their work, which in turn means that I am getting further behind, because I have to wait*

*before I can critique their project ... I have decided to get on with things without consultation with others as it will be the best way for me to do well ... working collaboratively was good to meet people but I have come to the conclusion that I am the type of person that needs to get things done and if others don't participate I won't be sacrificing my prospects to bring them up to date ..."*

### **Benefits of working cooperatively and collaboratively**

It is also evidenced in the journals that the learning groups during this stage were amenable to a much wider range of aims than just producing the course work. Some participants found that once they got involved in the process, shared feelings, and met with others, they discovered that the cooperative aspect of the course was fun, rewarding and supportive. Some reported finding the role-plays, and the question and answer sessions that followed fun and a productive way to learn.

During this stage, participants reported benefiting both intellectually and socially when meetings were arranged in informal settings. They reported spending time on campus together, meeting in McDonalds fast food stores, food courts, pubs and flats where personal information was shared, ideas were bounced back and forth, and discussion was followed by the allocation of roles and tasks.

Group trust and support is built through a cycle of disclosing one's thoughts and feelings and having group members respond with acceptance (Mayberry, 1998). Combining purposeful social interaction and intellectual discussion lets others know not only 'what is on top' but also how that information might affect their interactions in that space and time.

Building trust and acceptance appeared to develop a level of cohesiveness where participants felt involved, close to peers and satisfied with the process.

*"I enjoyed working in group last week, it seems to distribute the work well, and working with others seems to make our work a better standard." (Sarah)*

A level of cohesiveness can build self-confidence in the group context, which can result in a concerted effort being applied to the academic task. For instance, some participants in the Research Writing group reported changing their initial perspective on working cooperatively after they had completed their peer critiques on a piece of written work. They reported finding the giving and receiving of feedback a valuable way to learn, to extend thinking and to receive support for their own efforts.

*"I feel that I am getting a lot out of this course and feel that peer critiques area really valuable way to learn about your own work. Getting feedback from someone in your class is great, and you feel that as you critique other work that you are actually helping someone." (Dale)*

There were a few who reported finding the initial process daunting for two reasons: they did not feel that they had the skills to comment on someone else's work; and some were shy and reluctant to share their own work. However, having risked disclosing their discomfort to other group members, after they had completed the task, they reported appreciating the feedback comments they had received, the writing skills they had acquired, the information they had shared and the support they had gained.

### **Tensions within groups**

As predicted in the literature (Hunter, Bailey & Taylor 1996, Jaques 1998), the groups at times reached a stage where differences emerged.

*"In so far as collaboration is concerned, my group is giving me good ideas and advice, but I feel that the other members need to work much harder to meet our set deadlines. Perhaps the lecturer needs to step in on such issues." (Jamie)*

If various group functions are not performed in a manner that is helpful, or are performed inappropriately, this can interfere with group members achieving their goals. While working collaboratively to achieve academic success is a very personal and tenuous thing, success still depends on members having effective interpersonal skills, time to meet and motivation to complete course work in a way that is satisfactory to all concerned.

Some participants were not aware that a group process is about taking care of the group and the people in it. When this awareness was missing, individuals found it difficult and uncomfortable to give attention to how they and others responded to group behaviours. Participants appeared to take a position of powerlessness when they accepted group members' behaviours, for example, when they did not do their fair share of the work, or when, as Liz reported, a male group member turned up at meetings but did not speak or take part in the discussions.

*"Also (a group member) never talks to us...I feel rather weird because the three of us are always the only ones trying to get the discussion going and he sits there and stares at us or looks around. Sometimes he writes notes...we're not really communicating! Isn't effective communication part of working together?"*

Taking a powerless position may have been perceived as the only option if participants lacked confidence, interpersonal skills, or information.

Different roles and responsibilities can also be a source of tension. Ideally, the literature says (Johnson and Johnson, 1987; Bosworth, 1984), roles and responsibilities should be shared. Jaques (1998) does suggest though, that for some group members, the position of 'leadership' is required while other group members appear quite willing to adopt the norms of any group that becomes important to them. Certainly the participants in the Multi-Media group divided their roles up in different

ways. Some participants were happy to take on the responsibilities of organising the group contact. Some groups divided the responsibilities. Sometimes this division was made through personal choice, or through perceived expertise in research and multi-media production.

*"...he is more interested in just the production side...we all have a fairly good idea of what our roles are and how it is all going to come together." (Paula)*

Other groups wanted to share in the gathering of the data and in producing the final product. Some participants did take on the role of organising the contact, or gathering data, or attending planning meetings, which meant having to accommodate everybody's time schedules. Those who did so found the task, at times, an organisational nightmare.

A few participants saw themselves as automatic leaders of their group, and in some instances assumed the right and responsibility to question another group member's priorities when they did not attend, as Judy's journal indicates.

*"I am so relieved that we are all working well as a group. We all seem to have defined our individual roles well. I have emerged (not surprisingly) as the leader of the group. It is funny how people just automatically slide into roles. I don't mind being in charge, and for the most part all of the decisions we make are as a team. I think that the VUT students look to me for basic direction even when it comes to the production side (in which my skills are basic) ... I haven't seen a lot of (a group member). She has told me that she has so much work from other subjects to do, I question her priorities. She wasn't at the meeting today and I have been unable to catch up with her ... I will email her soon to ask whether or not she has done her share."*

During this stage, an on-going source of stress for some students arose from group members not turning up at meetings, or not finding time to arrange meetings, and the confusion over course aims. Participants reported feeling frustrated and annoyed about being unable to make decisions and get on with their work. Some of the frustration was over

'what the lecturer wanted', some was reportedly over different learning styles and strategies, and some was over different levels of motivation. Certainly, when the learning task is not clear, frustration appears to set in, not just with the work, but with peers and the group process as well. A few participants responded to this frustration by wanting to move groups. For instance, Lucy was initially frustrated with her group members and the way that she perceived they went about their learning. It was only when she came to understand the overall course goals that she was able to become more accommodating of their learning strategies.

*"I prefer working by myself rather than collaborating...perhaps its more to do with the people that I am with. Within my group, I often feel like that we are three separate units instead of one. And I can see that this is having an effect on our learning. I don't know about the others but I'm not having any a-ha moments, as we are not discussing the work properly...nobody in the class seem to have any idea of what we are supposed to be doing...this makes inter-group discussion not very effective ... I realize today that I don't dislike the girls in my group, it's just that they're more interested in getting the work finished than in doing it properly ... It finally hit me today that this course is about the methods used to collect the information we're studying, rather than the information we're studying itself. Six weeks into a course called 'Introduction to Research Methods' and I've only just realized it."*

### **Tensions are influenced by a variety of factors**

Tensions, a normal part of group work, are influenced by a variety of factors. Different worldviews produce differences in meanings, differences in priorities and differences in approaches. These differences influenced motivation to complete the learning tasks to everyone's satisfaction. While the areas causing tension within the groups was consistent with the literature, it was not always clear from the journals how participants dealt with the tensions that arose, beyond expressing them. Certainly some participants, depending on the level of tension, reported being able to work together enough to bounce ideas off one another, to discuss different angles and to develop a plan to tackle different tasks.

*"We had another face to face meeting with our groups...we used our two hours to really sit down and nut out what it was that we were doing...we each have little tasks to complete before tomorrows meeting." (Cathy)*

Others appeared to take a 'wait and see' approach. Only one participant reported asking for 'help', though a few did report offering and receiving support from others.

*"It is a bit easier because we are not working in groups anymore...On the other hand, it was good having other people to share the work, because it is a bit scary doing it all by myself." (Mary)*

### **'Research Writing Facility'**

Communication over this period was supported by the online 'Research Writing Facility', which provided the participants with course outlines, assessment tasks, course reading, and specialist mentoring forums where they could ask questions on areas such as carrying out research, research writing, computer and library skills. The facility also provided a forum to post work, to receive feedback and to facilitate the sharing of ideas and carry out common tasks. Once participants got used to using the online forum, some reported it as being an ideal form of communication. They posted ideas and descriptions of their work and within hours or days they reported receiving feedback on it from other group members or their lecturer or both.

While some participants used the forum throughout the course, most commented on their use of it during this middle stage. The following participants' journals represent different ways in which the forum was used across the course.

Eileen used the forum to get feedback about her work in preparation for an arranged meeting.

*"...I've just checked out the forum, and discovered that another group member has left me a message ... I spoke to a different group member on the phone last night and she is going to have a look at it today some time and hopefully post a response as well. Then we'll meet tomorrow just before class to have a chat about what we're doing."*

John used the forum to access ideas without having to speak to anyone.

*"The whole idea of using the net forum is new and it takes time to get used to, but it gives pretty easy access to ideas which group members may have without having to physically speak to them."*

Annie enjoyed the convenience of the forum but hesitated over using it to give negative feedback. She reported concern about how her words would be taken and expressed a preference for face to face verbal communication when it came to giving feedback to others about a piece of work.

*"We came up with some good ideas we agreed to communicate from home through the forum. We designed our questions and submitted them to our forum on the net. This I have found to be a great device ... I am more afraid of writing the wrong thing, or perhaps that the criticism will be taken the wrong way. I think by talking about it I can justify my criticism better."*

Some participants found the forum of limited use in resolving conflict and at times other forms of mediation were required. For instance, Gay reported feeling upset and hurt with the replies she received to her suggested topics, and was concerned that the group would not take the work seriously. Gay reported using face-to-face communication to discuss her concerns, whereas Cherie found herself having to mediate, using the forum and the phone, between two group members who used the forum to express their annoyance over the other's perceived lack of contribution to the project.

Some participants reported other limitations in using the on-line facility. They reported not having enough skills to access on-line information and admitted not using the computer forum until the last weeks of the course.

Not everyone had access to computers outside of the campus and when it came to completing course work, arranging meetings and organising computer time, access was an issue.<sup>6</sup> What was a disadvantage for some, though, was an advantage for others. Participants who worked late into the night and did their study on the run, found that the forum allowed them to access information from their peers, and to pass on comments and ideas at any time of the day or night that they had access to a computer.

Also participants like Norma were excited by their new-found computer skills.

*"One thing that I can say, is that my computer skills have improved ten fold and I hope that they continue to do so. With each class, I learn more and more things about the computer and the Internet, and that is really exciting."*

## **Summary**

By the end of the middle stage, participants had moved on enough to cooperate and work together to plan, execute and complete some tasks. As interactions increased, differences emerged in skills, personalities, learning styles and learning strategies.

The fact that participants had to accommodate others' different ways of working meant that their own style and pace was altered, which in turn led to tensions arising. Some of the participants used this as an opportunity for self-reflection.

Some participants reacted to the lack of group cohesion by completing tasks alone, by withdrawing and saying nothing, or by shifting their thinking enough to accommodate different perspectives.

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<sup>6</sup> While not commented on in the Multi-Media participant's journals, the VUT senior lecturer did report on the difficulties his students had with computer access being limited to their time at university.

By using a variety of communication media, for example the on-line forum and arranged meetings outside course hours, participants developed a better understanding of one another's perspectives. Consequently, they were able to interact more effectively with one another during the course work.

### 5.3 THE FINAL STAGE OF GROUP

*"I feel that I am getting a lot out of this course and feel that peer critiques are a really valuable way to learn about your own work. Getting feedback from someone in your class is great, and you feel that as you critique other work that you are actually helping someone."  
(Dale)*

The final four weeks were spent finishing off projects. Cooperation within groups was stretched and tensions mounted as participants came under pressure to complete work on time while simultaneously earning a living and coping with life events. The themes that emerged during this stage were tensions over performance efforts and standards, more acceptance of personal differences, re-evaluation of group systems and support structures to complete tasks in the stated time frames, and coping with life events and final comments.

In this part of the discussion paper I have included journal comments that reflect the participants' perceptions of the final stage of their group work as well as their reflections on working in a cooperative learning group.

#### **Performance efforts and standards**

During this stage, beliefs and feelings continued to play an important role. While feelings are not good or bad they can leave people feeling vulnerable and therefore affect the level of tolerance towards others and in turn the disposition to learn. Also feelings of vulnerability in social interactions, especially in relation to individual performance efforts and standards, can affect confidence when carrying out tasks, pride in the

completed work and finally self-esteem. Lack of motivation, unequal distribution of work effort, poor communication and lack of trust were all factors that were perceived to adversely affect performance and lower academic standards.

One area of reported difficulty for Linda and Dale, both Research Writing participants, was group members' lack of motivation. Linda found that she had to work to keep her own morale up in order to cope with a group member who disliked the subject. Dale had previously reported that she was getting a lot out of this course, and felt that the peer critiques had been a really valuable way to learn about her own work. However, two weeks later, she was frustrated with her group members for taking up more time than she was prepared to give. Dale is representative of a number of participants who had mixed feelings about group work.

*"I'm having a bit of trouble with the collaborative learning process. I believe that the duties in our group are not being distributed evenly and I think some people in our group take the subject more seriously than others. The problem is I can't even vent my frustration at being left with most of the work because half the group doesn't show up for class...Frankly I'm not impressed by this because I don't think I should give up more time for people who believe attending class is not important ... So what am I getting out of the process? I have found that I do most of the work because I feel that I have to get it done, otherwise it would be left unfinished. I'm annoyed that I have to give up my spare time to complete set tasks with a group who feels they don't have to turn up to classes."*

Gay, Kath and Kaye, Multi-Media participants, report on different concerns relating to communication.

Lack of trust led Gay to be concerned about how the quality of her work might be affected once it was handed over to the VUT students.

*"It's a little hard to rely on people in a group when you're not sure whether or not they'll keep their end of the bargain. This doesn't help when, if you know exactly what you are doing, you have to delegate work to these members and you're unsure as to whether the work will be completed...hopefully we'll get our act together."*

Gay's group finally did meet. It was at this point, she reported, that they were 'at ease' with one another and that she knew the project was going to be completed. Gay was disappointed that their group communication problems happened towards the end of group.

Kath, like a few other participants, wanted to pull back to doing the work individually. However, despite her setbacks Kath was still able to acknowledge the benefits that she had received from working in a cooperative environment.

*"We have arranged to all meet up together...however nobody made it...I think the whole group is beginning to feel the pressure building...I had a chance to talk to another group member and the feeling that we both have is that it will probably turn out to be disastrous. I would hope not since we did put a lot of research and effort into this research. It seems such a waste that the communication problems came towards the final weeks of production ... If I were to have done it individually, I am sure things would have run more smoothly and my research would have been much easier. However, I wouldn't have been able to learn as much or taken away any new skills."*

Kaye raised an ironic situation.

*"We deviated from the track I think due to a lack of communication. I think this is ironic because our group has spent so much time together...I think we were asking the wrong questions...however one conversation with the lecturer put us back on the right track. The morale of the story is that succinct collaboration is far more effective than drawn out, irrelevant conversation."*

### **Balancing study, life's events and earning a living**

One of the themes throughout the journals was the challenge of balancing study and life events. This became more evident during the third stage, as participants attempted to find time to meet with others to complete tasks. Some participants became irritated with others for not doing their share of the work. The need to balance various factors often resulted in the group work not being a priority for some, and the participants feeling overwhelmed and exhausted. The following journals from Dale, Liz and

Cherie are examples of how the academic learning environment extends beyond the classroom walls, and how this can affect interactions, as participants engage with one another and their academic work.

Dale attributed her feelings of being overwhelmed to the amount of academic work that she had to complete, and to the demands of her personal circumstances. Life events, as reported by Dale, not only affected the participants' health, they also affected how they viewed their collaborative work. Some were clear that they would 'think twice' before entering into a group work programme again.

Liz was deeply concerned about her personal problems and how they were affecting her ability to study.

*"I am having some personal problems at the moment and feel that they are taking control of my academic life...the main one has to be money...you should conduct some research on the effects of lack of money on academic performance...I know it affects one's ability to do well academically."*

While it is not uncommon for students to be busy finalising work towards the end of a course, Cherie reported being in a state of exhaustion for a number of personal and course-related reasons. Not being able to meet up with the others, and 'being told' to do more research, left her feeling dissatisfied with her collaborative experience.

*"I am in a state of exhaustion...I have several assignments due this week and everything else in my life is not going well. My car has broken down, I feel sick and I have so much homework I am hardly getting any sleep. I know this frustration is only temporary and that after tomorrow, my workload will be manageable. I can't wait."*

*...I am not very satisfied with the collaborative experience. We can never meet and it is very difficult to try and finish the project. I was told last night that we haven't done enough research. I am annoyed about this, as they could have told us earlier."*

### **Accepting differences and completing tasks**

Group work rarely stands still in time or space, and having concerns realised and unrealised as time went by helped some participants understand the dynamic nature of being part of a group. At this stage most participants were committed to their group:

*"My group members are starting to grow on me." (Maria)*

*"My group members are really great. I find them both really approachable..." (Annie)*

*"Group work has improved because we are now helping each other." (Mary)*

They allowed room for differences, though this did not stop them from feeling frustrated and angry at being overworked or unappreciated.

Vanessa took the risk of discussing how she felt with another group member.

*"I love group work as it allows you to bounce ideas off one another and inevitably come up with something different and better. However at university it is different. I find that because we are strained for time, as none of us can work outside university time, the ideas we come up with are the lowest common denominator rather than getting the best out of all our ideas. Although we do not argue I find we are not particularly compatible as a foursome. We do not understand each other properly and are impatient to finish...I feel sometimes that I'd do better on my own...I can think at a time convenient to me for as long as I like...in a group we don't have long to think...so we are pressured to compromise to the loudest person who I do not always agree with but I'd rather get the work done even if it is not how I'd do it. Group work has improved because we are helping each other...Which means pressure is off, we actually talk more and are friendlier to each other...Had a discussion with one member of the group...got on to the fact that we didn't function as a group well because we didn't like each other – we're not on the same wavelength...it was interesting to talk with someone I don't particularly like about it because this person doesn't like me either."*

### **Final journal comments**

Of course, it is not entirely possible to know how everybody felt at the end of the course, because only sixteen participants wrote journals in the

last two weeks. It is uncertain as to why other participants did not journal till the end. Those who did, report getting on with others enough to complete their work. Despite having some difficulties with group processes, at the end of their course work they reported feeling supportive of the cooperative and collaborative group process. Most participants did find elements of group work to be demanding, and, as already suggested, not all groups ended with members feeling successful and satisfied. In some instances, challenges were submerged, differences went unacknowledged, and for some this finally led to dissatisfaction with the final outcomes. Other groups appeared to end up by accepting what Hunter, Taylor and Bailey (1997, p31) call 'this is as good as it gets'.

For some, having interpersonal skills that included problem-solving strategies, a commitment to the task, and being prepared to support others, did, at the very least, lead some group members to feeling satisfied at having completed their academic tasks. Jamie demonstrated problem-solving skills and a commitment to the task to finish off his work.

*"I submitted my final paper today, and on the whole I am happy with it. I couldn't get in touch with my estranged group member, but nevertheless, I got the critiques I needed...I think I am better suited to more traditional styles of teaching. Nevertheless I did enjoy the course because it was so different and also because I met so many different people."*

Once again we can see in these final journals a range of shifts in thinking about group work, and the benefits participants receive from taking part in cooperative learning groups. The major benefits reported were in the friendships that the participants made, despite reporting how stressful the group process was at times.

*"I'm enjoying the last few classes and it's really coming together. This subject has been great in helping me make new university friends."*

*Firstly the size of the class is perfect. Secondly, working in groups, although at times stressful, it is really a fun experience.” (Ben)*

For others, such as Kerry, the experience was the best she had ever had in a group.

*“This is the best experience I’ve had with group work because we are all confident in throwing ideas around...It is a good experience and I feel like one of the lucky ones.”*

Marie, in her journal, outlined how she really did not like her group members. She thought she would not get along with them, but found that slowly over time her group improved and eventually got along really well. She extended this feeling to include her whole class.

*“This is my final entry. Well after all my complaints and stress I actually think that collaboration helped me a lot. There is no way I could have done this subject without the support I received from my group. Although it was difficult to meet deadlines in a group, it was great to get help through peer critique...the atmosphere certainly fostered close relationships and in spite of the frustration and lack of guidance, I really miss the people and the informal atmosphere.”*

Annie also demonstrated that she was able to shift her thinking over a period of time. She reported benefiting in a number of ways from her collaborative experience. For example, she gained confidence to work with others, learned to trust group members’ contributions, acknowledged friendships and the part that collaboration plays in the workforce and in her time at university.

*“This course has certainly been a unique one in terms of my own experience at university so far... What I have gained is the confidence to work with other people and to trust them with group contributions. Unfortunately I entered this class with a prejudice against group work after a few bad experience that left me feeling I had to do all the group work because others were incapable of completing things to a high standard. This course and the collaboration within it gave me greater confidence in others to be able to positively contribute on an equal basis...Collaboration has certainly taught me that two heads are better than one and that my ideas are not always the best and that you can come up with different angles on the same topic...Overall I made some*

*great friends that I hope I will continue to see once this course is over...collaboration is something that we must do in our lives."*

### **Summary**

During this final stage, as participants completed their projects, they attempted to accommodate the different standards of performance demonstrated by group members. There was evidence in the journals of both cooperation and tension during this stage.

As the pressure went on to complete the work, some participants became frustrated with the failure of others to contribute to the group task on time. Others became frustrated with trying to juggle study, coping with life events, and the need to earn a living. Some of these frustrations may well have contributed to the fact that only 16 out of 44 participants journalled within the last two weeks of the group process. What does come through in the entries of the final sixteen, was the level of cooperation that enabled completion. Most of these participants reported feeling a strong sense of belonging to their group. Some named the skills they had developed. A few reported on their dissatisfaction with the same aspects of the cooperative and collaborative process.

I note with interest that although the participants were in a learning environment that was initially unfamiliar, nearly all managed to work through the challenges that cooperative and collaborative learning groups can present.

## CHAPTER SIX: IMPLICATIONS OF THIS RESEARCH

This research was designed to gather information about participants' perceptions of their learning and the strategies they used when working in a cooperative and collaborative learning environment.

This research confirms that cooperative and collaborative learning environments provide opportunities for students to effectively interact, question, problem-solve, be exposed to alternative ways of thinking and behaving - in short, 'to think outside the square'.

This chapter summarises the major themes of this research, outlines implications for practice, identifies limitations of the research and gives direction for further research.

### 6.1 SUMMARY OF RESEARCH FINDINGS

The overall findings from this research are:

- Cooperative and collaborative learning groups require students to shift their thinking from working independently to working interdependently.
- Cooperative and collaborative learning groups require emotional energy.
- Cooperative and collaborative learning groups require students to have a range of positive interpersonal and problem solving skills.
- Cooperative and collaborative learning groups require lecturers and students to have the appropriate skills, values and attitudes to plan and achieve their academic tasks.

### **Themes emerging from the research**

The conclusions of the present study will be summarised within the major themes that arose within the data:

- interdependence;
- benefits to students in working cooperatively;
- behaviours that hindered learning;
- anxieties; and
- the role of the lecturer.

Cooperative and collaborative learning took place as participants worked in small groups. However cooperative learning groups did not just happen. It required time, effort, skills and a willingness to engage in the process from both the lecturer and the participants. Participants' trust in the cooperative learning group process took time to develop. It was built through a cycle of disclosing one's thoughts, ideas and feelings in a variety of situations and having other group members respond with acceptance and support.

#### **Interdependence**

Taking responsibility for their own learning and the learning of others was a new experience for most of these participants. Group work is different from individual learning. It is based on interaction, which requires a level of interpersonal, problem solving and communication skills that assist in getting the work tasks completed to an agreed standard. Sometimes participants resisted these responsibilities, and sometimes life events or the need to earn a living interfered. A minority of the participants responded by wanting to return to the more traditional passive student role, to complete work independently or to work with their friends. A majority of the participants were able to shift their thinking enough to move on. However, it was clear that most needed space and time to find and develop these different boundaries. There is also the possibility that some

of these participants came to understand themselves as learners much better when they had to cope with a different learning environment.

### **Benefits to students in working cooperatively**

Most participants had mixed feelings about being part of the cooperative learning group. Some found it to be a positive learning experience at both a personal and intellectual level. These participants appreciated how the highly interactive group work environment assisted in connecting them with others, which helped in reducing their academic anxiety and isolation.

The following list is drawn from the data and identifies a number of ways the participants benefited from the cooperative working environment when they:

- spoke and developed their own ideas in front of and with their peers;
- listened and learned from giving and receiving feedback;
- assisted in developing organisational skills;
- received support and motivation from peers;
- developed ways for handling multiple ideas and constructing concepts;
- shared experiences, which led to contrasting and comparing information;
- discussed difficult concepts;
- pushed themselves outside their comfort zone;
- made connections with others at both a personal and intellectual level;
- took risks in being part of role-plays and other interactive learning tasks;
- responded to the open friendly casual atmosphere; and
- increased their technology skills.

## **Behaviours that hindered learning**

There were also a number of behaviours that participants identified as having 'got in the way' of their learning. The two most common concerns were:

- the course structure and content not being clear and
- group members not turning up to arranged meetings.

Other behaviours that hindered learning at times were group members:

- not offering ideas and suggestions;
- making personal comments about other group members;
- not completing work that contributed to the whole project;
- not turning up to class workshops;
- having the tendency to become dependent on others for completing tasks;
- not staying focused on task;
- not having the necessary skills to do the task;
- feeling that they were not being heard; and
- feeling frustrated with unclear tasks.

## **Anxieties**

While the participants agreed on entry to take part in the cooperative learning process, in practice many appeared to lack an understanding about what cooperative and collaborative learning actually was. Most participants had limited experience of taking an active learning role and of performing social and cognitive tasks within small learning groups. The interactive discussions challenged their assumptions about how group learning took place and many initially found the changing rules unsettling. Given their limited experience of the cooperative learning process, it may

well be that some of the levels of anxiety and concern were simply caused by having to compete with other people's work habits, with different personalities, different interpersonal styles, understandings and beliefs that combined together to make the group dynamic mix.

Some participants, at different times, were frustrated, confused, or disappointed with the group process and this resulted in them:

- wanting to change groups;
- wanting to go it alone;
- feeling that they were not learning when taking part in role-plays and other interactive learning activities;
- wanting to learn in a more 'traditional' style;
- blaming others for uncomfortable feelings; and
- wanting to be told what 'to do' so they could get on and 'do it'.

### **The role of the course lecturer**

Just as cooperative learning groups were unfamiliar to the participants so was the role taken by the lecturer. His teaching philosophy was visionary and creative, given the didactic learning environment<sup>7</sup>. The opportunities he offered to students were radical and innovative.

A few participants reported on his personal style as being kind and helpful, wanting to hear from them on any problems or concerns that they were having. This is in contrast to many others who reported feeling frustrated and confused over lack of direction and what he expected of them. They reported lack of clarity on the tasks such as the purpose of the role-plays and the workshop interactions. Participants were initially unable to make the links between what was happening in the workshops and what they

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<sup>7</sup> See Chapter One

were meant to produce to be assessed on. By half way through the course when the participants had clarified their tasks and were more familiar with the workshop structure and their group members, their level of frustration with the lecturer and the course aims dropped.

The participants in this study are also at an age where socialising and being part of a group is still an important developmental task. Many planning meetings were organised around food and drinking places. Friendships were forged over ideas and inspirations. In my view it is often during informal gatherings that challenges are made to ideas or different ways of seeing things are suggested and more readily accepted. Interacting over ideas, possibilities and 'what ifs' are important parts of academic development.

## **6.2 IMPLICATIONS FOR PRACTICE**

This thesis highlights some implications for practice when working with undergraduate students in a cooperative and collaborative learning environment in higher education.

Coping with the life cycle of a group and the powerful group dynamics involved is part of '*being in a group*'. Cooperative learning requires students to participate actively in a way that is often unfamiliar and difficult. Given that many students do not have the necessary skills, maturity or abilities needed to carry out their tasks, it is not surprising that students do not greet this experience with enthusiasm. Therefore, planning for cooperative approaches to learning, in terms of content and process, needs careful consideration.

Lecturers may want to consider the impact on students who:

- have never been part of a cooperative learning environment at university;
- have never considered that they are able to create knowledge with others; and
- have limited comprehension of the social and interpersonal skills required to be an effective group member.

These approaches to teaching and learning also require lecturers to have effective interpersonal skills, time and a teaching philosophy that supports the implementation of such an approach. There are a number of things that lecturers cannot influence, for example: institutional constraints, students' personality types and their past experiences in groups. Lecturers may also want to consider the limits of their abilities to make students work together successfully in groups. There is no 'perfect group'. At best, as teachers, we can provide a learning environment where students are able to search for meaning, appreciate uncertainty, develop, challenge and integrate a range of ideas and concepts. We can also identify issues, demonstrate skills, model behaviours, provide opportunities to practice and receive feedback, discuss problems and solutions and work with students to develop their skills so they are enabled to do the same.

Knowledge of these variables can help to design an array of tasks or projects that will build group process skills and allow for shifts in students' thinking, from individual and dependent learners to interdependent learners, to take place. Being an effective group member means being open to learning new information about self, others and the course content. Having the following social and interpersonal skills can assist this process:

- active listening;

- asking for help and offering help;
- joining in the discussion;
- giving and receiving feedback appropriately;
- using a range of problem solving tools;
- knowing and expressing feelings;
- being open to learning new information;
- expressing concerns; and
- dealing with group pressure.

The results of this research indicate that tasks and assignments students are required to carry out need to be stated clearly and be referred to a number of times. Skills that are required to carry out the tasks may need to be identified and practised within class time.

I believe that learners have an amazing ability to negotiate differences and I see the lecturer's role as similar to that of a coach who supports and up-skills individuals and group members to resolve group dynamic problems. It is necessary to put aside time for discussion on group process. The benefits of such a discussion may help prevent student disengagement which can, along with lack of skills or motivation, or juggling study requirements, result in major problems in group dynamics. Bringing group processes to the foreground on a regular basis may well leave group members with more energy to ask questions, to challenge their own thinking, and to take on knowledge in a way that becomes genuinely significant to them.

### **6.3 IMPLICATIONS FOR RESEARCHER**

This research also has implications for my own practice as a social educator who facilitates therapy groups for violent offenders.<sup>8</sup> The therapy

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<sup>8</sup> See Positioning the Researcher in Chapter 1.

team plan for the enormous shift in cognitive and emotional thinking that is required before individuals can address their offending beliefs and behaviours. In the past, I believe we have underestimated the enormous shift we are asking them to make to become effective group members as well.

This was highlighted when I was simultaneously receiving journals from the participants of this research and beginning a group within my work place. Both groups were displaying a high level of anxiety and evidencing the following:

- confusion about course aims and task;
- limited skills in giving and receiving feedback;
- unwillingness to take part in role-plays;
- difficulty with staying on task; and
- a wish for the facilitator to be the expert and 'tell them what to do'.

In the past some of these group behaviours at work would have been labelled as 'part of working with clients within a prison environment'. Without wishing to underestimate the skills and knowledge required to work with clients with rigid offending beliefs, we are nonetheless at risk of falling into the trap of failing to look beyond our own processes for solutions. In doing so we run the risk of micro-assessments that can only produce ineffective solutions.

On reflection, the emotional and behavioural impact of working in a cooperative and collaborative learning environment needs to be more consciously discussed among teachers and learners. The results of these discussions may well make us all more aware of the differences between learners' perceptions and teachers' intentions when using cooperative and collaborative approaches to learning.

## **6.4 LIMITATIONS AND DIRECTIONS FOR FURTHER RESEARCH**

The present study has limitations. It is exploratory in nature. It sets out to understand how participants perceive their learning when asked to work in a cooperative learning environment. The data is largely based on self-report, which is highly subjective, being a combination of reality and an interpretation of reality. As the researcher, I am aware that the tool I used to gather data – for example, the journals - may have had an indirect limiting effect on group process. The journalling process may have given the participants permission to express feelings such as frustration in the one-to-one interaction with the researcher. If this occurred, participants may have been less inclined to work through their issues in the context of the group, thus affecting opportunities for group development.

A major strength of this research was using the journals as a tool to collect data. The journal process allowed the participants to share how they were experiencing their learning environment over a period of time. However, further research needs to be undertaken using this method. This will assist in determining whether the themes and patterns that emerged are consistent across a wider range of participants, of courses, of ages, and universities. There is also a need to investigate the contribution of broader systemic factors (social, cultural, political and economic), and resources that affect cooperative learning groups in higher education. In addition it would be particularly helpful to conduct further research aimed at gaining a holistic appreciation of the understandings and functions of cooperative learning groups.

## **6.5 FINAL COMMENT**

To make a final point, I acknowledge that the ability of a qualitative study of this nature to make definitive statements about cooperative and

collaborative learning is somewhat limited. However, the intent has not been to find one 'truth', nor has the intent been to generalise the outcomes to all students. It has been more about attempting to understand how these participants perceived and made sense and meaning of their course work, their interactions and their environment. To this end, this study has been as much about the research process, as it has been about outcomes. On this note, I think the significance of this study is that participants have directly shared their stories. They remind us that they are the 'experts' on themselves. It is their knowledge and expertise that will inform future research and hopefully future practice.

## **Appendix 1**

### **Introduction to Research Methods**

#### **Contract to participate in multimedia workshop and projects**

The following contract is to be signed by students participating in the special multimedia workshop. Students who do not wish to participate in these workshops are free to join another workshop where no contract is required.

- *I agree to work co-operatively with members of my group, attend meetings regularly and carry out agreed tasks.*
- *I agree to provide comments on the work of other members of my team, at the time and in the form specified by the course instructor.*
- *I agree to prepare work required for workshops, and hand all assignments in on time.*
- *I agree to keep a weekly journal, recording the research process and my experiences of it, to be sent weekly to the independent course evaluation team. I understand that my journal comments will be included in research products, and used to evaluate the collaborative exercise, but will remain confidential to the independent researchers and not made available to course instructors.*
- *I agree to attend all scheduled workshops except in emergencies. If for serious personal reasons I am unable to attend a workshop, I will notify the course instructor immediately after the schedule time, and include a full explanation. I understand full participation is a requirement for this option, and my grade depends in part on this participation.*
- *In return, I understand I will be receiving regular feedback in response to my journal entries, feedback from other members of my team, and feedback from the instructor at least three times in the semester.*
- *I agree to notify the course instructor immediately of any change in my circumstances, which affects my ability to contribute fully to this course.*

Signed:

Name:

Date:

## **Appendix 2**

7<sup>th</sup> March 1999

### **To Research Participants**

My name is Trish Kirk and I am writing a thesis as part of my Masters in Education program. The thesis aims to 'explore student's experiences of collaborative learning while working across disciplines in a criminology research methods course' at Melbourne University.

Collaborative learning in this context is how students go about co-operating as a team to develop academic information about research methods.

**I am interested in understanding how students conceptualize, perceive and understand their experience of collaboration from a variety of perspectives.**

The research process I intend is designed to encourage participants to reflect on/in their own experiences and their interaction between the content of the learning material and the overall learning environment. Data collection will include a number of sources: individual interviews, a focus group workshop and through using regular weekly online journal writing. Journal writing is the place for recording insights, descriptions, reflections, in fact, anything that discoveries are being made about. Journal writing will be posted to: **pkirk@xtra.co.nz**

### **Ethical considerations**

I understand that you have signed a contract agreeing to the terms and conditions of being part of this group and that this agreement includes being part of this evaluation. In keeping with this agreement the following ethical considerations are intended:

- All factual data and information collected will remain completely confidential to the researcher and her supervisors.
- The information will not be used for any other purpose other than this research study and related publications.
- The thesis will acknowledge the contributions of those who have participated and their anonymity in the research report is guaranteed.
- On completion, the thesis will be made available to the research participants.

It is hoped that the student's who take part in this research will enjoy the opportunity to critically reflect on the collaborative process while they themselves are learning about research methods. The information gained could also influence future course design with learning community ventures.

Thank you for taking part in this research. I am in Melbourne for this week only and if you have any further questions you can contact me on the above email address.

Regards,

Trish Kirk

## **Appendix 2 (continued)**

### **Journal Writing**

Journal writing is a way of capturing learning in a tangible form. It is the place for recording insights, descriptions, reflections and discoveries. I am interested in your a-ha moments, your questions and any mismatches between what you are or were doing then and now.

Journal writing is not formal writing, it is spontaneous, and its only purpose in this context is to capture the how of your collaborative process. To do this it is important that you write in your journals on a regular basis, at least two or three times a week.

**The journals will be used to ask for follow-up information to further assist in capturing learning experiences with all its trials and tribulations. Journals need to be written regularly and posted weekly to [pkirk@xtra.co.nz](mailto:pkirk@xtra.co.nz)**

To assist with journal writing (if you have no previous experience) I have set out over the page a beginning structure and an ongoing reflection structure. I have also provided below some prompt statements that may assist you when thinking about an event, an act, someone's behaviour or thinking about your thinking. Feel free not to use them, I do not want to stifle your creative process.

- Meeting new people...
- The work is...
- Speaking my mind in the group...
- My individual ideas...
- People whom...
- Students who...
- Men/women who...
- Lecturers expect...
- I do not understand when...
- Why doesn't...
- My memories of previous group learning...
- Working this way...
- I often feel...
- It is neat when...
- I cannot stand...
- I feel anxious when...
- I know I have learnt something when...
- Aha moment was...
- Writing things down...
- Sitting and talking...
- Using the library...
- I feel frustrated when...

## Appendix 2 (continued)

### Journal Writing Structure

#### Beginning your journal

Firstly the writing style should be casual and written in the first person, any additions of drawings, pictures, diagrams are welcome. Journals will only be read by me and it is better to write in it frequently and a little at a time rather than in chunks.

The questions below provide an easy starting point and they also allow me to have some idea of who you are:

- Who are you?
- Your background?
- Your interests?
- Your ambitions?
- Courses you are currently studying?
- What do you find interesting in these courses?
- How do you normally approach study?
- What is your previous experience of working collaboratively?
- What do you think of this course?
- What do you think of writing a journal?
- What are your personal objectives in this course?

#### On-going reflection

Below is a possible structure for your ongoing reflections, however *feel free to create your own*.

Begin by telling me:

Where and what time of the day/night you are doing this journal?

What is the main issue/event/act/behaviour (give it a name even if its "a rave")?

- What am I thinking?
- What am I feeling?
- How is this related to other issues?
- What assumptions am I making?
- What questions should I ask?
- Who could help me?
- What do I know and what do I need to find out?
- How can I do this better/differently?

*(If stuck make good use of the suggestions over the page*

*Don't forget to post your journal weekly [pkirk@xtra.co.nz](mailto:pkirk@xtra.co.nz))*

*If, for some reason you cannot maintain your journal writing you must let me or your course coordinator know as soon as possible.*

## Appendix 3

### Journal data

The following data are verbatim extracts from the journals. For clarity of presentation they have been divided into the beginning, middle and final stage of group. Each stage in this presentation represents four weeks of the course work.

#### **The beginning stage of group**

The following journal extracts are from the beginning stage of group. They are representative of the journal data that arrived over that period of time.

##### **EILEEN:**

Handed in our first comparative essay. I panicked over this because I really had no idea of what we were suppose to do and I was sure I was going to get to class and find out that everyone else's was so much better than mine...when I got there only five people had done them. We started the class going over the problems or worries people were having so far about the course. I have lots, but I thought that my questions were silly and that everyone knew what was going on. Talking to the other girl sitting next to me soon relieved my mind – I wasn't the only one after all! So I started asking questions and discovered that I actually had a lot more clues about what's going on than most. We did these role-play things, which is something I generally hate doing, but they weren't so bad. It's really good how we keep getting to work with different people, and it's really good. This is the only class I have where I actually speak to the other people, and it's really good. Already everyone seems pretty relaxed and easy going with each other – I think that it comes from the fact that we are all pretty clueless about what's expected, and we find unity in that.

This week's class wasn't the best I've ever been too unfortunately. I don't really see what all this role-playing and game playing is teaching us. It also really frustrates me how people don't seem to be able to work if they don't have an exact, precise framework to adhere to – can't anybody work independently? I have a feeling lately that I wasn't going to be able to work by myself when I needed to, without the guidance of the teachers, but I've discovered in this course that its actually heaps of fun. I think the point here is that we're suppose to interpret things in whatever way we like, and that the lecturer actually wants to see how we'll interpret the activities he gives us.

##### **TRAVIS:**

I enrolled in this course on the advice of the undergraduate co-ordinator and I am beginning to regret this decision.... The subject does still seem confusing but it is getting clearer after every workshop. We get into groups and acted out scenes in a courtroom the other day, couldn't see the link between acting and research writing at first, then it clicked.... After thinking about the course I have re-evaluated my initial thoughts on it and have come to the conclusion that it will actually be enjoyable and rewarding. The set up of the workshop allows for everyone to participate which means that the range of ideas and opinions forces me to appreciate different views on the one topic, which can only help me think laterally.... I do not know anyone here the exercise is also character building in the respect that I have come out of my shell. For me this course is not just about learning at an intellectual level but also at a personal one.

**LINDA:**

I must say that I am really enjoying the classes...because there is a real feeling of closeness and friendship that is developing... I find that everyone is very friendly and willing to participate and it makes the class so much more rewarding...went to the magistrate's court for the observation exercise...it put a whole different spin on the exercise since I wasn't sitting there by myself... it feels that this class is a flashback to secondary schooling. Because of the overwhelming feeling of closeness and friendship that seems to go hand in hand with the class... It is very different to the other classes I am undertaking...I was sceptical that all of these contracts, journal entries and collaborative work groups would work coherently. Everybody is afraid of change and difference I suppose. I was very wrong...I am really enjoying these classes.

**SARAH:**

I usually approach study like all the people I know at university, leave everything until the last moment and then freak out and cram like crazy!!! I'm not really predisposed towards working in a group, it usually seems like another stressful experience I could do without. I'm basically a shy person, a bit of a loner when it comes to group activities...So in my eye this course is going to be a little stressful for me, but I think that I can handle it, even though it is a little different to the courses I am use to. My major objective in this course is simply to pass, I'm doing it as part of my major, not really for any other reason.

This week's class was kind of weird, breaking off into groups and doing activities that didn't seem to be helping us much. I think that most of us are kind of confused about what is going on and the general details of the course (how we will be marked what work we have to do). I'm a little worried, as I really don't know anyone in this class and I think it will be hard to find a group to join.

I am not quite sure about the way this class is going. I feel like we are not really learning much, I don't know, maybe the idea is that there isn't much to learn, this is just support for the things we already know and so we can do the research assignment. The work we are expected to do is confusing. Most of the time we have outlines on how to write things up, what to study, but in this class you are really running on your own steam, and doing things anyway we like. I usually like a little more structure to my work, so I know what I am doing and where I am going with it....this class makes me feel a little but lost at times.

I am happy with my team...I really had a lot of fun in this class, we learnt something without having to sit and write pages after pages of notes that you don't really read or absorb anyway. We learn by role-playing and discussion and we swapped ideas and questions. I didn't think I would particularly enjoy this type of class, and I still get a little nervous before a class because of the high amount of participation required, but I think I'm fitting in really well and pushing myself outside my comfort zone to join in with the class. We are still in the dark about what is required of us later on...but I feel that everything has turned out okay.

**MARGARET:**

This course seems quite interesting. It seems a little strange though- at times we feel 'hand-held' – not unlike our experiences at school, and at times we seem quite lost, and not really sure where we are going. At the moment I think I have my head around all that is required...

**BEN:**

The most confronting thing last year, as a first year student was the size of the university and the lack of friends you have once you leave the sheltered school environment. This subject has been great at helping me make friends...Firstly the size of the class is perfect. Secondly working in-groups, although at times stressful, it is a really fun experience. It's almost like being back in junior secondary and having to get together after class to prepare our special projects. I guess being stressed together, forces us to discuss things, and ultimately reduces all our stress levels.

**BARBARA:**

I'm finding the Research Methods class interesting for a few reasons; firstly it is very much like a high school class which is rather nice as I feel my ideas are being appreciated and listened to. Secondly that fact that at this stage the content is all rather general is good in some ways but I am also feeling a bit confused as to where it is all heading.

To be short I really don't know what is expected of me in this class. I don't know what is going on! It just seems like a waste of time that we have to sit around and play charades etc, when we could be actually learning something. Although the lecturer has put us in groups, we don't seem to be doing anything with them as he puts us in yet another group. It is very confusing...Basically I'm feeling frustrated with the lack of structure in this subject.

**BRIDGET:**

My previous experience with collaborative learning has always involved a few people doing all the work and others taking the credit for things they didn't do so I think I might be approaching this course with a bit of scepticism. I guess that my biggest problem with this course is that it is so unstructured, which I know is the whole point of it. Sometimes I don't understand what I'm meant to be doing until after I've done it, then I can see why we've done it. The people in this group seem to fall into two neat categories: those who are keen and interested and willing to contribute and those who are pretty pathetic about the whole thing...Today we were assigned the group for the rest of the semester. The two girls I am with are described pretty neatly by the two categories above. I don't know how this is going to impact on our collaboration.

**MARY:**

This course has been unusual to me...I have to admit that my previous experiences with working collaboratively have not always been very successful but I am willing to give it a real go.

**COLLEEN:**

I have done a bit of collaborative work before...previously I have found it somewhat frustrating as I am a self confessed conscientious student who likes to do well and therefore find it hard when others don't put in. However the first thing I notice about this course is that most people seem eager to participate. This is probable because this particular option was optional.

**DALE:**

I'm normally the type of person who is a perfectionist about her work. My study habits were good last year but my circumstances were different then...I was more organised with my time...I have moved into a flat...always have visitors; which means not much studying. I have no qualms working collaboratively and am glad that I have the opportunity to make new friends.

**MARIE:**

I thought it would be quite a boring subject with heaps of work, however so far I have been pleasantly surprised. I really love the laid back casual atmosphere of the classes – it actually reminds me a bit of school. I didn't know anyone at the beginning, but everyone is open and friendly so I am finding these classes a welcome break from normal university lecturers. We did these role-plays last week and even this simple exercise has shown me some of the difficulties I might be facing working collaboratively....My group discussed ideas...no one is prepared to commit to anything...I tried to lead but didn't want to seem bossy. It was quite frustrating...I've always like to be organised in my study, so this attitude really annoys me.

I found it annoying again in my group that some people did not want to participate properly...we were confused with the instructions and I had to go and ask the lecturer...the activities are a bit trivial but they do have a purpose.

**JUDE:**

This is the last criminology subject I will do as I am getting a little sick of the department...I have had experience of working with different teams...Research Writing is very confusing for me at the moment as I can not seem to determine what is the main goal of the course. After the class today it became a little clearer and hopefully over the coming weeks it will become even more apparent.

**LYNSIE:**

In our first class we got into groups...I was able to learn and understand the point of the exercise easily, which is obviously a good thing...I am enjoying working in groups so far, as it enable and encourages discussion of difficult concepts...the instructions were vague and open to interpretation. I prefer being told more specifically what to do, so I can get on and do it.

**LYNN:**

...my first impression of this course. It is definitely unlike anything I have ever done before. I am very much use to a lecturer lab format which requires little group work, However, I'm sure that Research Methods will be able to help me organise myself better when researching as well as helping me to overcome shyness....I was quite surprised...we were emailed homework on Sunday night. I did not of course expect this and therefore came to class without completing it. This weeks exercise has helped me deal with an important task that I am not good at. The first deals with peer evaluation. I continue to find it quite difficult to negatively evaluate a peer. Although I tired to write the truth, most of what I wrote comprised of positive comments and excuses for why some parts lacked perfection. I guess I keep thinking that by writing a good review she will repay me by writing a good one about my work, which was stupid as we were writing at the same time.

I have found that many more people are willing to express their opinions and try to answer questions than me. I always find it difficult to provide my ideas and thoughts thinking that others will think them as stupid. This is what I hope to further develop through group work.

In this weeks session nearly everyone had a go at answering the lecturer's questions except me. I hope that I will be able to change that in the future.

**KAYE:**

I happen to have quite a few thoughts regarding this issue. Firstly, for a group to function in a joint project such as this, I think it is extremely important to have assortment of personalities and varied roles in each group, for example, use this person as a spokesperson to trigger ideas and conflicts...one of the main strategies for raising really good ideas in group is conflict...this makes every individual think about their own ideas.

**CATHY:**

Our first meeting was a little daunting, and dare I say it intimidating? They all knew each other...whereas all of us criminology students didn't. When we were told to split up into groups I was instantly uncomfortable, having to mix and share ideas with a group of complete strangers! After the initial hello, I totally relaxed, realising that everybody else was in the same situation.

One problem I know that is going to keep coming up is the fact that we can not seem to stay focused. It just might have been that it was the first time that we had all meet each other...but my group and I spent more time talking about football teams and our favourite night-club than we did discussing the topic.

Whilst I know that some groups are arguing over what there project is going to be about, my group is doing exactly the opposite! We still haven't settled on a direct angle for our project yet because every time I email our group asking them what we are doing, all they reply back saying 'whatever is easiest for you'. Great that helps me a lot! I can't help getting the feeling that they are both over compensating on the friendliness aspect of working in the group. I on the other hand would much prefer them to say 'look we wouldn't mind doing this, this and this, what do you think?'

I find it hard to find time for this subject. It takes up a considerable amount of time in comparison to other subjects where you work by yourself. Now we need to work around everybody else's schedule.

**JUDY:**

I anticipate that you will find my entries a source of useful information and entertainment as the collaborative effort undertaken is proving certainly to be a union of contrasting personalities...Ultimately I would like to produce a spectacular piece of media, which will reflect all the talents of the group although I have found thus far that communication is proving to be a notable issue.

**LIZ:**

I find it hard to work with others. I find they can not really adapt to the way I speak... I have got to speak their way to have myself understood. This Multi-media group is much better...at least, its assuring to know people can understand what I say.

Well I hope to learn more about the media in this course...I hope that there will be more practical sessions instead of sitting around for 2 hours every week...Going over to VUT...we'll be visiting their media department... I am looking forward to it.

**GAY:**

The first workshop...was a little surprising. I guess I though I was thrown in the deep end and was told to swim back without any assistance. Not only did the course sound extremely computer based, but it sounded way over my head. I had no idea where to start...I guess it was all a little daunting. It progressed for the best. My group members...are all extremely nice and we seem to get along well...

At the beginning it was a little daunting,.. The main group work we did in the workshop was the role-play. Although our objectives weren't exactly achieved, I realised that when working in group members have to have a similar way of working. Not have to, but if one is unable to conform to a particular technique of working, then the group will not be a success.

This subject is very discussion and group based. These workshops are very intimate and at times this can be daunting. Having to speak in front of a group can be scary. Maybe the most important thing with working in a group such as this is that you always have to be focused and on the ball with what is going on. If not, you can lose track of the discussion, ask a question, look like a complete idiot...When going through something like the Internet...it helps to have someone going through the same steps. It gives you confidence in using the material and allows you to realise that not just you has problems...

I created the four topic and I wrote messages, hoping that sooner or later I would get a reply...I got replies...they were extremely honest...they made me wonder if this guy in my group was a smart arse...I hope that the group will be reasonable when I tell them I have a problem...I'm just weary as to how important this project is to them and whether or not they will take it seriously.

**PAULA:**

I had to think hard, as I am not good with people and prefer to be on my own...I have basically forced myself to be involved in this. After the first class I wish I hadn't. I had really had a bad week and was not in the mood for having to get into groups and be friendly and make decisions. I found it really hard to work with the other guys from VUT, and come to any agreement on anything. I also felt like such the academic, whereas they were the creative cool ones. Sounds childish, but I felt like there was a Melbourne University upper class academic stigma attached to us that they were aware of and didn't like. I don't know, maybe I was making it up. Maybe it's just me that is aware of it! The second class was good in that there were only 11 of us there, and it was quiet comfortable and casual. I felt more comfortable doing group work there because we were all in the same boat, and had similar concerns, uncertainties etc. I have always managed to go through university, not making friends and doing a minimum amount of interaction. It hasn't really been intentional, its just the way it happened...I can be quite extroverted in some situations. But when it comes to university and working with other people I'm not at all, and really don't like doing it.

## The middle stage of group

The following journal extracts were received during the middle stage of group. They are representative of the journal data that arrived over that period of time.

### **EILEEN:**

...I'm not very good at working in groups, I appear to have taken over already, having been the only one to post messages on the board, and using all my own ideas in doing it.... Hopefully the others will check it and say if they're got any ideas which would work better than mine...This has to be the worst week possible for having to work collaboratively – I've got so much other work that I am having trouble figuring out when I'm going to have time to talk to the others ...we'll meet tomorrow just before class to have a chat about what we're doing. It's 'good there's' been no arguments so far, or criticising of each other's ideas. I suppose that's got something to do with that fact that we don't know each other so well. All the group work I've done recently has been with people I've know extremely well, so it has been quiet acceptable to tell each other if we haven't agreed with suggestions...its not easy to tell some you don't know very well that their ideas are 'crap', it's much easier to be polite. Luckily there haven't been any crap suggestions yet!!!

### **TRAVIS:**

The group work is starting to take shape and I have got to know one of my group members well. We hang out on campus a bit and talk about the subject and its content etc. so in that sense we are bouncing ideas off each other and discussing our own perspective. The in class material is still confusing and I don't feel like I am learning anything at all, if anything it seems like a waste of time. Being the optimist I am I have faith that somehow this subject will enhance my writing skills and be of value down the track. I was looking forward to the group outing...the others didn't show and the host wasn't there at the organised time. I guess this is a pit fall of group activities, people are unreliable and there can be a lack of communication. I feel like my class in general is pretty good, there is a sense that most people are unsure of the subject is its like we're unified somehow...

Well what can I say it doesn't feel like we're heading anywhere? If I am learning anything then it must be happening without me being aware because I honestly feel that it is a brain dead subject. As for my other subjects well I have been involved in study groups and they are working out fantastically. There has been nothing to inspire me...we will be learning in class this week so I'll have to go to that...the group is not going well, one member has dropped off the planet and the other girl and I have no idea about what is going on. I am feeling as though I have wasted my money on a subject that hasn't done a thing for me.

### **FRANK:**

I went to court with a friend also doing IRM...ended up focusing on respect, and how it is shown only as a way of following protocol. I discussed the observation with the other student, and found that she had noticed things that I hadn't and vice versa, so it proved to be a valuable incident. While we haven't done any work in our collaborative groups yet, I have found that when working in groups for short tasks, you feel guilty if you do not make any valid contributions to any discussion...I sometimes find that I don't have anything valid to contribute.

**LUCY:**

More and more I am realising that I prefer working by myself rather than collaborating...perhaps it's more to do with the people I'm with. I think one of the drawbacks of collaborative learning is that you only really work well with people that you like. Within my group, I often feel like that we are three separate units instead of one. And I can see that this is having an effect on our learning. I don't know about the others but I'm not having any a-ha moments, as we are not discussing the work properly... Another thing is that nobody in the class seems to have any clear idea of what we're suppose to be doing...that makes inter-group discussion not very effective. Apart from those few grips, I'm really enjoying this subject. I like the fact that we're getting out and doing things rather than just learning the theory.

I realise today that I don't dislike the girls in my group, its just that they're more interested in getting the work finished than in doing it properly...It finally hit me today that this course is about the methods used to collect the information we're studying, rather than the information we're studying itself. Six weeks into the course called "Introduction to Research methods" and I've only just realised this.

**MARGARET:**

You probable know that many of us have been fairly frustrated with the apparent lack of direction that the course has been taking...it is now great to have a goal to work towards...have successfully used the forum to get feedback...and to reply. Collaboration is great when it works, and group members know what is expected...We had a little trouble with our survey... both missed lessons...completed the revised survey on my own...It was almost good that we did have problems during this process, as it has enable us to iron out collaboration problems before we start on the research project work.

**MARY:**

When we first started this class, and we had to sign the contract, although I didn't take it too seriously, it still reminded you that there are other people replying on you in this course, since we're working in groups most of the time.

**ANNIE:**

We came up with some good ideas we agreed to communicate from home through the forum. We designed our questions and submitted them to our forum on the net. This I have found to be a great device. My group members are really great. I find them both really approachable, but sometimes she is a bit distractible and is prone to laze around a bit. This sound awful but when you have things to do in allocated time frame, it makes it difficult and I do not want to have to spend an excessive amount of time after class...nevertheless, we seem to work well as a group and everyone is prepared to input and say 'we'll do this'.

**JOHN:**

Working in groups we figured collectively that the task was pretty vague... What was interesting was that while nothing final was discussed, different angles by which the task was approached via the input of 3 people provided some sort of grounding. By bouncing ideas off each other, which were, either accepted, rejected or even elaborated on, some headway into the task was achieved.

**JAMIE:**

I would have to say that doing the survey was the least pleasurable of the three research tasks. The collaborative component was essential the cause of this. Within the group we all had good ideas, however we found it difficult bring all of our ideas together to form a cohesive focus and directive.

**MARIE:**

The lady who was showing us around the web-site moved at such a fast pace that we could not keep up with her and I became hopelessly confused...We were trying to ask for help but we could never get their attention. There was no real understanding in the class about what we were supposed to do.

The lecturer gives us broad assignments, which is good in one way...however we do not know how to approach them. It would be better to be given more specific instructions.

My group did not have the time to meet during the week...it seems so disorganised...I know it is only a small exercise, but if this is the state of things to come, I want to move groups! I wish we could of chosen our group because we work a lot harder with friends, than people we don't really know. It took us a long time to specify out topic exactly...no one seemed prepared to take the initiative...The classes are not that bad. They are more enjoyable than I thought they would be.

**DALE:**

I sometimes wish that the course had a bit more instruction and less more open interpretation. Is this a tactic of the lecturer? Because if we are unclear about the instructions, we are forced to seek help from each other and discuss the issues; opening up the opportunities for collaborative learning.

I was a bit frustrated at the last IRM class, as I was the only one from my group who bothered to show up. The same thing happened the week before...I can not help feeling that if we had the chance to pick our groups ourselves, there would be no problem with absences...In terms of group work, I definitely believe that two heads are better than one...we had to offer a peer critiques and we both found that being able to discuss the issues drew so much more out of the exercise than simple completing the questions one by one.

**SARAH:**

Finally we are working in groups, but it is harder than I first imagined. I'm one of these people who likes the work they do and when someone else has a different idea, and it doesn't seem up to scratch, I can't tell them that, I just ignore my feelings and do what the other group members want. I suppose it means I don't cause friction, but it also means I come out dissatisfied with my performance. Not only that, our team is not entirely working together, we are going away, each writing what we think and coming back and collating. I don't like this method, I prefer to brainstorm within the group, then work together the entire way. But we all agree on one thing we still don't know what we are doing... It is a bit hard and a bit stressful when you can not wrap your head around what you are suppose to do...I find learning hard in this environment, although I prefer assignments and homework to exams, and workshops to lecturers, it is hard to know what you are suppose to be learning.

Last weeks classes were okay. We all got to express some of the concerns we have...The group work aspect seem to be getting better. My concerns about not working together on survey questions was entirely unfounded, it turned out better than I imagined. We worked together to combine out best questions for the survey, and it turned out to my satisfaction as well as the satisfaction of other members of the group.

I enjoyed working in group last week, it seem to distribute the work well, and working with others seem to make our work a better standard, as we could pick out the best bits from everyone, and discard the not so good parts. It also seems to help motivate me a lot. If I know someone is depending on me to get something done, I am more inclined to get it done straight away, instead of leaving it till the last minute, like I do with everything else. And working in a group helps you find out things about other students, and this is good, especially at this time of the year when everyone gets a little stressful. You find out things like the fact that you are not the only one with a lot of work to do, and your not the only one who leaves it till the last second, and your not the only one whose marks have dropped since high school, and most importantly, you're not the only one who is stressed out.

**CHRIS:**

This subject is going okay. I must admit it is quiet interesting and definitely a new experience, with all the collaborative work we have to do, I've never spoken so much in class. We raised some of the issues we have on our minds regarding the content of the class material. Fortunately, I went off with a better understanding of what was expected.

**JUDE:**

Things haven't been going well in the Research Writing class. The Lecturer has led the class into an absolute shambles and we are all quite disheartened and disappointed with the class.

**EMMA:**

I usually work best with highly structured subjects, that is, when you are told you should read this on this week, go there to find that etc. I think the reason for this is I am a bit vague and have a tendency to fall very far behind. So I like it when people tell me what to do and when to do it. Hence, I have been a bit lost in this subject.

**ANNIE:**

We came up with some good ideas we agreed to communicate from home through the forum. We designed our questions and submitted them to our forum on the net. This I have found to be a great device...I am more afraid of writing the wrong thing, or perhaps that the criticism will be taken the wrong way. I think by talking about it I can justify my criticism better.

**JUDY:**

I am so relieved that we are all working well as a group. We all seem to have defined out individual roles well. I have emerged (not surprisingly) as the leader of the group. It is funny how people automatically slide into roles. I don't mind being in charge, and for the most part all of the decisions we make as a team. I think that the VUT students look to me for basic direction even when it comes to the production side (in which my skills are basic). While two other group members debate the 'best way of doing things' another group member acts as umpire, or a observer who helps to ensure the other two agree and make the right choices. As for (a group member) I haven't seen her a lot of her. She has told me that she has so much work from other subjects to do, I question her priorities. She wasn't at the meeting today and I have been unable to catch up with her...I will email her soon to ask whether or not she has done her share.

**PAULA:**

Well things are starting to progress a bit more...we got some concrete things down, and it was surprisingly quite easy to discuss ideas, and agree on what we wanted to do, and in ways in which we could do it. Both are pretty easy to get along with...(a group member) is a little more quiet...I guess it will be a little bit hard for him being the only guy in the group of four, and he's more interested in just the production side...we all have a fairly good idea of what our roles are and how it is all going to come together.

**LIZ:**

I'm having some personal problems at the moment and feel that they are taking control of my academic life...the main one has to be money...you should conduct some research on the effects of lack of money on academic performance...I know it affects ones ability to do well academically.

VUT students joined us for the second time...finally came up with a project title...It was a pleasant discussion. Today's meeting was a disaster...were 20 minutes late and (a group member) was 45 minutes late! She has never been early! But I think its kind of justifiable for her to be late as she always has to work weird hours that make her very tired....I don't think the guys are happy that she is always late but they never said anything...we didn't really discuss anything today...we all went to the lab to do our own thing instead of discussing the project.

I am rather annoyed with her for always being late... Also a group member never talks to us...I feel rather weird because the three of us are always the only ones trying to get the discussion going and he sits there and stares at us or looks around. Sometimes he writes notes...we're not really communicating! Isn't effective communication part of working together? ...he is beginning to speak up...maybe I was over reacting in this.

**KAYE:**

Our initial reservation about group responsibilities have been overcome as we have made reasonable compromise via good communication.

We are really all starting to think on a similar level now that we have narrowed the project down to something we all agree on...Probably the most valuable lesson I have learnt from this project to date, is how people have different perspectives on things which allows for new concepts and variety in the things we do. The lecturers have a different perspective...the key to a good mark is to get in tune with the marker perspective and structure the project accordingly.

**GAY:**

I told a group member off for being so rude in the forums. We all took it lightly...and I think the point came across that the forums needed to be taken seriously. We were given the task of writing our project title, description of the project, roles and responsibilities and difficulties encountered. We worked well with this, not only being honest but thinking out our project in terms of deadlines, real situations and workload. I noticed that we were at ease with each other. This helps when depending on other people in the project, so it seems that the collaboration work is going well.

After the group meeting... we said we'd meet again next week...I didn't hear from them after that...It's a little hard to rely on people in a group when you're not sure whether or not the work will be completed.

I called one of the guys up... on Monday we meet up...went down to the food court...This meeting worked effectively. Not only did I leave with a saner mind than when I arrived, I felt that it was the first time that we were all in this together, that we were all thinking the same things and had the same opinions.

**CATHY**

I am enjoying the course but I cannot help feeling that we are all just little animals in an experiment. Every time we ask a question, we just get told, "now that is an interesting question, and one in which we want you to figure out for yourself."

We had another face to face meeting with our groups...we used our two hours to really sit down and nut out what it was that we were doing...we each have little tasks to complete before tomorrow's meeting...We are all getting along really well, and if we have a decision/choice that we cannot make, a simple flip of the coin has so far seemed to solve any problems.

**CHERIE:**

I don't really know what I am going to get out of this project...As of yet I don't think I have learnt anything new...Unfortunately someone couldn't make it to class so we couldn't discuss our project. The students from VUT are getting anxious ...I don't want to give them anything until it is perfect as I know that they won't change a word...I don't think the students from VUT understand that this assignment isn't necessarily always my priority...Our research project is progressing. A (group member) has been doing some really great interviews. It has been good having him in the group...Our other member of the group is not doing her fair share of the work. It really is not fair...I am going to try and help out...have just returned. I am feeling really positive about the project. The multimedia students are so talented and have so many skills that we do not have. I think our project is going to be a success.

## The final stage of group

The following journal extracts are from the final stage of group. They are representative of the journal data that arrived over that period of time.

### **TRAVIS:**

Will now attempt to inform you of how my studying is affected by shitty group work. Firstly, when working in groups and there is a lack of communication I tend to get frustrated and my work suffers. As I rely on my fellow members, and in turn hope they rely on me, when there is a breakdown in communication it results in a lack of commitment to the project. I should say there that part of the problem is lack of direction, if no one in the group is sure of what is going on obviously the end result will not be achieved to its potential. I guess that fact that people don't know what is happening acts as a buffer in that because you are in the same boat you react slower...

In a sense I get through this subject without giving it my all, although I would not let anyone down in the process. Secondly learning is a process. No matter how I approach something I will learn from it, whether it be a positive or negative experience is irrelevant. I am sure that come next semester I will look back and be able to identify things that are going to prove useful in the future.

Things are starting to go well in the criminology research. The only thing that is pissing me off is that my other group members are not doing their work, which in turns means that I am getting further behind because I have to wait for them before I can critique their project.

I have decided to get on with things without consultation with others as it will be the best way for me to do well...working collaboratively was good to meet people but I have come to the conclusion that I am the type of person that needs to get things done, and if others don't participate I won't be sacrificing my prospects to bring them up to date. In a sense I have found that now I am flying solo I actually understand the subject.

The group work was a complete disaster, people not doing things meant being late to do the work but all is done! I won't be rushing into another group project for a while let me tell you!

### **RACHEL:**

I've been really lucky to work with Margaret. She provides a different perspective and a different spin on things. Mainly due to the fact that she is older and this is her final year. The survey was truly collaborative effort. Coming up with a topic and a survey presented a few challenges... I had to learn to compromise...

### **MARGARET:**

I'm not feeling too bad about this subject. It has been really good using the forums to get group feedback ...I am usually a person who does most of her work at the last minute, and drafting is an unfamiliar concept to me (I usually write an essay knowing that this is my last draft) It will be nice to have most of the report done weeks before it is due.

**MARY:**

I have not got together with my group for awhile...while it has been a little bit frustrating that one of our group members is rarely there, I don't think it has been affecting the way I have been working. The other girl and I both get on quiet well, and we seem to handle most things – although it is a hassle getting together. I think that is the hardest thing about group work, it is difficult to find a time when we can all get together, and most of the time, people including me I guess – don't really make it a priority. I think we all just want to leave the schoolwork at school and not have to worry about it out of school hours...

..Its been a bit easier because we're not working in groups anymore, so we don't have to worry about all that. On the other hand, it was good having other people to share the work, because it's a bit scary doing it all by myself.

**ANNIE:**

The collaborative work through discussion and then critique was very beneficial. N made me aware of other possibilities and a way to narrow my focus which had not occurred to me. I will definitely take away from this class the reality that 'two heads are better than one'. The collaborative work in this course has certainly justified this.

The forum is a good place to communicate and collaborate, although personally I find it more easily to verbally communicate...I think I would find it easier to verbally clarify than to write...I am more afraid of writing the wrong thing, or perhaps that the criticism will be taken the wrong way. I think that by talking about it I can justify my criticism better.

This course has certainly been a unique one in terms of my own experience at university so far. It has been broadly based around collaboration, which I have not been subject to in many other of my courses. What I have gained is the confidence to work with other people and to trust them with group contributions. Unfortunately I entered this class with a prejudice against group work after a few bad experiences that left me feeling I had to do all the group work because others were incapable of completing things to a high standard. This course and the collaboration within it have given me greater confidence in others to be able to positively contribute on an equal basis.

Collaboration has certainly taught me that more heads are better than one and that my ideas are not always the best and that you can come up with different angles on the same topic. I think the focus on writing styles and the numerous critiques that we had to do on others writing styles has taught me to be more conscious of how others write and not just their content of their work. It has also compelled me to look at my own writing style...

Overall I made some great friends that I hope I will continue to see once this course is over...collaboration is something that we must do in our lives; particular in the workforce so it is something that we must become confident in using. Interaction is a crucial aspect of our lives and our time at university.

**JOHN:**

Today we actually started on our research reports. Initially we were paired off in order to bounce ideas off one another about our topic, how we could incorporate our previous research, and the research model we would use. This process was pretty useful because at the start of the session we both had no idea, and at the end I was beginning to formulate something I could actually work with

The second hour was spent working on our groups net forum...The whole idea of using the net forum is new and takes time to get use to, but it gives pretty easy access to ideas which groups members may have without having to physically speak to them.

**LINDA:**

This week we are suppose to have reviewed our surveys and resubmitted then on the net however as of yet nothing has been done about it... I am finding this very frustrating...The class is still going all right, although a difficult aspect of collaborative learning from last weeks class is that one of the girls in my group really dislikes the subject therefore she is not willing to participate in the activities as my self and the other members. I find this to be difficult I have to motivate her...it is not so much of a problem as long as I keep my motivation and morale up...it just comes down to ignore most of what she says...

**VANESSA:**

I love group work as it allows you to bounce ideas off one another and inevitable come up with something different and better. However at university it is different. I find that because we are strained for time, as none of us can work outside university time the ideas we come up with are the lowest common denominator rather than getting the best out of all our ideas. Although we do not argue, I find we are not particular compatible as a foursome. We do not understand each other properly and are impatient to finish...I cannot remember the last time I said this, but I feel sometimes that I'd do better on my own.

...I'm trying to say is that this exercise is not providing me with an insight into my learning patterns. There are some things I like to do in groups and other things I like to do on my own... I can think and work at a time convenient to me for as long as I like...in a group in this situation, we don't have very long to think because we can not meet out of university so we are pressured to comprise to the loudest person who I do not always agree with but I'd rather get the work done, even if it is not how I would do it.... Sometimes if you are not suited it is better not to work together, but alone. Working and work habits are a very individual thing...Group work has improved because we're now helping each other... Its much better ... we talk less because we just write to each other. Which means pressure off, we actually talk more and are friendlier to each other

Had a discussion with one member for the group...were discussing the problem of group work...got on to the fact that we don't function as a group well because we don't like each other – we're not on the same wavelength...it was interesting to talk with someone I don't particular like about it because this person doesn't like me either.

**BEN:**

I'm enjoying the last few classes and its really coming together...This subject has been great at helping me make new university friends. Firstly the size of the class is perfect. Secondly, working in groups, although at times stressful, it is a really a fun experience... I guess being stressed together, forces us to discuss things, and ultimately reduces all our stress levels.

**KERRY:**

This is the best experience I've had with group work because we are all confident in throwing our ideas around and I don't think any of us are worried about constructive criticism. It is a good experience and I feel like one of the lucky ones...

**JAMIE:**

In so far as collaboration is concerned, my group is giving me good ideas and advice, but I feel that other members need to work harder to meet our set deadlines. Perhaps the lecturer needs to step in on such issues...I am worried about one of my group members, who have been unable or unwilling to contribute to the interactive forum and peer critiques. Not only does this prevent me from critiquing her own work, but it also subtracts from the other group dynamics....given the choice again, I wouldn't do IRM. I think I'm better suited to more traditional styles of teaching...I did enjoy the course because it was so different and also because I met so many different people.

**MARIE:**

I'm so stressed about this class because it is never exactly clear what we are meant to do...I believe the atmosphere in my group is a major factor in my attitude towards the class. We had to define a survey which my group took almost the class defining...because we couldn't meet during the week, we agreed to all write questions and collaborate the following week. Well, I was the only one who had done it. It seems so unfair. No one is prepared to take the initiative. Perhaps I am being unreasonable but when we receive an average group mark, mainly due to our disorganization and therefore poor quality, I feel angry. I don't know what else to do. All my previous experience of group collaboration has been very positive, but I wish I could change groups. They are all really nice people, but no one is prepared to take the initiative...

This is my final entry. Well after all my complaints and stress, I actually think that collaboration helped me a lot. There is no way I could have done this subject without the support I received from my group. Although it was difficult to meet deadlines in a group, it was great to get help through peer critique. I now keep in touch regularly with two girls from the class. The atmosphere certainly fostered close relationships and in spite of all the frustration and lack of guidance, I really miss the people and the informal atmosphere.

**DALE:**

Lets talk about the collaborative learning process. I feel that I'm getting a lot out of this course and feel that peer critiques area really valuable way to learn about your own work. Getting feedback from someone in your class is great, and you feel that as you critique other work that you are actually helping someone....I feel that the structure of the course is conducive to learning and we are all getting along well.

I'm having a bit of trouble with the collaborative learning process. I believe that the duties in our group are not being distributed evenly and I think some people in our group take the subject more seriously than others. The problem is I can not even vent my frustration at being left with most of the work because half the group doesn't show up for class...Frankly I'm not impressed by this because I don't think I should give up more of my time for people who believe attending class is not important...I can't even do the basic requirements of the course because my peers have not completed the work to begin with... So what am I getting out of this process? I have found that I do most of the work because I feel that I have to get it done, otherwise it would be left unfinished. I'm annoyed that I have to give up my spare time to complete set tasks with a group who feels they don't have to turn up to classes.

**SARAH:**

*Asked for her strategies towards learning in this subject.*

I pretty much just turn up to class and wait to see what comes of it. I rely on the lecturer...to explain what we are learning and how we are learning it. I don't take any more steps to make sure everything turns out okay. I just do what I have to do, and if it's not good enough, what's expected, on the right track etc., that's just too bad. Learning for me is not something that I can readily talk about, it's more of a subjective, abstract notion, in that you don't really know if you are learning or what you are learning or how you are learning it. We all rely on assignments and exams to show it we have learnt something.

We have encountered a major problem. We did not read the handouts from class so we did not meet to do what we were suppose to do...this lack of communication is a major problem, especially with our group, as we only see each other in class, and have all expressed a desire not to interfere in the other members lives.

**MARIA:**

The group work and effort has improved greatly...we both agreed that whilst we each felt there were times when people weren't pulling their weight and we were doing all the work that now everyone was doing their fair share and everyone had recognised their responsibility to other group members, especially in the critiques of other people's work

The course is slowly drawing to a close, and the mood today in our last class became very nostalgic, as we all discussed how important we thought group work was to the course and how it was our favourite part of the course...I really did not like my group members, or I thought I probably would not get along with them, but slowly, after we got over those initial problems we seem to get along well. By now we get along really well, but perhaps that was going to come along with time. The whole class seems to be close, well closer than any other class I've been in.

**LIZ:**

Another important aspect of working in groups is never taking things too seriously. When seriousness dominates discussion and research, it places unwanted pressure on the members.. This worked well...Even when working out meetings, forums, the interviews, despite the fact that we knew what we had to do and we wanted to do it right, there was never a point in time that we felt that the project was too serious.

I think this is a great way to learn how to work in a group and it is very practical too because when we go out to work later on, this experience will be very handy...working in a group is beneficial because you tend to get more ideas than when working alone. I think I would be more satisfied with the project if I did it by myself. Well in a group there has to be a compromise...the end result may not be extremely satisfying to both.

**CHERIE:**

I am in a state of exhaustion...I have several assignments due this week and everything else in my life is not going well. My car has broken down, I feel sick and I have so much homework I am hardly getting any sleep. I know this frustration is only temporary...

I'm sorry I have not emailed you lately. I have been very busy. I am not satisfied with the collaborative experience. We can never meet and it is very difficult to try and finish the project. I was told last night that we haven't done enough research. I am annoyed about this, as they could have told us earlier... There has been a communication breakdown.

**KATH:**

Both of us are still working together quite well...We are beginning to form our analysis and conclude our research. Our group is having problems with one of our group members...I do not really feel that I know what is going on...I hope that this problem can be solved soon and that they are able to solve differences and complete their work...Working together has helped me develop some key skills, which will also be important in the future. If I were to have done it individually, I am sure things will run more smoothly and my research would have been much easier. However, I wouldn't have been able to learn as much or taken away any new skills.

**KAYE:**

We deviated from the track I think due to a lack of communication. It is ironic because our group has spent so much time together...I think we were asking the wrong questions...one consultation with the lecturer and we were back on the right track. The moral of the story is that succinct collaboration is far more effective than hours of drawn out, irrelevant conversation. Sometimes it is hard to focus in a group because the meeting often turned social, and you end up having to extract from it the information relevant to the project.

**GAY:**

It's a little hard to rely on people in a group when you're not sure whether or not they'll keep their end of the bargain. This doesn't help when, if you know exactly what you are doing, you have to delegate work to these members and you're unsure as to whether the work will be completed...hopefully we'll get our act together.

The meeting was extremely casual and we were at ease with each other. I think this was the point in time that I realised that I was getting motivated to complete the project and do a good job...An important aspect of group work is making sure that all members feel that they are doing something worthwhile. When a member believes that they can't contribute to anything in the project, this is when group work begins to break down. Support and positive statements can go a long way.

Another important aspect when working in a group is never taking things too seriously. When serious dominates discussion and research, it places unwanted pressure on the members. This worked well for us.

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