TO WHAT EXTENT IS THE DEEP ENJOYMENT OF FLOW EXPERIENCED IN PRIMARY CLASSROOM LEARNING, AND UNDER WHAT TEACHING AND LEARNING CONDITIONS MIGHT THE DEEP ENJOYMENT OF FLOW BE FACILITATED?

by

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This research concludes that the intellectual knowledge is available which will make flow facilitating classroom cultures achievable. Achieving such a classroom culture is possible when educators identify and value the enjoyment of flow, with its subsequent sense of learner control, confidence, success, well-being, energy and motivation to learn. To do this, educators need to identify and implement the teaching and learning strategies available that facilitate the experience, with the intention of ensuring recurrent learner success from the early years of school attendance. Such a change in the educational ethos would lead to successful, enjoyable and vibrant learning experiences for teacher and learner in the classroom.

CERTIFICATE OF ORIGINALITY

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis have been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

I certify that I have received ethics clearance from the appropriate authorities in accordance with UTS policies on human and animal research.

Signature of Candidate

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ABSTRACT

The primary purposes of this research were to identify if and how a selected teacher and her class experience deep enjoyment as flow in the classroom, and if they do have that experience, to investigate the teaching and learning factors that facilitate that deep enjoyment. In particular this research had the following three aims:

1. to explore the conditions and activities that are identifiable in learner's perceptions of their deep enjoyment or flow in learning.
2. to identify the component characteristics of flow articulated in the learners' stories about their enjoyable learning experiences.
3. to identify and examine perceptions of deep enjoyment or flow in learning in teacher practice and student learning through a teacher's stories of her teaching experience and through classroom observations.

The research involved a case study of a teacher in a state school Year 5/6 classroom, and seventeen of her students. Qualitative data were collected from interviews with the teacher, interviews with the students, and field observations recorded in the researcher's journal over a period of several months. These data, analysed by using the NUD*IST software, provide valuable insight into how the teacher and her students perceive their teaching and learning experiences.

The children and their teacher do experience enjoyment, often the deep enjoyment of flow in their classroom. A classroom culture was identified that includes teaching characteristics, environmental, and instructional variables, which help facilitate deeply enjoyable flow in meaningful learning.

CHAPTER 1

INTRODUCTION TO THE RESEARCH

It is not only what should be taught to children that is important, but also how it should be taught (Csikszentmihalyi, 1975, p.20).

1. INTRODUCTION

This explorative study seeks to identify if and how children experience deep enjoyment identified in the concept of flow (Csikszentmihalyi, 1975), in their learning. The primary aim of the thesis is to identify the conditions and activities within teaching and learning that facilitate that deep enjoyment? Csikszentmihalyi (1997, 1992, and 1975) has identified deep enjoyment or flow as highly motivatory. It is anticipated therefore, that if teaching and learning provide some deep enjoyment or flow, then teachers and learners will be motivated to continue with that which gives them such enjoyment. The major concerns of the research are first, to investigate what children say constitutes their enjoyment or flow in learning and what they say facilitates that enjoyment. Second, the research focuses on what the teacher perceives as facilitating enjoyable teaching and learning in the primary classroom.

1.1 The Importance of Deep Enjoyment or Flow in Learning

Children's enjoyment of learning is recognized as an important factor in successful and continuing learning. For instance Nakamura's (1988) research identified factors which influence continued engagement in learning. She studied high and low

achievers among the flow, boredom, apathy, anxiety spectrum, and using the descriptor 'enjoy' for 'flow', notes enjoyment, is

> …why high achievers invest the time in schoolwork… (and) …low achievers study less in order to avoid anxiety. (Also), Consistent with previous findings about motivations for academic success and failure, high achievers enjoy academic challenges, whereas low achievers find them overwhelming. The low achievers spend as little time as possible in productive academic situations, and instead invest their time in socializing (Nakamura, 1988, p.326).

Enjoyable learning is effective learning which is motivational and often identified by children as 'fun' (Rea, 1997; Allen, 1995). It is intrinsically motivating learning that is enjoyable for the sake of engaging in the tasks of learning and for the sake of effective learning itself. Larson (1988, p.150) writes that the usefulness of flow activities is because 'they provide a state of being that is an end in itself.' Such experience generates a sense of well being and can produce a continuing desire to engage in learning and learning activities (Csikszentmihalyi, 1988).

The importance of connections between enjoyment, concentration, meeting challenges in learning and the growth of self-esteem, as an affective response to self, have been identified over many years in educational literature (Rogers, 1969; Dewey, 1938). Commentators in more contemporary education literature make these connections by inference (Woolfolk, 1998; Eggen, & Paul, 1997; Gage, & Berliner, 1991).

These commentators also identify the term self-concept, as the composite of ideas, feelings, and attitudes people have about themselves, and acknowledge the importance of a strong self-concept for the learner to succeed, that is, to meet the challenges in learning (Woolfolk, 1998; Eggen, & Paul, 1997; Gage, & Berliner, 1991). This issue of a strong self-concept is acknowledged by Child (1997) as an

important aspect of motivation. However, an understanding or acknowledgement of the connections between enjoyable learning and teaching and learning strategies in primary school classrooms is not well developed in educational research.

There is a dearth of research which identifies and acknowledges what types of teaching and learning strategies create enjoyable and successful learning experiences for children and how teachers might facilitate that enjoyable learning while experiencing enjoyment in teaching and learning for themselves (Armstrong, 2000; Allen, 1995). Although there have been initiatives to make schools more enjoyable places for children generally, a coherent, systematic approach to what makes successful learning an enjoyable experience is timely. This study, therefore, identifies and interprets the connections between teacher and learner experience; of successful and deeply enjoyable teaching and learning in the primary classroom using the theory of flow (Csikszentmihalyi 1997, 1992, 1975) for interpretation and discussion. The theory of flow is explained fully and related to learning theory in Chapter Two.

1.2 THE RESEARCH PROBLEM

The research problem is based on the theorising of Csikszentmihalyi (1997, 1992, 1975) and Jackson and Csikszentmihalyi (1999). Csikszentmihalyi claims that given particular conditions, any activity whether it be work, leisure, sport, or learning becomes deeply enjoyable and is experienced and described in the same way. He names the deeply enjoyable experience as 'flow', and provides a phenomenological explanation of the concept as having originally six elements (1975). Later adaptations included a further two components (1992) and with Jackson, a final one

is included with reference to sport (Jackson, & Csikszentmihalyi, 1999). Each of the various components has been addressed throughout Csikszentmihalyi's writing as his understanding has evolved, and the components have been identified in different circumstances. Because of the consistent way enjoyment of activity is experienced and described, the theoretical concept of flow has the potential, to inform the experience of deep enjoyment in learning for both learners and teachers in the primary school classroom.

Csikszentmihalyi, a psychologist writing on leisure, lifestyle and learning theory explains that:

> There is a role connection between learning and happiness… …to be happy one must grow (learn) and enjoying learning makes one happy (Csikszentmihalyi, 1992, p.177).

That connection between learning and happiness, the fact that the description of the experience of enjoyment is consistent whichever activity is engaged in, and the connections noted between learning and flow theories addressed in Chapter 2, were of interest to me. These led me to believe that the principles and characteristics of deep enjoyment explained in flow theory may well have beneficial application to the experience of learning and teaching in the primary school classroom. The research problem is therefore:

> **To what extent is the deep enjoyment of flow experienced in primary classroom learning, and under what teaching and learning conditions might the deep enjoyment of flow be facilitated?**

1.2.1 Aims of the Dissertation

The three primary purposes of this research are to:

1) explore the conditions and activities that are identifiable in learners' perceptions of their deep enjoyment or flow in learning.
2) identify the component characteristics of flow articulated in the learners' stories about their enjoyable learning experiences.
3) identify and examine perceptions of deep enjoyment or flow in learning in teacher practice and student learning through a teacher's stories of her teaching experience and through classroom observations.

1.3 THE STUDY: HOW IT EMERGED

My interest in this field of research evolved because I have a leisure studies background, and over some years have worked and studied in both areas of education and recreation, later identified as leisure. First, my study in recreation, followed by further studies in teaching, and then in leisure, stimulated my interest in the relationship between the two fields of learning and leisure. My thoughts eventually turned to a New South Wales draft Personal Development, Health and Physical Education (PDHPE) syllabus which included sections on leisure at each learning level. This inclusion of leisure in the curriculum suggested to me that learning about leisure or recreation in the primary classroom should be experienced first hand by the learners, as the enjoyment of leisure itself. Pursuing the idea that primary school learning could be a leisure experience, my postgraduate work included the development of a teaching resource on the topic of leisure for primary school children. The resource was developed with the particular focus of making the

activity of effective classroom learning a deeply enjoyable or flow experience and a leisure experience for the learners and teacher.

My interest then became focused on the possibility of researching the implementation of the teaching resource in order to identify whether it was possible to enable effective learning to be perceived as leisure in the primary classroom. Initially I faced two necessary questions about the usefulness of the teaching resource. They were:

1) How important is teaching and learning about leisure in an already overcrowded school curriculum where the basics of reading and mathematics are constantly under scrutiny?
2) Would a teaching resource developed for teaching and learning about leisure be useful for teaching other topics in the primary classroom?

As mentioned in Section 1, I became aware that the central issue of my interest was in identifying teaching and learning strategies that would lead to flow, that is, purposeful and deeply enjoyable learning experiences in the primary classroom. Such flow experience is particularly beneficial to participants and is found in wide ranging activities when certain conditions exist. My research aims to identify and analyze what range of activities and conditions of teaching and learning might enable purposeful learning that is experienced as flow or deeply enjoyable experience in the primary school classroom.

1.4 RATIONALE FOR THE STUDY

Csikszentmihalyi (1997, 1992, and 1975) notes that flow is a panhuman constant and that people will engage willingly in actions or activities where flow is experienced because the deep enjoyment makes these actions and activities highly motivational. If educators had an understanding of flow and the connections between enjoyment and effective learning they could make teaching choices that facilitate flow, thereby making teaching and learning more enjoyable in the classroom. Once flow is experienced people want to repeat this deep enjoyment in their lives again. To have and be able to apply this knowledge in teaching and learning should make the task of teaching and learning more enjoyable and motivational for both teacher and learner.

1.4.1 Sources of enjoyment: Conceptual issues

This section first addresses the importance of enjoyment in learning; and secondly, the importance of understanding the reasons for the choice of actions, activities and conditions in teaching and learning. Research into learning, as a deeply enjoyable or flow experience must take account of complex issues. Lynch and Veal (1996) explore historical notions of leisure, claiming that attitudes have changed over time and that with the Protestant work ethic, work was perceived as leading to godliness, and leisure was perceived as, 'idleness, free time, sociability and 'unproductive' activity, …(with) connotations of evil and guilt' (Lynch and Veal 1996, pp.11). Social influence and cultural tradition has created separations between expectations of how work, leisure and learning might be experienced and as society has evolved, these three social constructs have been identified as separate experiences. Leisure experience has emerged as the only genuine source of real enjoyment.

Csikszentmihalyi and Kleiber address this issue in their paper on Leisure and Self-Actualization:

> Over the course of time we have separated work and leisure to the extent that now we think only unproductive leisure can be enjoyable, and productive work must necessarily be unpleasant. Nothing is further from the truth. Leisure begins to be thought of as the sole source of enjoyment only when a culture loses its capacity to make everyday life enjoyable (Csikszentmihalyi, & Kleiber, 1991, p.96).

Engagement in worthwhile leisure activity is known to have a positive effect in people's lives (see Hamilton-Smith, 1992; Driver, Brown, & Peterson, 1991; McDowell, 1983). Because of this understanding of leisure, and the well-being that is generated by enjoyment from leisure, leisure education has been advocated by some academics. Ruskin (1993) and Godbey (1981) for example, point to the constantly high rates of unemployment; the lack of experiential quality in much existing work; the high suicide rate and also the longevity resulting from higher health and medical standards as relevant to a growing need for leisure education. Leisure activity has historically been used as a placation for such social conditions.

Games and other selected activities have regularly been aspects of school education. These activities are viewed positively as enabling the growth of knowledge and skills, positive experience, facilitating social relationships and the development of self-esteem. Indeed, leisure activity is identified positively as an adjunct to the overall school learning experience (Ruskin, 1993). However, where a gulf between expectations for leisure education or recreative activities and 'academic' classroom learning remains, the potential for interpreting classroom learning as a deeply enjoyable or flow experience is reduced.

Given that any task or activity, under certain conditions, can be a source of deep enjoyment, there are reasons for reconsidering expectations of the experience of classroom learning. There are some consistent and fundamental theoretical connections between leisure experienced as enjoyment of worthwhile activity, and classroom learning. The development of skills, knowledge, understanding, values and attitudes that are acknowledged in leisure are often those used in learning. Indeed skill and self development, perceived freedom of choice, goals and feedback, control of action, social interaction, time to engage and complete the task, intrinsic motivation, and satisfaction, are fundamental to both learning and leisure. The analysis of flow can be used to describe many aspects of both these experiences and therefore is useful to identify and explain the connections between the deep enjoyment arising from leisure and from learning in the classroom.

Also relevant to both leisure and teaching learning strategies, and rarely researched for either topic, is the importance of fun (Armstrong, 1998; Rea, 1997; Allen, 1995; Podilchak, 1992). Fun for Podilchak (1992) is an equalling and interactive process, and for Armstrong (1998), Rea (1997) and Allen (1995), is basic to creative and worthwhile learning. Children recognise the potential for learning as fun (Allen 1995) and the ways in which the teacher and children relate with fun and interactive communication is important to the sense of happiness for both teacher and learner. Csikszentmihalyi and Kleiber (1991, p.93) claim, as does Dewey (1938) that 'What counts is not the activity per se, but the quality of the experience it provides.' Csikszentmihalyi makes the connections between happiness and learning clear in his research on the psychology of happiness when he notes

> Happiness requires that one be able to find increasingly complex opportunities for action and that one be able to improve one's appropriate skills (Csikszentmihalyi, 1982, p.177).

The application of the relationship works in two ways: to be happy one must grow (learn and increase skills); and the most effective learning arises from a happy experience (Csikszentmihalyi, 1982).

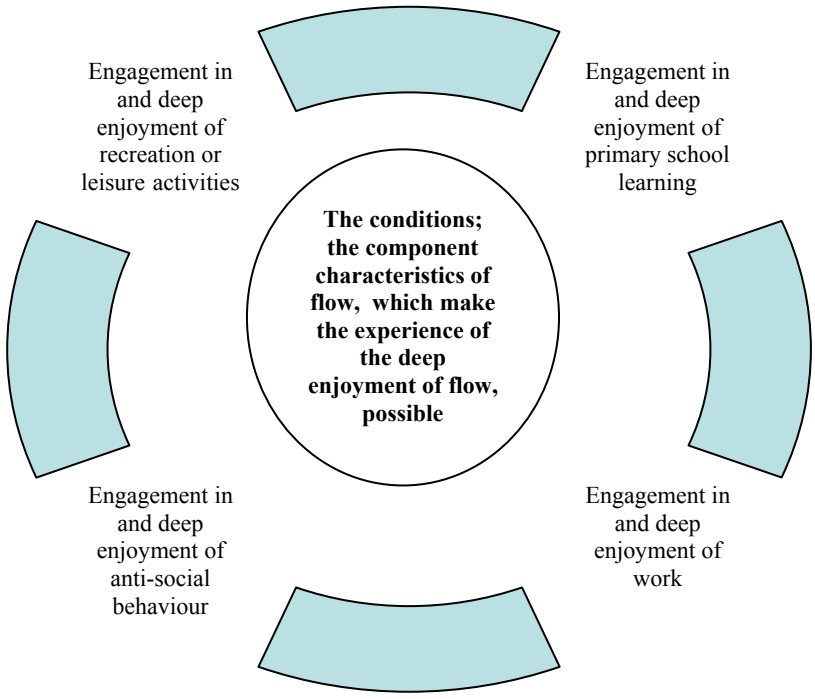
The concept that leisure, work and learning are different experiences has done much to separate our expectations of how we might experience each of these activities in our lives. If teaching and learning strategies, classroom, and school structure and organization were developed *with an expectation* of learning as an enjoyable experience in primary school, then some learning could be perceived and experienced as a deeply enjoyable experience. It is not intended here to demean the real value of leisure as rest and enjoyable recreation, nor the work of teachers in their classrooms. Nevertheless, it can be claimed that successful learning, structured for enjoyment, has to be immensely profitable to the participant.

1.5 THE EXPERIENCE OF ENJOYMENT

Csikszentmihalyi *et al* (1999, 1997, 1988, and 1975) have explored and defined the nature of enjoyable experience in many cultural and life contexts in activities that include work, learning, leisure, sport and activities recognised socially as deviant. These have been shown to be constant in human experience. The enjoyment of flow, given particular conditions, can arise from focused engagement in any activity. Csikszentmihalyi (2000) has never suggested that flow is the only source of human happiness. Figure 1.5, displays the conditions which make flow possible according to Csikszentmihalyi.

The interest in flow, for this research, is that the component characteristics of flow make it useful for analysing children's enjoyment of learning activities in the classroom. It is the understanding of deeply enjoyable experience arising as much from work, anti-social or learning activities under certain conditions, as it does from leisure activity, which makes the theory of flow appropriate to teaching and learning.

Figure 1.5 Indicating conditions for flow experienced in work, leisure and learning



As Csikszentmihalyi (1997) indicates, the phenomenology of enjoyment seems to be a panhuman constant. Figure (1.5) above attempts to describe visually these circumstances indicating that the conditions that facilitate deep enjoyment or flow have application to whichever activity a person is engaged in, work, leisure or learning, and in whichever culture the person is living.

Experience in learning can be understood as engagements in activities that develop knowledge, understanding, skills, attitudes and values. As well, human experience can be understood to mean the human emotional responses that arise from the engagement of the attention to those activities. These two aspects of experience, the

engagement in, and attention to activities, and the emotional experience arising from that engagement and attention are inseparable in learning (Dewey 1938). At issue is the structure and organisation of learning activities that lead to a meaningful and enjoyable learning experience.

Importantly, Csikszentmihalyi (1988, p.89) notes 'that flow is not an ephemeral state but contributes to the overall quality of life'. The theory of flow as identified by Csikszentmihalyi could well provide a theoretical framework for the analysis and identification of conditions and activities of enjoyable teaching and learning. As noted previously the concept of flow has evolved as Csikszentmihalyi has continued with his investigations. This research began previous to the availability of the 1997 list, so I have chosen to retain the 1992 list of eight components, and added a ninth component identified by Jackson and Csikszentmihalyi (1999) in later work related to sport. The ninth component identifies flow as an autotelic (having an end in itself) experience and does much to address the issue of motivation in teaching and learning. The merging of action and awareness and the balance between skills and challenge have been a consistent factor in Csikszentmihalyi's discussion of flow.

Not all of the components are necessarily mentioned in every participant's description of flow. This is confirmed by Csikszentmihalyi (1997) who writes that as few as one or two components of flow might be mentioned in a participant's description of a flow experience. The components listed and their description, are a construction of the most frequently mentioned elements that compose the flow experience identified by participants. The nine components of flow or optimal experience used for this research are as follows:

1. *The experience usually occurs when we confront tasks that we have a chance of completing.*
2. *We must be able to concentrate on what we are doing.*
3. *The concentration is usually possible because the task undertaken has clear goals.*
4. *The task provides immediate feedback.*
5. *One acts with a deep but effortless involvement that removes from awareness the worries and frustrations of everyday life.*
6. *Enjoyable experiences allow people to exercise a sense of control over their actions.*
7. *Concern for the self disappears, yet paradoxically the sense of self emerges stronger after the flow experience is over.*
8. *The sense of the duration of time is altered; hours pass by in minutes, and minutes can stretch to seem like hours.*
9. *Flow is an autotelic experience. It is a task chosen for its own sake and is intrinsically rewarding. (The 9th component is the outcome of the other 8.)*

Some of these elements are consistent with established theories used in education. Among these are those concerned with enjoyment, social and emotional growth, intrinsic motivation and self-responsible learning, found in the work of Marton and Booth (1997), Rogers (1969), and Dewey (1938), and in science education (Schaverien and Cosgrove 1997). Schaverien and Cosgrove, and Dewey were concerned for primary (elementary) school learning; Marton and Booth, and Rogers are concerned with the experiential qualities that assist in enabling effective learning for tertiary students.

1.6 CONTEXT OF THE STUDY

The setting of the study is a public school in New South Wales called 'Wingala' (not real name). The principal and staff describe the school as a multi-aged school, which means that all classes include a mixed age range of pupils. No socio-economic label is offered for the school because as the principal suggests 'such labeling is not an issue for the school where all children are to be treated with equal concern'. The school has seven hundred and fifteen pupils, forty-three full-time teachers and five part-time teaching aids, who visit the school each day for special duties.

The environment of the school provides an atmosphere of friendliness, and according to staff, is a pleasant place to work. The leadership in the school encourages an earnest application to learning. The buildings are light coloured brick and are a spacious contemporary design, developed as a series of buildings that range in three sections up the side of a hill. The issue of the spaciousness of building design will be raised in chapter 5 and in the discussion in chapter 7.

A visitor finds that there are numerous children playing all types of games, talking in groups or sitting on seats or on the ground around the various outside areas of the school. Even during class time it is not unusual to find groups or individual children engaged in various outside activities. There appears to be a general sense of well being among the children as they interact and, a sense of social openness among the children when they greet visitors.

1.7 METHODOLOGY

The study method is an interpretive case study including both interviews with the teacher and children, as they describe their enjoyable teaching and learning experiences, and observations of classroom occurrences. The case study, according to Marton (1981, p.180) 'aims at description, analysis, and understanding experiences; that is, research which is directed towards experiential description'.

Specifically the case study aims to find the categories of description and the hierarchical connections between those categories that are inherent in the teacher and learners' enjoyable teaching and learning experiences. The theory of flow, the psychology of happiness (Csikszentmihalyi, 1997, 1992) is used to interpret the categories of description in the data.

The study is mainly exploratory and contributes to the research base on enjoyable learning experience in the primary school classroom. It consists of an interpretive case study of a Year 5/6 class including initial whole class interviews, separate interviews with seventeen-Year 5/6 children, five interviews with their teacher and, some incidental interviews with Year 5/6 children generated by observations in the classroom. Participant observations took place for approximately one day each week for ten weeks. Information from these participant observations was transcribed immediately following the visit. The visits and interviews were arranged by negotiation with the teacher on a week-by-week basis.

1.8 SIGNIFICANCE OF RESEARCH FOR PRACTICE

Csikszentmihalyi (1997, 1988, and 1975) affirms the usefulness of flow theory for improving teaching and learning. Recognizing how learners and teachers may become engaged in flow activities is vital in teaching and learning practice. This research attempts to focus on what classroom tasks, activities and interactions produce deeply enjoyable learning or flow. It attempts to interpret the children and teacher's experiences of enjoyable learning in the classroom, using the theory of flow. There has been school and learner-based research, specifically at middle or high school level, using flow for the purpose of analysis, which has considered several aspects of students' study or learning behaviour (Csikszentmihalyi, Rathunde, & Whalen, 1993; Larson, 1988; Nakamura; 1988). However, there is a lack of research investigating both the primary school teacher and the use of student voices. This research enhances our understanding of enjoyable teaching and learning in the primary classroom.

1.9 DEFINITION OF TERMS

Flow or Optimal Experience: Flow is a self-determined experience, where awareness is totally focused in the activity. Flow is experienced as a unified flowing from one moment to the next, in which a person is in control of his or her actions, and where there is little distinction between self and environment, stimulus and response, or between past, present, and future (Csikszentmihalyi, 1975, p.36). The experience can be an outcome given certain conditions, from engagement in any socially accepted activity, work, leisure, and sport or learning, and the socially unacceptable, such as house breaking or stealing. Some activities are structured to

facilitate flow, for instance, 'games are obvious flow activities and play is the flow experience *par excellence*' (Csikszentmihalyi, 1975, pp.36-37).

Learning: An adaptation of a definition of learning by Carl R. Rogers (1969, p.5) is used here because it appears consistent with an understanding of the experience of flow in learning. The essence of learning is gaining both knowledge and meaning; it has a quality of personal involvement, is self-initiated, is pervasive, and is evaluated by the learner.

Leisure is defined variously in the literature as activity, behaviour or participation, as an experience or state, as setting and as time (Mannell, & Kleiber, 1997, p.417). Mannell, and Kleiber (1997, pp.107 & 110) claim that a definitional approach should identify three criteria necessary for something to be construed as leisure:

1. People attribute their reasons for participation to themselves (i.e., it is freely chosen) rather than the social setting.

2. Activities, settings and experiences are likely to be perceived as providing opportunities for the development of competence, self-expression, self-development, or self-realization and are intrinsically motivated.

3. When an engagement is experienced as enjoyable, fun or pleasurable, it is more likely to be construed as leisure. As well as relaxation, and its antithesis of intense involvement, escape from everyday routine, a sense of adventure, spontaneity, loss of time, fantasy, creative imagination, are each suggested as attributes leading to perceptions of leisure.

1.10 ASSUMPTIONS AND LIMITATIONS

1) No attempt is made to determine depth of learning or achievement of outcomes. Only the factors that may generate enjoyment of the learning experience are addressed. However, there is an assumption that enjoyment from engagement is most likely to produce motivated and more effective learning.

2) A great variety of factors account for the experience of flow in learning, and it is readily acknowledged that these cannot be 'controlled or manipulated' in naturalistic research. These factors include:

- the quality of teaching, variation in teacher skill, attitudes and abilities;
- the curriculum, and the way that curriculum is implemented;
- the whole school organization, inter-school relationships, and school/ community relationships;
- cultural understanding of teaching, learning and the curriculum;
- the hidden curriculum;
- family background.

As researcher, I was aware these factors existed and that each has the potential to influence the learner and teacher in experiencing, or not experiencing, flow or enjoyable learning in the classroom.

3) It is recognized and acknowledged that the study cannot be replicated because the conditions, contexts, participants and their interactions would always vary. The study is relatively limited in size in both the length of research time, as well as the size of the sample. The findings though can be useful in providing insights for understanding enjoyment in primary school learning.

1.11 ORGANIZATION OF THE DISSERTATION

This introductory chapter has provided an introduction, the rationale and purpose, a definition of terms, an overview of the methodology, and an introduction to flow, the capacity for deep enjoyment. An explanation is given of flow's potential for interpreting the enjoyment of teaching and learning in the primary classroom. The major issues reported here include the lack of research into enjoyment of learning, and the potential for the categorization of components of flow, to provide a structure for analysing the experience of enjoyment of learning in the primary school classroom.

Chapter 2 reviews Csikszentmihalyi's (1997, 1992, and 1975) construction of the theory of flow. An explanation of the various components of flow is provided using examples from leisure theory. The literature from teaching and learning theory is reviewed as it relates to the nine components of flow. The literature relevant to flow and classroom learning is also reviewed.

In Chapter 3 the methodology and research design are discussed and explained. A description of the qualitative methodology is provided as well as the development of data collection tools, including the interview schedule. Chapter 3 closes with a discussion of my values, assumptions and role in the research.

Chapter 4 presents the data on the learners' enjoyment of learning in the classroom. It includes examples of the learners'[1] enjoyable learning experiences drawn from the qualitative data. It notes the range of responses the learners have made in

[1]Throughout this dissertation names of persons and places have been changed to maintain anonymity.

explanation of their particular experiences, and uses the theory of flow for interpreting these.

Chapter 5 presents and explores the data pertaining to the teacher and my own observations of teacher and school related incidents. Examples are presented from the qualitative data, which indicate the issues, strategies and values that the teacher finds important for enjoyable teaching and learning. Teacher perceptions of enjoyable teaching and learning in the primary school classroom are discussed.

Chapter 6 presents three students, Matt, Elise and Peter, as topical examples from the case study. The data are analysed using the components of flow, and examples are presented from the qualitative data. The individual and particular learning experience of each respondent is addressed.

Chapter 7 presents the discussion arising from the findings of the research, relates this to the literature, makes recommendations using the components of flow for analysis, and contains suggestions for further research.

2. SUMMARY

There is little research that addresses the issue of either learning as enjoyable experience in the primary (elementary) school classroom (Armstrong, 1998), or of how children and teachers perceive their enjoyable learning and teaching experiences (Allen, 1995). This chapter briefly outlines a study focusing on the dynamic of flow using a case study methodology. The study aims to identify what range of activities and conditions of teaching and learning might enable purposeful learning that is experienced as flow or is deeply enjoyable. It also aims to account for the existence

of flow by determining what the teacher does in the primary classroom. Key issues are addressed, terms are defined, and the organisation of the thesis is established.

CHAPTER 2

REVIEW OF LITERATURE

2. INTRODUCTION

This chapter introduces the theory of flow, and is presented in three sections. First, the theory of the happy or enjoyable experience of flow, and the nine components of flow used in this research to describe the phenomenon, are introduced. Second, using leisure activities as introductory examples, the connections between the nine components of flow and teaching and learning theory are identified. Third, literature referring to flow in learning is examined.

Csikszentmihalyi, the major proposer of flow, is a prolific writer who associates flow with various activities and life settings. The main sources for this study are *Beyond Boredom and Anxiety* (1975) which introduces the theory of flow, including the experience of non-flow and, *Flow The Psychology of Happiness* (1992). While the former contains a segment which suggests the value of certain teaching and learning processes for enjoying early primary years of learning, neither book addresses specific issues of formal education. They do however, address learning. Learning in this sense involves organising a lifestyle structure of experience for maximising the occurrence of enjoyment in life. Csikszentmihalyi (1992) writes that people can have a spontaneous sense of enjoyment or ecstasy triggered by a bar of music or for 'no apparent reason', however,

> by far the overwhelming proportion of optimal experiences….occur within sequences of activities that are goal-directed and bounded by rules….activities that require the investment of psychic energy, and that could not be done without appropriate skills (Csikszentmihalyi, 1992, p.49).

In *Flow The Psychology of Happiness* (1992), flow is addressed as having eight components. In *Living Well*, available after the commencement of this study, Csikszentmihalyi (1997) and later, Jackson, and Csikszentmihalyi (1999) provide a slightly different list. While each list is different, the various components are easily equated in each source.

The list of components of flow used for this research includes the eight from the 1992 list and the ninth component, 'the experience becomes autotelic or intrinsically motivated', which was included from Csikszentmihalyi's 1997 and, Jackson and Csikszentmihalyi's 1999 writing associated with sport. Csikszentmihalyi stresses intrinsic motivation, the merging of awareness and activity, and the need for a balance between skills and challenges, in all his writing. The latter concepts are included in this research as they relate to the components. This review also includes reference to Csikszentmihalyi's other work.

2.1 FLOW: THE PSYCHOLOGY OF HAPPINESS

> Thus the flow experience acts as a magnet for learning –that is, for developing new levels of challenges and skills. In an ideal situation, a person would be constantly growing while enjoying whatever he or she did (Csikszentmihalyi, 1997, p.31).

This section introduces the difference between pleasure and enjoyment and reviews the concept of flow identified by Csikszentmihalyi (1997, 1992, & 1975) in his study of the source of enjoyable experience and intrinsic motivation.

Csikszentmihalyi's (1975) specific intention was to address activities appearing to contain rewards in themselves (intrinsically motivated activity). He therefore primarily explored the impact of some leisure activities in participants' experiences. His concern though was deeper than the value of leisure in society because, 'A society could not survive long if people were exclusively involved in playful pursuits,' but it was by studying peoples' enjoyment of leisure activities that Csikszentmihalyi hoped to learn 'how work might be made enjoyable' (Csikszentmihalyi, 1975, p.5). He extends the same thinking to enjoyment in education and learning (Csikszentmihalyi, 1997a, 1975, and Csikszentmihalyi, & Csikszentmihalyi, 1988).

The reasons individuals engage in any activity at any time are many and varied and their responses to the same stimulus or activity can also vary according to conditions under which the stimulus or activity is experienced (Csikszentmihalyi, 1975, p.6). However, Csikszentmihalyi's original concern was with

> …understanding enjoyment, here and now –not as compensation for past desires, not as preparation for future needs, but as an ongoing process which provides rewarding experiences in the present (Csikszentmihalyi, 1975, p.9).

It was his intention to examine enjoyment as an 'autonomous reality that has to be understood in its own terms' (Csikszentmihalyi, 1975, p.10). Csikszentmihalyi's theoretical assumption is that there is no unbridgeable gap between the enjoyments of work or leisure experience. To ensure that no gap did exist, Csikszentmihalyi's original research investigated participants in three areas of work: composers of music, surgeons and teachers.

There are differences identified between the feelings of pleasure and enjoyment (Csikszentmihalyi, 1992). Pleasure appears as a less intensive feeling that arises 'whenever information in consciousness says that expectations set by social conditioning have been met' (Csikszentmihalyi, 1992, p.45). For instance some things we do, give us pleasure, or are pleasantly relaxing: 'Pleasant experiences are restorative and pleasure is an important component of the quality of life, but by itself it does not bring happiness' (Csikszentmihalyi, 1992, p.46).

Conversely deep enjoyment, the outcome of flow, occurs when,

> …a person has not only met some prior expectations or satisfied a need or a desire but also gone beyond what he or she has been programmed to do and achieved something unexpected, perhaps something even unimagined before (Csikszentmihalyi, 1992, p.46).

There is a forward movement found in deep enjoyment with a sense of novelty and of accomplishment where a person's ability is stretched, where new light is identified or where we 'express ideas we didn't know we had' (Csikszentmihalyi, 1992, p.46). The enjoyment of flow 'comes at a very specific point: whenever the opportunities for action perceived by the individual are equal to his or her capabilities.' It 'does not happen without the application of skilled performance' (Csikszentmihalyi, 1992, pp.49-54). Furthermore,

> It is not possible to make flow happen at will, and attempting to do so will only make the state more elusive. However, removing obstacles and providing facilitating conditions will increase its occurrence… (Jackson, & Csikszentmihalyi, 1999, p.138).

Activities that produce flow experiences for learners are those which 'allow the practitioner (learner) to develop sufficient skills to reduce the margin of error to as close to zero as possible' (Csikszentmihalyi, 1992, p.60) and in which there has been 'an

initial investment of attention' and disposable 'activation energy', that is, the energy to become engaged with the task. (Csikszentmihalyi, 1997, p.65)

Csikszentmihalyi has defended the claims made by Sink (2000) who suggests that flow is not the only source of happiness, and that subjective states such as flow can not be quantified. Csikszentmihalyi (2000) argues that he has successfully measured subjective states with a quantitative research approach and, that he has never claimed that flow was the only source of happiness. One of Csikszentmihalyi's (1975) original intentions was to identify how *work* might be made as enjoyable as *leisure*. He subsequently identified the *multifaceted nature* of the *activities that produce flow* and the remarkable *similarity across activities, and cultures, of the experience of flow*. The experience of flow has been identified across activities such as work, leisure and learning.

The Elements of Flow

Concerned with the limiting nature of explanations of the phenomenon of enjoyment, Csikszentmihalyi (1975, p.11) suggests that his original model of six elements and the methods he used to explain the experience of flow results in an 'impoverishment of the object of knowledge'. Csikszentmihalyi perceived his description of the experience as inadequate and insufficient, given the life changing quality of the flow experience itself. The model that Csikszentmihalyi originally used to explain the signs of flow in human experience had six elements: i) the merging of action and awareness, ii) centring of attention on a limited stimulus field, iii) loss of ego or self-forgetfulness, iv) control of actions and of the environment, v) non-contradictory demands for action and clear

unambiguous feedback to a person's actions, and, vi) 'autotelic' engagement in activity having no goals or rewards external to itself.

Csikszentmihalyi's theoretical descriptions of the number of components of flow have evolved in his later work. He moved to describing eight components of flow in 1992 (p: 49), and later discarded that related to time (component 1). In *Living Well* (1997) Csikszentmihalyi described flow as follows:

> When goals are clear, feedback relevant, and challenges and skills are in balance, attention becomes ordered and fully invested. Because of the total demand on psychic energy, a person in flow is completely focused. There is no space in consciousness for distracting thoughts, irrelevant feelings. Self-consciousness disappears, yet one feels stronger then usual. The sense of time is distorted: hours seem to pass by in minutes. When a person's entire being is stretched in the full functioning of body and mind, whatever one does becomes worth doing for its own sake; living becomes its own justification. In the harmonious focusing of physical and psychic energy, life finally comes into its own (Csikszentmihalyi, 1997, p.29).

The nine components used for this research are explained and examined in the following Section 2.2 with links to both leisure and learning theory. Research studies show that those who deeply enjoy an activity, mention at least one of these components, and often mention all components. However Csikszentmihalyi's (1997) description of flow as cited above indicates that even though a person does not mention all components in their description of the experience, generally the range of components is what is involved when flow is experienced. Particularly, the nature of flow ensures that the activity is undertaken for the enjoyment of the activity itself; it is intrinsically motivated (component 9); the self-esteem is enhanced (component 7); and basic to the nature of any flow activity, it is 'a challenging activity that requires skills' (Csikszentmihalyi, 1992, p.49).

The nine components addressed in this study follow:

- *First*, the experience usually occurs when we confront tasks that we have a chance of completing;
- *Second,* we must be able to concentrate on what we are doing;
- *Third and Fourth,* the concentration is usually possible because the task undertaken has clear goals and provides immediate feedback;
- *Fifth,* one acts with a deep but effortless involvement that removes from awareness the worries and frustrations of everyday life;
- *Sixth,* enjoyable experiences allow people to exercise a sense of control over their actions;
- *Seventh,* concern for the self disappears, yet paradoxically the sense of self emerges stronger after the flow experience is over;
- *Eighth,* the sense of the duration of time is altered; hours pass by in minutes, and minutes can stretch out to seem like hours;
- *Ninth,* the outcome of the other eight components, the experience becomes autotelic; the activity becomes intrinsically motivating and continuing to engage in the activity is done for its own sake.

> The combination of all these elements causes a sense of deep enjoyment that is so rewarding; people feel that expending a great deal of energy is worthwhile simply to be able to feel it (Csikszentmihalyi, 1992, p.49).

An Explanation of the Nine Components of Flow

2.1.1 We confront tasks we have a chance of completing

Regarding time, Csikszentmihalyi writes that

> ...most flow activities do not depend on clock time; …they have their own pace, their own sequences of events marking transitions from one state to another without regard to equal intervals of duration (Csikszentmihalyi, 1991, pp.66-67).

He notes the importance of freedom from the tyranny of time for experiencing flow. There must be sufficient time so the activity can be deeply engaged in without concern or interruption from the constraint of insufficient time.

2.1.2 We must be able to concentrate on the task

All the person's relevant skills are needed to cope with the challenges of the situation and the person's attention is completely absorbed by the activity: 'All the attention is concentrated on the relevant stimuli' (Csikszentmihalyi, 1992, p.53). In this deep concentration or merging of action and awareness the attention can not be split: you are not thinking of yourself as separate from the action and there is no room even for reflecting on the act of awareness itself. Such reflection would destroy the necessary concentration. The length of time this merged concentration is possible varies according to the person and the conditions of engagement. In some activities, the merging of action and awareness is possible only for short periods; in others such as a marathon swim, concentration is required and can be sustained for great lengths of time.

2.1.3 The task undertaken has clear goals

To achieve the merging of action and awareness, there must be 'clearly established rules for action' (Csikszentmihalyi, 1975, p.39), and the tasks involved must be within the persons' ability to perform them. The goals must be clear and the feedback from the task, immediate. Csikszentmihalyi (1992) writes of tennis or chess where the players always know what to do. The participant's awareness is 'limited to a restricted field of possibilities' (Csikszentmihalyi, 1975, p.46). When the participant is engaged in the action there is no ambiguity: decisions are made according to need. The goals and rules for action order the direction of those decisions and there is an awareness of the results of various possibilities. Csikszentmihalyi (1992) notes that achieving a trivial goal does

not lead to deep enjoyment. He suggests further that open ended activities, such as creative endeavours, may have ambiguous goals, but nevertheless they require the capacity to gauge the feedback that arises from the action (Csikszentmihalyi, 1992, p.55).

2.1.4 The task provides immediate feedback

The flow experience usually contains understandable, non-contradictory demands for action and provides clear, unambiguous feedback from a person's actions. In flow one does not evaluate the feedback that arises from engagement in action. Action and reaction have become so well practised that they become automatic. Csikszentmihalyi (1975) states that, 'The person is too involved with the experience to (consciously) reflect on it' (p.47). What makes up the feedback varies in different activities:

> …almost any kind of feedback can be enjoyable, provided it is logically related to a goal in which one has invested psychic energy… What makes this information (feedback) valuable is the symbolic message it contains: that I have succeeded in my goal. Such knowledge creates order in consciousness, and strengthens the structure of self (Csikszentmihalyi, 1992, p.57).

2.1.5 There is effortless involvement; no awareness of worries and frustrations

Csikszentmihalyi (1992, p.58) writes that, 'One of the most frequently mentioned dimensions of the flow experience is that, while it lasts, one is able to forget all the unpleasant aspects of life'. He notes that in everyday experience we are prey of thoughts and worries that intrude unwanted into consciousness. He claims further:

> …this is one reason why flow improves the quality of experience: the clearly structured demands of activity impose order, and exclude the interference of disorder in consciousness (Csikszentmihalyi, 1992, p.58).

Anxiety and worry can limit the capacity to experience flow and Csikszentmihalyi (1975, p.50) also identified the responses of participants who fall outside the flow experience. Where participants are faced with challenges beyond their level of skill, *worry* followed by *anxiety* can arise. Where the level of challenge is less than the degree of skill of the participant, *boredom* and *anxiety* is the result.

2.1.6 People exercise a sense of control over their actions

The sixth characteristic of a person in flow is that they are in control of their actions and their environment. Flow experiences 'occur in activities where one can cope, at least theoretically, with all the demands for action' (Csikszentmihalyi, 1975, p.45). Jackson and Csikszentmihalyi (1998) write of this as the challenge/skills balance. The enjoyment is not from the sense of 'being in control' but rather the sense of 'exercising control' in difficult situations (Csikszentmihalyi, 1992, p.61). There is no concern about 'the possibility of lack of control' (Csikszentmihalyi, 1975, p.44). When the participant thinks back over the engagement in action there can be an awareness of having skills adequate for meeting the demands or challenges of the environment.

2.1.7 Concern for self disappears; the sense of self emerges stronger after flow

In flow participants no longer centre attention on themselves but rather, concentrate totally on the action. This feeling is sometimes 'accompanied by a feeling of union with the environment' (Csikszentmihalyi, 1992, p.63). In the flow experience there is no room for scrutiny of the self. The '*concept* of self' slips below the threshold of

awareness, and this experience then leads to the opportunity to actually 'expand the concept of who we are' (Csikszentmihalyi, 1992, p.64). In this process, the person 'in effect becomes part of a system of action greater than what the individual self had been before' (Csikszentmihalyi, 1992, p.65). Later, with a chance to reflect on the process, '…the self that the person reflects upon is not the same self that existed before the flow experience: it is now enriched by new skills and fresh achievements' (Csikszentmihalyi, 1992, p.66).

2.1.8 The sense of the duration of time is altered

One of the common descriptions of flow is that time does not seem to pass as it normally does. Time has little relation to 'the passage of time as measured by the absolute convention of the clock' (Csikszentmihalyi, 1992, p.66). Minutes may seem like hours, or hours may pass like minutes. The passage of time, in effect, is irrelevant and 'freedom from the tyranny of time does add to the exhilaration we feel during a state of complete involvement' (Csikszentmihalyi, 1992, p.67). This component is different from 2.1.1 where there must be sufficient time to complete the task.

2.1.9 The outcome of all eight components: the experience becomes autotelic

The ninth component of flow involves its 'autotelic' (intrinsically motivated) nature. The experience appears to need no 'goals or rewards external to itself' and 'it is a matter of 'doing it because you love it' (Csikszentmihalyi, 1975, p.47). The author notes the autotelic nature of play and writes of enjoyment of autotelic activity:

> Apparently, something that is enjoyable to do gives feelings of creative discovery, a challenge overcome, a difficulty resolved. People who see what they are doing in these terms tend to enjoy the activity more for its own sake (Csikszentmihalyi 1975, p.181).

Autotelic activities had some basic similarities in that they included 'designing or discovering something new, exploring a strange place, and solving a mathematical problem' (Csikszentmihalyi, 1975, p.181). They also had some unique differences: they included intellectual processes; involved kinaesthetic movement; strong feelings of camaraderie; others included competition and in some 'a solitary coping with some of the inanimate environment' (Csikszentmihalyi, 1975, p.181). While the initial engagement with the activity may or may not be intrinsically motivated, it may well need to be extrinsically motivated (Csikszentmihalyi, 1975). The activity becomes enjoyable at the point where the engagement in action is motivation for that action in its own right.

2.1.10 Model of the Structure of Flow

Figure 2.1 displays Csikszentmihalyi's model of the concept of flow. He writes of the limited value of the model because the state of flow does not

> …depend entirely on the objective nature of the challenges present or on the objective level of skills; in fact, whether one is in flow or not depends entirely on one's 'perception' of what the challenges and skills are. With the same "objective" level of action opportunities, a person might feel anxious one moment, bored the next, and in a state of flow immediately afterward (Csikszentmihalyi, 1975, p.50).

To understand flow engagement more fully, the characteristics that make people 'underestimate or overestimate their own skills as well as the objective demands for action in the environment' need to be identified (Csikszentmihalyi, 1975, p.50).

It can be assumed that estimating an accurate prediction for a person entering a flow state is difficult. This is because individuals need to 'perceive the difficulties and their own capabilities "objectively" (Csikszentmihalyi, 1975, p.51). When skills are viewed "objectively" and the individuals' skills are greater than the challenge, the individual can increase the challenge by 'adopting some tacit rule' (Csikszentmihalyi, 1975, p.52). In this way the individual can decrease the likelihood of experiencing boredom and is more likely to enter the state of flow:

> By limiting the stimulus fields, a flow activity allows people to concentrate their actions and ignore distractions. As a result, they feel in potential control of the environment. Because the flow activity has clear and non-contradictory rules, people who perform in it can temporarily forget their identity and its problems. The result of all these conditions is that one finds the process intrinsically rewarding (Csikszentmihalyi, 1975, p.48).

Csikszentmihalyi identifies quality of experience, as a function of the relationship between challenges and skills: '…flow, occurs when both variables [of skills and challenges] are high' (Csikszentmihalyi, 1997, p.30). He suggests that the experience of flow 'is not limited by the form of the activity, although it is affected by it' (Csikszentmihalyi, 1975, p.186). Ideally it is possible that, 'anyone could learn to carry inside himself [or herself] the tools of enjoyment' (Csikszentmihalyi, 1975, p.53). It is possible that 'People can turn any situation into a flow activity' (Csikszentmihalyi, 1975, p.193). Accordingly, work, leisure or learning that is organised to focus on the structure of flow can lead to the experience of flow. In this process, the matching of the participants' skills and challenges is an important factor.

Figure (2.1) indicates how the individual's perceived level of skill in the activity is associated with the perceived level of challenge inherent in the activity. It further

displays the results emerging from the interplay of these two dimensions. Where there is a perceived high challenge level and the individual's perceived high level of skill is adequate to facilitate complete concentration on the activity, the merging of action and awareness, then flow occurs. Where the perceived level of challenge is too great for the perceived level of the individual's skill, then anxiety occurs. Where the perceived level of skill is not high enough for the individual's perceived level of skill, then boredom occurs. Figure 2.1 illustrates the balance between skills and challenges no matter what the activity.

Figure 2.1: Model of flow and non-flow states.

Source: Adapted from Csikszentmihalyi 1975:49-51

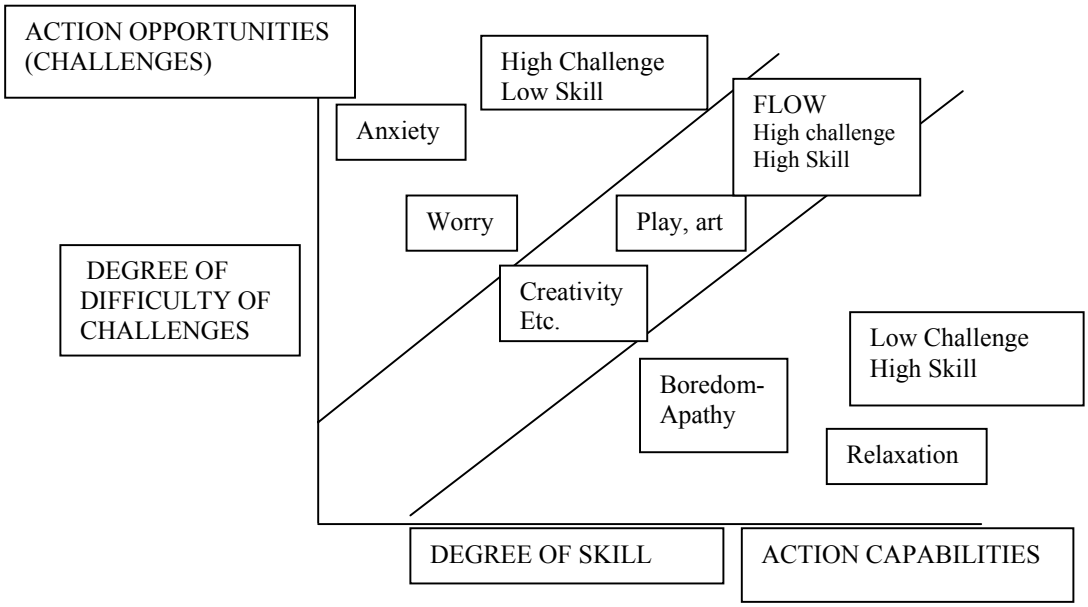


Figure 2.1. Model which indicates an example of flow where the perceived high degree of skills (capacity for control of task and environment) are equal to the high degree of difficulty in the challenges. The model also shows non-flow conditions where the perceived degree of skill is less than the degree of challenge causing worry and eventually anxiety or, the perceived degree of skill is greater than the degree of challenge causing boredom, eventually apathy and also relaxation.

Mundell (2000) disagrees with Csikszentmihalyi's findings and suggests that the assumption made in the flow literature that a balance of high perceived skills and high perceived challenge leads to the enjoyment of flow is not supported. However, Csiskzentmihalyi (2000) claims that his work has been frequently corroborated.

2.1.11 Microflow and Flow Deprivation

Deprivation of flow can have negative effects on a persons' daily life (Csikszentmihalyi & Graef 1975). The authors found that respondents engage in a variety of small and seemingly insignificant activities like chewing gum, stretching one's fingers, or pursuing a daydream, to create an enjoyable 'space' for themselves. These responses were found to be 'important in the psychic economy of everyday life' (Csikszentmihalyi, 1975, p.185). In an effort to identify the effect of flow deprivation, a group of subjects was asked to deliberately stop all such activities for forty-eight hours. Csikszentmihalyi and Graef (1975, p.161) noted some interesting outcomes. Almost unanimously the subjects reported being:

> More tense toward people
> Head going in circles, infuriated
> Slept badly, listless, more nervous, more guarded
> Hungry for people, everything became more of a chore,
> felt weaker, it was harder to cope
> More irritable, restless, shorter concentration…
> (Csikszentmihalyi, & Graef, 1975, p.170).

> (also) …less relaxed, more tired, more sleepy, and less healthy after being deprived of micro-flow than they had before the deprivation. (Csikszentmihalyi, 1975, p.185).

The deprivation had negative effects on most but not all of the respondents: 'Some subjects felt that they were going to have a "nervous breakdown," and only the thought

of the experiment's terminating in a few hours kept them going' (Csikszentmihalyi, & Graef, 1975, p.170). This finding, Csikszentmihalyi (1975, p.204) suggests, has direct implications for redesigning settings in which we live and work and for what and how we teach our children.

2.2 FLOW IN RELATIONSHIP TO LEARNING THEORY

This section reviews the nine components of flow, using examples from leisure, and the literature on teaching and learning.

2.2.1 Component 1: There must be Time to Complete the Task

The first component of flow theory is that the experience usually occurs when we confront tasks that we have a chance of completing. Given enough time ensures the opportunity for what Lee, Dattilo, and Howard, (1994, p.202) suggest is a 'key component of leisure'. To enable enjoyment or flow in leisure it is necessary to avoid the stress or disturbance of time constraints by ensuring an opportunity to complete the task.

The same utilisation of time in relation to enjoyment or flow according to leisure theory is applicable in classroom learning:

> …the length of the school year or day is only one dimension of time. A more complete picture examines *how* teachers use their available time and how this influences learning (Kauchak, & Eggen, 1998, p.111).

Commentators on education note the crucial dimension of time for achievement in learning from the learners' perspective. Theorists refer to time in different ways,

including mandated time, allocated time, instructional time, engaged time or time-on-task, and academic learning time (Woolfolk, 1998; Eggen, & Kauchak, 1997; Moore, 1995). Turney, Hatton, Laws, Sinclair, and Smith (1992, p.78) refer to time as macro-structures, micro-structures, individual time patterns, allocated and transition times. Successful learning is affected significantly by the teachers' management of time—the time allowed for learning and the time needed for learning, that is, of engaged or time-on-task (Kauchak, & Eggen, 1998; Woolfolk, 1998; Moore, 1995; Eby, 1992; Turney et al, 1992).

Engaged time doesn't guarantee learning, but rather that the activities 'engaged in [need to be] worthwhile, appropriate learning activities' (Woolfolk, 1998, p.443) and the 'time-on-task' used productively (Moore, 1995; Turney et al, 1992). The amount of learning time-on-task can also be limited by the style of teaching. Fenstermacher, and Soltis (1998) note for instance, that in the executive teaching style where fifty minutes was allocated to a lesson, students may only spend seven or eight of those minutes on task. The literature reveals that it is important for teachers to develop flexibility in use of time and skills in decreasing the non-instructional time, so that instructional time can be increased (Riner, 2000; Kauchak, & Eggen, 1998; Moore, 1995; Eby, 1992; Freiberg, & Driscoll, 1992; Turney et al, 1992).

The allocation of time to complete a task is as important to actual learning as it is to the enjoyment of learning. Learners can master the learning tasks given sufficient time (Kindsvatter, Wilen, & Ishler, 1992). The length of time a learner is expected to pay attention to a task is also important. Moore (2000) focusing on learner attention span

claims that the brain is designed for ups and downs, stops and starts, and not for constant attention. He suggests that the brain learns best when there are different types of inputs, different beginnings and endings, and when there are choices. This information seems in some ways consistent with Csikszentmihalyi's comment that, 'With the same "objective" level of action opportunities, a person might feel anxious one moment, bored the next, and in a state of flow immediately afterward' (Csikszentmihalyi, 1975, p.50).

Moore (2000, p.161) notes that there are 'periods of time' for working which suit different age groups, and that there are 'periods of time' in which different age groups can be focused and 'on task'. He writes that '…different students may have different attention spans which themselves may vary according to the situation…' (Moore 2000, p.161). Certainly Csikszentmihalyi (1992) points out that when engaged in a task, different people have different capacities for attention, and even different levels of attention while engaged in the same task.

Marzano (1992) writes of the differences between 'real-life work tasks' and 'school work'. He notes that 'inside school' tasks are often short term and completed within one class period while 'outside school', real life '…tasks …may take weeks, months, sometimes years to complete'. However, because the 'skills and abilities' requisite for 'effective learning' are facilitated in long-term projects, it is '…the extended engagement in complex tasks (that) allows for the deepest learning' (Marzano, 1992, p.13). The manner in which these are organised is also important. When '…giving students the chance to learn what is being taught,' teachers should allow learners the opportunity to '…become involved in a complex topic by not covering the material too

quickly, by providing adequate background, and by monitoring the time allowed for the topic' (Fenstermacher, & Soltis, 1998, p.15). Time management might be transmitted informally to students: 'it may be that student efficiency can be taught through the teacher's management of time' (Freiberg, & Driscoll, 1992, p.102).

2.2.2 Component 2: We must be able to Concentrate on the Task

Csikszentmihalyi suggests that being able to concentrate in flow is the 'merging of action and awareness' (Csikszentmihalyi, 1992, p.53). In flow all the relevant skills of a person are needed to cope with the challenges of the situation. In this condition the person becomes totally absorbed by the activity. 'All the attention is concentrated on the relevant stimuli', and the activity becomes 'spontaneous, almost automatic; (the students) stop being aware of themselves as separate from the actions they are performing' (Csikszentmihalyi, 1992, p.53). To 'engage the concentration on the task' does not happen without the application of skilled performance, and flow is experienced in the balance between a high level of skill and a high level of challenge (Csikszentmihalyi, 1992, p.54).

Lack of concentration on the task is identified by Csikszentmihalyi (1992, p.37) as the opposite of flow, psychic entropy, which happens when information that conflicts with an individual's goals disrupts concentration on the task. In the context of leisure theory, Crawford, Jackson and Godbey (1991) identify three different categories of disturbances or constraints that can impede concentration: intrapersonal (within the person), interpersonal (relations between persons), and structural. The physical setting can also

influence the quality of experience (Jackson, & Csikszentmihalyi, 1999). Csikszentmihalyi (1992, p.49) indicates however, that people with a particular attitude will continue engagement in stressful situations, expending a great deal of energy when a deep sense of enjoyment is an anticipated outcome.

The school ethos and classroom management procedures also influence the learner's capacity for concentration in learning (Riner, 2000; Webb and Vulliamy, 1996; Woods, & Jeffrey, 1996; Turney et al, 1992); as do the learner's attitude to school and schooling (Moore, 1995; Richey, 1986); the learner's aptitude for the task, ability to understand the instructions, the students' perseverance, and the teacher's quality of instruction (Merry, 1998; Richey, 1986). Additional factors include the lack of social and emotional growth, and factors in the home which can negatively influence learning capacity in the classroom (Shriver, Schwab-Stone, & De Falco, 1999).

The learners' developmental stages are cited as important in engaging learner attention because problems (constraints) can occur when teaching is directed to a cognitive level higher than the learners' stage of development (Phillips, & Soltis, 1998; Woods, & Jeffrey, 1996; Richey, 1986; Dewey, 1902). For Turney et al (1992), lack of relevance and mindless repetitive tasks will direct attention away from classroom learning. Constructivist learning theory takes as its starting point the knowledge, attitudes, and interests students bring to the learning situation as one of two basic premises of learning (Howe, & Berv, 2000, p.30).

Dewey (1902, p.24) nominated the lack of organic connection between what the child already knows and loves, and the learning material, as one of three 'evils' leading to lack

of motivation to learn. However Kauchak and Eggen (1998) shed perspective on such a claim, by arguing that it is impossible to design learning activities that answer the background experiences and needs of every learner in the classroom. Their concern is instead, that 'all of the information needed for understanding the topic exists in the representations' of the lesson content (Kauchak, & Eggen, 1998, p.128).

2.2.3 Component 3: The Task has Clear Goals

The third component of flow is that the task must have clear goals from which feedback can be identified. The most easily understood examples of clear goals in enjoyable activities, 'are found in games' (Csikszentmihalyi, 1975, pp.36-37). Both institutionalized games such as sport and games in play provide both rules and immediate feedback. An analysis of poker groups provides an excellent example, indicating that there are various levels of structure around the activity, where the rules of the game of poker are augmented by 'house rules' that govern all others aspects of the interaction (Kelly, & Godbey, 1994, pp.220-21).

The importance of clear instructions (goals), associated with frequent feedback, is a consistent feature of the contemporary literature on desirable teaching technique, (Conner, in Whitebread, (Ed) 2000; Riner, 2000; Kauchak, & Eggen, 1998; Jarolimek, & Foster, 1993; Eby, 1992). Commentators on education generally believe that for success in learning, the teacher and learner must understand what the learning tasks are and why they are engaging in them (Riner, 2000; Kauchak, & Eggen, 1998; Collis, Dalton, & T.E.C.S.S.A., 1991). Various teaching skills like a clear explanation of the task,

questioning, modeling, teacher and student think-alouds, examples of finished products, and opportunities to receive feedback at frequent intervals, all reinforce the goals established for learning (Riner, 2000; Kauchak, & Eggen, 1998; Moore, 1995). The importance of clear goals is stressed because, 'they give teachers reference points that can guide learning', and as they work 'students build on their current understanding, [and] teachers modify their goals.' (Kauchak, & Eggen, 1998, p.188). The authors note the importance of clear goals for learning in all methods of teaching.

Child (1997, p.53) suggests that 'the teacher's function is to provide the direction', and that 'badly organised goal-seeking and goal-planning might have disastrous effects on children's morale.' It is noted that high teacher expectations, which influence teaching goals 'can be transmitted to pupils' by relevant teaching skills, 'and considerable emphasis on the detail of what is important' (Collis, Dalton, & T.E.C.S.S.A., 1991, p.26). Dewey stressed the importance of knowing where the direction of the task is progressing:

> To see the outcome is to know in what direction the present experience is moving… Taken in this way (as a direction to move forward) it is no remote and distant result to be achieved, but a guiding method of dealing with the present (Dewey, 1902, p.13).

Csikszentmihalyi (1992), makes a direct connection between clear goals and feedback. He does not address them separately but links them as Components 3 and 4.

2.2.4 Component 4: The Task Provides Immediate Feedback

> feedback…and especially immediate feedback…was essential to the learning process. Students must be able to see necessary corrective procedures (Kindsvatter, Wilen, & Ishler, 1992, p.46).

Feedback for the purpose of flow is that feedback which arises in the midst of concentrated engagement in activity. There is an integration of action and feedback so that at times feedback is not even noticed as such (Csikszentmihalyi 1992). Examples of feedback are ably demonstrated within the context of a game of poker with a group. The rules of the game and the house rules each provide the opportunity for immediate as well as retrospective feedback. Kelly, and Godbey (1994) claim that, 'the "scripted competition" allows for self-testing without long-term consequences' because, 'poker yields outcomes [feedback] that are signalled and recognized, for each hand of the evening' (Kelly, & Godbey, 1994, p.221). The poker group interaction also allows for retrospective analysis with 'consideration of missed opportunities, and announcements of event-bounded success' (Kelly, & Godbey, 1994, p.221).

A noticeable aspect of the contemporary literature on learning involves the different purposes identified for assessment feedback in learning (Conner, 2000). Commentators on feedback note that knowledge of whether the action is right, partly right or wrong *at the end of the activity*, are not the issues in this process and has little or no effect on improving learning (Conner, 2000; Riner, 2000; Jarolimek, & Foster, 1993; Kindsvatter, Wilen, & Ishler, 1992; Turney, Hatton, Laws, Sinclair, & Smith, 1992). The reflective teacher can provide information about what is left to be learned, and provide corrective measures for students' responses, making instruction more effective (Caffarella, & Barnett, 1994, p.38). Moore (1995, p.197) identifies teacher reflective listening skills as

an important aspect of the reflective teaching feedback process. Informal feedback influences both the short term and also long term motivation for learning, learner confidence and pupil involvement in learning (Barnes, 1999; Kauchak, & Eggen, 1998). Effective feedback has four characteristics: 'it is immediate, it is specific, it provides corrective information, (and) it has a positive emotional tone' (Kauchak, & Eggen, 1998, p.131). For improved performance in primary learning, Conner (2000) believes that feedback should be related specifically to the task, and that one should provide the learner with a blueprint for improving performance, so that the learner is given control and can accept responsibility for learning.

Barnes (1999) distinguishes between formative and summative assessment. Broadfoot (1991) suggests, that summative assessment, which is grading to indicate accomplishment, comparison, or for certification, can be experienced as judgement of the outcome of the task and warns that there are perils that confront those who uphold meaningful assessment. These perils are 'a sense of powerlessness and coercion among pupils; an even greater intrusiveness of assessment; (and) an imprisonment in a benign but ubiquitous judgement from which there is no escape' (Broadfoot, 1991, p.3). Effective 'student learning is dependent on knowledge of results when that knowledge can be used for correction' (Kindsvatter, Wilen, & Ishler, 1992, p.47). These authors stress that grades (assessment results) do not provide the learners with the feedback necessary for learning. Armstrong (1998, p.63) suggests avoiding the competitive or comparative nature of assessment, by providing frequent times that are 'test-free' and 'grade-free' so learners can engage in activities without the worry of test and grading results.

In the collaborative classroom, assessment can be organised or structured to involve the components (structural elements) of flow, as a collaborative 'performance' for sharing learning and measurement of learning in the whole class (Research Observation 8/99; Johnson, & Johnson, 1987; and Johnson, Johnson, & Holubec, 1993). Cooperative learning can also assist feedback processes by enabling the connection with past learning through the cross-fertilization of previous knowledge and present learning within the group (Katz, 1995, p.56). In the flow experience, the feedback and reflective interaction becomes an automatic process in which the feedback and responsive action become to a high degree spontaneous. There is no room even for reflecting on 'the act of awareness itself' (Csikszentmihalyi, 1975, p.38) because once you reflect in action, you change the experience.

2.2.5 Component 5: One acts with a deep but effortless involvement that removes from awareness the worries and frustrations of everyday life.

Deep concentration on a task is not easy because the problems and events of everyday life and the minds' 'ruminations' about the past tend to disturb a person's thinking (Jackson, & Csikszentmihalyi, 1999). 'Prolonged experiences of this kind (that create anxiety in the mind) can weaken the self to the point that it is no longer able to invest attention and pursue its goals' (Csikszentmihalyi, 1992, p.37). Moore (2000, p.159) notes that stress has an effect on the human brain, the blood vessels constrict, and the blood leaves the skin and the intestines. Blood pressure rises and the blood is made available to the oldest part of the brain. The individual loses peripheral vision, focuses on anxiety, and the capacity to solve problems, be creative and flexible are diminished.

In some leisure literature the effortless involvement in flow is addressed from the perspectives of arousal and engaged interest and, incongruity, anomie (anxiety) alienation (boredom), and withdrawal from involvement. Kelly and Godbey (1994, p.193) characterise anomie as a state in which norms of behaviour have become unclear, leaving confusion about what behaviour might be appropriate. Alienation occurs when the social system constrains people to go against their own personal goals. 'At the individual level anomie corresponds to anxiety, while alienation corresponds to boredom' (Csikszentmihalyi, 1992, p.86). Both anxiety and boredom, are 'anathema' to the condition of flow, and deep and effortless engagement in a task.

Sources of anxiety and frustration causing an inability to engage in learning tasks without worry or concern are found in various issues of learners' lives. The problem is both individual and institutional. Commentators on anxiety in learning note that the issue is complex and that the level of arousal for a learning task needs to be right: not too little and not too much (Woolfolk, 1998; Eggen, & Kauchak, 1997). Woolfolk claims:

> Highly anxious students evidently divide their attention between the new material and their preoccupation with how nervous they are feeling. …Much of their attention is taken up with negative thoughts about performing poorly, being criticized, and feeling embarrassed. From the beginning, anxious students may miss much of the information they are supposed to learn because their thoughts are focused on their own worries (Woolfolk, 1998, p.397).

She notes that they have trouble focusing on relevant material and

> Even if they are paying attention …they have trouble learning material that is somewhat disorganised and difficult…that requires them to rely on their memory (Woolfolk, 1998, p.397).

In teaching, anxieties about learning, student boredom and frustration are issues that vitally concern all teachers. McInerney (2000) writes that learner boredom is found

because of lack of task or topic relevance. Frustration or anxiety can arise when lesson tasks assigned, are beyond the learner's ability or impossible for the learner to complete, and so the learner stops working (Kauchak, & Eggen, 1998; Woolfolk, 1998; Freiberg, & Driscoll, 1992). The use of a variety of teaching methods, including group work, peer tutoring, simulations, and allowing 'students some choice and control over their learning related to the method, pace and content,' are suggested for overcoming these anxieties (McInerney, 2000, p.10). Assessment can also be a source of anxiety and can impact on the learners' capacity to engage in the task without worry (Woolfolk, 1998; Child, 1997; Broadfoot, 1991).

As mentioned in component 4, Broadfoot (1991, p.3) warns of the perils that can arise from assessment, including a sense of powerlessness and coercion among pupils, and 'the stress of the examination room …(which) would seem perversely designed to reduce the very capacities that are supposed to be tested' (Moore, 2000, p.159). While Eggen and Kauchak (1997) note that, issues of anxiety in the classroom are complex, Moore (2000) emphasises that, it is important not to eliminate all anxiety from the learning situation because there is a positive relationship between moderate anxiety and effective learning performance.

The New Haven Connecticut school system, addresses the problem of anxiety through a comprehensive and integrated K-12 curriculum of competencies in social and emotional learning (SEL) which arose out of a 'crisis' in the realisation that children were (i) not learning about social and emotional growth factors in the home and that (ii) this lack of growth factors, was negatively influencing the learning capacity of children and youth in

the classroom (Shriver, Schwab-Stone, & DeFalco, 1999, p.44). The development of an integrated school curriculum was identified as important because:

> If schools are to be responsive to the needs of the whole child, then the social and emotional needs of children will have to be a more integrated and central focus of classroom teachers and school communities. Of central importance is the understanding that social and emotional factors are central parts of learning–that stability, motivation, and even attention are essentially social and emotional components of the individual (Shriver, Schwab-Stone, & DeFalco, 1999, p.44).

These authors believe that because of the integrated nature of its three key factors, namely knowledge, responsibility and caring, SEL is more than a 'fad or add-on'. (See Component 7 regarding self-esteem and the concept of 'add-on'.)

2.2.6 Component 6. Enjoyable experiences allow people to exercise a sense of control over their actions.

Control is identified in this text as including two specific issues, first, acknowledging learner control through perceived choice and second, the learner feeling a sense of control through self-responsible and concentrated action in learning. These are addressed first using examples from leisure, and are then related to teaching and learning theory.

A commonly used response to the question 'What is leisure?' is 'Leisure is what I choose to do because I enjoy it' (Kelly, & Godbey, 1992, p.11). Choice in leisure is not unconstrained; it is at best, mostly perceived or constrained choice (Iso-Ahola, 1980). It is thought of in comparative rather than absolute terms (Kelly, & Godbey, 1992). Csikzentmihalyi (1992) notes that flow is not limited entirely to activities that are

primarily of personal choice. The individual's capacity for control during action is also a relevant factor in enjoyment of leisure.

Iso-Ahola (1980) refers to the 'helplessness which is a psychological state that frequently results when events or behaviors are uncontrollable' (Iso-Ahola, 1980, p.120). Seligman (1980) identified three deficiencies in humans that arise from this situation. There is (1) a decreased motivation to initiate action, (2) retardation in ability to learn, perceive, and believe that one's behaviour has been successful when it actually has been, and (3) disturbed emotional balance, with increased anxiety and depression. The problem with helplessness is that once learned it tends to extend to other circumstances, 'and thus undermine a person's entire repertoire of adaptive behaviors' (Iso-Ahola, 1980, p.120). A learner-perceived sense of control is a significant, even a mandatory factor to be considered for any teaching and learning model for the classroom.

The freedom to choose in learning has historical significance. Commentators on learning note that the opportunity should arise for choice among the learning topics and tasks, to promote self-directedness and intrinsically motivated responses (Woolfolk, 1998; Eggen, & Kauchak, 1997; Rogers, 1967; Dewey, 1902). The genial classroom is one where there is freedom to choose, because with some choice the students feel empowered (Armstrong, 1998). It is in making choices that the opportunity for curiosity and decision making is given voice; where open-ended exploration is a source for choice; where there is value in exploring a subject without 'necessarily having to reach a fixed end point'; and where 'real learning' involves 'dead-ends, stagnations, resignations, cross-outs, and regressions' (Armstrong, 1998, p.62). Armstrong (1998)

confirms the earlier view of Dewey (1902), that the value of open-ended learning is that it encourages flexibility in thinking, and prepares the learner for the real world.

The two perspectives of creative performance or genius in the classroom (Armstrong, 1998) and academic achievement (Kindsvatter, Wilen, & Ishler, 1992) influence strategies for learner choice in the classroom. Armstrong points out that:

> Students who aren't given significant choices about what they can learn or how they are able to learn it, soon either give in and adapt, or give up and tune out (Armstrong, 1998, p.61).

Academic results however, appear to be negatively influenced by too much choice in the classroom where learners have less academically engaged time and lower achievement (Kindsvatter, Wilen, & Ishler, 1992). Armstrong stresses that freedom to choose, does not mean learners do not receive instruction and support:

> Choices are carefully designed within safe and clear structures so the kids can experience the delight of having a limited number of choices… (Armstrong, 1998, p.61).

Commentators on learning note the importance of learner control of their own learning, particularly as an aspect of motivation (Conner, 2000; Woolfolk, 1998; Child, 1997; Eggen, & Kauchak, 1997). Striking differences were found between children who believed what they did was what they wanted to do, called 'origins' by de Charms (1968) (quoted in Woolfolk, 1998; Child, 1997; Eggen, & Kauchak, 1997, Csikszentmihalyi, & Csikszentmihalyi, 1988) and the 'pawns' who felt they were just being pushed around by outside forces. 'Origins' experienced intrinsic motivation, because they felt they owned their behaviour, they took it more seriously and enjoyed it regardless of outside recognition' (Csikszentmihalyi, 1988, p.6). This finding is consistent with the attribution theory of motivation where learners perceive a sense of

control of their learning and are subsequently intrinsically motivated (Anderman, & Midgley, 1998).

Control over actions can be influenced by the degree of difficulty of either the topic or task relative to the learner's ability and also, the social environment in which the learner is situated. Dewey (quoted in Moore 1982) addressed the issue of degrees of task and topic difficulty. Learning according to Dewey meant cooperative engagement with life in society, with:

> problems appropriate to the developmental stage reached by the child and which spring from his interests as a child, not adult problems suggested by his (sic) teachers, and not problems of the merely academic kind (Dewey, in Moore, 1982, p.45).

Control of learning through the development of learner independence; a democratic classroom climate; teachers who build expectations for student success; and skills such as enabling learners to self-check their work, individually and through peer interaction, are advocated in the literature on learning (Woolfolk, 1998; Jarolimek, & Foster, 1993; Kindsvatter; Wilen, & Ishler, 1992; Collis; Dalton, & T.E.C.S.S.A., 1991).

Cooperative learning is included here because of its potential for enabling control and enjoyment in learning. Cooperative learning is suggested as a source for positive interdependence, face-to-face interaction, individual accountability and the use of appropriate interpersonal and small-group skills (Johnson, & Johnson, 1987, p.12). Csikszentmihalyi believes that there are unique differences among autotelic or flow activities. Some are intellectual processes, some involve kinaesthetic movement, some include strong feelings of camaraderie, others include competition, and in others there is 'a solitary coping with some of the inanimate environment' (Csikszentmihalyi, 1975,

p.181). All these activities except for the 'solitary coping' are potentially interactive in nature. The impact of social development on cognitive development enables children and adults alike to learn more, achieve more, and enjoy the experience of learning more when they work in cooperative learning groups (Hill, & Hill, 1990, p.1). Research has shown small group cooperation, and collaborative learning, are highly influential in children's perception of their enjoyment of learning (Allen 1995).

2.2.7 Component 7: Concern for the self disappears, yet paradoxically the sense of self emerges stronger after the 'flow' experience is over.

Haggard and Williams (1991) writing about the self and the benefits of leisure, report that 'freely performed behaviors influence one's self-perceptions [positively] more so than constrained behaviors' (1991, p.104). The suggestion is that these behaviours are seen as representative of the self, and that situations with high degrees of choice are more likely to lead to attitude change. Haggard, & Williams, (1991, p.104) claim that in situations where there is no choice, the existing self-images (positive or negative) were reinforced. Only those subjects who felt a 'perceived freedom of choice incorporated *new* identity images into their self-concepts'.

Much of the effort to encourage learners' self-esteem in the classroom is addressed in what is called the 'add on' factor (Armstrong 1998). This includes techniques, strategies and activities for use in the classroom, like those found in, *Feeling good Raising self-esteem in the primary school classroom* (Wetton, & Cansell, 1993), and, *100 ways to enhance self-concept in the classroom*, (Canfield, & Wells, 1976) which emphasise acceptance of self, and understanding relationships with others. Another source of this

‘add-on ’factor is what Armstrong (1998), labels as a lot of razzamatazz or ‘hyping up’ like activities common in entertainment.

Esteem as an aspect of flow however, is not found in the techniques, strategies and activities developed for that purpose and identified as ‘add-on’, but rather it is esteem that arises from success following concentrated engagement and use of skills to face the challenges of the chosen task. Esteem rises out of that success. Woolfolk (1998) claims that this issue of challenge and resulting success has implications for teachers, and notes that, ‘teachers must design learning activities so that students are successful; if they do, self-concept should improve as a result’ (1998, p.87). Marton and Booth (1997, p.53) address this issue as well when they write about ‘becoming able’. They note, as Ekeblad put it:

> So, you are able, you must have, learned, and the aspects of your experience that might indicate learning must be that slight surprise, the excitement, or joy, that feeling of lightness that constitutes an aspect of your first successful performance (Ekeblad, quoted in Marton, & Booth, 1997, p.53).

Kauchak and Eggen (1998) cite a study which showed that students in classes where success was the dominant pattern not only learned more but also felt better about themselves and the material they were learning (Kauchak, & Eggen, 1998, p.114). They note however, some learners need to attain more success than others. These include younger students, low achievers, and students from lower socioeconomic backgrounds. Content can also be a factor for these students. Those disciplines that require previous knowledge such as reading and some maths, need higher success rates than ‘less cumulative and structured areas’ such as social studies. A lack of a ‘robust history’ in

classroom success can lead more easily to frustration and discouragement in the learner (Kauchak, & Eggen, 1998, p.115).

2.2.8 Component 8. The sense of the duration of time is altered; hours pass by in minutes, and minutes can stretch out to seem like hours.

Kelly and Godbey (1992) suggest that the 'lessening of self and time awareness is often considered an attribute of play' and is a separation of the consciousness of self, from the event (1992, p.190). The loss of awareness of self and time when immersed in an activity might also be identified in the 'play frames' of Bateson, who hypothesised a paradoxical frame 'this is play' which sets the event apart for a time, from other events of life (Lynch, 1994, p.111). Huizinga (1950) refers to one characteristic of play, as 'its secludedness, its limitedness. It is 'played out' within certain limits of time and place. It (play) contains its own course and meaning' (1950, p.28).

Lynch and Veal (1997, p.40) also make a connection between the sense of timelessness in flow and the historical Australian Aboriginal engagement in music and ceremony. They claim an association between the experience of flow and the engagement of Aboriginal people in ceremony. They suggest however, that the Aboriginal peoples' experience is integrated and multi-layered, with a total connection between human, spirit, nature, land, music and ceremony, during their immersion in ceremonial action. This total immersion in action appears to rise out of a unified group engagement in the totality of the action. They say:

> However, to write such a religious experience off as only a peak state of enjoyment, however transcendent, is to miss the integrated and multi-layered meaning of the ritual-musical moment (Lynch & Veal, 1996, p.40).

The issue of flow and a multi-layered group experience will be discussed in relation to a classroom observation, in chapter 7.

Providing an example of an individual's focused experience, Armstrong (1998, p.24) refers to Montessori's description of 'the great work', her term for the transformative moments when children become totally absorbed in the learning process. Armstrong suggests it bears a striking resemblance to the experience of flow. He cites her description of a three-year-old girl intent on placing cylinders of different widths into their respective containers. The child's concentration was so complete that she did not stop her activity even when she was picked up and moved:

> Then she [the child] stopped as if coming out of a dream and smiled happily. Her eyes shone brightly and she looked about. She had not even noticed what we had done to disturb her… Similar events kept recurring, and every time children emerged from such an experience, they were like individuals who had rested. They were filled with life, and resembled those who have experienced some great joy (Montessori, 1973, quoted in Armstrong, 1998, p.25).

2.2.9 The Experience becomes Autotelic or Self-Motivating

The ninth component of flow is its autotelic or self-motivating nature. In flow, the activity becomes self-motivating. The word autotelic derives from two Greek words, *auto* meaning self and *telos* meaning goal, which **'**refers to a self-contained activity, one that is done not with the expectation of some future benefit, but simply because doing itself is the reward' (Csikszentmihalyi, 1992, p.67). Self-motivation is an important aspect of the theoretical understanding of flow experience. Being intrinsically motivated in a domain is its own reward, 'yet paradoxically it brings other kinds of rewards with it' (Csikszentmihalyi; Ruthunde, & Whalen, 1997, p.139):

> What transpires in the two situations is ostensibly identical; what differs is that when the experience is autotelic, the person is paying attention to the activity for its own sake; when it is not, the attention is focused on the consequences (Csikszentmihalyi, 1992, p.67).

Commentators on motivation in learning note that intrinsic motivation comes entirely from the learner's enjoyment or interest in the activity being performed (Eggen, & Kauchak, 1997; Moore, 1995; Lumsden, 1994). Engagement in the activity is reward enough to the participant (Woolfolk, 1998). In extrinsic motivation, the learner responds to external requirements to engage in the task and may even perceive value in the academic tasks, whether or not they are intrinsically interesting (Woolfolk, 1998; Eggen, & Kauchak, 1997; Moore, 1995; Lumdsen, 1994). Moore (1995, p.209) emphasizes the importance of extrinsic motivation in learning, believing that the probability of changing learners to intrinsically motivated learning in the elementary school setting, is doubtful.

Conversely, the motivation to learn, Dewey (1947) believes, is inherent in the life force of human life. His work in many ways is consistent with the work of Csikszentmihalyi, and adds a dimension to the discussion of motivation and learning. Motivation to learn, Dewey (1947) argues, is found in the comprehensive nature of life and the learning processes themselves. He argues that the immaturity of children 'designates a positive force or ability' that is 'the power to grow' (Dewey, 1947, p.50). 'Where there is life' he says, 'there are already eager and impassioned activities, growth is not something done to them, it is something they do' (Dewey, 1947, p.39). The immature child is dependent, he states, but immaturity is not akin to impotence. Within a social context, growth involves interdependence, and indicates a power rather than a weakness (Dewey, 1947, p.40).

Commentators on motivation in learning also refer to Maslow's hierarchy of needs as having an impact on motivational psychology, and note a changing emphasis from motivation through needs, to that of goals, where learners have something outside themselves they wish to attain (Woolfolk, 1998; Child, 1997; Eggen, & Kauchak, 1997). Child claims that:

> …an instinct, need or whatever, is assumed to give rise to tension, which drives an organism to action in an attempt to reduce the tension. Successful tension reduction is clearly an event which is likely to be remembered, and so learning takes place (Child, 1997, p.52).

He also refers to goal seeking in learning:

> When a sufficient level of arousal is reached, mobilization of the body and mind takes place. The resulting activity is referred to by some, as *goals-seeking behaviour* (Child, 1997 p.53).

Eggen, and Kauchak (1997, p.360) note three important features of goals for motivation: i) They provide a standard against which to measure performance, (with a) tangible evidence of learning, ii) They increase effort and persistence, iii) They encourage the development of new strategies when old ones are unsuccessful. Eggen, and Kauchak (1997, pp.364-367) suggest a model for increasing student motivation in a learning-focused classroom. It comprises teacher characteristics: modeling, enthusiasm, caring, expectations; climate variables: order and safety, success, task comprehension, challenge; and instructional variables: introductory focus, personalization, involvement, feedback. They believe that to be effective this model 'must be embedded in a learning-focused framework that emphasizes a task orientation, improvement and evidence of progress, and an incremental view of ability' (Eggen, & Kauchak, 1997, P.364).

Other theories of motivation reviewed here include attribution, goal, self-determination and achievement theories of motivation. Attribution theory suggests that student perceptions of whether success or failure is within their own control, actually influences motivation to learn more than the actual, objective reality of the experiences (Anderman, & Midgley, 1998). If students perceive poor performance as a lack of skills or poor study habits, they are more likely to persist in the future. Those students who perceive their reason for failure as out of their own control are unlikely to persist with their studies. The implications for teachers 'revolve around the importance of understanding what students believe about the reasons for their academic performance' and involve ensuring that they endeavour to communicate self-responsible attitudes to the students (Anderman, & Midgley, 1998, p.1).

Goal theory of motivation has the two main emphases of task goal and ability goal orientations. It focuses on the reasons or purposes students perceive for achieving in learning. Students with a task goal orientation 'focus on their progress in mastering skills and knowledge,' and success is defined in those terms (Anderman, & Midgley, 1998, p.1). The student, whose purpose in learning is an 'ability goal orientation', defines success by the appearance of competence, often in comparison to others. Of the two, the task goal orientation in learning is more flexible and produces more 'positive educational outcomes and feelings (both) about school and oneself as a learner' (Anderman, & Midgley, 1998, p.2).

Self-determination theory suggests that learners have three categories of needs (Anderman, & Midgley, 1998, p.2). They are the sense of competence, of relatedness to

others, and of autonomy. Competence is the ability to understand the task, how to proceed, and believing that one can achieve. Relatedness is the ability to satisfactorily interact and collaborate with fellow learners, and autonomy is the initiation and regulation of the learner's own actions. The motivations to learn are complex, and are influenced by many and diverse issues of the learner's comprehensive life experiences.

Commentators on motivation refer to achievement motivation, which is a drive to excel at learning tasks and to feel pride in the accomplishment (Woolfolk, 1998; Child, 1997; Eggen, & Kauchak, 1997). Rea (1997) identifies a system of motivation he also calls achievement motivation and which he suggests is 'dancing on the edge of chaos.' He observes this as the space between a strict control of children's classroom behaviour and the chaotic over-excitement that can arise with lack of classroom control. He describes it as 'a dynamical system of "serious fun"' (Rea, 1997, p.4) and believes fun is found on the 'ever shifting edge of constant change' which provides 'motivation moments'. These moments allow 'the emergence of the fun side of motivation and the freedom necessary for new insights'. The challenge for teachers is to make 'learning …both seriously important and spontaneously fun' (Rea, 1997, pp.19-20).

2.3 FLOW IN THE CLASSROOM

This section reviews seminal literature regarding flow and learning in the classroom.

2.3.1 Armstrong (1998)

Armstrong (1998, pp.1-2) identifies and links the root of the word genius 'to give birth' or 'to come into being' with the word 'genial' and suggests genius in the classroom is 'giving birth to the joy in learning'. He suggests that if more research investigated the subject of joy in learning there might be less need for therapeutic and remedial education and research. For joy and genius to arise in the classroom, teachers need to find the joy and genius in their own lives. Armstrong (1998, p.24) notes Csikszentmihalyi's comment recorded in June 1986 *Newsweek* that children 'have flow states all the time', and gives examples from Piaget, Helen Keller, Wagner, and Renoir to support such a comment. Armstrong's book is an appeal for the quality of joy in primary school learning.

2.3.2 Csikszentmihalyi (1997a)

In a paper to the *North American Montessori Teachers' Association*, Csikszentmihalyi (1997a) expresses concern with what it is that engages learner's interest and motivates them to pay attention, and to learn. He mentions research indicating how little actual attention learners pay to the content of a lesson when the teacher is talking, and suggests that the teacher communicate the reasons for learning, and relate the learning task to the present. He recalls his own childhood experience which indicated the importance of collaboration in effective and enjoyable learning, and notes the importance of

minimising distractions, and allowing the organic development of the child's own interests. He discusses the implications for flow in teaching: that enjoyment leads to a continued desire to learn; suggests that teachers need to understand the implications of enjoyment and flow in teaching, and also seek how to apply its principles in the daily life of the learners in the classroom because, 'the attention of students is related to the flow of the teacher in almost every subject' (1997a, p.30).

2.3.3 Larson (1988)

Larson (1988, p.158) found among students engaged in a writing assignment, that boredom occurs when a student can see nothing in the work that is personally interesting or challenging.

2.3.4 Nakamura (1988)

Nakamura (1988, p.319) compared high and low school academic achievers. She found that both groups spent equal time at various levels of engagement in activities, including high skill/high challenge 'flow situations'. A major part of both groups' time was engaged in something identified as boring, with high skills and low challenge. The differences were that high achievers spent more time at academic studies outside of school, and experienced greater flow than did their peers. The low achievers spent more time socialising and in unstructured activities, and experienced greater anxiety than did their high achieving peers.

2.3.5 Csikszentmihalyi (1975)

Writing of the politics of enjoyment Csikszentmihalyi (1975) suggests that society should encourage children to be taught how to 'recognize opportunities for action in their environment' (Csikszentmihalyi 1975, p.204). Quoting from the work of theorists from Plato to Comte and Huxley, Csikszentmihalyi (1975, p.205) suggests that: 'the use of the body in physical exercise and artistic discipline should precede book learning', and beyond that is the reality that 'It is not *what* should be taught to children that is important, but also *how* it should be taught' (Csikszentmihalyi 1975, p.205). Csikszentmihalyi stated that 'mass education is too impersonal and rigid to allow the application of this simple recipe' and that the task is awesome and bristles 'with the oldest problems of economic and social justice' (Csikszentmihalyi 1975, p.206).

2.4 SUMMARY

This chapter has reviewed the literature on flow, focusing on Csikszentmihalyi's nine components of flow upon which this research is based, and relating these components to relevant learning theory.

The following chapter presents the methodology used for the research. Chapter 4 presents the data from observations and interviews with children in the classroom; chapter 5 presents the data from observations and interviews with the teacher; chapter 6 presents three topical case studies of children's learning experiences; and chapter 7 presents the discussion arising from the findings, recommendations and suggestions for further research.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3. INTRODUCTION

This chapter reports on the way in which this research was designed and implemented. An explanation is given of the research design and methodology; the case study collection techniques of interview, observation and documentation; the analysis of the data; and the research format including sampling, validity, reliability and the values, assumptions and role of the researcher.

3.1 RESEARCH DESIGN AND METHODOLOGY

The investigation commenced unofficially when, in February 1999, I was granted permission to re-orient myself to teaching and learning in a school classroom, for 2 days a week for 10 weeks in a primary school. To do this, I became a voluntary teaching assistant and observer in a New South Wales public school Year 4 classroom. Assisting the teacher, while observing the teaching methods and strategies used in that classroom, provided a basis for understanding teaching and the implications of teacher responsibilities in the classroom and school.

The official case study research commenced in June 1999, progressed for a term of approximately one day a week for 10 weeks, and included two phases.

Phase 1: The researcher as 'participant as observer'. In this role, events and documents in the classroom were observed and both teacher and learners interacted with and called on the researcher for teaching assistance in limited ways. Suggestions were offered to the teacher regarding the implementation of teaching strategies with the aim of resolving some issues that might inhibit learner enjoyment, in the classroom.

Phase 2: Structured and unstructured interviews. These were conducted with the whole class; with learners in relation to particular issues; and focused interviews were conducted with 17 randomly chosen learners and, with the classroom teacher.

3.1.1 An Interpretive Case Study

A case study was the choice of research method for this study. There are many types of case studies identified in the literature. Merriam (1988) writes of ethnographical, historical, psychological and sociological case studies and states that in education these can also be identified as descriptive, interpretive and evaluative. This case study is informed by the three 'foundation' education disciplines of psychology, sociology, and philosophy as judgements are made about the nature, structure and value of learning, and the social context in which it operates. The study also has elements of an historical nature as the historical sources of respondents' enjoyable learning, and lack of enjoyment are identified.

This case study is interpretive because the nine components of flow are used for interpretation. Such a study is one in which, as Merriam (1988) suggests, the rich, thick descriptive and observational data is used to develop conceptual categories. The concept

of flow used for the interpretation involves a phenomenological analysis of the components of deeply enjoyable experience.

The case study is the analysis of a single case or a group of cases for the purpose of description or the generation of theory (Miles, & Huberman, 1994; Denzin 1989). Denzin, (1989, p.185) claims that 'The case study analyzes a case or body of cases for what can be said about an underlying or emergent theory or social process'. In this research the case study enables that subjective closeness to the learner and teacher which is necessary for the reflective nature of the interviews with both children and teacher. It was determined that a whole class study would not be possible given the limited time frame for the research.

Miles and Huberman (1994, p.25) define the case 'as a phenomenon of some sort occurring in a bounded context', noting the importance of setting the boundaries, and assuring the choices made within the research maintain the selected boundaries. In this case it is noted that there are an inner and an outer boundary. The outer boundary is that of the whole classroom of 64 Year 5/6 children and 2 teachers, where the observations and incident-specific interviews took place. The smaller boundary was that which identified the group for focused interviews and the one teacher.

The case study offers several useful outcomes. Denzin (1989, p.185) writes that a case study and case history will often merge. This was useful for identifying the connections between the categories of description, and was noticeable in the comments of some

children where stories of their learning histories began to emerge in the interview discussion. Bromley states:

> …case studies by definition, get as close to the subject of interest as they possibly can, partly by means of direct observation in natural settings, partly by their access to subjective factors… (thoughts, feelings, and desires) (Bromley, in Merriam, 1988, p.29).

Data for this interpretive case study were gathered from qualitative interviews with 17 children and 5 interviews with their teacher. Other data were collected from extra interviews, and records from participant observation in the designated classroom. Respondents' written works are identified as documents for the case study, and comments from the interviews about these are included in the analysis.

3.1.2 Case Study: Sampling and Interviews

The process of sampling in this research was used to provide an example of opinion that is representative, and selected in an effort to be 'fair to the larger population' (Seidman, 1998, p.14), with each person having an 'equal and independent chance of being selected as a member of the sample' (Borg, Gall, & Gall, 1993, p. 97). Sampling is used to be both representative of the population, and to minimize bias as far as is possible (Veal, 1992, p.149) and to allow the widest possibility for readers of the study to connect with what they are reading (Seidman, 1998, p.45).

The sample for the case study was selected from the class population, that is, those systematically and randomly selected children who were permitted to participate in the research by their parent or guardian. Only one child was not given permission to

participate. The respondents were selected by having the children sit on the floor and every fourth child, alternating girl and boy was selected. A sample of a little over one quarter of the classroom population was considered manageable. In relation to sample size Veal (1992) states that '…the larger the sample, the more chance it has of being representative' (p.149). The case study as a sample of the particular Year 5/6-classroom population involved in the research can well be considered representative of the population of that classroom. As a sample of Year 5/6 classroom populations within the school institution as a whole, the findings are exploratory and may well not be representative of the whole state-wide population of Year 5/6 learners.

The interview practices in research include a range of interviewing techniques, from the

> …tightly structured, survey interviews with preset, standardized, normally closed questions. At the other end of the continuum are open ended, apparently unstructured, anthropological interviews that might be seen almost, …as friendly conversations (Seidman, 1998, p.9).

Focused interviews, were used as the primary interview technique in this case study. This technique has four characteristics:

1. It takes place with respondents known to have been involved in a particular experience.
2. It refers to situations that have been analysed prior to the interview.
3. It proceeds on the basis of an interview guide specifying topics related to the research hypotheses.
4. It is focused on the subjects' experiences regarding the situations under study.

(Frankfort-Nachmias, & Nachmias, 1996, p.234)

Focused questions were used in the interviews, with follow up questions to ensure clarification of meaning. These follow up questions arose from the responses of the interviewee. They had the particular purpose of identifying the interviewees' deepest understanding of their experience of enjoyment and possibly non-enjoyment in learning.

Seidman (1998) referring to in-depth interviewing, explained, '(there) is an interest in understanding the experience of other people and the meaning they make of that experience' (p.3). The interview method used involved 'the researcher form(ing) the interview according to the research question' (Martin, & Booth, 1997, p.131). The two part interview included 'a situated theme', determining how the participants were engaged in teaching and learning during lesson times, and 'a theme that demanded reflection' (for instance, what did the learners think and feel about their learning; and what feelings, did engagement in teaching and learning evoke)?

This method of questioning was used because the interview process addresses the learners' perceptions of their experience of learning, and because it is consistent with the three aims of the research:

1) explore the conditions and activities that are identifiable in learners' perceptions of their deep enjoyment or flow in learning.
2) identify the component characteristics of flow articulated in the learners' stories about their enjoyable learning experiences.
3) identify and examine perceptions of deep enjoyment or flow in learning in teacher practice and student learning through a teacher's stories of her teaching experience and through classroom observations.

How respondents experience the interviews is important in identifying the nature of their responses. Therefore, in the interview process, five of Whyte's list of six techniques mentioned by Veal (1992) were used as follow up to the focused questions. These included:

i) non-verbal response: smiling or nodding my head indicating I was still listening, saying OK or yeah,
ii) encouragement: I showed interest and non-judgemental approval for the students' verbal contributions, enticing expansion of the topic,
iii) reflection: I repeated the last comment as a question,
iv) probing: I invited explanations of comments that were made and,
v) backtracking and broadening: I returned to previous comments as prompts for the new question (while remaining focused on) the topic (Veal, 1992, p.97).

As part of the interview process I observed the respondents' non-verbal responses, observing the congruence, between what respondents said, and non-verbal cues. The children's eye contact and physical appearance were observed as the interviews progressed. These techniques were used to acquire as deep as possible an understanding of the children's perceptions of enjoyable and not-enjoyable learning, while providing them with support in the interview process. The teacher was interviewed in the same manner but for considerably longer periods of interview time.

The Interview Process

This section addresses the interview process in three phases. First, the initial whole class interviews, conversational interviews with children as they worked in small groups, and incident specific interviews; second, the selection of the case study involving 17 students who were interviewed away from the classroom; and third, the interviews with the teacher.

The interviews with seventeen children in the case study were held in the final three weeks of the term. Six children were interviewed in the first two weeks and five children in the last week. The final three weeks were chosen for these interviews specifically to fit in with classroom activities and on the advice of the teacher. This

decision by the teacher extended the observation time spent with the children and teacher, and limited the interview time for the case study with individual children. The interviews with the teacher were conducted in lesson-free time.

Children – Whole Class Interviews

The initial interviews about work, leisure and learning were conducted while the children sat on the floor in a circle and took turns responding to the questions. This was an introductory activity in which the children were asked to identify what they perceived was work, leisure and learning, and if and when these were enjoyable experiences. I did not seek to clarify the meanings of those concepts with the children and they spoke clearly about their understanding of the concepts of work, leisure and learning. I observed at the time that the responses of these Years 5-6 children were well consolidated, and were the same or similar responses, to questions about work and leisure asked of undergraduate students I had taught. There was no intention to identify individual responses in this process but rather to gain a whole class representation for the purpose of familiarising the children with my presence and the tape recorder. As the class teacher taught I then walked around the room asking questions of the children who continued to work in small groups. At this stage the selection of students was initiated by opportunity.

As the research progressed in later weeks, and following observations in the classroom, the interview process included other incident-specific interviews with some learners.

The answers to all questions were recorded on audiotape during the interviews, and later transcribed.

Case Study: Selection and Interviews

The choice of the 17 students for the final interviews was made by random and systematic selection from two classes totalling 64 students. On each of the three interview days for the case study, the children who were permitted to participate in the interviews were seated in a group on the floor. Choosing girls and boys alternately, each fourth girl or boy was chosen in an effort to give the same chance of inclusion (Borg, Gall, & Gall, 1993, p.97; Denzin, 1989, p.72). There was not sufficient time to interview all children who wished to be interviewed. On the first day, 3 interviews were conducted on one side of the classroom until it became too noisy. I moved then to sit with each child on a ledge outside the classroom. The 6 interviews on the second day and 5 interviews on the third day were conducted in a quiet room in the school library. The interviews were audio recorded and later transcribed. This process was formally agreed upon by all respondents, including the teacher.

Children's Interviews

Seven focused questions were asked of the seventeen children, in relation to enjoyable learning in the classroom. These were each interspersed with unstructured follow up questions from which respondents could develop answers according to their own evolving understanding of the phenomenon (Trigwell, 1994, p.59). The interview time for each child varied. One child finished the interview after ten minutes telling me, in

effect, 'that is all I can say about it,' which indicates either that the child had exhausted her opinions, or that the researcher was willing to accept her desire for closure. Four of the seven focused questions asked the children to identify aspects of enjoyable learning and also their feelings about that enjoyable learning. Questions one and two led the children to thinking about enjoying learning and could indicate a flow experience. The third question in particular focused on a specific learning event in which I sought to identify the context and process of the flow experience. Three questions addressed issues arising from learning activities in the classroom. They were the learner's experience of assessment, their use of a time line intended to provide a structure for a recent project, and their perception of the importance of choice in learning. (See Appendix 1 for the list of questions). Every effort was taken, as Trigwell (1994, p.60) suggests, in maintaining a process of exploring to greater depths without leading. I took the attitude, as Marton and Booth (1997, p.133) write of the phenomenographical researcher, of a learner who seeks the meaning and structure of the phenomenon being researched.

Teacher Interviews

The focused and in-depth interviews with the teacher were conducted during her break from teaching, usually the day following the lesson being observed, and were of approximately 45 to 60 minute's duration. (See Appendix 2a, b, c, d, and e for a full text of questions). These interviews took place in the classroom during lunch break and in the teachers' staffroom during the teacher free period. The focused and structured questions for these interviews arose from the observations of classroom interactions, and

unstructured questions were then used to follow up the interviewee's evolving thoughts about the conditions and activities that led to deep enjoyment in teaching. The questions related to introductions to lessons, teacher expectations, the influence of whole school values and organization on classroom interactions, the need for a quiet area in the classroom, and classroom management.

3.1.3 Case Study: Observation

An initial method of data gathering in this interpretive case study was that of observation. Observation refers to 'what is –that is, to what can be seen' (Tuckman, 1999, p.73). The literature suggests that there are several types of observer identities (Frankfort-Nachmias, & Nachmias, 1996; Denzin, 1989). These comprise the range from participant to observer. The complete participant is one who intends to become a fully-fledged member of the group without necessarily being known as a researcher. The complete observer is one who has no interaction with the group. The participant as observer, the method used for this research, makes his or her presence known and seeks to form close relationships with the group in order to become both respondents and informants (Frankfort-Nachmias, & Nachmias, 1996, p.285; Borg, Gall, & Gall, 1993, p,207; Denzin, 1989, p.163).

The participant as observer goes through several stages in his or her acceptance and relationships with the group until becoming a provisional member. This acceptance happened in the short period of this research study. For instance, I was greeted by children outside the school and introduced to a parent as a member of the classroom.

The final stage is that of identity disengagement (Denzin, 1989, p.163), when I was given a farewell and thanked for my participation in the class, and when the field relationships were terminated.

The strengths of the participant as observer are evidenced, as mentioned by Burns (1994, p.259), in the researcher taking part in the activities in the classroom and recording the interactions and activities in field notes written as soon as possible after their occurrence. Burns (1994, p.260) mentions the attempt to be both a member and a researcher as a potential limitation of participant observation as a research method. For instance there is a danger that either 'the observer will go native' (Frankfort-Nachmias, & Nachmias, 1996, p.289; Burns, 1994, p.268) or 'the presence of the researcher changes the behaviour of the people' being studied (Burns, 1994, p.268). The limited nature of my participation as teacher/helper, allowed me to 'hang around' (Frankfort-Nachmias, & Nachmias, 1996, p.289) as a sense of goodwill and honesty grew between the children, the teacher and myself. My presence did not inhibit either acceptable or unacceptable behaviour in the children.

Another limitation of participant as observer mentioned by Burns (1994) is that the observer may not be present when events occur spontaneously, 'for example, incidents of aggressive behaviour in the classroom' (p.263), or experiences of flow. The restricted time in which I was actually present in the classroom was a particular limitation of this study. However, there were instances of power struggle and disharmony evident while I was present, and some germane observations took place in what were effectively non-participant observation times. These were times when a lesson was in progress and I

waited, either to begin the participant as observer period or waited to interview the teacher during class free times. While the time frame was limited, credible opportunities to observe arose both inside and outside the designated time periods.

Researcher: Participant as Observer

My presence as participant-as-observer provided opportunity to both offer suggestions and give support to the classroom teacher. For instance, the original intent for the research had been to negotiate about the format of the lessons being taught with the teacher. However the classroom is a team teaching one, and the two teachers talk through how they intend to teach the learning program. As a result the plan to co-develop the teaching and learning was abandoned before the intervention. It did become apparent however, that some issues I had thought about as beneficial to enjoyment in learning, and that I had expressed to the teacher, were already included in her plan for the lessons.

The teacher did include some of my suggestions in the lesson plan of one class project. These suggestions could have had an effect on teacher and learner experience; nevertheless this research does not attempt to analyse that effect. Where any of the suggestions have relevance to the specific intent of the research, they are mentioned in the discussion.

During my time as participant-as-observer in the classroom, I moved from student to student observing their work and both talking with them where appropriate, and giving support when requested. There were times when there was no need of my assistance and

I could focus on my observations. This was particularly so at times of expository teaching when the teacher was giving instructions for learning activities.

Research Observation: Field Notes

When the researcher engaged in observation has a plausible identity within the research population, tape recording and note taking 'may interfere with the natural sort of relationship which the researcher is trying to establish' (Frankfort-Nachmias, & Nachmias, 1996, p.291; Veal, 1992, p.101). It did not seem appropriate to either record or take notes in the times I was participant as observer in the classroom. For the sake of the teacher and children, I felt it more useful to be participating in a limited way as an assistant in the classroom, and to write field notes and offer suggestions about my impressions later. Notes from the observations were typed immediately on arrival at my home following each visit to the classroom. Several suggestions and structured questions for interviews both with children and teacher arose from these field notes.

3.1.4 Case Study: Documents

The documents available during this research were the student's books used during lessons. I considered these as the student's worked at their desks, and again in more detail when these were presented for assessment to the teacher. I also had opportunity to explore some of those documents when the students had prepared them for the student directed parent interviews. Denzin suggests that:

> a visual document can make two different types of truth claims about the phenomenon depicted. It can argue that X is true about something, or that X

> is all that is true about something. Obviously, a visual document can say many different things at the same time. No single truth statement or assertion need be the whole truth about the phenomenon in question (Denzin, 1989, p.219).

The visual documents available to me were evidence of the degree of learner engagement and commitment to quality work in the various aspects of learning. These were referred to at times during the participant observations and respondent interviews.

3.1.5 Implementation

An account of the overall research design and chronology is illustrated in Figure 3.1. The top section notes the official approvals, my reorientation to the classroom in a Year 4 classroom and the development of my research tools. My reorientation to the primary classroom was necessary because my work and studies had taken me out of the classroom some years earlier. I was over 60 years old, and am now retirement age.

The left and right sides of the second section of the following chronological description were conducted simultaneously and include the observation and interview schedule with the children on the left, and the interviews and interventions with the teacher on the right.

Figure 3.1 Chronological Description of Research Format

Late 1998, UTS Ethics and NSW Department of School Education approvals to conduct research in New South Wales Public School.

Commencing February 1999: 2 days a week for 10 weeks
Reorientation as teaching assistant and observer in Year 4 classroom.

Development of research tools for interviews with learners and teacher.

Figure 3.1 Chronological Description of Research Format (cont.)

10 Week Research Period: Commencing June 1999

In Class Time (Children)	During Class Free Time (Teacher)
Week 1 Whole class interviews. What is work and what is leisure?	**Weeks 1-10** Five interviews were held with the teacher during Weeks 4, 5, 7, 8, & 9. 10 May, 2,8,25, & 30 June, 1999 These interviews were used to explore questions about observations and to discuss suggestions for interventions that arose during participant observation.
Weeks 2 to 7 Participant Observation. Research interventions and prearranged interviews with children on specific issues.	
Weeks 8,9 and 10 (2 X 6) (1x5) 17 Focused student interviews.	

The second phase of the study is described more fully in other sections of this chapter.

Triangulation

Triangulation is the process in which the topic is examined from a series of different methodological perspectives (Denzin, 1989, p.234). Denzin suggests several data sources (including person, times, place), and that data sources are by method (observation, interview, document), by researcher (investigator), and by theory. Miles and Huberman (1994, p.267) add data type (qualitative text, recordings, quantitative) to Denzin's initial list. It is using two or more methods of data collection that 'is the essence of triangulation' (Frankfort-Nachmias, & Machmias, 1996, p.206).

Triangulation according to Denzin (1989) overcomes the weaknesses inherent in single measurement research instruments. There is concern with this claim according to Miles

and Huberman (1994, p.266) who acknowledge that sometimes the information from different sources can be contradictory. If there are only two sources for instance, there can be questions of who is to be believed. Triangulation is created in this case study using the written notes from observations in the Year 4 and Year 5/6 classrooms, interviews with the teacher, interviews with the Year 5/6 learners, and visual documents.

Validity, Reliability, Values and Assumptions

This section is in three parts and considers first, issues of validity and reliability; second, my values and assumptions, and my role in the research process; and third, the process of obtaining permission to engage in the research.

Validity

Concerns about validity, focus on the interview process, which is not 'always conducive to careful, thoughtful responses', as respondents may either exaggerate or understate answers (Veal, 1992, p.146). There is concern too that 'subjectivity and bias' might occur. A researcher for instance might 'seek out answers that support his (or her) own preconceived notions' (Borg, Gall, & Gall, 1993, p.114). As well, respondents might give answers they view as 'pleasing the researcher' (Borg, Gall, & Gall, 1993, p.114). This could be a relevant concern in this research where the interviewees are children who may expect to please the interviewer and give an answer that they think the researcher wants to hear. I did take care during the individual interviews to i) give permission for honest opinion and ii) clarify the interviewee's meaning if I suspected less than a transparent response iii) probe and clarify the respondents' meaning and iv)

question my own understanding of what the respondent was telling me, by saying things like, 'Tell me again, I'm trying to understand what you mean.' I also tried to be particular in my research and be non-judgemental.

Reliability

This case study is limited both in time allocation for the research and in size of population. There could be questions of concern because of the small number, and young age of respondents, thus raising questions about application to the whole population. Veal points out that:

> Reliability is the extent to which research findings would be the same if the research were to be repeated', saying that, 'if experimental conditions are properly controlled, repetition of an experiment should produce identical results (Veal, 1992, p.37).

Veal claims further that 'This is rarely the case in the social sciences, because they deal with human beings in ever changing social conditions' (Veal, 1992, p.37). However I did endeavour to achieve reliability by being consistent in my interviewing, by being open and non judgemental of children both in the classroom and in the interview process; by endeavouring to be consistent over time; by observing the visual responses to my questions; by linking some questions with my observations, discussing with the teacher how she interpreted the meaning of what I had observed; by clarifying respondents' individual answers with them; and by transcribing my observations as soon as possible after the event.

Values, Assumptions and Role of the Researcher

My perceptions of the need for this research have been greatly influenced by my own experience in primary school. In reading '*We of the Never-Never'* as a small child, I realised that the quality of life experienced by the children in the story was far superior to that which I was experiencing. I perceived even then the integration of life's activities: how work and learning and enjoyment were part of the same experience.

I have perceived my own experience in the primary classroom as unfriendly at times. My often-negative experience in the classroom has been confirmed in many ways in the lives of my children, my grandson and more recently in my reorientation into the primary classroom in the first phase of this research. I was not a disinterested observer in the choice of research topic or the pursuit of knowledge about learning as enjoyable experience in the primary school classroom. Furthermore, there is a dearth of research that addresses enjoyment or joy in learning. I have strong feelings that there must be some way that the politics of economy in tertiary education, in the primary school and of necessity, in society can be adapted to provide finance for a more supportive, encouraging, and personal environment, with learning structured for enjoyment in the classroom. This enjoyment is potentially motivating for learners and teachers for life-long learning.

In making an honest assessment of my predisposition, I recognise that my own perceptions have shaped my theories about life in educational organizations and have prompted me to identify the issues worthy of study. Usher *et al* (1997) suggested that the notion of the individual researcher standing outside the world in order to properly

understand it is highly questionable. In this dissertation, I recognise that although I have temporarily suspended subjectivity and attempted to assume the stance of disinterested observer, my age, the varied nature of my education, my views, standpoint in time and place, and preconceptions have all fused to influence the process of enquiry. While I have this predisposition, I made every effort to be objective in my observations and interactions with the respondents, to allow the data 'to speak', and for validity to be demonstrated from multiple data sources.

My Role in Research

I felt a strong relationship with the children and teacher, both in the classroom and during the interviews. The teacher welcomed me with ease and with real respect. I have long experience in relating with children in leisure settings. The ease of welcome into the classroom and my own past experience both in conducting qualitative research and relating with children meant that the children and I interacted with good will and trust. In the process of answering my questions the children reflected on their own learning and the data demonstrates that.

Approval to Conduct Research

Approval to conduct the research was obtained from the University of Technology, Sydney Ethics Committee, and The New South Wales Department of School Education, (now, Department of Education and Training) Sydney (See Appendix 4).

Following contact and an interview with the principal, I was granted permission to conduct the research. A subsequent interview, led to the teacher's agreement for herself, her associate teacher, and the children in the combined Year 5 and 6 class to participate in the research. A letter was sent to the parents of the 64 children in the combined class asking permission for their children to participate in the research (Appendix 5). Only one child was not given permission to participate.

3.1.6 Case Study Analysis

Gathering and reflecting upon the data were ongoing throughout the study as observations and interviews were recorded. The reflections about data were used as a basis for interviewing the teacher with the intention of identifying a deeper understanding of the phenomenon of enjoyable learning and teaching. They were sometimes discussed with the teacher with the view to future changes in teaching learning strategies. An interpretive case study using such analysis is different from a descriptive case study because of the complexity, depth and theoretical orientation (Merriam, 1988). The research aims through the use of the interpretive case study to identify the participants' experiences of those classroom interactions in learning and teaching that may encourage or inhibit flow and enjoyable experience for the learner and teacher in the primary school classroom.

In recent years there has been an increased acceptance of the use of computers in qualitative research (Fielding, & Lee, 1991). Richards and Richards (1994) suggest that the computer can provide the researcher with the ability to move between inspecting the

data and thinking about it. In this research, all interviews were transcribed onto disk and entered into the computer for analysis using the qualitative research software package NUD*IST.

The first task of analysis was the coding of the interview transcripts. According to Strauss (1987), coding is defined as the general term for conceptualising data and includes raising questions and giving provisional answers about the categories and their relations. An inductive coding scheme (Frankfort-Nachmias, & Nachmias, 1996, p.338) was used in this exploratory case study. This process can take some time because 'Categories are not always easily identified …' (Frankfort-Nachmias, & Nachmias, 1996, p. 338).

While looking for the main themes I used provisional labels until better ones were formulated. I repeated this process in various ways until three core categories were established, with definitions for each category to standardise the subsequent analysis. The first category is related to what the children learn, with learning as primarily seeking meaning. The second category includes enjoying learning as primarily reproducing, rote learning, and artistic endeavours. The third category is the relationship between enjoyable and collaborative learning. The three categories are:

(i) enjoys learning, where the learner seeks understanding, sees something in a different way, and feels changed as a person.

(ii) enjoys manual, artistic or rote learning, where the learner increases one's knowledge, memorises and reproduces information, applies information, and enjoys manual, craft and artistic skills.

(iii) enjoys learning collaboratively, where learners exchange skills, resources, information and understanding as an aspect of their enjoyment of learning.

In his discussion of core categories, Strauss (1987, p.36) suggested that core codes should be at the heart of the analysis, must appear frequently, and should relate easily to other categories. Within those three core categories there are thirty-two sub-categories identifying the activities, the interactions and at times, the historical influences that generate enjoyment or lack of enjoyment in the classroom (Appendix 3). The teacher, Mrs Critcher, read the NUD*IST coding transcripts, and made helpful comments about them. The categories are interpreted using a combination of nine components of flow (Csikszentmihalyi 1992, 1996). These nine components are used as a means for identifying the qualitatively different ways the learners and teacher have of experiencing the phenomenon of learning and teaching.

3.2 SUMMARY

This chapter has described the design and methodology of the research. The research occurs within an interpretive case study framework, involving the researcher as participant observer. The methods of student and teacher interviews, observations, field notes and documents enabled a triangulation of the data. These methods were used to explore how the learners and teacher perceive their experiences of learning and teaching in the classroom. The research methods are used particularly to identify factors either enabling or inhibiting flow and enjoyable experiences in learning and teaching. The research therefore focuses on the learner and teacher's perspective of that phenomenon.

This chapter also outlines the limitations of the research and my values, assumptions and role as researcher in relation to this dissertation.

The following three chapters, Chapters 4, 5 and 6 present the findings and analysis of the collected data. Chapter 4 presents the findings of the connections between children's comments and the nine components of flow. Chapter 5 presents the links between the teacher's comments, my own observations and flow. Chapter 6 presents the learning histories of some respondents and topical examples of three respondents. Chapter 7 discusses the findings of this research within the context of the literature.

CHAPTER 4

RESULTS: THE STUDENTS

> The combination of elements causes a sense of deep enjoyment –people expend a great deal of energy so that they might feel it (Csikszentmihalyi, 1992, p.49).
>
> The quality of life does not depend on happiness alone, but also on what one does to be happy (Csikszentmihalyi, 1997, p.21).

4. INTRODUCTION

This chapter is the first of three to present the findings of the research. It reports on the nature of flow and presents findings that indicate the evidence of the learner's enjoyment and non-enjoyment of learning. Chapter 5 reports the teacher's belief and teacher practice in skilled and enjoyable teaching and learning. In Chapter 6, findings are reported on the historical connections found in three topical stories that illustrate and expand the findings.

Csikszentmihalyi has evolved his explanation of flow and its components throughout the years. Nine components of flow or deep enjoyment, combining eight from Csikszentmihalyi's 1992 writing and the ninth from his 1996 list, are used to interpret the enjoyment of learning within the verbal and non-verbal communication of respondents. The ninth component of flow, an autotelic experience (it is done for its own sake) goes some way to address the issue of motivation in teaching and learning. The nine components of flow used for this research, explained fully in Chapter 2, are:

1. The experience usually occurs when we confront tasks that we have a chance of completing.
2. We must be able to concentrate on what we are doing.

3. The concentration is usually possible because the task undertaken has clear goals.
4. The task provides immediate feedback.
5. One acts with a deep but effortless involvement that removes from awareness the worries and frustrations of everyday life.
6. Enjoyable experiences allow people to exercise a sense of control over their actions.
7. Concern for the self disappears, yet paradoxically the sense of self emerges stronger after the flow experience is over.
8. The sense of the duration of time is altered; hours pass by in minutes, and minutes can stretch to seem like hours.
9. Flow is an autotelic experience. It is a task chosen for its own sake and is intrinsically rewarding.

As discussed in Chapter 1, the three primary aims of this research are to:

1) explore the conditions and activities that are identifiable in learners' perceptions of their deep enjoyment or flow in learning.
2) identify the component characteristics of flow articulated in the learners' stories about their enjoyable learning experiences.
3) identify and examine perceptions of deep enjoyment or flow in learning in teacher practice and student learning through a teacher's stories of her teaching experience and through classroom observations.

This and Chapter 6 report the findings relating to the first and second aims. Chapter 5 reports the findings of the third aim. This chapter presents the findings using the nine components of flow to interpret the respondents' comments about their enjoyable learning, and includes reporting on the respondents' lack of enjoyment, identified by Csikszentmihalyi (1992) as entropy. The nine components of flow are addressed individually in the analysis because each component embraces different factors that influence teaching and learning in the classroom. No effort was made to define with the respondents, or for them, what was meant by enjoying learning, nor were they told about the theory of flow. There was an assumption by the researcher,

that the respondents had their own 'internal vantage point' (Mannell, & Kleiber, 1997, p.111); that is, they had their own idea of what enjoying learning constituted for them.

In analysing flow Csikszentmihalyi (1992) notes that one or two, or up to the entire list of components is mentioned in participant's descriptions of their flow experiences. However a defining aspect of flow is the esteem it generates after the event is over (component 7), and its autotelic nature (component 9) about which eleven respondents make comment. Basic to the nature of any flow activity is that it is a challenging activity that requires skills (Csikszentmihalyi, 1992, p.49). These skills and challenges are evident in the conditions and activities: the processes of learning. Some respondents in this research made comments attributable to three, four or five of the components, as well as components seven and nine, and no comment attributable to others. Often respondents made a comment about enjoying learning that could be credited to more than one component. For instance Tania (22/6:2,4,6) indicates in one comment that she had clear goals (3); she must have concentrated (2) because the feedback (4) from the computer, while not easy to find, was nevertheless done without anxiety because 'that was fun' (5), and no concern for self was evident because she 'enjoyed that' (8). The explanation of symbols for respondents' interviews in the example from Tania (22/6:2, 4, 6) above, may be interpreted as Tania (not real name), 22/6 as the day in June of 1999 when the interview was recorded, and 2, 4, 6 as the lines in the transcription where the particular responses may be found.

In all instances, the component of flow I nominate as describing a particular response is based on my ongoing thorough working with the components over time. In

summary eleven respondents, Andrew, Brett, David, Ella, Kerrie, Lisa, Maeve, Matt, Robert, Ross, and Tania, indicate deep enjoyment, a growth in self-esteem (component 7) and motivation (component 9) to continue learning as seeking meaning. Peter indicates deep enjoyment, a growth in self-esteem and motivation to continue achieving from assessment success in reproductory learning, and Stephen particularly from artistic endeavour. Four respondents, Anne, Elise, Jeffrey, and Joy, indicate some degree of enjoyment from reproductory learning, making meaning in learning and creative activities.

It should be remembered that the flow experience does not happen in every learning situation, nor consistently during any learning experience. Table 4.1 below, presents only those instances where the respondent's comments could be referenced to particular components when talking about enjoying their learning.

It should be noted that in this and the following chapters, all text in italics represents direct quotations from the data. If the data source is from interviews, it has been transcribed from audio-tape, or if from typed observations, has been coded and then retrieved using NUD*IST.

Table 4.1 Component characteristics of flow identified within the respondents conversations about their enjoyable learning.

Name	Component, 1.	Comp't, 2.	Comp't, 3.	Comp't, 4.	Comp't, 5.	Comp't, 6.	Comp't, 7.	Comp't, 8.	Comp't, 9.
Andrew		✓	✓	✓	✓	✓	✓		✓
Anne		✓	✓	✓	✓		□✓		□✓
Brett		✓		✓	✓	✓	✓		✓
David			✓	✓	✓	✓	✓		✓
Elise				✓	✓		□✓		□✓
Ella			✓	✓	✓	✓	✓	Inf. ✓	✓
Jeffrey				✓			□✓		□✓
Joy				✓	✓	✓	□✓		□✓
Kerrie		✓	✓	✓	✓	✓	✓		✓
Lisa	✓	✓		✓	✓		✓		✓
Maeve		✓	✓	✓	✓	✓	✓	Inf.✓	✓
Matt		✓	✓	✓	✓	✓	✓		✓
Peter		✓			✓	✓	✓	Inf.✓	✓
Robert			✓	✓	✓	✓	✓		✓
Ross			✓	✓	✓		✓		✓
Stephen	✓	✓	✓	✓	✓	✓	✓	✓	✓
Tania	✓	✓	✓		✓	✓	✓		✓

In all instances, which component of flow the respondent's comments are credited to, is based on my ongoing thorough working with the components over time. Thirteen respondents were identified as experiencing flow in some aspect of their learning. This is signified by a ✓ in the table. Peter who said he does not enjoy most learning, mentioned being addicted to achieving satisfactory assessments, and related this to primarily reproductory learning, and four others signified by □✓ in the table, experienced some degree of enjoyment in their learning. Inf. ✓, in component 8, means the suspension of time was inferred in the conversation with the respondents.

4.1 SOURCES AND COMPONENTS OF ENJOYABLE LEARNING

This section presents the findings from the data interpreted according to the nine components of flow. Jackson and Csikszentmihalyi (1999) claim there are degrees of enjoyment. The deepest of these is the experience of flow and they note how, 'often the words we use to describe the flow state are similar to those that describe fun' (p.141). It must be stressed, that a defining aspect of flow is the esteem it generates after the event and its autotelic nature. Three girls and two boys identify their most enjoyable learning as 'fun'. Three boys did not use fun as a descriptor; however each of these respondents described a growing self worth and motivation to learn. Two girls, and one boy also used the descriptor of fun and with six other respondents, (three girls and three boys), expressed enjoyment in some learning, yet indicated a degree of uncertainty, anxiety, or a learning history, that inhibits their potential for deeply enjoying their learning. These issues are covered in the various components.

4.1.1 We confront tasks we have a chance of completing (Component 1)

Component 1 identifies the importance of having enough time to complete the task. Three respondents mentioned insufficient time for the task as a factor in their non-enjoyment of learning. It is noticeable that two of them focus their anxiety or resistance about insufficient time on the communication behaviour of the teacher. The other, Lisa, identifies lack of sufficient time as possibly the major source of her lack of enjoyment in learning. The reasons that other respondents, apart from Gavin, when setting his goal for the week, did not mention this component, may be because i), as Tania (22/6:79) confirmed, a sufficient amount of time is allowed for learning tasks, and the teacher doesn't yell all the time (Anne 15/6:92), and ii), the teacher

opens the classroom during lunchtime for those children who wish to complete unfinished work.

Tania and Stephen, with a sense of resistance, are concerned about a teacher's 'bossy or aggressive' attitude regarding the learner's own work pace. Lisa is concerned about the shortage of time and potentially a low mark. Gavin acknowledges his need to allocate sufficient time for the task when preparing his goal for the week:

> *22/6:73 TANIA: Well the teacher's not being bossy about like what you've got to do and things. Like –they let you do it at your own pace.*
> *22/6:75 TANIA: Um –I was once in a class where um—they were kind of mean –a little. Where they set strict times about when you've got to do your work, - and they weren't very long times.*

> *15/6:46 STEPHEN: It's usually the um –it's usually the speed, how a different teacher says it aggressively, you know –you really don't want to do it. Or –um – like you have, like only 15 minutes to do something really big, I don't want to do it either because I know I can't do it anyway.*
> *15/6:54 STEPHEN: ...I often miss a few because I know (can't understand –something like 'it's big') –like I know I'm going to run out of time –so I don't do it.*

> *22/6:90 LISA: Probably the stress they give you to put it in on time and to get it all right. Like -you might get a low mark or something.*

> *25/5:90 GAVIN: Well, I usually don't allocate enough time to do it and I usually leave something out.*

Stephen's experience of time and learning is mentioned again when, with a shortage of time, and concentrating totally on a craft activity he experienced the altered sense of time (see component 8).

4.1.2 We must be able to concentrate on the task (Component 2)

> But innate talents cannot develop into mature intelligence unless a person learns to control attention. By learning to concentrate, a person acquires control over psychic energy, the basic fuel upon which all thinking depends (Csikszentmihalyi, 1997, p.26).

Being able to concentrate on what we are doing is the second component of flow. The evidence indicates that the reason for being able to concentrate mentioned most often, by six respondents, is the association between concentration and achieving and, or enjoying learning. Other influences on respondents' concentration mentioned by them are: a time limit when the task is achievable; a natural competency enabling success in a task or topic; choice of task or topic; respectful teacher communication; the structured organisation of some tasks; and learning with others. Several respondents acknowledge thinking of other things during lesson times. Their concentration is disturbed by a wandering mind, and peers or a teachers' attitude.

Csikszentmihalyi (1997, p.24) claims that 'thinking is a process whereby psychic energy gets ordered' and 'that mental operations consist in linking of cause and effect.' Of the six respondents who value concentration, David and Ella explain concentration as thinking and using your mind. Kerrie and Gavin choose to concentrate:

> *22/6:69 DAVID: The main thing that helps me learn is thinking about it.*
> *22/6:71DAVID: Yeah, instead of using other people's ideas you think about it yourself.*
> *22/6:60 ELLA: Because like –you're using your own mind (R: Yeah) and like –you're looking at a picture and then like –you have to do it fast 'cause you've only got an amount of time and you have to try and still keep it neat. (R: Yeah) And it helps you get your writing better.*
> *29/6:77 KERRIE: Um –I concentrate and I try not to talk to my friends and all that (R: Yeah) and I listen to the teacher on the floor and I –don't*

fiddle on the floor. ('On the floor' is when the teacher gives the children their instructions about how to proceed with their learning tasks and assignments.)

25/5:8 GAVIN: Mine is a leisure goal. It is to get 95 at bowling when we go to bowling on Friday.
25/5:9 R: Oh OK. How?
25/5:10 GAVIN: Concentrate, (R: Yeah) have confidence and to bowl faster.

Tania and Stephen recognise that enjoying learning makes you want to concentrate: (See also component 9.)

22/6:39 TANIA: Um –well yeah, when we were doing the Bali brochures. I thought it was good and I was ignoring everyone around me. And when I read, I'm a readaholic, and I ignore everyone.

15/6:20 STEPHEN: I don't know, it makes you want to listen to it, like pay attention to it, I want to talk to other people and really enjoy it. No, Mmm –I just feel like, I just feel like –I want to do it. (Accent on 'do it', and spoken with the laughter that accompanies realised enjoyment)

Running out of time on an achievable task and having sufficient skills, can focus concentration. Four respondents, Ella (22/6:60) above, Stephen and Peter (see component 8**)** and Maeve, explain about concentrating:

15/6:121 MAEVE: Yeah, when I was doing the Bali project, one week when I was doing it, 'cause, on the last week when we went to hand it in we didn't even like … and we didn't have it all –like ready. (R: Yeah)
15/6:122 MAEVE: So my friend had to take it home and then she done half of it. Then at school the next day at lunch we sat down and we stuck all the words on and then we did our timetable of work that we did because, we stuck on our timetable. (R: Yeah) Yep –that's what we did. (There was a lot of laughter as Maeve told me of this experience.)

Anne and Peter mention a natural propensity for a topic or task as enabling their concentration on the task. Peter mentions not enjoying what he perceives as a learning challenge, but he has a natural competency for various learning tasks. For instance he has had no mistakes in his spelling tests for 5 weeks in a row, and this success facilitates his concentration. My observation of Anne at the time of telling was that *...her whole face glowed, and her body was alive as she described her enjoyment of learning maths.* (Observation: Anne 15/6/99):

> *15/6:40 ANNE: Um –Let's think. I do (concentrate) in maths. In—when we're doing maths Olympia because you're, you have to use up heaps – we just –because sometimes you don't know any of the questions and then in the end you get it –it takes you ages.* And about the natural propensity,
> *15/6:80 ANNE: Oh –I don't know I really like adding and I've always been good at it and stuff.*

> *29/6:104 PETER: When I enjoy learning something all right, --I look at the work and think 'I can do this' and that gives me sort of the energy to go through and do it all.*
> *29/6:105 R: So if you look at something ---*
> *29/6:106 PETER: If you look at something and say 'I've got to learn this and I've got to work really hard' –it sort of like –you have to –I can't say it –like I can't get it out.*
> *29/6:107 PETER: Knowing the work you can do –that makes it enjoyable.*

Csikszentmihalyi (1997) writes of deep enjoyment as a form of energy and Peter appears to experience that. In finding a balance between the learning challenge and his skill levels in some aspect of his learning Peter has found the things he is able and willing to concentrate on.

Seven respondents (see component 6), believed that a choice of topic promotes enjoyment of learning and by suggestion, also promotes concentration. Matt's response is typical:

> *29/6:44 MATT: When we get to choose and it's not very boring.*
> *29/6:52 MATT: Well, like if the teacher says 'Choose an animal' to do a project on and most people have a favourite animal and they choose that animal and it makes them more interested and work harder. If you're told to do an animal that you have no interest in, it is not as good.*

It is noticeable that the classroom social environment can influence the respondents' capacity for concentration. Six respondents mention that the teacher's communication and organisation can impact on learner concentration, (see Tania and Stephen p. 94 above, Elise (29/6:64-171) and Ross (15/6:100) who values the teacher's structured organisation of learning tasks.) Anne comments:

> *15/6:92 ANNE: Um –well, it's good to have a nice teacher like Mrs Critcher who doesn't yell all the time and it's good having activities like reading. (The class has a mandatory ½ hour supervised quiet reading time each day, where the only choice is a library book chosen at the respondent's reading skill level.)*

Also, as Kerrie pointed out when asked what stops her enjoying learning:

> *29/6:89 KERRIE: Um –mostly when the teacher always yells at the kids or something and it distracts you. Uuuuuh.*
> *29/6:91 KERRIE: Yes, or if she yells at you as well, when you didn't even do anything. (R: Yes) And I don't really like it how the teacher might embarrass you in front of all the kids. (R: Oh)*

Twelve respondents associate collaboration with their enjoyment of learning for various reasons. For Lisa, working with friends helps her to concentrate on her work,

and as an observer I have a mental picture of groups of children sitting on the floor around low cut picnic tables busily engaged and concentrating on their learning tasks:

> *22/6:50 LISA: Ummm-when we we're like doing group work and you're having fun with your friends and doing it, that's good –I like that.*
>
> *They (low cut picnic tables) are a favourite place for working at any time. The girls chose one of these tables as their work area. …Concentrating on their work, they were totally involved in what they were doing, which was finishing off their Bali assignment (Lunchtime Observation, 7/99, pp.17&19).*

Several factors can impact on the learners' concentration. These include the learners' wandering mind; the challenge of a task too hard for the learner's skills; having skills too well honed for the task; situations often described as boring; and anxiety about peer, personal, and teacher issues. Each can impact on concentration and subsequently on enjoyment in the classroom. It is important to note Csikszentmihalyi's claim that:

> Concentration requires more effort when it goes against the grain of emotions and motivations. A student who hates maths will have a hard time focusing attention on a calculus textbook long enough to absorb the information it contains, and it will take strong incentives …for him (sic) to do so (Csikszentmihalyi, 1997, p.25-26).

Day dreaming is a reality in people's lives. In a forty hour week people work about thirty, and the rest is spent talking, day dreaming, making lists and other activities irrelevant to work (Csikszentmihalyi, 1997, p.10). The following five respondents relate their respective daydreams:

> *15/6:88 ANDREW: I don't know –Oh when I'll do my homework, and what I should do when I get home.*

29/6:182 ELISE: I like thinking of other things.
29/6:184 ELISE: Just holidays and stuff.

22/6:78 ELLA: Ummm—probably from the excitement of other people and like sometimes the –um –you still think about work but you want to think about other things too. Like sport, I always think about sport.
22/6:40 ROBERT: Um –think about –um—what I'm going to do in the afternoon.

29/6:31 PETER: I sort of like get 'drifts' sometimes. (R: Yeah) Like I'll listen to the first bit and I'll think, 'oh, I'll do that" and then I'll go to do it and that was only one step. I asked did he know what caused the 'drifts'?
29/6:35 PETER: No–I just like talking to my friend.
29/6:36 R: You just like talking to your friend. (Laughter) (Peter: Yes) …Oh –Click and away you go.
29/6:37 PETER: Oh –what am I doing next weekend and then I turn to him and talk about it. And if I don't talk to him about it –I'm thinking about it. (R: Yes) I'm looking directly at them (the teachers?) but I'm not thinking about them.

Csikszentmihalyi (1992, p.120) writes of daydreaming as one way to create emotional order in the mind 'by compensating in imagination for unpleasant reality'. The respondents could be daydreaming to create a comfortable mental space, escaping from the reality of their classroom or lessons, or they may not have yet developed control of their psychic energy (a discipline of the mind).

Csikszentmihalyi (1997, 1992, & 1975) believes that the relationship between skills and challenge is a central factor for experiencing concentrated engagement and flow in any activity:

> A first requisite of flow is striking a positive balance between these two elements: the challenges you think you face and the skills you think you have (Jackson, & Csikszentmihalyi, 1999, p.6).

Jackson and Csikszentmihalyi write of this as the CS (challenge/skills) balance. Jeffrey (29/6) provides evidence of what can happen if the CS balance is not achieved early in learning. Jeffrey was in his 8th year at school and while he claimed not to enjoy learning, *'this year he doesn't stress about it'* (Jeffrey 29/6:75):

> *29/6:48 JEFFREY: I just wasn't learning, because like –I wasn't concentrating on my work. I don't know why. It's just that I stopped concentrating. But now—*
> *29/6:49 R: What happened to stop you concentrating?*
> *29/6:50 JEFFREY: Oh---- It's just ---- (there was a long pause)*
> *29/6:51 R: You don't know? With the work, did you feel that the work was too hard or something?*
> *29/6:52 JEFFREY: Yeah! Yeah! Yeah! I was finding it pretty hard and – (there was another pause)*
> *29/6:53 R: You just gave up?*
> *29/6:54 JEFFREY: Yeah, I just gave up! That's it!*

I realise that I provided the words for Jeffrey to explain his situation, but his strong affirmation of my words confirmed his truth. The lack of CS balance has negatively influenced all Jeffrey's years of learning.

Csikszentmihalyi (1992, p.59) commenting on a sense of control, claims that it is 'more precisely, (as) lacking the sense of worry about losing control that is typical in many situations of normal life'. In the following situation Elise does not understand her level of skill relative to the degree of challenge. She carries an anticipatory anxiety about her skill level into a task. I asked her, 'What was the main thing that stops you enjoying learning.' Elise explained that her lack of enjoyment in learning

comes from her inability to perceive her skills as adequate to the challenge of the learning task:

29/6:115 ELISE: Ummmm—things that might be too hard.
29/6:116 R: Like what?
29/6:117 ELISE: I don't know, sometimes I think it is hard but when I get it, it is easy.

How she perceives her skill would influence her choice of topic if she had that choice:

29/6:73 R: The questions that you had were hard to find?
29/6:74 ELISE: Yeah.
29/6:75 R: If you had answered your own questions would it have been easier?
29/6:76 ELISE: I would have made them easy.

Elise also felt anxious because of a plan prepared for the progression of her learning task (a time line), *'Because it made you feel like you didn't have much time left.'* (ELISE 29/6:84) In Elise's situation, she does not describe for herself 'the possibility of control' and appears to lack what Csikszentmihalyi (1992, p.60) notes is the subjective ability 'to estimate the degree of difficulty in relation to the person's (her own) ability'. She obviously feels confident in her maths skill relative to the challenge:

29/6:121 ELISE: I like it (maths).
29/6:122 R: Why do you like it?
29/6:123 ELISE: Because it is fun.
29/6:124 R: What is fun about maths?
29/6:125 ELISE: You get to learn how to keep money and change and you get to learn your time's tables and you get to learn problem solving.

Jackson and Csikszentmihalyi (1999, p.30) claim that descriptor words for fun are in common with those of flow. Elise speaks of the fun aspect of learning, and of being confident and feeling in control of your skills relative to the challenge. Learning maths, and reading, are valued because of that.

'Boring' is one descriptor of lessons that inhibits concentration and enjoyment of learning. For Ross, the state of boredom is promoted by expository type learning; for Andrew, Anne and David boredom comes from repeating a task:

> *15/6:30 ROSS: Uh, comprehension I don't like that. I find it really long and boring. (Ross has a preferred topic of Science Fiction.)* Or,
> *15/6:108 ROSS: Um –if it's a really boring subject, like –if it's not interesting and um –you've got just to write about something. Like 0h – just writing about um –just straight out like writing out, writing lines, copying of things 'cause you're not really getting to say what you want. It's what the book has to say or whatever you're copying it out of.*
>
> *15/6:12 ANDREW: Um I don't know, you can be doing maths and then you can be getting this boring long question you've heard a thousand times.*
> *15/6:86 ANNE: Things that I've already done (R: Yes) and some times you get work that you've done 2 years ago or something. (R: Oh) Yes.*
>
> *22/6:77 DAVID: Well math is OK. But sometimes it does get a bit boring because some of it you already know and it gets a bit boring.* But then there are links with concentration, involvement with no worries and enjoyment when he says: *But some of it you don't know, it is fun, because you have to work it out.*

Anne admits there is access to harder work but won't ask for it because she wants to work with her friends. I asked Ross how an expository learning task he claimed was

boring might be handled differently. He (Ross 15/6:113-114) indicated a collaborative learning style from recent experience.

Neither Max, who had been to and didn't appear to like Bali (the topic for an assignment), or Jeffrey who had previously done a project, had an anticipatory interest in the topic:

> *3/6:67 MAX: Um –I don't know I just –I've been to Bali and like I know a lot about it. So I don't learn much.*
> *3/6:85 R: You just weren't interested in Bali?*
> *3/6:86 JEFFREY: Nope.*
> *3/6:90 MAX: Um –it's very hot in the summer, it smells funny, and when I got off the plane it smells real funny. …and it smells real bad.*
> *3/6:103 JEFFREY: No, but I've done a project on it before. (He later admitted realising that he had not learned much then. 29/6:10)*

Another factor in this lack of enjoyment was the lack of 'activation energy': an inability to decide what to do, stopped them engaging with the task, and led to some serious lack of concentration and some side tracking:

> *3/6:75 JEFFREY: Yeah. We just couldn't decide on what format we should do, like we were going to do it in a book (R: Yeah) and now we are doing it on a piece of cardboard and that slowed us down a bit.*
> *3/6:50 R: Can you tell me why you think you haven't done very much, as Max said, this far.*
> *3/6:51 MAX: Because um –we've been mucking around a bit and staying on the computers a lot.*
> *3/6:52 R: You found the computers more interesting than the assignment?*
> *3/6:54 JEFFREY and MAX together: (with a laugh) Yeah.*

Later Jeffrey and Max told me it was a 'great' assignment because they learned 'heaps'. Enjoyment came as they engaged and identified task-related feedback. In

the collaborative assessment presentations, they had to pay attention, and use criteria to mark each group's presentation. Jeffrey (29/6:91-94) speaks of his enjoyment of the presentations when explaining the value of learning collaboratively. I had noted collaborative learning as a positive aspect of concentration and enjoyment in learning. Respondents valued talking with each other about their lessons: *'They (the children) ...value that permission to communicate as an aspect of their learning environment' (Classroom Observation, 10/5, pp.41-42).*

However, four respondents, Matt (29/6:103 and 107), David (22/6:43-46), Andrew and Maeve, note the disturbance of their concentration by peers, saying this does impact on their enjoyment of learning. It is the main factor that stops them enjoying learning:

> *15/6:90 ANDREW: What stops me enjoying –um, --probably when somebody else is talking to me and I don't want to talk to them.*
> *15/6:91 R: OK, they disturb you in what you are doing.*
> *15/6:92 ANDREW: Yeah, I'm trying to think of a way I can stop them.*

> *15/6:126 MAEVE: Um –when people talk and annoy me and like –when they harass me and go 'Oh what did you do on the weekend' or something? (R: Yeah) and I say, 'Can you be quiet because I'm trying to finish this work'.*

The disturbance of concentration can lead the respondent away from the goals and feedback of the learning task. The goal then becomes to stop peers talking: *'Can you be quiet because I'm trying to finish this work'. (MAEVE 15/6:126)*.

There are factors outside the classroom that trouble respondent's concentration. Csikszentmihalyi uses a first person description to explain such a disturbance of concentration:

> But this particular job is not one I ordinarily would want to do, so I am not very motivated intrinsically. At the same time, I am distracted by feelings of anxiety about my teenage son's erratic behaviour. So while part of my mind is concentrated on the task, I am not completely involved in it. It is not that my mind is in total chaos, but there is quite a bit of entropy in my consciousness – thoughts, emotions, and intentions come into focus and then disappear, producing contrary impulses, and pulling my attention in different directions (Csikszentmihalyi, 1997, P.27).

School tasks are obligatory, as is the job mentioned by Csikszentmihalyi. Ella, Peter, (Robert 22/6:42 who mentioned a fight like Peter), and Ross each note being disturbed by factors outside the classroom:

> *22/6:60-62 ELLA: Um –Uh –this only happens sometimes –like when you are feeling a bit bad that day (R: Mmmm) –like something has gone wrong in the morning. (R: At home?) Yes. Like when the cat dies or something (R: Oh OK.) or if you have a headache in the morning.*
> *29/6:263 PETER: Um –um, if you had a fight with your friend at lunch, you come back; you don't feel like working. You feel like going over to him, having fun with him and you wish it never happened. (R: Yes)*
>
> *15/6:66 ROSS: Just what is happening around me, and if I'm having like, if I've got something like going to the Doctor's or going to the dentist after –um –I can't stop thinking about that and I try my hardest to concentrate but I just can't.*
> *15/6:67 R: You can't.*
> *15/6:68 ROSS: No I can't concentrate.*
> *15/6:69 R: Are there days when there are not things like that happening when you do concentrate?*
> *15/6:70 ROSS: Oh –sometimes –um –yeah sometimes. It's a bit hard 'cause my dad works for (name of firm supplied) (15/6 R: Yes) and he's*

always ... (personal information) and I'm quite worried about him; that something happens.

4.1.3 The tasks undertaken have Clear Goals (Component 3)

Component 3 suggests that concentration is usually possible because the task undertaken has clear goals. Seven respondents recognise the importance of listening to understand goals, and having a teacher who has clear goals for teaching, who can explain learning goals clearly, and who is willing to clarify the goals for enjoying their learning. Having the support of peers who can clarify goals with them is also important. One respondent, Peter, spoke of his struggle with concentrating and understanding the goals for learning.

Three respondents, Robert, Maeve, and Andrew, realise the relationship of listening to understand the goals to their enjoyment of learning tasks:

22/6:36 ROBERT: Yeah –how to work out things –yes just reading through the maths, when they tell you how to do things. Yeah that's how you do it.
15/6:109 MAEVE: The main thing? Um –listening to the teachers before I do it, so – because, they tell you actually what to do, and how to do it.

15/6:84 ANDREW: The main thing? (R: Yeah) Probably when we all sit on the floor (R: Yeah) and the teacher sits on her chair and she talks to us all. Because if we all sat at our desks, she wouldn't see us all and it wouldn't really feel like a group. (R: Yeah) We'd be all spread apart and stuff, but if we all sit together in a big circle or something, everyone can hear (R: Yeah) and everyone understands what the teacher's talking about. (R: Oh, -- alright. Yeah)

David, Kerrie and Matt, recognise that how the teacher clarifies the goals, is important in their enjoyment of learning. They value former teachers because of that:

> *22/6:28 DAVID: um –in Year 5 he was a good teacher and it was interesting the stuff he had done. It was hard work and it was –*
> *22/6:30 DAVID: stuff we hadn't heard of before and then he taught us how to do it.*
> *22/6:32 DAVID: Yeah, he taught us how to do everything properly.*

> *29/6:39 KERRIE: …and if you couldn't do a question she'd tell you to go over to her desk and she'd like –give you a little cuddle and she'd explain it just to you. (R: Oh, all right.)*
> *29/6:40 KERRIE: Like –she wouldn't be yelling it to anyone else or anything like that but a lot of other teachers they just tell you with all the other kids and you might not understand.*

> *29/6:73 KERRIE: That was good (criteria for a current group assessment) because you knew what the teachers expected out of you.*
> *29/6:18 MATT: Well, in Year 2 we used to do a lot of projects and they gave us instructions.*

Ross identified the classroom organisation as a reflection of the teacher's goal for enjoying learning:

> *15/6:103 ROSS: Um –I'm not sure –just being really organised I think. 'Cause um –like everything in this classroom seems to go, like –everything's known what we are going to do next.*
> *15/6:104 ROSS: Like um –in my old classroom,* (evidently organised for self-directed learning) *'cause I went to a different school, um –there –it wasn't really organised (R: Yes) and um like –the teachers, we had two teachers and they'd sit down and say and ask us, 'What are we going to do next?' And they'd ask us for ideas because they weren't really sure. We just wasted a lot of time on not knowing what we're going to do.*

Peers appear to enable the components of flow through collaboration, clarifying goals, sharing skills, resources and workload, and lessening the pressure, in effect, by substituting for teachers in the classroom. Elise, Joy, and Ella's comments indicate collaboration as facilitating the respondent's clear goals and enjoyment in learning:

> *29/6:225 R: And what makes it enjoyable?*
> *29/6:226 ELISE: Working together and your friends (and peers 29/6:228) can always help you.*
> *15/6:76 R: …OK, so what is the main thing that helps you enjoy learning in the classroom?*
> *15/6:77 JOY: Um –probably that we (tape unclear) being able to (unclear- work?) with friends. It's easier if you don't have to ask the teacher.*
> *22/6:68 ELLA: Um –Probably being with my friends, 'cause I'm in the same class as them. And like –if I don't understand it I can just ask them, instead of going up to the teacher and asking.*

The children have been taught the importance of setting themselves learning goals each week. Amanda speaks for Karen (25/5:1-3):

> *25/5:18 R reading with AMANDA: You're (I'm) going to try and do all the math's you're (I'm) given in a set time. (R: Yeah)*
> *25/5:19 AMANDA: And how I'm going to do it is to read what to do quicker, write my answers quicker and neater, (R: Yeah) and not to spend so much time thinking about them.*

The goals (component 3) of the task, and the processes of the task itself, must be clearly understood so that the feedback from the task (component 4) can be identified as the task progresses.

One child in the case study finds that understanding goals in learning is a major problem. I had noticed the impact this had on Peter's 'activation energy': his capacity to begin the task. Peter appears to have trouble concentrating on the teacher's instructions. He calls it 'dozing off':

> *23/6:35 R: I observed ...that this young man (Peter) likes support for entering into the learning task.*
> *23/6:36 R: Peter had asked me several times how to begin his task. ...*
> *29/6:21 PETER: ...It was like –(R: Yes) like you've gotta pay attention so much. If you like –doze off for a few words, you won't know what to do. You missed it.*
> *29/6:23 PETER: Yeah. Like when I was in Year 4 if you dozed off he wouldn't tell you again. You would have to sit there and do nothing and you'd have to do it in lunchtime if it wasn't finished. (R: O.K.) So it was listen once or you don't listen at all. (R: Oh) And you don't get the answer.*
> *29/6:31 PETER: I sort of like get 'drifts' sometimes. (R: Yeah) Like I'll listen to the first bit and I'll think 'Oh, I'll do that' and then I'll go to do it and that was only one step of it.*

His inability to understand learning goals limits Peter's access to deeply enjoying any learning except that gained by skills based learning such as learning spelling lists, maths tables or cursive writing.

4.1.4 The task provides Immediate, Comprehensible Feedback

The fourth component of flow involves providing immediate and comprehensible feedback. Csikszentmihalyi (1992, p.57) writes that, 'almost any kind of feedback can be enjoyable, provided it is logically related to a goal in which one has invested psychic energy.' There were various sources of feedback enjoyed in the classroom.

The main source of enjoyable feedback for fourteen of the seventeen respondents was found in the context and process of success of learning new information. The development of skills, learning spelling, cursive writing, presenting work, and artistic endeavours were a major source of the context and process of success in experiencing feedback for the other three. All respondents enjoyed several sources of feedback within their learning experiences. Words like 'I found out' and 'I learned heaps' were commonly used to describe sources of learning feedback. Eight respondents mention the enjoyment of research, and eleven mention collaborative learning, associated with enjoying learning or 'finding out'. Some respondents found that learning the information, could turn a task perceived as boring into an enjoyable one. Csikszentmihalyi (1999, p97) writes that, '…most people rely on external cues for getting into flow states', peer feedback and enjoying the work of others were among sources of external feedback in the classroom.

Andrew, Elise, David, Ross and Jeffrey express their enjoyment of various aspects of feedback in learning, learning something new, appreciating and working on art and craft, understanding how art and craft products are created, designing promotion materials, and working on computers, as satisfying feedback. These examples support Csikszentmihalyi's (1992) comment that just about anything can be satisfactory feedback as long as it is a response to the engaged activation or psychic energy:

> *15/6:16 ANDREW: ...And if there is something you haven't heard of, you can relax and learn about it.*
> *15/6:20 ANDREW: ...And if you've got something new and you haven't heard of it before, you get to enjoy it a lot.*
> *29/6:24 ELISE: I started to find it interesting.*

29/6:26 ELISE: You can learn stuff.

22/6:4 DAVID: Because we learnt a lot of stuff about Bali and like the things that they do.
22/6:6 DAVID: Just like the art and drawing and making the brochures and that.
22/6:8 DAVID: Yeah it was fun, looking on the computers for information and talking with others and cooperating in a group and that.

15/6:4 ROSS: Um -yes, it (an assignment) was good, it was interesting. I found out lots of information that I didn't know.
15/6:18 ROSS: Oh, I did the art and craft so –I like to find out what art and craft had to do with other things like religion and I thought that was really good, just finding extra information about Bali. (R: Yeah) Yeah, I did, and not just from the art and craft.
29/6:6 JEFFREY: Yes, because (the ceremonial masks) they're pretty fascinating and the woodwork (R: Yeah) and how they just carve it with their bare hands.
29/6:8 JEFFREY: …they just do it with a pocket knife and that.
29/6:22 JEFFREY: And I just enjoy –usually art and drawing and that. That's what I like.

Thirteen respondents in the case study, mention in some way that enjoyment arose for them as they started to identify feedback, when applying their skills in learning. Comments made by Jeffrey and Michael are used to demonstrate when the respondents started to enjoy their assignment:

29/6:12 JEFFREY: When we started doing all the project and doing all the –bringing things –and learning about the beaches.
1/6:59 MICHAEL: When I actually started looking for myself. Yes!

Csikszentmihalyi writes of this moment:

> Most enjoyable activities are not natural; they demand an effort that initially one is reluctant to make. But once the interaction starts to provide feedback to

> the person's skills, it usually begins to be intrinsically rewarding (Csikszentmihalyi, 1992, p.68).

For two respondents, the intrinsic goal is not only that of learning *per se*. For them, the intrinsic goal is to receive extrinsic reward: the feedback of peer's opinions. Brett and Kerrie indicate this:

> *22/6:25 R: Tell me how did that make you feel?*
> *22/6:26 BRETT: Excited about the presentations.*
> *22/6:27 R: ...why would making a video for the presentations make you feel excited?*
> *22/6:28 BRETT: 'Cause you don't know what people are saying about it.*
>
> *29/6:12 KERRIE: Because I really like presenting my work nicely (R: OK) and in projects I can do that.*
> *29/6:14 KERRIE: Um – It makes you feel good because when people say 'I really liked that' –you feel all funny inside.*
> *29/6:15 R: ...-say some words that describes what that funny inside feels like.*
> *29/6:18-20 KERRIE: Exciting! Surprised, (R: Yes) Happy (R: Yeah)*

A criterion for group presentation and assessment had been created democratically in the classroom with each group responsible for assessing each other's presentation. Mrs Critcher said, 'Ch'n (sic) love watching other ch'n (sic) show/present their work.' (Mrs Critcher's written comment. April 2002.) *'The assessment time was like experiencing first night fever for a major stage production.' (Classroom Observation: 25/6/99)* Peter and Jeffrey indicate how they value the work and effort of others:

> *29/6:257 PETER: Yes, yes, like you feel good for them. Like –you'd go through it –tick, tick; tick and you'd feel good for them.*

29/6:260 JEFFREY: Yeah, it's (group assessment) pretty good, 'cause you know – I liked when there's heaps of good presentations. 'Cause I seen their one (A group doing art and culture had made a video as well as a comprehensive coverage of the topic in other ways, including artefacts.) when they did what they did. ...And it was just good when they did that. All that effort, it's just great.

Collaborative learning can provide evidence of effort and excellence that encourages peers, providing a model or goal for learning. A broader understanding of feedback is found in collaborative learning as well. One respondent, who lacked the activation energy, or motivation for the task, found that the feedback from collaborative learning from peer modelling, led to some engagement with the task:

1/6:46 R: Did you get interested in the assignment at all?
1/6:47 GARETH: A little bit.
1/6:48 R: What made you get a little bit interested?
1/6:49 GARETH: Um, just my friends, they kept doing it –so I followed.
1/6:40 R: So it was your friendship that made you decide it was a little bit interesting?
1/6:51 GARETH: Yep.

4.1.5 There is effortless involvement: No awareness of worries and frustrations

The fifth component of flow is that one acts with a deep but effortless involvement that removes from awareness the worries and frustrations of everyday life. To find enjoyment, it is important to concentrate and focus one's attention on the task at hand. Csikszentmihalyi writes about the structure of experience:

> Normally …we are the prey of thoughts and worries intruding unwanted in consciousness. This is one reason why flow improves the quality of experience; the clearly structured demands of the activity impose order, and exclude interference of disorder in consciousness. …thus leaving no room in the mind for irrelevant information. Normally we are the prey of thoughts and worries intruding unwanted in consciousness (Csikszentmihalyi, 1992, p.58).

There was strong evidence of effortless involvement among the seventeen respondents, all of whom indicated there was something about their lessons with which they could engage without worry or concern. Three mentioned computers, three maths, three research, four art, craft and cursive writing, two presenting their work and two, learning generally. Following are examples of engaging in learning without worry or concern:

> *22/6:8 DAVID: It was fun, looking on computers.*
> *29/6:39 MATT: I wanted to do it because I liked fictional writing so I was always looking for ideas.*
> *15/6:44 JOY: Probably when we did Egypt because I was really enjoying that and getting into it.*
> *15/6:40 ANNE: ...when we're doing maths Olympia because you're, you have to do heaps, we just – because sometimes you don't know any of the questions and then in the end you get it –it takes you ages.*
> *22/6:52 BRETT: Awww –art and drawing and that –Yeah I just enjoy doing that.*
> *29/6:12 KERRIE: --because I really like presenting my work nicely (R: OK) and in projects I can do that.*

There is evidence however, that more than half the respondents are anxious at times about learning. This is because of a perceived lack of ability, personal reasons, lack of teacher support and a lack of perceived confidentiality in assessment practices. Effective collaboration can help ease the worry and frustrations for some respondents. Lack of effective collaboration and negotiation skills can cause anxiety and frustration. Kerrie feels anxious about going to high school; Ross acknowledges feeling 'not good' at maths; and Joy, like Peter (29/6:23) feels anxious about understanding a task, particularly when the teacher, can't or won't answer a question:

> 29/6:24 KERRIE: *Um –sort of. I'm a little bit nervous about going to High School next year though.*

15/6:10 ROSS: I don't know, I've never liked maths because I'm not that good at it I don't think.
15/6:13 R: What does that make you feel?
15/6:14-16 ROSS: Just that like –I feel a bit sad 'cause I'm not good at it and I don't like feeling sad, and I just don't like doing maths then.

15/6:78 R: What's the main thing that stops you enjoying learning in the classroom?
15/6:79 JOY: (Unclear) …when you and your friends don't know and the teacher won't answer your question. That is very hard when you can't understand everything.

Peter found with his friend that, *'... I ask my friend and then I get it from that, like that, -do it in a kid's language …-that helps.'* (PETER 29/6:113). Allen (1992) found that children valued the ability of their peers to communicate a task to them in 'kid's language'.

Peer assessment appears a problem for Kerrie, Lisa and Anne because of a lack of confidentiality. Sharing in collaborative assessment helps lessen these respondents' anxiety about assessments. A group assessment appears less strain:

29/6:68 KERRIE: …when other kids mark your work –they'll tell all their friends if you've got a question wrong. (R: Oh, will they?)
29/6:69 KERRIE: …I don't really like it when other kids do (mark your work) because they might tease you after –if you've got –oh maybe 4 out of 10. (R: Yes.)
22/6:99 LISA: That was OK (group assessment of peers' group presentations). Even if another kid marks it, it's OK because you have done it with all your friends. That's OK; there is (sic) other people in your group.
15/6:72 ANNE: And because it (the group assessment) didn't have your name on –they couldn't go and bash you up if you gave them a 1 or something.

Matt felt unsure of himself when peers marked an assignment and prefers to mark his own '*...because the teachers gave us a higher mark.' (MATT 29/6:80)* Ross feels better marking a peer's work than marking his own:

> *15/6:92 ROSS: ...you're a lot more worried (marking your own) about if you've made a mistake and you're not really concentrating.*
> *15/6:93 ROSS: It's much (Unclear, easier on?) someone else's, say your friend. You wouldn't really worry about the mistakes. You just mark it and it wouldn't really matter, 'cause it's not your writing.*

The first indication of the lack of collaborative learning skills causing anxiety and frustration in the classroom occurred when the groups were being organised for an assignment. As I watched I wrote:

> *17/5:14 R: ...The agony of choice. Who will I be with? Who will have me? What group are you in? The groups fill.*
> *17/5:18 R: Some children appear to suffer the rejection of not being wanted in a group long after the allocation to final task groups has occurred.*

Maeve, Peter and Gracie note a lack of cohesion in their groups. I was observing a group of six girls seated on the floor. The expressions on the faces of the girls ranged from *'pleased with self' to 'none of this pleases me, sullen'.* I wrote:

> *17/5:37 R: There was a tremendous amount of shouting going on between the four who were trying to get the question of their own choice, question number one on the topic sheet for dance. Two others sat by nearly silent.*
> *17/5:44 R: The loudest shouters had already claimed that topic.*
> *17/5:45 R: I pointed out to the group that there had not been any negotiation about who got which question from the sheet.*
> *17/5:46 R: The most silent girl said that she had been given no choice at all (Observation, 17/5).*

I observed several unsupportive comments were made by respondents:

> *17/5:61 R: I don't want to work with that partner and I don't want to do that question.*
> *17/5:62 R: In response to which and seemingly without animosity, her partner made the statement, 'No one ever wants to work with me'.*
> *25/5:139 GRACIE: Well, it (the group assignment) was good except some people didn't agree with the partners and everything.*
> *25/5:147 GRACIE: Mrs Critcher talked to us about it (working together) after maths.*
> *25/5:150 GRACIE: She talked about (us) screaming. (giggle)*

Later that day, when the groups were working together, I asked the four girls present where the other two group members were:

> *25/5:180 SALLY: One of them's away and the other one is over there.*
> *25/5:183 SALLY: She's over there on the ponytail group.*

It is noticeable in this and other instances that lack of collaborative learning skills will militate against the experience of flow and enjoyment in learning. Skills are needed to achieve enjoyment in any activity (Csikszentmihalyi 1997, 1992, 1975). The respondents lacked the skills of negotiation and group interaction that would enable a successful and deeply enjoyable collaborative learning experience.

Children don't 'own' a seat or area in this classroom:

> *Children are shifted around, allocated to sit near particular people during the term, but where those seats are is their own choice. They take their plasticised nametag with them and put it on the desk. The children try to make the desk they sit at, a desk of their own choice (Observation 2/6:1).*

The seats are occupied by 'first in' or negotiated. No child spoke of the allocation of the classroom seating as a source of anxiety or lack of enjoyment. I did observe

instances of willing negotiation (Observation 2/6:9). However, when I arrived in the classroom on the Monday, *'it seemed all the children were 'Hyper'* (Observation 17/5:1) *'There was a lot of emotional shuffling around.'* (Observation 17/5:4*)* Children were jockeying for positions and a lack of respect in the form of 'forthrightness' was observed as children tried to achieve their particular wants:

> *'No, not you there, you sit somewhere else' (One boy to another) and, 'I've got a good one' (by a girl about the boy allocated to sit beside her) 'I didn't want that one' (pointing to another boy who heard the comment) (Observation 17/5:5-6).*

These are two examples indicating that the combination of organized and democratic choice of seating and communal ownership of the classroom may not be comfortable for all children if the class has not been immersed in a culture of amenable interaction. The issue is included here because the situation may impact on the learning experience of some respondents. Whether the boys mentioned here have the emotional maturity to respond positively under these circumstances, could influence their capacity to work without concern or frustration, concentrate on and engage with their learning in the classroom.

4.1.6 People exercise a sense of control over their actions (Component 6)

Having a perceived sense of control over their actions is the sixth component of flow. The ways respondents attained or identified a sense of control over their learning actions are enabled in having teacher directed clear goals for the task, peer support through collaborative learning, and a natural competency for the task. While choice of topic is not an aspect of the control in component 6, a section has been included in

this component about the initial control in learning of making choices in learning tasks.

Being taught how to go about the task, gives a sense of control for Kerrie (29/6:203) and David. Both respondents voiced a sense of appreciation for a teacher who had taught them during a previous year:

> *22/6:28 DAVID: Um –in Year 5 –he was a good teacher and it was interesting the stuff he had done –it was hard work and it was –*
> *22/6:29 R: What was hard work?*
> *22/6:30 DAVID: Stuff we hadn't heard of before and then he taught us how to do it.*
> *22/6:32 DAVID: Yeah, he taught us how to do everything properly.*
> *22/6:33 R: O.K. Why was that good?*
> *22/6:34 DAVID: Because when we first started to do it we didn't know how to do it, and when he taught us we could always do it.*

We talked about being happy to succeed, then:

> *22/6:39 R: O.K. Tell me what that feeling was like.*
> *22/6:40 DAVID: It was good because you learnt something new and someone else taught you and like it is just good you can do it, the feeling that you can do it.*

David confirms the operation of components 3, 4, 5, 6, 7 and 9 in his interview, and finds learning 'fun' (22/6:8). Other respondents, Maeve (15/6:109), Andrew (15/6: 84), Robert (22/6:36), Kerrie (29/6:39) Matt (29/6:18), and Ross (15/6:103) referred to in component 3 for having clear goals, also indicate the importance of clear, teacher directed instructions as a source of their control and enjoyment in learning.

For Robert (22/6:28) control in self-responsible research is his source of enjoyment: '*...you find out the information and you write it in your own words. You find out*

pictures. You're doing all the work…' Andrew (15/6:59-67) and Maeve indicate the enjoyment of control when being creative:

> *15/6:98 MAEVE: Because you get to do your own work and you get like –make up in your own words and like –it's fun because no one else can actually copy you.*
> *15/6:99 MAEVE: I don't watch something, or do something, before you do it. You go and sit down and write.*
> *15/6:104 R: You like that responsibility?*
> *15/6:105 MAEVE: (There was an accent on the response) Yyyeepp! Because like, you like –get to do it (R: Yeah) no one else can.*

Criteria for group assessment of peers can create a sense of control of learning. Joy (15/6:63), Jeffrey and Kerrie identify the importance of having goals for the assessment process. These provide an opportunity for a sense of control of the task. Jeffrey adds the learning feedback (component 4) as well:

> *29/6:93 JEFFREY: Yes, because then you know how you went. Because –one person's opinion wouldn't be too good, because you're just one person –coming from one person, not the whole class's.*
> *29/6:94 JEFFREY: And if everyone gets their point of view about it, you know if you've done well. And if everyone gives you a good mark that means you've done real well. But if they give you a bad mark that means you have to work on your studies and that.*

> *29/6:73 KERRIE: That was good (criteria for group assessment) because you knew what the teachers expected out of you.*

Sharing the workload, skills, and resources collaboratively can enable a sense of control in learning. Eleven children spoke of the value of collaboration for their enjoyment of learning. Ella (22/6:10) had noted that '*…you don't have to do it all by*

yourself... other people find some other stuff'. Lisa and David, who has an element of delight in his comments, are used as example:

> *22/6:54 LISA: Yeah. It does. –Like working with a couple of friends really does make it easier because –it like –takes away some of the pressure.*
> *22/6:55 R: Tell me about that –what do you mean?*
> *22/6:56 LISA: Well –like say one of them was a good speller and another was a good drawer, you could all do some. But –if you weren't like –a good speller or something then you could get your friends to help you on that and stuff.*

> *22/6:8 DAVID: Yeah it was fun looking on the computers for information and swapping with others and working in a group.*
> *22/6:9 R: OK, you enjoy the working in a group, is that important to you?*
> *22/6:10 DAVID: Yeah.*
> *22/6:11 R: Why?*
> *22/6:12 DAVID: Because if you do it by yourself it isn't as fun, because if you work with others they can have ideas that you wouldn't think of.*

I had wondered about the respondents' opinion of making choices about their own learning. I recognise that making a choice of topic is not an aspect of component 6, a perceived control of the progression of the task. Csikszentmihalyi, Rathunde and Whalen however, write of choice as an aspect of freedom and say:

> Perhaps because schooling has traditionally militated against individual expression, a measure of choice is arguably the ingredient most crucial to the realization of intrinsic rewards in the classroom (Csikszentmihalyi, Rathunde, & Whalen, 1997, p.193).

They note that freedom of choice is critical to student motivation and that 'students will learn only if they are motivated' (Csikszentmihalyi et al, 1997, p.195). They also note that while freedom is critical to initial motivation, it is not so for long term

engagement. Teaching support for safeguarding the learner's energy, and continuing adjustments of the challenge, as learner knowledge and skills grow, are also important. As Csikszentmihalyi (1997, p.33) writes, 'the psychological effects of activities are not linear, but depend on their systemic relation to everything else we do.' I therefore include this section on choice, as an aspect of motivation and an initial sense of control of task.

Not all respondents were concerned about initial choice of topic or task in their learning. The varieties of activity available in the classroom, and the teacher's model of self-motivation and joy of learning, may explain the lack of concern. However, for eight respondents, choice is a critical factor in their enjoyment of learning and therefore for their initial motivation to engage in learning. David and Maeve identify choice as a potential source of self-responsible learning. For Tania, choice assures variety in learning:

> *22/6:48 DAVID: Yeah, because you would have to look for the questions you have asked and you would have to find them, and when you find them you could answer them, and they would be your questions.*
> *15/6:70 MAEVE: Yep. (Laugh) 'Cause we'd planned to do it even before we got to the –got to choose our thing. (There was some choice of topics in a class project on a first-in best-dressed basis. Maeve's group intentionally organised quickly and managed to get its own choice of topic.)*
> *22/6:26 TANIA: Yeah, because like well it is because you need to make a choice, not just do the same thing over and over again. It can get really boring. (Tania repeated this opinion during the interview TANIA 22/6:45)*

The issue of choice has been influential for Peter (29/6:67-68) and Ross (15/6:37, 45) and their enjoyment of learning. For Ross, choice of task can even overcome a

dislike of the topic. Jeffrey, whose topic on special events in the Bali calendar year was not initially welcomed, was nonetheless able to enjoy the task:

> *29/6:4 JEFFREY: Um—Looking up all the different kinds of beaches in Bali.*

Even so Jeffrey (29/6:62/65) and Kerrie (29/6:54) remarked, that children would make their own questions too easy if given that option, an opinion Elise (29/6:76) suggests for herself.

4.1.7 Concern for self disappears; the self grows stronger after flow

> *The initial comment I will make and this has been confirmed (for me) in listening to the tape is that there is a deep sense of reverence in the demeanour of these children who recalled enjoyable learning from early primary school years. There is also seriousness, a thoughtfulness, about the business of learning. These children have very definite opinions about their learning and their classroom experiences. This was evident in both boy and girl learners (Observation 15/6/99).*

Several respondents' comments confirm the potential of school learning as a source for experiencing component 7 of flow: the concern for self disappears; yet paradoxically the sense of self emerges stronger after the flow experience is over. Jackson and Csikszentmihalyi (1997) note that there are degrees of enjoyment, and that not all enjoyable experiences are flow experiences. This is substantially true for these respondents. It is noticeable that some indicated their enjoyment of learning in terms of a comparison with others, or in terms of achieving grades, presenting their learning, feedback from peers, and a future orientation for the learning, rather than enjoying learning for itself. The enjoyment and confidence in respondents' enjoying learning finds its source mainly in learning new information, but also learning new skills, spelling and tables, and creative endeavour, both artistic and literary. The

experience of enjoyment or flow in learning is often identified as 'fun' by respondents.

The stronger emerging self was evident in Ross' non-verbal communication about his learning in Year 2. 'Optimal experience is a form of energy…' (Csikszentmihalyi, 1992, p.69) and is apparent in a transformative and energy-producing quality, which respondents who enjoyed learning, displayed and articulated. Peter confirmed the energy aspect of enjoyment verbally. David spoke of it as power. Observation of Ross and his comments indicate that this transformative quality also has durability:

> *...But when he told me about an enjoyable learning event, which was in Year 2 (he was now in Year 5), his body became straight, he turned and he looked me in the eyes. Then he told me in concise and articulate language what he had learned at that time and how he valued knowing that information. There was transformation in his presence (Observation of Ross 15/6/99).*

Eight examples are used below to indicate the range in response of how respondents explain the nature of their enjoyment in learning. They each suggest a strengthening of self (7) and often motivation (9) to continue learning in some aspect of their classroom activities.

The eight respondents mentioned above are included as follows: Kerrie indicates components 2, 3, 4, 5, 6, 7, and 9; Ross components 3, 4, 5, 7, and 9; Lisa components 1, 2, 4, 5, 6, 7, and 9; Maeve components 2, 3, 4, 5, 6, 7, 8 inferred, and 9; Tania components 1, 2, 3, 5, 6, 7, and 9; Ella components 2, 3, 4, 5, 6, 7, 8 inferred, and 9; David components 2, 3, 4, 5, 6, 7, and 9; and Brett components 2, 4, 5, 6, 7, and 9. Each noted being encouraged or strengthened by enjoying learning:

29/6:12 & 14 KERRIE: I really like presenting my work nicely. Um –It makes you feel good because when people say 'I really liked that' you feel all funny inside.

29/6:18-20 KERRIE: Exciting. Surprised (R: Yeah) happy.

15/6:22 ROSS: Um – it's a bit hard to explain but I just felt really good in myself (R: Yeah) and it was a warm feeling kind of---

15/6:26 ROSS: Um –It just makes me feel as if I want to go on and like do it again, like do another project. Not just on Bali but on anything.

22/6:23 LISA: ...it makes you feel more happy and everything like –to make it look all good.

22/6:38 LISA: Ummm –because like –actually I found out more information that I wouldn't have known before, and that has kind of like –affected my life right now. *This comment by Lisa is evidence of learning as primarily seeking meaning; 'changing as a person' is an aspect of this conception of learning (Marton, Beaty, & Dall Alba, 1993).

15/6:27 MAEVE: Like goodness and like- maybe a bit more smarter. (Her eyes were shiny as she spoke.)

22/6:6 TANIA: ...It was pretty hard getting the information. I enjoyed it.

22/6:19 ELLA: Um –exciting, (R: Yeah) fun (R: Yeah) and I was happy.

22/6:43 ELLA: Um –because there is lots of problem solving and I'm good at that.

22/6:49 ELLA: Happy about myself Uhhh— it makes me feel good because I know I've done well.

22/6:22 DAVID: It makes you feel good because you know something that someone else doesn't know and you can share that with them. (David had sat up very straight while making these comments.)

22/6:23 R: What I thought of myself when you sat up is that it (enjoying learning) gives you energy. (22/6:24 DAVID: Yeah!)

22/6:25 R: You sat up as if it gave you energy. Is that how it feels?

22/6:26 DAVID: (spoke affirmatively). Yeah! It gives me power.

22/6:36-38 BRETT: Yeah –I do enjoy my learning…. ...Doing fun things.

22/6:109 BRETT: Well, learning more and more and getting confident and stuff.

22/6:111 BRETT: I don't think anything stops me enjoying learning.

Conversely Ross also identified the antithesis of flow in learning, the feeling of alienation that comes from anxiety or lack of enjoyment:

15/6:28 ROSS: You want to do it –instead of dreading it.

Kerrie indicates a comparison with peers is important when talking of enjoying maths:

29/6:251 KERRIE. Um----good, happy (laughter) –you feel like you're better than other kids sometimes 'cause you can do it but they can't. And, you just feel really smart when you might not really be.

Jeffrey, with a history of not enjoying any learning until his 8th year at school, associated his enjoyment with a future orientation which was different from his previous experience:

29/6:179 R: …What's it feel like to enjoy learning?

29/6:180 JEFFREY. I don't know. Oh – it feels like if you go to other schools you can do it and you know about it. So you don't struggle.

Eight respondents indicate the enjoyment of learning as fun. The comments of Andrew, Lisa and David are typical. Andrew's enjoyment of learning was noticeable when he spoke of learning two years previously:

There was a glow in his eyes and face as he used his hands, it could be seen that using his hands is important to him, as he described his enjoyment of learning (Observation of Andrew 15/6/99).

15/6:22 & 24 ANDREW: Enjoying? Um- it feels like you're succeeding', 'Yeah, and you're doing the things right.

15/6:34 ANDREW: Oh great, good –because it is just fun, like we did all the studying and that was fun…

22/6:11-13 LISA: Finding the information was a bit of a drag, but it was fun to find the music side to do about their music and it was fun to actually find the (unclear) gumlung (phonetic spelling). That is what their music is called.
22/6:77 DAVID: Well math is OK. But sometimes it does get a bit boring because some of it –you already know and it gets a bit boring. But, some of it you don't know –it is fun because you have to work it out.

No question was initially asked of respondents regarding collaborative or cooperative learning, however, it was raised spontaneously as a major source of their enjoyment in learning. Csikszentmihalyi writes of the importance of relationships as an aspect of human growth:

> Most people spend roughly about equal amounts of time in three social contexts. The first is made up of strangers, co-workers, or –for young people – fellow students. This public space is where one's actions are evaluated by others, where one competes for resources, and where one might establish collaborative relationships with others. It has been argued that this public sphere of action is the most important for developing one's potential, the one where the highest risks are run but the greatest growth occurs (Csikszentmihalyi, 1997, p.13).

Children recognise what Dr Benjamin Spock 'took a lifetime to learn', that 'it is at least as essential for them to learn to work for a common good…' than to work primarily for themselves (Quoted in Csikszentmihalyi, 1997, p.129).

As previously cited, Jackson and Csikszentmihalyi (1999) note how, 'often the words we use to describe the flow state are similar to those that describe fun' (p.141). Whatever the respondents mean by 'fun', it is often associated with collaborative learning in the experience of enjoying genuine learning. Twelve of the seventeen respondents noted the importance of sociability, shared skills, ideas and resources,

and seven of those associated collaboration with the 'fun' of learning from and with each other. Joy, Tania, David, Catlin and Maeve speak for the group. Enjoyment was noticeable in both verbal and non-verbal responses. In relation to the latter, my journal records, '*the light of joyful learning shone in her (Joy's) eyes as she talked (Observation of Joy, 15/6/99)*:

> *15/6:36-37 R: …What can you tell me about why you enjoy learning?*
> *15/6:38 JOY: ----Because it's fun sometimes. (39 15/6 R: What's fun?)*
> *15/6:40 JOY: Um –Just being with someone different. And just finding out what they do and stuff in a different country, or like the sea or something.*
> *15/6:41 R: OK. What it is, 'if you are doing it with someone else'…?*
> *15/6:42 JOY: Yeeep!*
> *22/6:81 TANIA: The main thing that stops me enjoying it (learning) is um—having teachers boss you around. And having to—like it stops you having fun when you're learning when- like- you don't have any friends with you—and it's all individual like …—that's pretty boring.*
> *22/6:82 TANIA: Not fun. (R: Yeah) Like -its fun to have friends around you when you are working.*
>
> *22/6:8 DAVID: Yeah, it was fun looking on the computers for information and swapping with others and working in a group.*
> *22/6:12 DAVID: Because if you do it by yourself it isn't as fun, because if you work with others they can have ideas that you wouldn't think of.*

Sally's friend Catlin had said, *'It was fun because we got to work together…' (CATLIN 25/5:47).* And Maeve sounded excited:

> *15/6:4 MAEVE: It was really fun because like, we all worked together and it was like, we just learned lots of other things. It was terrific.*

The fact that respondents identify the fun of collaboration as a source of shared skills, ideas, and resources enabling greater and enjoyable learning is not unexpected (see

Armstrong, 2000; Johnson, Johnson, & Holubec, 1993; Hill, & Hill, 1990) but is profound. Allen (1992) notes the importance to children of their learning being perceived as 'fun'. It is the 'fun' that children experience, often at two levels –at a social level involving collaboration, and also at the academic level involving learning new skills and information that appears akin to Csikszentmihalyi's concept of flow or deep enjoyment where:

> …a person has not only met some prior expectations or satisfied a need or a desire but also gone beyond what he or she has been programmed to do and achieved something unexpected, perhaps something even unimagined before (Csikszentmihalyi, 1992, p.46).

Using Csikszentmihalyi's comments to interpret the respondents' experiences would indicate that classroom activities can enable the deep enjoyment of learning, if not flow itself.

It is noticeable that Anne (15/6) who is influenced by her parents and an older sister's success to strive for excellence, and is acknowledged in the classroom as a good student, is a child who is tentative about any enjoyment of learning. She finds things interesting, concentrates on maths, and responds to the challenges, but does not express enjoyment without a limiting adjective like 'in a way'.

Just as the non-verbal evidence of enjoyment in learning is evidenced in energy, so does the non-verbal evidence of boredom, anxiety or lack of success in learning indicate the depletion of energy, or an antithesis of component 7, where the self emerges stronger. The observation of Ross and Peter's comments indicate this strikingly:

...there was a tear in his eyes and his body appeared weak as he described his anxiety about some of his learning and some things in his life (Observation of Ross 15/6/99).

29/6:56 PETER: Yer. A lot happier and you can like –if you didn't get good in a test –I'd sort of grope a bit in my work and go like that (making his body limp).
29/6:104 PETER: If you look at something and say 'I've got to learn this and I've got to work really hard' –it sort of like –you have to –I can't say it –like I can't get it out.

Perceived anxiety about something, or lack of success in learning appears here as synonymous with lack of enjoyment in learning and as well, the depletion of life-giving energy.

4.1.8 The sense of the duration of time is altered (Component 8)

The 8th component of flow is the sense that the duration of time is altered, hours pass by in minutes, and minutes can stretch to seem like hours. There was only one respondent, Stephen, who mentioned the experience of a perceived alteration of time. Three respondents, Ella (22/6:60), Maeve (15/6:121-122) and Peter, mentioned instances which the researcher perceived as being akin to an altered sense of time. These children were, like Stephen, engaged in a race against time, and very real enjoyment is noticeable in the three experiences.

Stephen speaks of being alienated by insufficient time for a task (see component 1) but when engaged in craft skills with which he feels confident, he enjoys *'basically anything you use with your hands' '...well it just makes you feel like you want to do it again'* (Stephen 15/6:9-11). Working on a task that he wants to finish in a limited

time, completely focuses his concentration. Stephen indicates components 1, 2, 3, 4, 5, 6, 8 and 9, as demonstrating the experience of flow. I had observed to him about craft *'...I can see from your shiny eyes that you thoroughly enjoy that.'* (R 15/6:23) He commented about his concentration:

> *15/6:27 STEPHEN: It would have been when I was doing that Bali project (R: Yeah) and we only had 15 minutes and I really wanted to finish the volcanoes and I looked down and got everything and when I looked up –it was nearly home time.*
> *15/6:30 R: How did you feel after that Stephen?*
> *15/6:31 STEPHEN: Oh, all right –it just felt like oh –the time goes so quick you know.*

Fifteen minutes when you are confident of your skill in relation to the challenge, makes the difference between experiencing flow or experiencing resistance as Stephen does with maths tasks.

Peter, Ella and Maeve each indicate how being late with an achievable task can make it fun. Peter described it as 'fun' 'like a race' and his story is used to demonstrate the situation. Ella and Maeve's groups were cooperative, just late completing the tasks, but Peter's work group was not cooperative, so initially they ignored their learning task and subsequently left it until the 'last minute'. Csikszentmihalyi writes that:

> …flow-producing activities require an initial investment of attention before it begins to be enjoyable. One needs such disposable 'activation energy' to enjoy complex activities (Csikszentmihalyi, 1997, p.65).

The inability of Peter's non-cooperative group to start the assignment, limited the time available for completion. Because something of the task was perceived as achievable, this created the 'activation energy' and conditions for flow. Perceptions of time can change and it can be like a race:

29/6:2 PETER: Yeah, but we had a bit of trouble in our group with some people that get along and some people that don't – but it was good.
29/6:5 PETER: Well, I totally ignored it (the assignment) for about two weeks then I had two days to go and I totally freaked out. And we all got together in the group and all did a lot of homework that night and we all got it done.
29/6:73 PETER: By the end it was fun –rushing it –it, -it was like a race.
29/6:78 PETER: --the challenge.
29/6:79 R: Like you've got to get it done.
29/6:80 PETER: Yes. Like it –by the end –like the last day we had to do it –we had like heaps –we wrote down what we had to do. Everybody in the group got a sheet of what we had to do. (R: Yes)
29/6:81 PETER: And like –sometimes we'd come back on the next day and we'd done it twice. (Laughter)

For Peter, enjoyment derived from the total focus necessary to achieve the task in the limited time. Whether this particular experience of flow or 'fun' is the most beneficial outcome for long-term learning is addressed in Peter's story (chapter 6).

4.1.9 The experience becomes autotelic: It is self-motivating

The ninth component of flow is where the activity is engaged in for its own sake and is intrinsically rewarding. This is the end result of the other eight components of flow (Jackson, & Csikszentmihalyi, 1999, p.30). It is noticeable in the language of respondents who spoke about enjoying learning, that the activity is intrinsically rewarding for them, they are motivated, and they want to do it again. Csikszentmihalyi (1975, p.13) states that, '…people are motivated to pursue these activities because they derive some satisfaction from them'. For him:

> The key element of an optimal experience is that it is an end in itself. Even if initially undertaken for other reasons, the activity that consumes us becomes intrinsically rewarding (Csikszentmihalyi, 1992, p.67).

The tasks of learning are mandatory, there is no initial choice, yet the engagement becomes autotelic and respondents choose to continue engagement with the activity because they deeply enjoy the experience.

Eleven respondents mention the motivatory nature of enjoying learning in a variety of contexts, and two respondents, Peter and Stephen, mention specific contexts. Matt enjoys and delights in learning, particularly research, problem solving, and creative literature. Robert also mentions research as his source of enjoyment from learning, and one can sense his delight. Ross, Stephen, Andrew, Joy and Lisa identify various learning tasks affecting their motivation to enjoy learning:

> *22/6:28 ROBERT: It is not maths –or with a text –you find out your own information and you write it in your own words.*
> *22/6:15 R: …What does that feel like to enjoy learning?*
> *22/6:16 ROBERT: Well you actually do it at home. You don't –um not do anything. You do a lot of work, you find out the information and you enjoy doing that.*
> *22/6:18 ROBERT: You are just surprised when you find out new information and how different it is.*
> *22/6:20 ROBERT: You like the topic and you just want to find out more.*
> *15/6:24 ROSS: Um –it just makes me feel as if I want to go on and like do it again, like another project…*
> *15/6:20 STEPHEN: I don't know, it makes you want to listen to it, like pay attention to it, I want to talk to other people and really enjoy it. No, mmm I just feel like, I just feel like –I want to do it. (Accent on 'do it', and laughter)*
> *15/6:53 ANDREW: ...sometimes when I write stories I have a lot of things, I remember things the teacher taught us and things I've read out of books (R: Yes) and I –like –use them in a story (R: Yes) and it ends up a good story because I think if I didn't read books –I don't think I could write very well, --write stories.*

15/6:44 JOY: ...when we did Egypt because I was really enjoying that and getting into it.

15/6:46 JOY: It was really fascinating finding out –like how they lived in those times, -like the Pharaohs, just finding out about all of them. (Joy was speaking almost reverently at this point in the discussion.)

22/6:34 LISA: Umm—it kind of made you feel like I wanted to know more things about China and all the things they do and their language and stuff.

22/6:52 LISA: Yeah, because it's like –if it's like a big assignment you can get really involved in it.

29/6:10 KERRIE: Because I was really excited ...we got to do one (a project).

22/6:38 BRETT: Awww –make—doing work --doing fun things.

22/6:40 BRETT: The hand writing book and stuff.

22/6:48 BRETT: Yeah –you've gotta do two lines of that and your hand hurts a lot.

22/6:52-54 BRETT: Awww –art and drawing and that –Yeah I just enjoy doing it.

22/6:109 BRETT: Well, it's just like um –learning more (R: Yeah) and more and getting confident and stuff.

Elise, Andrew, Stephen, Anne (15/6:86), Matt (29/6:57-60), and Ross (15/6:4 & 18) had each initially thought a particular assignment, and too familiar learning was boring. It was satisfactory task related feedback from unexpected new learning that enhanced intrinsic motivation. Speaking about the assignment I asked:

29/6:7 R: So why did you end up enjoying it?

29/6:8 ELISE: Because I ended up learning lots of good stuff about it.

29/6:24-26 ELISE: I started to find it interesting. You can learn stuff.

15/6:16 ANDREW: Yeah –like a long number sentence and that's really boring. And if there is something you haven't heard of and you relax and learn about it.

15/6:20 ANDREW: You don't really feel like doing it (learning without any challenge) but if you've got something new and you haven't heard it before, you get to enjoy it a lot.

Elise expresses what several children noted about the mandatory task and enjoyment of reading. When asked about enjoying learning, she nominated *'reading' (Elise 29/6: 46)* as her example. Reading in Elise's classroom has been supervised, chosen at the readers' skill level, and mandatory for 30 minutes each morning during this year. Elise had not enjoyed reading previously:

29/6:*47 R: What is enjoyable about reading?*

29/6:48 Elise: It's nice and quiet. (The classroom is normally quite noisy.)
29/6:49 R: Have you always enjoyed reading?
29/6:50 ELISE: No.
29/6:51 R: When did you start to enjoy reading?
29/6:52 ELISE: This year.
29/6:53 R: What made you enjoy reading this year?
29/6:54 ELISE: We have to read for thirty minutes every day.'

Anne (15/6:36) is motivated by achieving like her sister rather than enjoying learning: *'...I want to achieve as well as her.'* Peter (29/6:15) however says, *'most learning I don't really enjoy. I love like…things that's not a challenge. I love –not a challenge*'. He indicates that those things that are 'not a challenge' in his learning can be addictive, because he has success with them. The experience of flow, according to Csikszentmihalyi (1992:49) has high motivation content, and people will go to great lengths to experience it again as Peter indicates:

29/6:57 PETER: ...but, if you do good, you feel really excited and you want to do it again 'cause like –you're addicted to the feeling (R: Yes) and you want to reach it again. (R: Yes).

29/6:58 PETER: I've got like –with my spelling, with the mark of how many wrong –I've gone five weeks zero, zero, zero, zero, zero.

Csikszentmihalyi (1992, p.61) claims that the reason flow-producing activities can become so addictive, is that the person has a 'sense of being in a world where entropy is suspended'. Peter has always been troubled with understanding instructions for lessons and had been counselled regarding disruptive behaviour. Achieving flow through concentration on rote and manual type activities, like learning spelling lists and practising cursive writing, means Peter has found something to enjoy in the classroom, and has led, in his own words, to an addiction. At issue here is whether Peter, or other respondents motivated to learn for reasons other than enjoying learning itself, have the most flexible and useful attitudes for continuing enjoyment of learning.

4. 2 SUMMARY

The findings of the data show that the respondents each engage in some learning or skills development that brings them either a degree of enjoyment or flow, often identified as fun, in their classroom experiences. Thirteen respondents indicated component seven, *the concern for the self disappears, and the self grows stronger*, as an aspect of their enjoyable learning. Eleven respondents mention component nine, the motivatory nature of enjoying learning as seeking meaning. One mentioned

component nine, as response to success in reproductory learning and another related it to artistic endeavours in the classroom.

There are a variety of learning activities and events that lead to respondents' deep enjoyment of learning. These include learning new information, problem solving, skill development, creative endeavour both artistic and literary, sharing learning activities and skills with peers, the teacher's management and teaching skill and, learning skills developed in previous years. A high proportion of the respondents (twelve respondents and two not in the case study) identify collaborative learning as both fun and a source of support. Collaboration can facilitate flow through clarification, shared ideas, skills, resources and communication. Most respondents also identified some aspect of classroom, teacher or personal experience, both past and present that inhibited their potential to enjoy their learning in the classroom.

Chapter 5 presents the findings from observations and conversations with the classroom teacher. Chapter 6 presents further findings from discussion with the children and introduces topical examples of three respondents. Chapter 7 presents the discussion of the findings, recommendations and suggestions for future research.

CHAPTER 5

RESULTS: THE TEACHER

5. INTRODUCTION

This chapter presents the data from observation and interviews with Mrs Critcher, the Year 5/6-class teacher. The data are presented using the theory of flow as a basis for interpretation. Chapter 4 identified the children's engagement in learning. This chapter focuses on the role of the teacher experiencing flow in teaching while endeavouring to facilitate deep learning for her students. The teacher's experience is separate to, but certainly impacts on, the experience of the students. Mrs Critcher had been shown the 1992 eight components of flow as an introduction to my research, and while she does teach with the intention of facilitating self-responsible and meaningful learning, there was no intention on her part to consciously try and produce the conditions for flow in her classroom.

Enjoyable learning is a function of the students' response to various forms of learning, and the quality of the teaching. Csikszentmihalyi (1997a) suggests it is important for the teacher to experience some flow in teaching, because flow in learning is related to flow in teaching. It is important for learners to experience flow because flow motivates; it engages and encourages students, triggering student energy to learn in a teacher directed and student responsible classroom. This chapter is relevant to the research in that there are direct connections between teaching and the learners' responses to the conditions of learning as generated by the teacher, the ethos of the classroom and school environment.

For the purpose of this research I suggest that flow or at least deep enjoyment of teaching and learning has occurred, when component (7) the sense of self emerges stronger after the event is over, and (9) being autotelic and motivated to continue with the activity, are evident in the respondents' responses. These two components were selected as evidence of flow for this research because component (7) contains an outcome, and component (9), the activity becomes autotelic, is the outcome of engaging with the other components (Jackson and Csikszentmihalyi 1999). Nevertheless, other components are also evident in Mrs Critcher's communication. The findings show Mrs Critcher having a strong sense of self, and being an autotelic, highly motivated teacher.

5.1 THE TEACHER, TEACHING AND NINE COMPONENTS OF FLOW

This section presents the findings from conversations with Mrs Critcher, her written comments and my observations. Not all the components of flow are addressed within the observations and the conversations.

5.1.1 We confront tasks we have a chance of completing (Component 1)

The first component of flow is that the experience usually occurs when we confront tasks we have a chance of completing. The phenomenon of time and the organisation of learning events is always a pressing issue for the teacher within the culture of a classroom, even for a teacher who has taught for over 20 years. This appears at times as a balancing act for Mrs Critcher who organises a specific number of learning tasks for the time allocated and within the continuing complexities of a day:

2/6:24-25 T: And to allow them some time on their individual and group tasks (R: Yes). And we actually had to try and balance that.
2/6:51-52 T: …we were finding that maybe the time we had given the kids to do their research topic isn't enough –like maybe we should give them another week or whatever and maybe they haven't had enough time.
2/6:200-202 T: I was thinking too, 'oh my God', they have to get this written up in their book –then they had to have time on their projects, we're not going to get this done (laughter)…
2/6:204 T: We were aware that there were a lot of children who hadn't got enough of their research done and they needed that time…

Children are aware of needing enough time, as indicated by my conversation with a child:

2/6:207 R: Just about them enjoying the topic and what made it enjoyable and one said he'd rather do it at home because you don't have to go off and do maths or something or other else.

Keeping control of time during a day of several changes can become perplexing for the teacher. Mrs Critcher spoke of being disoriented at times with the numbers of different things the children need to learn. The need to change activity groups, while maintaining the time frame for learning, is at the root of this complexity. However she (25/5: 51-52) feels pleased when worthwhile learning is evident even when not as much is achieved as she had anticipated, and indicates the need for teacher flexibility in the use of time.

On one occasion I asked Mrs Critcher to explain her purpose in telling the children they had five minutes to complete a task. She explained her insistence:

25/5:95 T: I'll give you five minutes and it ends up being fifteen…

25/5:97 T: Just trying to get them hurrying up a bit more. Both Mrs Marshall and I felt that when we came into these classes that there was like a presence (attitude) that it wasn't important if things didn't get finished ok.
25/5:106 T: And you – (unclear?) they've got to finish it, so 'You'll stay in late'. (R: Meaning lunchtime?) Yes, yes, yes.

Because some children are not as quick as others in completing tasks in class, they are allowed to return to the classroom during their lunch break if they desire to complete unfinished work:

2/6:254 T: Some children, they are not slow, but they are just slow at doing their work, do you know what I mean? (R: Yes)
2/6:270 T: Everyone who comes in –they just need more time than the other kids who are quicker at it –that's all.

The following interaction could also be placed in component 6, 'Control is possible' and the democratic classroom culture, but ideally it is as much to do with learner enjoyment and the teacher's flexible approach to organisation of time. On the Wednesday, the first group presentations of project assignments to the class took place, and the next afternoon the teacher mentioned that the rest of the presentations had occurred that morning:

9/6:63 T: Well, I was going to leave it 'til next week but the children were just so keen and we thought 'Well, we can't'. It would be a shame to (word unclear, leave?) everything for a week. (R: Yes)

The enjoyment of the assessment processes created activation energy for the learners. A flexible attitude to time was the teacher's response to their desire to complete their assessment tasks. The noticeable issues here are the teacher's flexible attitude to time in her classroom, and the importance of a classroom culture which is responsive to the evidence of learners' activation energy, their enjoyment of learning and the democratic

processes which allow the learners, where possible, to have some control over their learning.

5.1.2 We must be able to concentrate on the task (Component 2)

Being able to concentrate is the second component of flow. Csikszentmihalyi (1997a, p.8) claims that in flow, concentration is deep and attention is focused on the task at hand. The communication and observation addressed in the next paragraph is placed here in component 2, concentration on the task, although it might also have been placed in component 8 where the sense of duration of time is altered. Although I was aware of the whole class deep concentration happening several times during my observations, this is the only time it is reported in these findings.

Concentration, while being the function of an individual, is often required concurrently for the class. At those times Mrs Critcher gathers the children in front of her on the floor, and while sitting, the children have nothing in their hands. (T 30/6:153) Reasons for sitting on the floor are both educational and social. Educational reasons include giving directions, organising learning tasks within the class, democratic decision making, class meetings speaking of things happening at the school, language skills practice, singing, some maths, and group work. Some lesson content can be talked of and discussed more effectively when the children are together on the floor. (T 30/6:143-150) Csikszentmihalyi (1992) reports on how a culture can build opportunity for flow into its life-style. Several times I observed as part of this Year 5/6 classroom culture, the concentrated attention given the teacher by the 60 or so children, in what appeared to be a suspension of time, or flow experience. An observation of this event is written below.

A small bell is used to suggest to the children 'OK I have to get ready to finish what I am doing.' This is followed by a clapping pattern which indicates that it is time to stop (T 9/6:202-203). Mrs Critcher has not found success with other methods of gaining children's attention (T 9/6:209-210):

> *9/6:2 Research Observation: …The children are very responsive to this clapping pattern, clapping their response in return. The children's particular response is expected and non-response is not tolerated. Stop what you are doing and listen to the teacher.*

> *9/6:3-4 Research Observation: The teacher sat on the low chair and all the children were now seated on the floor in front of her. Very soon after the teacher began to speak, it was as if time stood still.*
> *9/6:5 Research Observation: In my perception of it –it was as if the children were somehow floating above the ground and the respect shared between the teacher and the children was so 'thick' and I thought to myself that I could actually 'feel' that respect, it was so dense.*
> *9/6:9-11 Research Observation: The children were concentrating totally on the teacher. Some children seated toward the back of the room had their mouths open. For an observer time was suspended, it was a fascinating period of time.*

I asked Mrs Critcher what she thought were the combination of events that created what I perceived as the suspension of time. She observed that seating senior primary children on the floor has been unusual. They have been expected to sit at their desks *'and that's where they stayed all day'* (T 30/6:130). She continued:

> *30/6:132 T: And I've always found it really difficult to speak to children like that –'cause it is too far away.*

30/6:133-134 T: So when I want to speak to children …about particular things I want them –that's done on purpose –that close feeling –that 'this is important, we're here together to discuss this' without having to bellow your voice right to the back of the room.

Mrs Critcher, who values the social reasons for the class gathering, has had to insist on acceptable standards and on self responsible student behaviour:

30/6:135-136 T: And, I think it's really good too, because they get to sit next to different people on the ground, …they just come and sit down and it's always interesting to look at the children who like sitting at the front, and who like sitting at the back, and the amount of boys who actually sit at the front.

30/6:138 T: …we always give them the option, 'If you're sitting beside anybody who is going to disturb you or talk to you, move now.'
30/6:139 T: And there'll usually be two or three children who just get up and move. …And that's really interesting; they just do that off their own bat.
30/6:176 T: …We've had to really push that. At the beginning we had to actually move children and we had to speak to them about 'when we are speaking we don't expect you to be talking.' And things like that.'

She (T 30/6:140-141) also speaks of a feeling of closeness, and intimacy, and of the children sitting close by her playing with her feet. She comments: *'…It's really amazing, and it's just that closeness.'*

30/6:151 T: And they (the children) seem to be very focussed when they're on the ground. To listen really well, because they're all listening.
30/6:174 T: It is a time when they understand it seems –that this is when they listen. And they are willing to do that.

To the observer, there appeared to be focused concentration on the teacher's words. Csikszentmihalyi (1997a, p.9) claims that 'in everyday life, it's not very sure that your body and your mind are in the same place', and Peter confirms this claim by admitting (29/6:37), 'I'm looking at them but I'm not thinking about them.' Certainly there was a focused concentration on being still. The teacher unequivocally expects them to be quiet: *'...we don't appreciate them not being focused when we want them to.'* (T 9/6:199) Some learners, notably Maeve and Andrew, value this time on the floor, believing it to be helpful to their enjoyment of learning.

The deep concentration happens as well for the students, in the half hour mandatory reading period each morning:

> *9/6:232-233 T: And we thought ...we were thinking 'Oh – ½ hour, maybe we can only get 15 minutes out of them being quiet'. Not once have we had to cut the time short. The children are just so engrossed.*

Mrs Critcher mentioned several times, the importance of the teacher facilitating learning skills by modelling the behaviour she wants the children to learn. So the classroom culture includes the teacher's modelling skills. For instance, while her associate teacher reads to the children each morning, she as the support teacher, makes a point of listening:

> *9/6:220 T: And um –and so, I make a point of listening. So I try and make a really big point of not doing something at my desk. I'm actually sitting there and I might have some good (unclear) and I'm actually listening and marking. And at the end of the chapter, I can say, 'Oh gee, I really liked it when –this happened.*
> *9/6:221 T: So the children actually see that other people can listen too.*

Referring to reading she said, *'...but we modelled that for 15 or 20 minutes.'* (T 30/6:30). The teachers also modelled writing (9/6:224), gaining enjoyment from learning skills and new information and sharing those (9/6:43-59) through presentation of learning (9/6:329).

Csikszentmihalyi (1992) writes of the structure and rules of games as a source of flow and how a culture can also have a structural framework that enables flow. Mrs Critcher's classroom culture appears to have some likenesses to Csikszentmihalyi's description of the structural likeness between games and culture:

> Both (games and culture) consist of more or less arbitrary goals and rules that allow people to become involved in a process and act with a minimum of doubts and distractions.
> When a culture succeeds in evolving a set of goals and rules so compelling and so well matched to the skills of the population that its members are able to experience flow with unusual frequency and intensity, the analogy between games and cultures is even closer. Csikszentmihalyi, 1992, p.81

Such a culture, as described by Csikszentmihalyi, helps to eliminate the chaos from life, and to facilitate deep concentration and the experience of flow.

An important consideration is that of the teacher who can not assess the learners' needs successfully, does not understand both how to apply flow-relevant teaching methods of balance between skills and challenge, and promote learner control in the classroom. For them flow experiences in learning will happen serendipitously. For instance, Mrs Critcher did not initially understand the combination of events that led to the children focusing their attention and being totally immersed in her introduction to lessons. She believed 'magic moments' 'just happen' rather than being the outcome of structured and balanced events.

Csikszentmihalyi (1992) writes of taking risks as an aspect of facing challenges and for a growing skill development. In this Year 5/6 classroom culture, Mrs Critcher has established a pattern of a teacher who is willing to take risks; promote learner responsibility; and insist upon expectations of unequivocal response to limited but specific behavioural demands. She explains the challenges, suggests the means for learners to solve the challenges they will face, endeavours to support them as they attempt to solve the challenges of their learning tasks, and models the skills that are to be learned. Mrs Critcher has established a classroom culture that appears to facilitate the opportunity for both the teacher and the learners to experience flow, or at least real enjoyment in some aspect of their classroom experience.

5.1.3 The task undertaken has clear goals (Component 3)

The concentration on the task is usually possible because the task has clear and understandable goals. This section includes the teachers' understanding of the lesson goals, the manner and type of introduction, and how the goals are presented.

How a teacher conceives of and introduces the goals of the lesson impacts on how the learner might achieve in that lesson. I became aware of the teacher's need for a clear understanding of the learning task as I observed two different Year 4 lessons on writing a limerick. The same lesson was introduced by different teachers one week apart. The first week:

> *There was quite some confusion as the children tried to create a limerick for themselves. The teacher and I worked hard going around to the children giving them the assistance they felt they needed (Research Observation 20/3/99:9).*

In the second week another teacher introduced the same lesson in a different way. During the introductions limericks were read aloud, the children were told of the structure and rhyme, beat time to the rhythm, and created a class limerick as demonstration. Both lessons were introduced as information processing lessons. Neither teacher had explained how to solve the problems of writing a limerick. In the second week there were still two children who came to me and said, 'I can't do that.' I wrote in observation:

> *How the lesson is introduced (How the goals for the lesson are presented) must clearly be associated with what the children must do to achieve the goals of the lesson. If there is a problem (challenge) to be solved then the introduction must explain the problem (challenge) and offer the children ideas for how to respond to that problem (challenge) (Research Observation, 20/3/99:15).*

Later in the day I wondered how a teacher's conceptualisation of the lesson might influence its introduction. Any learning task has a multiplicity of challenges and outcomes; therefore the teacher's introduction must provide all the information the learners need to engage with in the learning task.

The teacher's attitude, beliefs and the energy used to uphold what is perceived as important in the socialization of the learners, influences the particular goals for learning in the culture of that classroom. Commenting on socialisation, Csikszentmihalyi claims

that, 'socialization not only shapes behaviour, it also moulds consciousness to the expectations and aspirations of the culture...' (Csikszentmihalyi, 1997, p.77).

Having high expectations for learning, influences how Mrs Critcher introduces her lessons. She believes:

> *High expectations should always be kept, otherwise the bar is continually lowering & where would we be in the future (Mrs Critcher's written comments, April, 2002).*

She further claims that, *'the instructions have to be fairly clear and concise, and ...usually done in blocks (stages).'* (T 30/6:162) In effect any learning task will have a variety of layers, with a multiplicity of goals. If lessons are related in some way, then each stage of learning is approached separately:

> *30/6:158-159 T: Oh you can't give them too much at a time. If we are doing a reading activity, and they have to do particular things after it, we'll just concentrate on that reading activity...*
> *30/6:160 T: ...and there'll be three or four things, no more than that, because they'll never remember it. They'll just get the third thing and forget about it.*
> *30/6:161 T: But, I also back it up by putting it on the blackboard. So they can refer back to it, and say, 'This is what I have to do.'*

When introducing a maths concept, the children sit on the floor around the board with their books and pencils on their laps. Mrs Critcher explains the concept on the board and the children sit on the floor doing their work. She can glance between the board and the children to see that they know what to do. When children understand the concept they are free to return to their desk:

30/6:168-169 T: I'll keep others on the floor with me until I feel quite comfortable and I know they're alright by themselves…

30/6:172 T: And the children are very responsive to it. They know they're all sitting together, and they're listening. Everyone is, and they're waiting to hear what's going to happen and things like that.

And with setting the goals for the student's writing:

9/6:273 T: Well –um –I guess not accepting –like we've got different books for different things –um like we've got draft writing books and I don't really mind how they write in those books and what happens, you know 'cause it's just their writing.

9/8:274 T: But there are other books that we have and you expect it will be quality out of those and I guess that sometimes you have to be really hard. Like I have to rip pages out and I've said, 'It's not up to the standard that I would accept and you will need to do it again.'

9/8:275 T: …Sometimes they can be lazy and they just need a little kick start so, 'No I can't do that'. And they accept it really well.

The class is shown precisely how to go about each task, and what is expected from their efforts.

Jackson and Csikszentmihalyi (1999) refer to different levels of enjoyment. While the following extract may not reflect a flow experience, it is an example of a classroom culture where enjoyment of learning is demonstrated through the lesson introduction. Mrs Critcher was explaining the expectations for the assignment, and what she had learned about the topic. Several times I had noticed her real joy in introducing the lesson and the children's excitement as she talked:

2/6:68 R O: They (the children) appeared to me to be quite excited about what they'd learned and what you had learned –because you were really dancing –do you realise? (T: No)
2/6:69-73 R.O: It was, -you had learned something really interesting, that's how it came across (T: Yeah) and they caught that feeling, well –I caught it and I believe that I was watching them catch it too (T: Yes) that excitement in learning.

9/6:43-44 T: um –and the excitement was I think, --came through the sharing of the knowledge you know, -the things the children have learnt and the things that I have learnt and –I think that it was like a little celebration of the learning that you can actually share with other children –and know –
9/6:45-47 T: -I had to do –because I didn't know a lot about the topic –...both Mrs Marshall and myself had to do a lot of reading up on that and particularly when we gave them (the children) their topics we had to do a lot of knowledge building for ourselves too.

9/6:320 T: They (the students) need to know that teachers are also finding things out as well, that they are learning –and learning things –and um –sharing the information.

Csikszentmihalyi (1997) argues the need for facing continued challenges as an aspect of growth and enjoyment in living. One part of Mrs Critcher's classroom culture involves her in continuing with the deep enjoyment of her own growth and development, and this appears to be what she is able to share with the learners in her introduction to the lesson.

Mrs Critcher identifies the importance of the teacher being highly organised and having a clear understanding of the teacher's goals, the challenges the students will face, and what is expected of them. The skills and resources the children will need to work successfully on those challenges, is another teacher requisite:

9/6:312 T: I guess (big breath) I just feel, I guess I feel that if I didn't do it (find the necessary resources for the children) then the children wouldn't have the equipment, they wouldn't be set up and I would be making a rod for my own back.

9/6:314 T: But I guess that is part of your –to make sure you're well equipped. You know that you have things ready for the kids to use. Other wise you can't get the work out of them that you want out of them, because they don't have the equipment themselves.

Mrs Critcher connects her continuing learning to sharing excitement in learning with the children.

5.1.4 The task provides immediate, comprehensive feedback

Feedback found in flow is that which arises from focused engagement in an activity. Feedback in teaching comes at several levels. One source of feedback is interaction with the learning processes as the teacher is teaching; another is the external feedback that influences the structured system of action in teaching which can come from interaction with others, and which impacts on the enjoyment of the teacher in her professional life.

As she focuses her attention on her task of teaching, the feedback Mrs Critcher is responding to is whether the children in her class are showing signs of developing learning skills, understanding concepts, learning information or gaining social and emotional skills. As Mrs Critcher comments about observing children develop their skills, and the various endings that the children had written for the story:

2/6:32 T: We wanted the feedback from them of the things that they might have learnt or from their research that might have come up and that they would actually put into the notes that we wanted them to do.

30/6:42 T: I'm just seeing them enjoy singing, and moving and like, just the energy that they have. It makes me feel good.

30/6:48-50 T: …and just seeing them do things…like writing …different endings to that story today…that was part of the big thing they were doing. And you would hope that they would understand the book. It's not until you read some of their endings that you actually realise how well they understood the book, and how much they enjoyed it.

30/6:57 T: …But just those little things. It's really good, very good.

Csikszentmihalyi writes of external feedback,

> But most people rely on external cues for getting into flow states, so we might speak of flow activities as those structured systems of action which usually help produce flow experiences. Csikszentmihalyi 1999, p97

I asked Mrs Critcher what else brought enjoyment for her from teaching and she mentioned some of those external feedback cues:

30/6:59 T: …watching them grow, and getting better at doing things. And other people, I really like other people saying nice things about the children, because I see nice things in the children.

30/6:60-62 T: And it's nice for other people, -like Miss Morley said today, …Grace had improved so much in her oral reading, and I had noticed that myself, but it's good for me to say that to Grace, but also for other people to say that.

30/6:63-64 T: And just seeing them –What I also like is that children I have taught in the past have still come up and say hello, …I was at the Service Station …and there was a tap on my back. I turned …and here's this boy …I never taught him …I actually taught his brother…

30/6:70 T: ...So it's really nice, and that happens quite a bit, and that's really lovely.

Student-led conferences were also a source of positive external feedback for Mrs Critcher during that term. They were also significant for facilitating learner control of learning. The children are shown how to conduct the conference and given the responsibility to show their parents what they have learned in the classroom. Throughout the conference she noted that the children were able to verbalise what they had learned. There was real satisfaction for Mrs Critcher because only one parent was not able to attend:

30/6:17 T: Well, we've just had our student led conferences, ...and the response we got from parents, they were extremely happy, and extremely happy with how happy and self motivated their children were.
30/6:20 T: ...those student led conferences went from ½ hr the minimum to 1¼ hrs where parents stayed and talked to the children about their work.

Mrs Critcher's teaching skills are appropriate to the challenge of the task. She can therefore relax and find satisfactory internal and external feedback at several levels of her teaching experience. Teaching for Mrs Critcher is a deeply enjoyable activity. There is further evidence of flow experience in Mrs Critcher's teaching presented in component 7.

5.1.5 There is effortless involvement; no awareness of worries and frustrations

The fifth component of flow requires one acting with a deep but effortless involvement that removes from awareness the worries and frustrations of everyday life. As noted

previously, flow is an individual phenomenon. It requires a particular structure to the organisation of the activity for the flow experience to occur. The classroom culture and physical environment can each have an impact on this experience. Mrs Critcher comments that:

> *Schools & classrooms should be a place where chn (sic) feel safe, comfortable and able to take risks with their learning. It's so impt (sic) to build up an environment where this can happen. TRUST between T (teacher) & C (children) enables this to develop. It's always great to see chn (sic) exploring their own limits in diff (sic) areas (Mrs Critcher's written comment: April 2002).*

This environment includes the physical structure of the school and classroom. Writing of flow in sport, Jackson and Csikszentmihalyi (1999, p.70) note how 'even the physical attractiveness of these settings (sports venues) can influence athlete's quality of experience.' Certainly, when engaged in the reorientation to the primary classroom, and working in an inadequate room with cracked paint, I noted how a facility can influence the quality of experience. Later, when comparing the 1930 era Year 4 classroom with the much newer Year 5/6, there is a distinct physical difference between the two classrooms. The former is old and the room is too small for the needs of the class. Its uncomfortable nature produced frustrations for the teacher:

> *In this (Year 4) classroom everything is old and not cared for. The walls are cracked, the air conditioner leaks, the room dark; artificial light needed on most times. There is not enough seating for all the children around the grouped desks because the room is too small and some of the desks have been taken to situate three computers at the back of the room.*
>
> *Children willingly take turns in sharing the back desks with the computers, with little room for their books. They sit facing the side walls away from the*

teacher who stands at the front of the room; they need to turn to see her. If the class is asked to sit on the floor, they cram between the grouped desks, some children peeking around the furniture to see the teacher (Research Observation 6/3/99:1, 2).

The Year 5/6 Classroom is a newer building, cream brick and glass, open and airy:

There is such a contrast here (Year 5/6 classroom) to the Year 4 classroom. Here there is more than sufficient room to walk between the grouped desks. There are grouped desks for the computer area and containers where the children put the books and materials they are not using.
A combined classroom, there is an area at the end of the room, between the two classrooms that is kept for combined class activities and there is sufficient room there for the 62 children of the two classrooms to sit comfortably on the floor facing the teacher. Different activity groups can work there, seated on the floor around the low cut plastic tables (Research Observation 16/5/99: 4&5).

I was so shocked on stepping back into what I perceived as the Year 4, 1939 classroom that I did not write my initial personal observations of that experience. However, in retrospect it seems to me that the difference between the two facilities must influence what each teacher feels able to achieve with the children. If, as Jackson and Csikszentmihalyi (1999) claim, the physical attractiveness of a sports facility can affect the quality of experience of an athlete, this would also be the case for the teacher and learners in an inadequate school classroom. The frustrations and worries of daily life would not be alleviated by a poor physical environment.

The school where the Year 5/6 class is situated is organised as a multi-age school. There are usually at least two and sometimes three age groups in any one classroom. It is actually like a family:

> *10/5:9-14 T: So that's the whole point of the multi-age, the social implications, social relationships amongst kids. ...you've got Year 5, you've got Year 6, there's a big mixture, it's not just sitting in little blocks, and I think it cuts down on that mentality that they're better than the other kids, that they're superior, that you can sometimes get, you know, that they're king of the roost? They're actually not.*

In this multi-age classroom, the children are ability-grouped for different subjects such as maths, and spelling. Ability-grouping noticeably facilitates three functions for the learner. It (i) lessens anxiety for the children as they learn with peers at their own ability level; (ii) it enables the matching of challenges with the skills of the learners; and thereby (iii) promotes learner control of the learning tasks:

> *10/5:51 T: So there is a lot of flexibility and so you can really gear into exactly where they're up to and you can put them into all those types of groups.*

In learning activities the able Year 5's have educational peers to work with, and the Year 6 students provide able models to facilitate the growth of the Year 5 students.

After a reorientation term in the Year 4 classroom where there had been just a little verbal interaction among students, I came into this Year 5/6 classroom a few weeks later. I wrote of the Year 5/6 interaction:

> *All the while in this classroom there is an amazing amount of children interaction happening. Expectations of a quiet classroom, an integral aspect of my childhood experience, are not expected in this extended family learning environment. They are allowed to communicate with each other and several comments made on tape indicate that they value that permission to communicate as an aspect of their learning environment (Research Observation 10/5:39, 40 & 42).*

When asked about what made learning enjoyable for her, like most of the other learners, Lisa (22/6:86) said, *'Umm, I don't know –kind of working with my friends I guess…'* Mentioning that friendships are not always positive, Csikszentmihalyi states however, that 'The most positive experiences people report are usually those with friends' (1997, p.78). He also notes the importance of socializing for well-being:

> Compared to the other main features of the social environment, however, friendships offer both the most emotionally rewarding contexts in the immediate present, and the greatest opportunities for developing one's potential in the long run (Csikszentmihalyi, 1997, p.79).

Mrs Critcher reports that:

> *Most kids enjoy working with friends but there are a few who enjoy working by self (sic) most of the time. Personally I don't think children should work by self (sic) all the time – It's really imp (important) to build up team relationships (Mrs Critcher's written comment: April, 2002).*

I had noted in the children's reports that in a recent assignment, they had included items about the topic of the assignment, and items to do with social interaction. I asked the teacher what part she thought effective social interaction might play in enhancing efficiency and enjoyment in learning (Teacher Interview 30/6:119). She spoke of the value she perceived for the children in having an opportunity to reflect on and compare the outcomes for their learning groups in action:

30/6:120-121 T: ...I think it made them have a very good look at themselves and say, 'Why didn't my group go as well as the other groups?' And I think that when they looked honestly at that, they could see that they didn't cooperate in a group, that there was bickering within some groups, and the groups that got on straight away with the job and got their tasks all right, they had a lot higher quality work.

Mrs Critcher reported that children who do not respect others or their possessions (T 9/6:141-147) provide a challenge for classroom management. While I had observed negative behaviours, I thought I had observed a high degree of respect within the interactions in the classroom:

9/6:152-154 T: Mmmm, yeah, I only wish I felt it. I can see the majority of kids have (respect) but there are some children that don't have any respect and I guess you always look at the few children and not the total package.
9/6:157-161 T: Yes –but still you've got the niggly little ones that you just think 'why can't they be nicer to other people?' ...(R: Mmmm) You have to be very, very careful -'cause you –feel like you're sometimes thinking –well you're fed up and you're focusing too much on them.

I had observed at least one boy who appeared to irritate Mrs Critcher, and asked how she handled different types of children in the classroom:

9/6:342 T: And um –it's been very tough at some times –particularly with some (unclear, insecure?) children. You have to be really positive all the time.

Even so, Mrs Critcher appears generally able to maintain an attitude of acceptance and tolerance. She mentioned that she has teenage children and so feels aware of what children are like, and understands that they do 'dob' or 'tell tales':

9/6:284 T: ...I guess it comes into your expectations – ...Some people believe that children will be completely honest –well –they're not! (Laughter)

9/6:285 T: ...they lie and tell tales and you just can't believe them. And you just have to accept that that is what they do.

9/6:344 T: (The teachers)…try to get rid of it (the problem) very quickly without a big build up to much.

She also mentions the need to be upfront or direct with children, to facilitate their capacity to grow to emotional maturity, and to leave the problems of the past behind. Bridget had had a 'bad day':

9/6:289 T: I will say to her (Bridget) 'Look you had a bad day; there is no need for that to carry over into today… And notes,

9/6:292 T: I try to do that, like if kids do have bad days or if they're upset or if they've done the wrong thing –the next day it's like a fresh start.

Even though Mrs Critcher perceives a lack of respect among a small number of children, she also said that it is valuable for children to learn applicable relationship skills, and notes how the life experience of one child can provide information that benefits the others. The data indicate that children are aware of this fact themselves. She comments:

30/6:122 T: A little bit of tolerance with other children –what they learn off other children will be so beneficial, that their learning would just sky rocket.

Because of her strong belief about the importance of social relationships in learning, Mrs Critcher has evolved a culture in her classroom of developing relationships as an integral aspect of everyday life. She changes seating relationships each week by 'picking names out of the hat'. Her choice is predetermined, even though it looked like *'I just grabbed it*

out, it was never grabbed out, it was always organised.' (T 9/6:252) By not allowing any ownership of space in her classroom, Mrs Critcher hopes to facilitate greater control of learner relationships and learning. She hopes that the control of seating can alleviate power groups and cliques, keep disruptive learners apart, and facilitate social strengths and peer support. This will in turn alleviate some learner anxieties and teacher concerns:

> *9/6:242 T: I'm a big one on non-ownership of space….*
> *9/6:244-245 T: To me it was really important that they just didn't stay with the same group of people, that they actually expanded their friendship groups. And to get children to do that, it's just impossible unless you split them on purpose.*
> *9/6:255-256 T: But to actually wreck somebody else's learning time –that's not fair. You know –so we had to make sure that didn't happen. And even though they didn't like sitting boy, girl, boy, girl, they got used to it.*
> *9/6:269-270 T: ...and to break up groups like –particularly peer pressure, like boys groups. And they don't accept other people. So that's been quite good too.*
> *9/6:267 T: But they also help each other quite a bit too and I've on purpose put Britney (a bright girl who works) next to lesser capable people.*

However, observations reported in Chapter 4 indicate that this process of pulling names out of a hat and having learner choice of desks is not always handled carefully by the children. It may for some be the source of negative social interactions.

Mrs Critcher also noted the importance of the relationship between the teacher and learners. She had read the quote from Csikszentmihalyi (1975, p.20): *'It is not only what should be taught to children that is important, but also how it should be taught.'* She responded:

How true! It is also the relationship that is built up between the teacher & child. It's so impt (important) that chn (children) know that their teacher is doing their best for them & wants the best out of them (Mrs Critcher's written comment. April, 2002).

The Year 5/6 classroom culture is open and friendly. There is an air of excitement and friendliness in just arriving at the door (Research Observation 22/6/99:3). There is no military style pressure in this classroom to conform to an external image of control and order. I wrote about this in one observation:

In this classroom, it would seem that part of the joy of entrance is the obstacle race the bags create at the front door of the classroom. There is an air of excitement and friendliness in just arriving at the door (Research Observation 22/6/99:3).

This was in stark contrast to my observation of a Year 4 classroom culture where:

I feel as if I've stepped back into 1939 except for the grouping of the desks. The room is old, one of the originals, it is cracked and unappealing; the teacher stands and talks, the children all sit, straight backed and little interaction is allowed.

The bags outside on the veranda are placed in neat order or, as is the case on most mornings, the culprit who left a bag out of place is 'accused', 'someone might trip over the bags', and then sent outside to bring the bags back into military style order again (Research Observation 27/2/99:1-2).

The issue for Mrs Critcher is time and learning:

30/6:181-182 T: To me it is just a really minor thing. If I was worried so much about getting their –if I had to send children out to tidy up the bags when they would be missing out on things that we are doing in the classroom. …It's not something I would even think about fixing up.

Of the Year 5/6 class, my observations confirm that *'I was never aware of anyone tripping over the bags on the times I visited over the term,'* but I did see children take pleasure in making *'running jumps over the bags'* as they approached this classroom door (Research Observation 22/6/99:4-6). The issues of social interaction and the school bags provide examples of the relaxed atmosphere of the Year 5/6 classroom culture and Mrs. Critcher's belief that learning should be experienced in an atmosphere that feels as comfortable as being at home.

A classroom culture where friendliness, social interaction and trust are viewed as normal, acts to limit the frustrations and worry that can become an issue in some classrooms. This is noticeable in this Year 5/6 classroom even during lunch break, and when discipline is the issue. There is time set aside to eat outside the classroom, and then the children are free to return to complete unfinished work, work on the computer, or attend the classroom for disciplinary reasons. I was interviewing Mrs Critcher during her lunchbreak in the very noisy classroom, when a child spoke to her, saying he had completed his tasks for a classroom infringement. Mrs Critcher answered *'Right-e-oh, off you go.'* He responded to her with, '*Thank you, 'bye'. S*he turned to me then and said, *'They'll take all their friends with them now'* (Observation 9/6:279). Discipline in this instance, is less about punishment and more about accepting responsibility. Another child wanted a particular worksheet: *'The interesting thing about all this cheerful activity is that it was during the children's lunchtime'* (Observation 9/6:279).

Part of my background involves being a leader in a Friday night primary age kids' club. I knew how much children and their parents found pleasure in the gift of a lollypop or a

bag of sweets. I found this same pleasure used as an affirmation in Mrs Critcher's classroom. The teachers have a 'chance ticket' as a means of affirming children in their growth and learning:

> *9/6:352-354 T: And during the week if we spot children doing the right thing –it could be anything –like (a spelling quiz)…we might say to them 'We're looking for people that are really listening' and we give out chance tickets and put them in a bucket. Um, -and we try to give quite a few out, to be positive. (We give out the lollypops) on Fridays, before they go out to lunch usually.*
>
> *9/6:356 T: And they just –we pick out six boys and six girls and it is just a chance ticket and they know it is a chance but they have to be in there with a chance.*

The children are not always told they are in the chance bucket so they get a 'big surprise'. When the ticket is drawn, the child is told why it was awarded. In this way the positive behaviour is affirmed in two ways, the acknowledgement and the lollypop. Being the best boy and girl singer is also reason to receive a lollypop: *'...It's amazing how well everyone sings'* (T 9/6:361).

5.1.6 People exercise a sense of control over their actions (Component 6)

In principle, Csikszentmihalyi (1997a) writes, success is in one's hands. Control of the task in flow is specifically related to an individual's ability to perceive a sense of control in each aspect of the learning task, or of not being concerned about a perceived lack of control. Learner control might also be facilitated by consciously teaching skills related to the challenges of learning, and by a principled and democratic classroom involving

children's opinions and voices being heard about criteria for group behaviour, assessments, and decision making. Csikszentmihalyi, speaking to Montessori teachers stated:

> Freedom –allow control over the activity. To give more control and freedom gives even more interesting options. We must set the course for life-long learning (Quoted from Csikszentmihalyi, 'The Evolving Self' 1993 in Csikszentmihalyi,1997a).

Mrs Critcher has evolved a strong sense of democracy in her classroom culture and learner control is noticeable in several areas. One of these domains involves the level of talking noise allowed. Mrs Critcher and I had been talking of the children's willingness to remain unmoving and listening while sitting on the floor when the teacher talked. Mrs Critcher observed that the willingness to be quiet may have been the result of other freedoms. An aspect of Mrs Critcher's willingness to allow elevated levels of talk noise in her classroom, is her whole hearted belief in the reality of children learning from each other:

> *2/6:175 T: And it's talking with your friends and talking and listening to other children's ideas and that's fairly vital to any learning situation.*
> *2/6:176-177 T: Um –We do require them to be quiet at certain times ...So they know how to be quiet. But we just don't think that's –the most important thing.*
> *2/6:178-179 T: And there's a lot of learning that can get done by sharing, and I think that a lot of people don't recognise that.*

There are short leg plastic picnic tables available for the children when working in activity groups. The democratic process in the classroom allows the learners the right to:

> *30/6:156 T: ...actually come down with that group of people, and they just go and get a white picnic table, and bring it down on the ground…*

The data reveal that choice as an element of control and enjoyment in learning, is extremely important for many learners. Mrs Critcher acknowledged that:

> *Chn (sic) I believe should have some control over their learning. They should be given a choice from a variety of activities that would suit them & their learning style. This, of course, has to be monitored closely. CHOICE –really impt (sic) (Mrs Critcher's written comment. April, 2002).*

Mrs Critcher also spoke about teaching toward self-directed learning:

> *10/5:54-56 T: …ah, you actually have to teach the children self-direction – like you actually have to give them a lot of um –I guess directed work to start with so they know what choices they can actually make.*
> *10/5:57-60 T: … by role modelling them on the floor, and getting different people's ideas, they actually could go back and actually do it –by themselves, -and think, 'Oh, that's what they mean by the questions. That's the type of things I should be looking for.' But even though it's self-directed, children making choices, the teacher actually directs it into that kind of thing. That they need a lot of direction of and expectation of what is expected of them.*

The children had also democratically set the categories for assessment, as well as the criteria that were included in each category. It is apparent that the teachers had set up a framework of learner control and help for each other in the classroom. Mrs Critcher believes that:

> *9/6:77 T: …And there is no point in (the teachers) putting in criteria that are important to us. It also has to come –you know it has to come from the children, the way they think also.*

> *9/6:99-100 T: Yes we have, and that's the whole point. …the children have to take a fairly good role in how… They gain guidance from us, you know.*

9/6:101-102 T: If they could have put something in there that was really irrelevant we would have to discuss that and say, 'Is it really worth it?' And I guess if they had really thought it was worth it, we would have left it there.

Fulfilling the criterion that everyone take part, was important to the learners, as was the quality of work presentation:

9/6:126 T: …and even children who were away for a week –and still handed it in –the other members of the group made them do something. They said, 'you have to do something' …and they actually wrote cue cards out for those children.

9/6:132-133 T: …-but we actually –how they wanted to present it, how they wanted to do it, some had cardboard, some had cue cards (Among the groups, one made a video and presented artefacts, one demonstrated dance, one cooked food, one made a model of the landform and one presented a play in the language of the people). *It was their own decisions –on how they wanted that.*

This ownership was also noticeable with the question time: the boys wanted the right for each person in the group to ask peers for questions. (Research Observation and Question 9/6:103) After discussion, Mrs Critcher had agreed with them: '*It's always great to see chn (children) exploring their' own limits in diff (different) areas' (Mrs Critcher's written comment: April 2002).*

In the following situation, even though the class had been doing a lot of writing, Mrs Critcher (9/6:222-223) perceived a lack of depth in the children's ability to write and their ability to edit the work:

9/6:224 T: …We're doing lots of modelled writing we're doing this and this. And yet we're still not getting what we want out of the children.'…

To address this issue the teachers surveyed the number of children who read for at least half an hour every second day at home. There were 6 of the 62 children (T 9/6:225-227):

> *9/6:230 T: So we said, 'We are really going to focus for the rest of the term. So we have a chapter reading everyday (teacher reads to class) which takes about 15 or 20 minutes, and then they have ½ hour reading their own book.*
> *9/6:232-233 T: …The children are just so engrossed. They are just sitting there with books at their own level. They chose those books.*
> *9/6:236-237 T: And I think that down the trail you'll see a difference in their writing. Particularly if we give them the structure in their writing that we want, you know, and hopefully some of that richness will come out. And we'll see how we'll go.*
> *2/6:138-141 T: Well you have to teach them,…–we've taken virtually a term and a bit and we've really given them specific examples of how to edit their writing and what we expect out of it and as a person editing another person's writing we've given them particular roles of what they have to do in that. ….*

As Andrew said to me:

> *15/6:53 ANDREW: …I remember things the teacher taught us and things I've read out of books (R; Yes) and I like to use them in a story (R: Yes) and it ends up a good story because I think that if I didn't read books –I don't think I could write very well, --write stories.*

Mrs Critcher (25/5:149-160) also talked about having the children compare pieces of their own work, like types of writing, while using a criterion for self assessment, giving a score, and commenting on their work. She also allows opportunity for children to offer

opinions, interpretations, and make comparisons between cultures and events without judgement or criticism.

The multi-age classroom offers children the opportunity to make choices. The learners' approaches to the questions they answer will differ, and their stage of development will influence the quality of answer that they give to those questions. Mrs Critcher suggests that when the Year 6 act as models for learning skills, they have a positive effect on the Year 5's learning skills in a multi-age classroom as well:

> *10/5:28 T: Oh, they (Year 5's) will have just so much better skills. Their skills will be so much better because they are learning all the time from the Year 6's now.*

The ability groups in the Year 5/6 classrooms also offer opportunity for self-responsible control in learning. Mrs Critcher (10/5: 199) notes, 's*o there was a lot of choice in this – as well.'* The teachers allocate the children to the ability groups. The learner has the right to negotiate a change if he or she feels incorrectly placed. Care is taken that children do not just choose the easy option:

> *10/5:204 T: ...but there were some children who actually opted to go back into Year 5 because they just found it too hard.*
> *10/5:208-209 T: And they're happy there because they're actually getting things right, you know, they're doing work that they're capable of, --they're achieving instead of always feeling like they're behind the eight ball.*

Teaching for self-directed control in learning includes recognising the specific giftedness of individual learners. Mrs Critcher, speaking of one child, comments:

> *10/5:68-71 T: He takes so much in, but if you look at his normal written work, you'd think, 'Oh gee, he's a fairly, you know, average –child –with not*

much ability.' But when you actually listen to him, he's actually got so much in there, so, that's why it's actually good to do a –whole lot of things together, so he can shine in those areas, I guess.

Her own lack of knowledge is used by the teacher as a source of modelling learning for the children. Neither she, nor her associate teacher, pretend to know something when they don't:

25/5:128 T: We say like, 'We don't know that.' That's part of the learning process; we'll go and look it up. (R: Yes)
25/5:129 T: Also we often tell the children what we've done. ...And so they (the children) can see us in the process of learning.

Another area of control is that of classroom discipline and interaction between teacher and learners. One issue here is the children's right to enter the classroom before the teachers have returned from recess. On one particular day the teachers returned to find some children rolling on the classroom floor. All children were promptly sent outside. The children concerned were asked to acknowledge their involvement. These children were told to remain outside (T 9/6: 166-168) while Mrs Critcher instructed the others:

9/6:169-171 T: The rest of you that we know we can trust to come in and go straight on with your work, are able to come into the classroom with us. And the children felt fine -'cause- they felt that was fair, because they thought it was unfair being shunted out.
9/6:171 T: There is such a fine line to give them responsibility.

The teachers say *'we want them to have the responsibility of coming in here, sitting down and start –getting ready…' (T 9/6:175-176).* The above example is part of the classroom culture of 'getting ready'. This is possible because the learners each have a time table and are expected to follow the program for themselves:

9/6:182-183 T: …so by the time the other teacher and I actually get up from the staff room, they're all ready, we're all ready to go. We're not coming in and saying 'right go, get your maths books, go here, do this' they actually know.

This 'knowing the time-table' is what Ross (15/6:103) identified as a source of his enjoyment in this classroom. Responsibility and self-control come at a price: responding to the demands of the classroom culture.

Maintaining the discipline of learner self-responsibility is a vital area of control in teaching and learning. Mrs Critcher and I had been talking about the children finishing or not finishing their learning tasks. There is a difference for her if the children have been working:

25/5:113 T: Yes, to not be working (R: Yes) and they're very aware of that too, and they know when they have been working.
25/5:117-118 T: And they think you know, 'Oh well'. Like even yesterday we had a couple of boys in at lunch time, they had to miss soccer trials, and they couldn't try out and we just said, 'Look if you don't use your time wisely, then you know, you have to face the consequence of that.
25/5:121 T: I think that if you let things go –without following up –then the kids have this um –feeling towards the work –that it's not important to get it finished –we can work slowly or we can make a half hearted effort and it's not –it's not a problem.

Referring to the instance of democratic control mentioned in component 1, it is noticeable that a classroom culture can evolve where learner control in the classroom can be facilitated in many ways. The children in this classroom are free to have their opinion heard by the teachers who are ready to negotiate the learners' control of as many

situations as is achievable. This is made possible where the teacher has a view of teaching and a classroom ethos which enables learner control. Such an ethos is beneficial to flow. Mrs Critcher had clear goals and expectations for the children's control of their own learning and was willing to seek ways to solve the challenges she faced.

5.1.7 Concern for self disappears; the sense of self emerges stronger after flow

I asked Mrs Critcher about her feelings when she explained the challenges of a learning task, provided information about the topic, and specified resources. The important issue for her is the message that is sent to the children:

> *9/6:326 T: Umm –I guess –really you feel really positive and fairly confident. That's probably where you could say the excitement or um –the suspension (of time mentioned in component 2) because –I was fairly confident in my knowledge of what I was telling the children.*
> *9/6:328 T: So I knew I wasn't making it up on the spot. ...it was actually correct and I felt very confident in myself doing that.*
> *9/6:329 T: Now if I hadn't found out the information it would have been a completely different message that I was sending the children.*

These elements of preparation create a learning environment where concern for self disappears and the self becomes stronger for the children. Mrs Critcher sees a connection between her modelling and presentation of learning to that of the children's presentation of their learning:

> *9/6:330 T: And actually, -when the children were presenting their information they were quite confident presenting their information and they*

were able to talk about it and put expression into the pieces of information they had. And they actually sounded like they knew what they were talking about.

During the group assessment where the class was free to ask the presentation groups questions about their topic, I had observed that the learners were not frightened of the questions. Mrs Critcher replied, *'no, no, it fascinated me too.'* (T 9/6:112) but she felt the questions asked were practical rather than tricky. I noted that there were some questions about content, and I had thought, *'Are they going to be able to answer?'* (R.Q. 9/6:121) She replied:

9/6:123 T: And they did throughout the other times too. They actually answered right throughout and they could actually talk about it.

My own observation confirmed this. The Year 5/6 classroom culture is one that encourages conversation and learner control. This strategy, of students questioning and answering each other, appears to help strengthen the self concepts of the learners.

Enhanced self esteem was also noticeable during the student-led conferences, which had been trialled in the school over the last two years. Mrs Critcher comments:

30/6:21 T: And the best thing – that I was going (through the classroom) and just walking around listening to children, that they could actually verbalise what they had learnt. And where they were going in their learning which I think is a really huge step. (R: Yes it is isn't it.) Yes it is.

Encouraging and making opportunity for self-responsible learning, and encouraging students to verbalise what they have learnt, leads the children toward creating an understanding of their learning in the future.

Children's enjoyment and sense of well being is noticeable in the classroom: *'...there is always someone beaming at me when I arrive.'* (R.O. 30/6:183) Mrs Critcher indicates that a democratic classroom culture considers factors that influence learner concern for self. This is particularly so when peers assess the work of peers. One group presentation which followed an especially high quality one suffered a lower assessment. The teacher concerned about the negative effect on students, explained her concerns:

> *9/6:67-68 T: Because that's not the point of it, it's not to write negative things, it's actually to look at what the group can do well you know? And there is something that every group can do well.*
> *9/6:69-71 T: You know it's just finding out the information that other people didn't know or the way they presented it or (unclear) and some of them, a group of them built models and things like that. So it was really good.*

Matt (29/6:73) explained how demoralised he felt about what he perceived as negative peer assessment of his project.

5.1.8 The sense of duration of time is altered (Component 8)

The only observation or conversation that related to this component of flow is that already presented in Component 2, relating to the need to concentrate on the task.

5.1.9 The outcome of all eight components: experience becomes autotelic

I asked what Mrs Critcher did that brought her enjoyment in teaching. She described a classic condition for flow in response. It is where new challenges are created and skills are developed to meet those challenges. She adapts things done previously, updates her

knowledge on how children learn, focuses on social skills, and finds enjoyment from the children's engagement in learning:

> *30/6:82 T: Yeah. (Laughter) That's right! I think the part of teaching I enjoy is changing, is changing constantly, what I am actually doing.*
> *30/6:83 T: I think I would be very bored with teaching, if I was still teaching the same way when I first came out, or …the same way as I was teaching five years ago. I know I would be extremely bored with that and I know the children would be very bored with that.*

> *2/6:156-157 T: Oh yes, and just trying different things all the time. Like even though I've done that (teaching children to edit their own and each others work) before, I've changed it every time and when I do it next year it'll be different again.*

> *30/6:84 T: And just, I also enjoy um, updating myself, looking at how children learn better and what we can do –I guess as a teacher to help them learn better.*
> *30/6:86 T: And try to develop those social skills in a nice caring environment. I think that's what I enjoy about teaching, trying to get that feeling through.* And later in our conversation:
> *30/6:197 T: Yes, we are really happy with what we are doing but we are always looking at how we're going to change too.*

> *30/6:41 T: Well …they never cease to amaze me …singing today, just watching them put the actions to the words.*
> *30/6:42 T: …just the energy they have, it makes me feel good.*
> *30/6:44-46 T: …everyone's got strengths. I certainly believe that. If they haven't got academic strengths, they've got really good interpersonal strengths, or, they're a really good friend to somebody, or, they can solve problems, or they're arty. They've got some kind of strength that's there;*

it's just finding that strength and making people aware of that strength, you know?

Mrs Critcher acknowledges that she has been fortunate to have bosses that encourage her innovation in teaching:

2/6:166-167 T: ...I've had very good bosses along my way that have really stressed the importance of learning and really pushed I guess –um –that issue right through all the teachers.
2/6:168-169 T: And that, I think comes through too. I guess if you have a boss that isn't interested in that, um, then you might become complacent.
2/6:170 T: But when you've got good bosses um –who are up to date and who encourage you to be innovative, then it is very good.

Responding to the comment that there is little research on enjoyable learning, she noted that:

Learning should be enjoyable but it must have <u>meaning</u> to it. There has to be a purpose for that enjoyable experience –academic, social, emotional – any of these purposes (Mrs Critcher's written comment. April, 2002).

Real or deep enjoyment experienced in flow, is the source of intrinsically motivated, or autotelic behaviour (Csikszentmihalyi 1997, 1992, 1975). In Csikszentmihalyi's opinion, educational psychologists 'fell into a trap' when studying children and learning. Engaging children in learning, he claims is 'affective, emotional, motivational, and not intellectual, not cognitive' (Csikszentmihalyi's 1997a, p.4). Mrs Critcher believes that learner self-responsibility and ownership of the task facilitates motivation in learning. She had observed that learner ownership had led to high quality in a recent assignment:

9/6:137 T: Yeah I did, and they took pride in it too, um –and they spent a bit of time out of class on it too. Like it wasn't all done in class but they

actually made arrangements to go around to people's houses, like the video, they actually did that.

This process of finding solutions for the challenges of teaching is important for Mrs Critcher. When I observed and commented that there was excitement in this process for her, she responded:

9/6:239 T: It is exciting. We both (the associate teacher) haven't done this (allocated ¾ to 1 hour each day to reading) before. You know this is new to both of us. And it is very hard for both of us because, it is a lot of time out of the day. But we felt that it was just really important at this time. We'll see how it goes.

She made that comment early in June, and by the end of June:

30/6:37 T: ...we're very happy with that, and we'll continue with that next term.

This mandatory listening and reading time where skills are matched to challenges and monitored by teachers, was mentioned to me as enjoyable learning by several children. For Mrs Critcher, the autotelic quality of her teaching is found in taking the risks of facing the challenge of her own continued growth as a teacher, and in identifying and facilitating the development and promotion of the potential strengths of each individual child.

The comment was initially made to me as a researcher that it would be hard to find a teacher to assist with my research because teachers are generally insecure about themselves. Mrs Critcher agreed:

30/6:88 T: Oh, I think that is a fairly true statement and I think that a lot of people (teachers) feel um- really threatened by other people coming in. And

it is not because they are not good teachers. I guess it is that they just don't like to be judged.

This insecurity may have an effect on learner enjoyment. Indeed, can teachers who have little capacity for challenging themselves with sustained engagement in, and enjoyment of continuing learning, actually challenge the growing capacity of the students in their charge? Mrs Critcher relates what she considered a common situation in school classrooms:

30/6:90 T: Because I know that my children had very few learning problems and they will cope. I don't think that my own children personally have ever been extended.
30/6:94 T: And I think that is quite common, which is a bit scary.

This comment reflects a situation in which skills are greater than challenge and is identified by Csikszentmihalyi (1997, 1992, and 1975) as a source of boredom, the antithesis of enjoyment, and the antithesis of growth in learning.

5.2 SUMMARY

This chapter has presented the data from observations and discussions with the teacher. The data identifies Mrs Critcher as a teacher who describes a typical flow experience and identifies her attitudes, skills, teaching methods, classroom organization and management, lesson introductions, processes, respect, the organisation for children's control of their learning, and classroom democracy as important elements for a classroom culture that facilitates the experience of skilled and enjoyable learning. The students' experience of flow (reported in Chapter 4) can be attributed to two aspects of

their school experience: the first is the skills and confidence to engage in learning tasks gained in previous years, and the second is the current teaching behaviours of Mrs Critcher. This is particularly evident in components 1, 2, 3, 4 and 6 and in her desire and capacity, even unknowingly, to model each of the components for the learners.

The following chapter presents the findings from three topical cases, and is followed by the conclusion chapter in which the findings are discussed.

CHAPTER 6

RESULTS: THREE CASE STORIES

6. INTRODUCTION

The stories of three students, Matt, Elise and Peter are presented in this chapter as examples of the enjoyment and non-enjoyment of learning in the classroom. The findings for each student are presented using the theory of flow as a basis for interpretation. Csikszentmihalyi (1992) writes that an individual's description of flow may include as few as one or two components, or as many as the nine. The predominant components that are taken to indicate flow in this research are the seventh component, the growth of self-esteem and the ninth component, its autotelic or intrinsically motivating nature, which is the culmination of the other eight. It was decided that three case studies would provide an example of the unique differences that exist between each of the respondents.

6.1 THREE CASE STORIES: MATT, ELISE AND PETER

Matt, Elise and Peter are very different in their skills, abilities and responses to learning. They each have something that they enjoy, and they experience their enjoyment differently. They also experience lack of enjoyment in learning. Matt shows evidence of enjoying learning which is primarily that of seeking meaning and of being an autotelic, self directed learner. Elise tends toward reproductory learning, and suffers from anxiety about her capabilities even in tasks she is capable of, which impairs her ability to deeply enjoy her learning. Peter claims addiction to success in reproductory learning. Because of his trouble in understanding instructions, he has

identified certain learnings that focus his concentration and promote enjoyment. These include tasks like learning spelling lists, some maths and cursive writing. He has experienced flow because he achieves high grades through his reproductory learning. Each of the three identifies different classroom management processes that have been influential.

6.1.1 Matt: Introduction

Matt was chosen as a topical example because he does experience real enjoyment in learning. The aspects of learning Matt finds most enjoyable are a freedom of choice in topic, and previous enjoyment of the task. Other conditions that influence Matt's enjoyment of learning are confidence gained from skills honed over his school life that are commensurate with the challenges of achieving the task; understanding the goals of the learning tasks; collaborative learning; sharing skills and resources with fellow learners to achieve the goals; and self-responsible learning. Matt recognises some issues that disturb his enjoyment.

Peers can Disturb Concentration

Matt's concentration on his learning is indicated in his achievement: doing research, finding things out, and entering an inter-school science competition. He has a strong conviction about his enjoyment of learning in collaboration with others: *'Well I like working in a group. ...Yeah, it made me feel like I wanted to do it.*'(Matt 29/6: 33-36*)* Relational factors limit Matt's enjoyment of learning: for instance, when he is engaged in his work and *'someone is annoying me or something'* (Matt 29/6: 103) or *'they talk...and they steal your pencils and things.'* (Matt 29/6: 107). The behaviour of other children in this instance acts as inhibitors of components 2 and 5 which

indicate that a person must be able to concentrate and be able to act with deep but effortless involvement that removes from awareness the worries and frustrations of everyday life. With disturbance such as this, the learner's goal (component 3) is to overcome the disruption rather than to realise the goal of learning. While Matt does enjoy working collaboratively with others, there are still issues about working beside peers, which he recognises as disturbing his enjoyable learning experiences in the classroom.

Having Well Honed Skills

Matt indicates how a previous teacher's clear instructions are important in learning: *'Well in Year 2 we used to do a lot of projects and they gave us instructions'* (Matt 29/6:18). Matt's learning skills were honed in this early experience. His enjoyment of an earlier project indicates this: *'Well with the hammer head shark, it was an interesting animal, and I did the research and everything'* (Matt 29/6:4). A challenging, enjoyable and flow activity requires the skills to be commensurate with the challenge of the task, and Matt's teacher's instructions from Year 2, some four years earlier, are a basis on which his current researching and learning are built. These instructions are durable and are a basis for Matt's enjoyable learning in Year 6.

Feedback: Extrinsic to Intrinsic Motivation

Recognising the feedback that comes from the clear goals of the task is important in enjoying learning or any flow activity. Matt, who values choice as intrinsically motivating in enjoyable learning, was disappointed about his lack of choice for an assignment. His initial response to the assignment was negative:

29/6:64 R: …With the Bali assignment, did you get a choice?
29/6:65 MATT: Well they had ten things but we were one of the last groups to get a choice but it ended up better than I thought it would be.
29/6:66 R: Did it? What made it better than you thought it'd be?
29/6:67 MATT: Well I thought it would be boring.

His further comment unknowingly recognizes the importance of feedback in enjoyment of learning. Matt found that engaging in the goals of the learning task, and experiencing feedback on something he didn't know, can overcome the initial negative impact of extrinsic motivation, and lack of choice. The learning task was not boring:

29/6:68 R: And why wasn't it?
29/6:69 MATT: Because I found out things I didn't know and things like that.
29/6:60 R: And that made it interesting did it?
29/6:61 MATT: Yeah.

This observation is consistent with Csikszentmihalyi's findings about flow activities, involving 'going beyond what is anticipated, and learning something new' (Csikszentmihalyi 1992, p.46). This 'going beyond' may lead to enjoyment even within a constrained choice (Csikszentmihalyi 1992, p.67). Extrinsically motivated activities can lead to intrinsic motivation and real enjoyment.

Anxiety in Learning

Component 5 requires that one must be able to engage in activity without awareness of frustrations and the worries of everyday life. Even though Matt does gain a deep enjoyment from his learning, there are some things that create some degree of anxiety for him. Matt is unsure about the value of the group assessment processes that were used in the class. A criterion had been developed by the class for each group to use in

the assessment of each other's work. According to Matt, a low assessment by your peers *'makes you feel bad about your project'* (Matt 29/6:76). It appears to Matt's understanding that the teacher's assessment was higher than that of his peers, a fact that devalued the experience for him. It is the difference of opinions about the assessment that appears to trouble Matt. On the other hand, he claims that *'it is good to assess your own work'* (Matt 29/6:81) indicating a desire to avoid being judged by others and to be in control (component 6) of this aspect of his learning. Overall Matt says, *'it (assessment) doesn't do much for me'*. (Matt 29/6: 80-86) indicating a source of entropy for him and the antithesis of component 5, of acting without awareness of the worries and frustrations of everyday life. Assessment and in this instance, a lower mark from peer assessment, is a source of lack of enjoyment for Matt in his learning.

Control in Learning

The sixth component involves one having a sense of control of the task. Matt likes to have, and does have control in certain aspects of his learning. The meaning of controlling the task in component six is concerned with not worrying about losing control. Matt's sense of control in his learning tasks is evident in his claims of action in learning: *'...and I did the research and everything'* (Matt 29/6:4), *'Because we looked up books and the computer and stuff.'* (Matt 29/6:12), and talking about problem solving, *'well I didn't actually feel like it was work because I do some of it in my own time.'* (Matt 29/6:26). He adds:

> *29/6:38 MATT: I wanted to do it because I liked doing story writing so I was always looking for ideas.*
> *29/6:39 R: Do you still feel like that now in your studying?*
> *29/6:40 MATT: Yeah.*

Matt indicated his sense of control when he spoke of the time line the students prepared for the learning project. He noted that it was useful in the first week, but then they forgot about it:

29/6:66 R: But after that you forgot about it?
29/6:67 MATT: Yeah, because we changed things.
29/6:69 MATT: Well, we didn't really do those same things that we wrote down because we got new ideas.

He does appear to be adaptable and to feel a sense of control of the tasks of learning.

Matt also likes to have control in his choice of topic. He believes that choice relates to enjoyment. He wasn't present on the day the children wrote their own questions:

29/6:108 R: If you had written your own questions for the Bali assignment instead of doing the teachers questions, would that have made any difference to enjoying the assignment?
29/6:109 MATT: Yes, it would have.
29/6:110 R: Why would it have?
29/6:111 MATT: Because I would have done something like the tourism or something.
29/6:112 R: Oh, OK.
29/6:113 MATT: And that would have been more enjoyable.

Matt's final comments about enjoyable learning confirm his preference for control of choice:

29/6:115 MATT: Yeah, it (a chosen topic) is the thing you enjoy.
29/6:116 R: Like the thing you wanted to choose?
29/6:117 MATT: Yeah.

Autotelic Behaviour

The ninth component of flow is that the activity becomes intrinsically motivated and intrinsically rewarding. This is the outcome of the other eight components of flow, and is indicative of the experience of flow from engagement in the activity. Matt does appear to be an autotelic learner who experiences some flow in his learning. It is noticeable from Matt's first comments:

> *29/6:1 R: I'd like you to tell me again about the best enjoyable learning time you've ever had.*
> *29/6:2 MATT: It was the hammerhead shark and the Eureka Stockade.*
> *29/6:3 R: Now tell me what made that enjoyable.*
> *29/6:4 MATT: Well with the hammerhead shark, it was an interesting animal and I did the research and everything.*
> *29/6:5 R: Did you choose to do that?*
> *29/6:6 MATT: We could do any sea animal.*

Matt took responsibility for his learning. I asked 'How did you know what to do?':

> *29/6:12 MATT: Because we looked up books and the computer and stuff.*
> *29/6:13 R: Did you ask anyone about it?*
> *29/6:14 MATT: No.*

Later, when speaking about code cracking, he indicates an autotelic experience, which is also evident in working in a group and writing stories:

> *29/6:26 MATT: Well, I didn't actually feel like it was work because I do some of it in my own time.*

> *29/6:30 MATT: Group work, when we got in and did like –writing in a group.*
> *29/6:31 R: How did that make you feel?*
> *29/6:32 MATT: Well –I like working in a group.*
> *29/6:33 R: Did you get a feeling inside you when you did that?*

29/6:34 MATT: Yeah –it made me feel like I wanted to do it.
29/6:38 MATT: I wanted to do it because I liked doing story writing –so I was always looking for ideas.
29/6:39 MATT: And, *I wanted to do it because I liked fictional writing so I always was looking for ideas, and am still anxious to have good ideas.*

Choice of topic leads to this same feeling of autotelic enjoyment of learning. When asked what makes him feel the enjoyment of learning:

29/6:42 MATT: If it is a good topic.
29/6:43 R: What makes a good topic?
29/6:44 MATT: When we get to choose it and it is not very boring.
29/6:52 MATT: Well –like –if the teacher says 'choose an animal' to do a project on and most people have a favourite animal and they choose that animal and –it makes them more interested and work harder. If you're told to do an animal that you have no interest in –it is not as good.

When questioned about the main thing that helped him enjoy learning, he referred to the topic:

29/6:89 MATT: It's just because –umm—some topics are better than other topics and if you like the topic you enjoy it more. You do better work if it is something you actually like to do.

Enjoyment, the experience of flow, and autotelic, intrinsically motivated behaviour for Matt, derive from skills that are well honed for the challenges of learning, and the topics that can be chosen.

Self-Determination Motivation Theory and Matt's Enjoyment

While intrinsic and extrinsic motivations are important in understanding the theory of flow, they do not sufficiently explain the various aspects of life and behaviour that influence and motivate a learner, or Matt's engagement in learning. The theory of

motivation that appears to best fit Matt's experience is that of self-determination theory (Anderman, & Midgley, 1998, p.2). Deci and Ryan (1986) suggest that learners have three categories of needs: a sense of competence; of relatedness to others; and autonomy. Evidence of each of these elements is found in the comments that Matt makes about his enjoyment of learning. This enjoyment, sense of competence and autonomy in learning are grounded in his learning history. When recalling his experiences in Year 2 he said:

> *29/6:19 MATT: Well in Year 2 we used to do a lot of projects and they gave us instructions.*
> *29/6:23-29 MATT: Oh I enjoyed problem solving. Like code cracking and things like that. Well it didn't actually feel like work because I did some of it in my own time.*

He also mentioned the enjoyment of doing group work in Year 2. He is firm in his comment: *'Well I like working in a group. …Yeah, it made me feel like I wanted to do it.'(Matt 29/6: 33-36).* Matt's sense of competence and autonomy is also indicated in the confidence of his comments that:

> *29/6:4 MATT: I did the research and everything.*
> *29/6:12 MATT: …we looked up books and the computer and stuff.* And,
> *29/6:39 MATT: I wanted to do it because I liked fictional writing so I always was looking for ideas, and am still anxious to have good ideas.*

Further evidence of Matt's sense of competence and autonomy is found in a recent learning assignment. The students were guided to create a time line/learning plan for their study, to aid the learners with their project by providing clear goals and feedback for timing the learning task. When asked about the value of this, Matt replied that it was OK for the first week, and then he said that *'…we changed things. …we didn't really do those same things that we wrote down because we got new ideas.'* (Matt

29/6:67-69). This indicates a degree of flexibility, a sense of competence, and of feeling in control of the task. Not all learners were comfortable about the changes necessary when 'finding new ideas', nor with having the timeline/lesson plan. Elise (29/6:201) for instance, found it was anxiety producing because of a perceived time constraint. Matt's history of enjoyable learning, which enabled a sense of competence, of relatedness to others and autonomy to blossom in Year 2, still appears to influence and motivate his responses to learning.

Matt: Summary

Matt is an autotelic self responsible, competent, and autonomous learner who generally enjoys working with others. He also acknowledges that there are some limitations in peer associations. Matt values the freedom of choice and control in learning and engages in learning as primarily seeking meaning. His learning history shows that he has honed his learning skills over his years at school and that these skills, adequate to most challenges he faces, are a source of his autotelic behaviour and flow experiences. The experience of flow is noticeable in several aspects of Matt's learning. These include his strong concentration (component 2); his understanding of goals and his comprehension of relevant feedback (components 3 and 4); his capacity to control his learning tasks (component 6); and his sense of esteem and autotelic learning behaviour (components 7 and 9). However, his anxiety (component 5) about some aspects of learning, such as peer assessment, can inhibit his enjoyment. While other issues influence Matt's capacity to enjoy learning, having a choice of topic is the thing he identifies, as most influential in his enjoyment of learning.

6.1.2 Elise: Introduction

Elise, who engages in learning as primarily reproducing, was chosen as a topical case study because she does speak of, and gives some reasons for, her anxiety in learning. A noticeable feature of Elise's learning is that while she gains some enjoyment from what she learns, she has a tendency to be anxious, and anticipates some learning tasks as either too hard or boring. The enjoyment she gains comes mainly from the practical or reproductory skills she learns, and also when unexpectedly learning interesting information. Her eyes shine when she talks of this. Elise does find real enjoyment from learning maths which she describes 'in kids' language', as fun. She is also like a majority of her fellow students, in that while she is obedient to the tasks of learning, she does not fully concentrate her attention. While she probably does experience real enjoyment in maths, Elise's anxiety and lack of concentration arguably inhibits the possibility of her gaining the optimum enjoyment of flow from learning.

Paying Attention

The second component of flow is that we must be able to concentrate on what we are doing. While Elise finds some enjoyment in her learning, she admits to not paying full attention. Csikszentmihalyi (1992, p.31) reports on the importance of being able to 'focus attention at will' and be oblivious to distractions, to concentrate for as long as it takes to achieve a goal':

> But innate talents cannot develop into mature intelligence unless a person learns to control attention. …By learning to concentrate, a person acquires control over psychic energy, the basic fuel upon which all thinking depends (Csikszentmihalyi, 1997, p.26).

'Attention', he writes, 'is the most important tool in the task of improving the quality of experience' (Csikszentmihalyi 1992, p.33). When asked about engaging her attention completely in her learning, Elise replied: *'No. ...I like thinking about other things'* (Elise 29/6:178-182). Elise prefers to think about happy occasions such as *'Just holidays and stuff'* (Elise 29/6:184). In another instance, Elise indicates a struggle with concentrating for a period of time. Asked whether she enjoyed assessing the collaborative groups' assignment presentations, a task that took an afternoon and a morning, she replied that:

> *...it got a bit boring because you had to listen to everything they said and you have to see if they had good eye contact and if they worked together (Elise 29/6:216).*

It would appear for Elise, as with several other students when asked about paying attention to their learning, that a desire for mental escape from the classroom is not unusual. Csikszentmihalyi (1992, p.24) explains the nature of such mental escapes: 'A person can make himself (sic) happy, or miserable, regardless of what is actually happening "outside" just by changing the contents of consciousness'. Or, perhaps as he suggests, human minds 'are the prey of thoughts and worries' (Csikszentmihalyi 1992, p.58). He also claims that: '…the information we allow into consciousness becomes extremely important; it is, in fact, what determines the content and the quality of life' (Csikszentmihalyi 1992, p.30). It appears that at times Elise, like several of the children in this study, creates a conscious space of 'interest' away from the environment of the classroom.

Initial Anxiety

Component 5 of flow is that the person has deep and effortless involvement, with no concern about everyday worries. Elise doesn't always approach learning with a

positive attitude, and will anticipate some learning as either too hard or, in the case of one assignment, *'I thought it would be boring'* (Elise 29/6:4). Elise does not describe for herself 'the possibility of control', and appears to lack what Csikszentmihalyi (1992:60) describes as the subjective ability 'to estimate the degree of difficulty in relation to the person's (her own) ability'. Asked about anything that stops her enjoying learning she named, *'Um –things that might be too hard.'* (Elise 29/6:115), and when asked 'Like what?' acknowledged *'I don't know, sometimes I think it is hard but when I get it, it is easy'* (Elise 29/6:15-17). Elise also perceived the use of a time line for organising her assignment as an inhibitor to enjoying learning because *'it made you feel like you didn't have much time left' (Elise 29/6: 201)*. The feedback from success in previous learning tasks however, does not appear to increase her capacity to estimate the degree of task difficulty, nor create enough confidence for her to develop a sense of control and so overcome her feelings of anxiety. She is still experiencing this anxiety. Only on two occasions does Elise mention any learning as fun: trying the gym equipment at the Australian Institute of Sport, and learning maths.

Control of the Task

The sixth component of flow relates to a person exercising control over their actions. An aspect of control in learning is found in the balance between the skill of the learning and the degree of difficulty of the task. Elise's reading practice (Elise 29/6:46) is something she is prompt to claim she enjoys. It is organised in a time frame of half an hour each day that is highly structured, and supervised to maintain a balance between the level of Elise' reading skill and the challenge of the reading. In his earlier writing Csikszentmihalyi always maintained the importance of the balance between skills and challenge. His 1996 writing on creativity includes this balance as

flow's third component, and he says that, 'in flow, we feel that our abilities are well matched to the opportunities for action' (Csikszentmihalyi, 1996, P.111). Elise (29/6: 166-173) had grown from not enjoying to enjoying reading because this supervised structure and regular daily practice achieved an increase in her skills and a balance between those and the challenge of the task.

The component of control in action does not refer particularly to choice as an aspect of control, but rather to being unworried about a potential lack of control. Elise does not indicate having a sense of control in her learning. She does mention desiring control in choice of questions because the answers to allocated questions were, *'...a bit hard to find'* (Elise 29/6:72). She wishes to make the challenge less than her skills: *'Yes, I would have made them (the questions) easy'* (Elise 29/6:76). Other students saw this attitude as a reason not to allow children to create their own questions (for instance Jeffrey 29/6:62 and Kerrie 29/6:64). Elise does not yet understand that the enjoyment she experienced is '*because I ended up learning lots of good stuff about it'* (Elise 29/6:8) and because it is the result of her persistence in finding answers to hard questions and experiencing the delight of retrieving unexpected information.

Elise also values working collaboratively with others. She identifies this as the main thing that helps her enjoy learning. In addition to the social aspect of learning, *'it's also useful working with other people you haven't worked with before'* (Elise 29/6:111). Friends, she claims, can act as surrogate teachers: *'...your friends can always help you'* (Elise 29/6:109). This belief of Elise's parallels Csikszentmihalyi's report of camaraderie in basketball and rock climbing, 'where one's life is in the hands of his (sic) companions…' (Csikszentmihalyi 1975:16) Other students report

on the value of camaraderie: '*Its fun to have friends around you when you are working.'* For Tania (22/6:81-83) and Andrew *(*15/6:69):

> *...I got to know –like- the people in my group –how they could help and things. I don't have a computer, I go to my friend's house ... And I've got an encyclopaedia at home and I can research…*

Elise indicates a sense of dependence on others to maintain control of the learning task. This would seem to be a real value of collaborative learning for Elise –that collaboration can enable her sense of control of the learning task, particularly when she is anxious about her ability.

Degrees of Enjoyment

Component 7 suggests that the concern for the self disappears and then the self grows stronger. Although Elise does speak of enjoying learning, and finds maths 'fun', it would not appear that she concentrates on the learning tasks to the extent that the action of learning and awareness of self merge so that concern for the self disappears. She appears to carry her apprehension about her ability into new tasks.

Jackson and Csikszentmihalyi (1998) claim that there are degrees of enjoyment, and Elise is a person whose enjoyment of learning often involves practical skills or reproductory learning. When describing enjoying learning, Elise indicates her enjoyment of experiential learning. Recalling an excursion in a previous year she said, *'we got to go and see…we went…that was really good' 'we got to go and try (equipment at the Australian Institute of Sport)…and that was fun', 'we got to see...that was good'* (Elise 29/6:38-40) and about classroom learning in Year 4, *'we had a cake stall ...we bought ...we went around…and collected. ...we made…that was good.'* (Elise 29/6: 44), and of maths, *'you get to learn how to keep money and*

change and you get to learn your times tables and you get to learn problem solving' (Elise 29/6:125). Elise' language is not effusive regarding her enjoyment: *'You can learn stuff', 'And feel happy about it.' (29/6:26-28)*, or the words 'was good' are her more usual description. Csikszentmihalyi (1975:46) believes that we think back to an enjoyable experience and say 'that was really fun.' Elise describes trying the equipment at the AIS, and learning maths –as 'fun'.

Autotelic Experience

An autotelic experience, the ninth component of flow and the outcome of the other components, is one that is intrinsically rewarding, and one we choose to do for its own sake, rather than for some future benefit. There are three instances where Elise appears to be intrinsically motivated: reading, maths, and the change evidenced when engaging in a negatively anticipated assignment. Elise's interest in maths most closely relates to autotelic or flow behaviour and includes the fun of 'solving problems':

> *You get to learn how to keep money and change and you get to learn your time's tables and you get to learn problem solving.* Elise 29/6:125

Csikszentmihalyi (1997) claims that:

> …the interest of an autotelic person is not entirely passive or contemplative. It also involves an attempt to understand, or, in the case of the inventor, to solve problems (Csikszentmihalyi, 1997, p.122).

Elise's interest and experience of fun in maths, does include efforts to understand and solve problems. This would most probably be the closest she comes to a flow experience.

The other instance where Elise's learning appears intrinsically rewarded is in a recent assignment although she did not at any time describe it as deeply enjoyable. Her anticipation had been negative. She thought it would be boring (Elise 29/6:4). Two weeks into the assignment, Elise started to find it interesting. Csikszentmihalyi (1997, p.22) notes that for experiencing enjoyment or psychic negentropy, being intrinsically or extrinsically motivated is a more desirable state than not being motivated at all. Being extrinsically motivated can, under certain conditions, lead to the experience of intrinsic motivation (Csikszentmihalyi, 1992, p.67).

Although Elise did not describe the assignment as 'fun' when she told me of her enjoyment, I noted that *'It makes your eyes shiny…'* (R 29/6:15) She enjoyed the assignment, it felt *'good'* (Elise 29/6: 10), because as she said, *'I started to find it interesting'* (Elise 29/6:24) and, *'you can learn stuff'* (Elise 29/6:26). Elise had gone beyond what she anticipated, and 'achieved something unexpected' which for Csikszentmihalyi is the indication of real enjoyment (Csikszentmihalyi, 1992, p.46). The enjoyment, the intrinsic reward and motivation was in the learning itself:

7 29/6 R: So why did you end up enjoying it?
8 29/6 ELISE: *Because I ended up learning lots of good stuff about it.*

Elise: Summary

Elise's enjoyment of learning is tempered by her initial approach to learning tasks which are often negative. She'll think something will be boring or too hard. She has an anxiety about the perception of her ability relative to the degree of challenge. Her negative feelings are at times overcome by the intrinsic motivation that can arise from learning something unexpected as she pays attention and engages with the task. Elise is like most of her fellow students in that, while she is obedient to the classroom

discipline, she does not fully concentrate her attention. She gains a degree of enjoyment from some learning tasks, particularly experiential learning, and the subjects maths and reading that are structured by the teacher, in time and challenge level, to Elise's ability. Elise's perceptions of her ability (her assessment of her CS competence), and her general lack of concentration (component 2) associated with her anxiety (component 5), most likely inhibits the possibility of her gaining optimum enjoyment or flow from most of her learning tasks.

6.1.3 Peter: Introduction

Peter is included as an example because he made a strong claim to not enjoy most learning, and also indicates that some aspects of his learning can be addictive. Peter claims that he has trouble concentrating on instructions. This, and his desire to talk with his friend, makes him perceive some aspects of learning as too much of a challenge. It is evident that he does enjoy, and is motivated by, good assessment grades when he achieves them. He does well at the tasks that he can practise at home: reproductory learning including maths, spelling tests and cursive writing. Peter also likes the challenge of a race-like situation and gained enormous enjoyment from doing his assignment with his peers at the last possible moment.

Challenge and Skills

Csikszentmihalyi (1992, 1975) notes the importance to enjoyment of finding the balance between the skills for the task and the degree of challenge. Later in 1996, writing of flow and creativity, he identifies the balance between skills and challenges

as component 3. For Peter, there is a struggle with what he perceives as the challenge:

> *29/6:15 PETER: Most learning, I don't really enjoy. I love -like –doing things that's not a challenge. (R: Oh OK) I love –not a challenge.*
> *29/6:16 R: So learning and schoolwork is a challenge is it?*
> *29/6:17 PETER: Yeah –so much. Like at one stage this year we like— were practising almost Year 7 work (Peter is in Year 6. R: Yeah) and it's like square times 16 and I'm going 'what is this?'*
> *29/6:18 R: And you didn't know?*
> *29/6:19 PETER: Like we did it in another teacher's room (name given) and I sat there and all the other kids do it and –I don't have a clue.*

Peter's perception of the task as beyond his skills informs his appreciation of the task.

Peter and Concentration

The second component of flow involves the ability to concentrate on the task. Peter provides two totally different pictures of concentration. Peter doesn't or can't concentrate enough to understand instructions when lessons are explained either to him or to the class. However, with information processing, such as learning spelling lists, he excels in his concentration.

Peter has trouble understanding the teacher's lesson instructions. He expressed this several times throughout our conversation:

> *29/6:31 PETER: ...Like I'll listen to the first bit and I'll think 'Oh I'll do that' and drift off and then I'll go to do it and that was only one step of it.*

> *29/6:19 PETER: ...I sat there and all the other kids do it and –I don't have a clue.*

His lack of ability to concentrate on and understand the instructions is evident in his learning history some two years previous to our conversation:

> *29/6:23 PETER: Yeah. Like when I was in Year 4, if you dozed off the teacher (name given) wouldn't tell you again, you would have to sit there and do nothing and you'd have to do it in lunchtime if it wasn't finished. (R: OK) So it was listen once or you don't listen at all (R: Oh) and you don't get the answer.*

While Peter thoroughly enjoys what he feels able to do, he doesn't enjoy learning when he can't listen to, and understand the instructions. Csikszentmihalyi (1992, p.30) indicates that anxiety occurs where the degree of challenge is perceived as too great for the learner's perception of skill for that activity. Peter appears to perceive the task of understanding instructions as too much of a challenge.

Different factors can influence why Peter doesn't understand lesson instructions. Csikszentmihalyi writes that, 'information enters consciousness either because we intend to focus attention on it or as a result of attentional habits based on biological or social instructions' (Csikszentmihalyi, 1992, p.30). Peter is articulate and well able to express his thoughts and feelings. He indicates that socializing is a skill that he enjoys. Peter's lack of focused attention could be as he acknowledges, attributed to talking to friends, and thinking of 'other things' during instruction times:

> *29/6:30 R: You intend to listen?*
> *29/6:31 PETER: I intend to listen. I sort of like get 'drifts' sometimes. (R: Yeah) Like I'll listen to the first bit and I'll think 'Oh I'll do that' and drift off and then I'll go to do it and that was only one step of it.*
> *29/6:32 R: Have you any idea why you drift off?*
> *29/6:33 PETER: Like – oh –I don't know.*
> *29/6:34 R: You don't know?*

29/6:35 PETER: No –I just like talking to my friends.

29/6:36 R: You just like talking to your friends? (Laughter. Peter: Yes) Your mind thinks of something else does it? (Peter: Yes) Oh Click –and away you go.

29/6:37 PETER: Oh! What am I doing next weekend and then I turn to him and talk about it. And if I don't talk to him about it I'm thinking about it. (R: Yes) I'm looking directly at them (the teachers?) but I'm not thinking about them.

Unable to concentrate, Peter does disturb his peers. He then fails to understand the learning task and loses the opportunity to create goals for the lesson. For enjoyment in an activity:

> …the activity must have relatively clear goals and provide rather quick and unambiguous feedback. It is difficult to become immersed in an activity in which one does not know what needs to be done, or how well one is doing (Csikszentmihalyi, 1996, p.32).

Sadly, as Csikszentmihalyi (1992, p.31) claims, 'some people learn to use this priceless resource (the capacity for attention, or the control of consciousness) efficiently, while others waste it.'

The learning issue for Peter is why, even when he intends to, he can't maintain a focused attention when receiving instructions. Whether a social or a biological problem, it could appear that Peter's time in Year 4, when instructions were given only once, and Peter would, *'...sit there and do nothing and you'd have to do it (the school work) at lunchtime if it wasn't finished.'* (Peter 29/6:23) may well have consolidated Peter's mental escape and lack of mental discipline. As he said, *'knowing recess is half an hour away.'* (Peter 29/6:97) is what makes learning enjoyable. His mind had to be doing something.

A further factor influencing Peter's concentration came when concern was expressed to his parents about his behaviour at school. Peter said he was threatened with expulsion at that point. Following these talks Peter said he totally focused his attention on his learning:

> *29/6:41 PETER: Last year I really went hard because I got into um—like I was really behind. Yes –last year my parents had a talk to me and my teacher said, 'If you are going into high school next year, you've really got to put your head down and work. And it finally got into my head –you can't do that –when you've got so much at stake, you can't just –you can't just throw it away by talking to your friends.*

> *29/6:43 PETER: After that, I was ten minutes finished, before everyone else. (R: Yeah) Like –I really worked. Like—it was a good feeling when you got like –straight A's or something like that, or 99% as a mark.*
> *29/6:46 PETER: Like –last year I was working on the weekends. I'd sit in my room all the weekend and do this work.*

Peter found in the process that he could get good marks in some lessons. He continues to do so, though without the intensity of the previous year when he notes, *'...I just sort of went overboard'* (Peter 29/6:48). He has *'...backed down a bit now'* (Peter 29/6:45). Now it is more a matter of getting it done:

> *29/6:49 PETER: So I'm getting it all done and I'm getting pretty good marks. (R: Yes) In maths tests, I'm getting between 80 and 100.*

Peter has found something to concentrate on, and the resulting good marks give him a good feeling.

Relational Impact on Concentration

Peter feels deeply for his friends and this can affect his concentration. When asked, 'what is the main thing that stops him enjoying learning', he claims it is the social condition of not being able to resolve a lunchtime argument with a friend:

> *29/6:99 PETER: ...If you had a fight with your friend at lunch, you come back you don't feel like working. You feel like going over to him, having fun with him and you wish it never happened.*

Peter says that such an event impacts on his capacity to enjoy learning, which means that it impacts on his capacity to concentrate, and elevates the frustrations and worries of everyday life (component 5).

Having Clear Goals for Enjoying Learning

Having clear goals for the task is component 3 of flow. In the following incident the teacher's method of instruction impacts on Peter's lack of capacity to understand instructions, and therefore his capacity to enjoy his learning. When asked whether he could tell his teacher about his not understanding the instructions for a maths task, he responded:

> *29/6:21 PETER: Yeah, yeah, yeah, I said it to her and she said, 'Look at this, D,d,d,d,d,d,d' (indicating speed) and I couldn't even keep up with her. It was like-- (R: Yes) like you've gotta pay attention so much. If you like –doze off for a few words you won't know what to do. You've missed it.*

Peter's learning history indicates a lack of support for his inability to understand. Noting again the situation where Peter's teacher made him sit through a lesson period not doing anything:

29/6:22 R: So you've got to pay attention.
29/6:23 PETER: Yer. Like when I was in Year 4 if you dozed off he wouldn't tell you again, you would have to sit there and do nothing and you'd have to do it in lunchtime if it wasn't finished. (R: OK) So it was listen once or you don't listen at all (R: Oh) and you don't get the answer.
29/6:24 R: How do you feel about that?
29/6:25 PETER: Oh alright. It's discipline, discipline.
29/6:26 R: Its discipline (Peter: Yes) how do you feel about that?
29/6:27 PETER: I reckon it's fair.

When prompted about the difficulty of the task:

29/6:112 R: ...Like does that help? Is the teacher helpful then?
29/6:113 PETER: Um most of the time, 99% of the time. But sometimes she can't. Like –you can't understand what they are explaining to you (R: Yeah) and in a class of 32 you can't expect all the kids to come up to you and say, 'How do you do this?' 'How do you do that?'

It can be seen from his comments, 'It's discipline, discipline', 'I reckon it's fair' and 'in a class of 32' that Peter is sensitive to the responsibilities of the person teaching him. Even though he understands the teacher's position, the lack of support for the problem of not comprehending the teacher's instructions, does affect Peter's potential to create clear goals for the learning task. Luckily for him in this class, his friend can tell him, '*in kids' language'* (Peter 29/6:115) what to do.

Comprehending the instructions and identifying the goals is an initial task of any learning activity. A teacher needs to be aware of component 1 of flow, that there needs to be sufficient time given to the task so the child has sufficient time to identify the goals (component 3). Lack of comprehension of the goals affects the learning outcomes for Peter.

Enjoyment

The following sections address the second aspect of Peter's concentration where he finds sources for enjoyment in learning. These sections show that after encouragement from his parents and his Year 5 teacher, Peter took responsibility to 'try with his schoolwork'. In doing so, he found some sources of enjoyment in reproductory learning, that is skills and ability goals on which he is able and willing to focus his attention. Peter tells us that *'...knowing the work you can do, that makes it enjoyable'* (Peter 29/6:107). After having been extrinsically motivated by his parents and teacher, Peter becomes intrinsically motivated by the subsequent enjoyment of the extrinsic reward from his efforts.

Peter had been explaining about 'going overboard' last year. This was his initial response to advice for him to take responsibility for his learning. He was explaining that now, in Year 6 he had chosen to '*relax a bit*' (Peter 29/6:48), that he was *'getting it all done and I'm getting pretty good marks*' (Peter 29/6:49). I remarked: *'Yes I saw your spelling. You were getting all of that right'*. (R 29/6:50)

Control, Challenge and Enjoyment

The sixth component of flow involves people exercising a sense of control over their actions, while the eighth component involves the sense that time is altered. Peter intimates a sense of control of the task in what he says about a group assignment. He does not mention the changed perception of time in his conversation. He does mention a set of circumstances that could have generated such an experience. Certainly it led to a lot of excitement and enjoyment. Peter's group for an assignment did not get along:

29/6:1 R: Did you enjoy the Bali assignment?
29/6:2 PETER: Yeah, but –we had a bit of trouble in our group. We had certain –like some people –we don't get along with, and some people we do. It was pretty good, yes. I enjoyed it –I enjoyed doing my speech.

29/6:4 R: When did you start to enjoy the Bali assignment?
29/6:5 PETER: Well I totally ignored it for about two weeks, then I had 3 days to go. I totally freaked out. And the whole group sat down and said, 'What are we going to do?' Everybody did about 6 hrs of homework and we all stayed up until about 1pm in the morning, all doing it.
29/6:6 R: So you're the sort of group of people who leave things to the last moment are you? (Laughter)

There is a sense of control in his response:

29/6:7 PETER: Yeah. Well –you can still get it done at the last moment.

And later in the interview:

29/6:73 PETER: By the end it was fun –rushing –it, it, it, was like a race.
29/6:74 R: Oh all right –so it was exciting?
29/6:75 PETER: Yes. Like for three lunch times –I had to sit in here and do it, in the library and it was like –that part wasn't too good –because all my friends were out there playing footie and I'd watch out the window and would go Oooooo (Laughter).
29/6:77 R: All right. OK. So there was a sense of excitement in having to get it done.

29/6:80 PETER: Yes. Like it –by the end –like the last day we had to do it –we had heaps –we wrote down what we had to do. Everybody in the group got a sheet of what we had to do. (R: Yes)
29/6:81 PETER: And like –sometimes we'd come back the next day and we'd done it twice or something like that. (Laughter)

Leaving the assignment until the last few days has an effect that can be pertinent to experiencing flow. The goal became to get the assignment done, rather than to learn

for the assignment. Peter's concentrated attention, even though he looked out the window at his friends, rose out of the last minute need to achieve the task. Peter and the group had to focus their combined attention or fail the assignment. The group had a shared goal; they knew what the task was; they conferred and decided what each person had to do; and they took control of the task. Then they enjoyed the unexpected delight of having 'heaps' of information, and *'the race'* of getting the assignment done on time. The nature of the experience was more fun than work (Peter 29/6:73).

All the components that arise from concentrated attention on learning about the topic arose in Peter's experience in the 'race to get it done'. Csikszentmihalyi (1992) claims that, 'any activity contains a bundle of opportunities for action, or "challenges" that require appropriate skills to realise' and 'one simple way to find challenge is to enter a competitive situation.' Such is, 'the appeal of all games' (Csikszentmihalyi, 1992, p.60). As Peter said, *'it was like a race.'* (Peter 29/6:73). For him, there was an exciting sense of exercising control in what might have been a difficult situation. Csikszentmihalyi (1992, p.61) believes that the sense of exercising control in difficult situations is a source of enjoyment.

Another element that would add to Peter's confidence and a sense of control in achieving the task, was that it was a group project. Even though the group was not collaborative at first, when it came to the need for completing the task by the given day, the group worked successfully, sharing ideas, tasks and resources when needed. There is no doubt that the enjoyment of 'the race' to complete the task is evident. If the boys had made their goal one of learning from the assignment, starting earlier, extending themselves, and had enjoyed the actual learning activity rather than the race, the outcome for learning may have been different.

Another element of control for Peter was found in the assignment topic. There was no free choice. Peter has a strong preference to choose:

> *29/6:67 PETER: Yeah because –not every body in the class, including the teacher, want to learn the same thing. We're not all the same. We're different personalities –everybody. (R: Yes)*
>
> *29/6:68 PETER: And some things I just don't want to learn. Like –if I chose them, I would have got –really good –on the report. (R: Yeah)*

Like Matt, Peter feels that when the topic is one of choice, learners are more interested and work harder. There is perhaps, more activation energy, more incentive to begin and continue with the assignment. For Peter, who interprets his enjoyment by the grades he gets, it would mean a better assessment.

A Stronger Self

The seventh component of flow is that concern for the self disappears, and the sense of self grows stronger. This experience is found in the concentrated application of skills applied to the challenge of the task. Peter explained the importance of practice of skills such as cursive writing and spelling, and the outcome for him as a learner when he did practice for his spelling tests. For Peter, it is this non-challenging practice that promotes learning:

> *29/6:51 PETER: Yeah I got –if you don't practise – if you don't practise there's no way –if you just turn up and say 'I can do this', you can't. You've got to practise. (R: Yes)*
> *29/6:52 PETER: It's like –you can't sit back and do cursive writing immediately. You've got to practise at home.*
> *29/6:53 R: Do you actually enjoy that skill once you've got it?*

29/6:54 PETER: Yeah –It's like –it's a good feeling to have –to be a certain level, to be an above average student. Yes you feel good about yourself.

Peter's comment about the feeling of enjoyment arising from 'doing well with tests', and being an 'above average student' is noticeable in all the interviews. He is the only child who identified the experience of the enjoyment of success as addictive: *'you're addicted to the feeling', 'you want to reach it again'* (Peter 29/6:57).

Enjoyment and Addiction

Csikszentmihalyi (1992, p.62) claims that, 'almost any enjoyable activity can become addictive, in the sense that instead of being a conscious choice, it becomes a necessity that interferes with other activities'. He mentions that surgeons describe operations as being addictive 'like taking heroin'. Peter did use the word addictive to describe his feeling of enjoyment from success, however there is no indication within the rest of his interview, that his actions are not a conscious choice:

29/6:43 PETER: (Speaking of the previous year.) After that I was ten minutes finished before everyone else. (R: Yeah) I really worked. Like it was a good feeling when you got –like straight A's or 99% as a mark.

29/6:55 R: Explain that feeling to me.
29/6:56 PETER: Yer. A lot happier and you can like –if you didn't get good in a test –I'd sort of grope a bit in my work and go like that (making his body limp).
29/6:57 PETER: But if you do good you feel really excited and you want to do it again 'cause like –<u>you're addicted to the feeling</u> (R: Yes) and you want to reach it again. (R: Yes).
29/6:58 PETER: I've got like –with my spelling, with the mark of how many wrong –I've gone five weeks zero, zero, zero, zero, zero.

Peter is saying that this feeling of enjoyment from success motivates him to a very high degree. Csikszentmihalyi notes that 'the activity that consumes us becomes intrinsically rewarding' (Csikszentmihalyi 1992, p.67), and considers this intrinsic motivation, as the real value of the flow experience. For Peter however, it is not the task of learning that is intrinsically rewarding, but rather the extrinsic reward of success, that is, gaining no mistakes in his spelling tests. From his initial extrinsically directed behaviour, and with schooled practice at home in lessons he knows he can manage, Peter is now intrinsically motivated to achieve extrinsic rewards in the areas of learning that he perceives as 'not a challenge'. He displays the sense of esteem and the motivatory nature of enjoyment that can arise from success, rather than the lack of choice that Csikszentmihalyi claims is found in addiction.

Theories of Motivation in Peter's Learning

There are two theories of motivation that appear to best interpret Peter's experience of learning in the classroom. These are the self-directed and goal theories described by Anderman and Midgley (1998). Self-directed motivation has the three aspects of autonomy, relatedness to others and competence, all of which are evident in conversation with Peter about some aspects of his learning. Goal theory includes task goal and ability goal orientations. Peter's learning experience is focused mainly in the ability goal orientation.

Self-Directed Theory of Motivation

Peter indicates how much thought he has given to the way he functions with his schoolwork. The three categories of needs: competence, relatedness to others, and

autonomy mentioned by Anderman and Midgley (1998:2) are present in Peter's attitudes to some of his learning, even though he doesn't enjoy what he perceives as 'a challenge in learning'.

However, influenced by significant others, Peter is willing to take responsibility for his learning where he feels he can achieve. Previously Peter had '*really worked*'; this year he has '*backed down a bit now.'* (Peter 29/6:45) He shows autonomy in this decision: he can still get *'it all done and I'm getting pretty good marks. In maths tests I'm getting between –80 and 100'* (Peter 29/6:49). He also initiates and regulates his own actions for practice: *'if you don't practise, there's no way –if you just turn up and say "I can do this", you can't. You've got to practise.*' His results from spelling tests: '*I've got like –with my spelling, with the mark of how many wrong –I've gone five weeks zero, zero, zero, zero, zero.*' (Peter 29/6:58) also support a claim for his competence in practice, and indicates his competence in his skills and reproductive learning. Peter acknowledges those learning tasks where he feels his competence does not exist, but this does not inhibit autonomy and determination to achieve where he can.

Peter is sensitive and can interact satisfactorily with others. He enjoys the success of classmates, as he said when asked about assessing one another's work:

> *29/6:93 PETER: Yes, yes like –you feel good for them. Like you'd go …tick, tick, tick and you'd feel good for them.*

Peter recognises the importance of collaborative learning. When asked what he did when his teacher couldn't help:

29/6:115 PETER: Yes, I ask my friend. He usually knows it. ...like that, do it in a kid's language.'

As mentioned previously, Peter has a propensity for being social: *'...I just like talking to my friends'* (Peter 29/6:35). He also acknowledges when interaction with others can be a problem: *'...some people we don't get along with and some people we do'* (Peter 29/6:2). Csikszentmihalyi (1992, p.60) reports on the importance of 'skills to enjoy an activity', and Peter demonstrates there is self-direction, relatedness to others and competence in specific skills he can use.

Goal Theory of Motivation

The ability goal orientation theory of motivation also provides a useful framework for interpretation. For instance, Peter's observations about the need to practise, indicate his focus on the goal of mastering ability skills:

29/6:51 PETER: ...if you don't practise there's no way –if you just turn up and say "I can do this" you can't.
29/6:52 PETER: It's like you can't sit back and do cursive writing immediately. You've got to practise at home.

Peter gains positive and enjoyable feelings from his ability in gaining high marks: '*...In maths tests I'm getting between 80 and 100.'* (Peter 29/6:49) and, *'...with my spelling ...I've gone five weeks zero, zero, zero, zero, zero.'* Peter was asked, 'do you actually enjoy that skill once you've got it?' (R 29/6:53) and he acknowledged:

29/6:54 PETER: It's a good feeling to have, to be a certain level, to be an above average student. You feel good about yourself.

Anderman and Midgley (1998, p.2) claim that there are 'more positive educational outcomes about school and oneself as a learner' from having a task goal rather than an ability goal orientation because it is the more flexible of the two. Peter's response, *'Um, knowing that recess is half an hour away'* (Peter 29/6:97) to the question 'what's the main thing that helps you enjoy learning?' aptly indicates his feelings about school and learning.

Peter: Summary

Peter does not, or can not, apply his focus of attention on what he perceives as a challenge in learning. He lacks the flexibility to accept the challenge of something he perceives as too hard. He does however concentrate (component 2) on developing the abilities that bring him success and enjoyment of high marks. This success is evident in tasks that have clear goals (component 3), provide unambiguous feedback (component 4), are not anxiety producing (component 5), and promote a feeling of control (component 6). They are typically expressed in reproductory learning like maths, spelling and cursive writing, and they result in a growth of his self-esteem (component 7) and autotelic behaviour (component 9). It is not the art of learning that motivates Peter or that he enjoys. It is the success gained from achieving a task and developing his ability skills. Enjoyment can come from either activity. Peter has learnt to focus his attention on practising his skills and abilities.

6.2 SUMMARY: Matt, Elise and Peter

Matt, Elise and Peter each experience their enjoyment and non-enjoyment of learning for very different reasons. Matt is an autotelic learner, experiencing flow from seeking meaning. His lack of enjoyment is centred on being assessed by others, and

by peers who interrupt his concentration. Elise experiences a degree of enjoyment from some learning, but is generally anxious about her capabilities which impact detrimentally on her capacity to concentrate and deeply enjoy her school learning. Like Peter, Elise gains most of her enjoyment from learning primarily as reproducing, and appears to have a dependence on the help that peers provide. Peter, like Matt, is also an autotelic learner and experiences flow, but this is from learning primarily as reproducing and by creating an achievable challenge from getting the task done cooperatively at the last moment. His lack of enjoyment is centred on his inability to understand the teacher's instructions.

It is not that Matt, Elise and Peter are typical, but rather that they demonstrate that learners are unique. They have each come into the classroom with different background influences and learning experiences. The other fourteen learners equally have different experiences of learning, and different capacities to experience flow. Chapter 7 discusses the findings of the research in relation to the literature.

CHAPTER 7

DISCUSSION

> It takes at least half an hour of often dull practice each time one sits down at the piano before it begins to be fun. In other words, each of the flow-producing activities requires an initial investment of attention before it begins to be enjoyable. One needs such disposable 'activation energy' to enjoy complex activities. If a person is too tired, anxious, or lacks the discipline to overcome that initial obstacle, he or she will have to settle for something that, although less enjoyable, is more accessible (Csikszentmihalyi, 1997, pp.64-65).
>
> Learning is what happens when you take the risk of not being competent (Merry, 1998, p.24).

7. INTRODUCTION

This chapter is presented in five sections. Section one presents a brief summary of the findings of the research; section two, the discussion arising from the findings, relating these to literature; section three makes recommendations for teachers, teacher educators, curriculum writers, and policy makers; section four contains suggestions for further research; and section five provides a conclusion.

7.1 FINDINGS: INTRODUCTION

While this research has not been primarily concerned with what children actually learned, it has been concerned that they experience deep enjoyment, as they engage in meaningful learning (Csikszentmihalyi, 1997a; Csikszentmihalyi, 1988; Dewey, 1934). The deep enjoyment of flow is a primary motivation to continue engagement in any activity (Csikszentmihalyi, 1997, 1992, 1975). The research question for this study was:

To what extent is deep enjoyment as flow experienced in primary classroom learning, and under what teaching and learning conditions might deep enjoyment as flow be facilitated?

The research question had three parts:

1) to explore the conditions and activities that are identifiable in learners' perceptions of their deep enjoyment or flow in learning.

2) to identify the component characteristics of flow articulated in the learners' stories about their enjoyable learning experiences.

3) to identify and examine perceptions of deep enjoyment or flow in learning in teacher practice and student learning through a teacher's stories of her teaching experience and through classroom observations.

7.1.1 Flow can happen in the classroom for children and teacher

The deep concentration of flow in learning can happen in the primary school classroom. The majority of the children were identified as experiencing real enjoyment as flow in some aspect of learning. Children indicated evidence in the growth of confidence, feeling stronger, more powerful, having energy from and for learning, and being motivated to continue some aspect of classroom learning.

However there are barriers to flow in learning. These include a sense of inadequacy, angst, or of resistance to engagement in learning. Anxiety about peers, the teacher, classroom organisation, management, and communication issues can each affect the learners' capacity to concentrate. The children's responses to enjoyable and anxiety producing situations are set in motion during the early years of learning, and the children's concept of self as learner is consolidated by Years 5 and 6.

Mrs. Critcher's stories indicate evidence of flow in her teaching. This is the result of her pursuit of the challenge to learn and to grow as a person and as a teacher. One expression of this growth is her desire for the educational, social and emotional growth of her students.

7.1.2 Brief summary of findings

The teacher experiences flow in teaching by pursuing her own personal and professional growth and development. The children experience flow and the enjoyment of meaningful learning because the teacher has evolved an environment and classroom culture that facilitates this.

Strategies used by the teacher in enabling flow in learning, include:

- teaching characteristics of:
    - modelling all aspects of learning, enthusiasm, flexibility in classroom organisation, caring, expectations for learning and behaviour, good will, joy in learning, consistency;
- social, emotional and academic climate variables:
    - provision of a flow facilitating classroom environment and culture: respect, openness, order and safety, flexible management of time, recognition of individual capabilities (natural competencies) and needs, encouragement, opportunity, democratic organisation, learner choice and control, learner self-responsibility, task comprehension, challenge, skill development, recurrent success, classroom and learner collaboration, minimal but unequivocal rules for academic and social behaviour, discipline intended for learner responsibility not

punishment, acceptance of classroom interactions and meaningful learning as potentially deeply enjoyable;

- instructional variables:
    - comprehensive and relevant lessons and lesson introductions, clarification of goals, satisfactory task related feedback, satisfactory and relevant social and emotional feedback, consistent restructuring of task challenges relevant to learner skills.

7.2 DISCUSSION OF FINDINGS: INTRODUCTION

The following section is a discussion of findings related to literature. Group concentration and classroom culture; engagement energy and task related feedback; the importance of natural competencies and previous success; the possible relationship between recurring success, confidence and Maslow's hierarchy of needs; collaboration for overcoming barriers to flow, and the need for conceptual change in educational institutions and literature, are each discussed.

7.2.1 Group deep concentration and a classroom culture of flow in learning

One interesting phenomenon was the focus of the teacher and group of learners on the present events of learning. This experience was observed several times as the children, seated on the floor before the teacher, were totally focused on the teacher's communication. It appeared as a suspension of time, as if the class of 60 or so children, was as a group, 'floating above the floor'. For the research observer concerned about the merging of action and awareness, the focused attention necessary for flow, the experience was both eerie and exciting. The teacher later

commented that such an experience was unexplainable, except as what is known as a 'teachable moment'. Further discussion led to my belief that such an experience was an aspect of the classroom culture, and is an outcome of conditions created by the teacher's minimal but unequivocal rules about the children's behaviour and because they understood the purpose, their unreserved response to those rules. The event seemed akin to Csikszentmihalyi's comment about the nature of goals and rules in games and culture:

> When a culture succeeds in evolving a set of goals and rules so compelling and so well matched to the skills of the population that its members are able to experience flow with unusual frequency and intensity, the analogy between games and cultures is even closer (Csikszentmihayi, 1992, p.81).

It seems that the teacher may well have evolved such a culture in her classroom.

As mentioned in Chapter 5 the reasons for having the children sit together on the floor, with nothing in their hands, when the whole class is required to concentrate on the teacher's communication, are both educational and social. Educational reasons for sitting in such a manner, include giving directions, organizing learning tasks, democratic decision making, class meetings regarding school issues, language skills practice, singing, some maths, group work, and very specifically, so that all children can hear what is said. Social reasons include feelings of closeness, of intimacy and the close relationship possible with children sitting at teacher's feet. Csikszentmihalyi (1992) claims a culture can build opportunity for flow into its life-style. The teacher's unreserved requirement for acceptable and self-responsible standards of behaviour and for whole class concentration while sitting on the floor is a dominant characteristic of this classroom's culture.

There are aspects of the teacher's talk with learners which are important for achieving whole class concentration. For instance, what the teacher is speaking

about must have meaning for all learners. As contemporary commentators on education note, for success in learning, the teacher and learner must understand what the learning tasks are and why they are engaging in them (Riner, 2000; Kauchak & Eggen, 1998; Collis, Dalton, & T.E.C.S.S.A., 1991), and all the information needed for understanding the topic must exist in the representations of the lesson content (Kauchak & Eggen, 1998). Various teaching skills like a clear explanation of the task, questioning, modeling, teacher and student think-alouds, examples of finished products, and opportunities to receive feedback at frequent intervals, each help reinforce the goals of learning (Riner, 2000; Kauchak & Eggen, 1998, Moore, 1995).

Group immersion in a cultural activity is a unique experience. Lynch and Veal (1996) writing of Australian Aboriginal engagement in ritual ceremony and deep immersion claim,

> the whole emotional and physical process that has transpired is the result of knowledge gleaned from the cumulative wisdom of countless generations. A contemporary leisure theorist addressing this phenomenon might well be drawn to Csikszentmihalyi's (1975) theory of enjoyable experience and suggest that the participants who have just hit 'immersion in the Dreaming' are in a state of 'flow'. Well they may be, but to write such a religious experience off as only a peak state of enjoyment, however transcendent, is the miss the integrated and multi-layered meaning of the ritual-musical moment (Lynch, & Veal, 1996, p.40).

Spiritual dimensions related to either learning or leisure experiences are not addressed in the literature review but commentators mention that these are among the fundamental experiences of human beings (McDonald, & Schreyer, 1991). They also note that a spiritual experience 'is not necessarily synonymous with religious experience… (And) …relates to the nonphysical, nonrational, nonempirical elements of human consciousness' (McDonald, & Schreyer, 1991, p.179). It is identified as

'the relationship between "self" and "other" (McDonald, & Schreyer, 1991, p.179) and 'seems to possess universal elements' (McDonald, & Schreyer, 1991, p.180).

They argue for understanding the process and content of spirituality found in leisure experience, and refer the nature of the experience to Maslow's 1970 description of 'peak' experiences and Csikszentmihalyi's 1975 concept of flow. The children in the classroom are aware of this group experience, and acknowledge the 'peak' nature of the experience, in their learning. I had observed about their attitude to learning that:

> *The initial comment I will make and this has been confirmed (for me) in listening to the tape is, that there is a deep sense of reverence in the demeanour of these children who recalled enjoyable learning from early primary school years. There is also seriousness, a thoughtfulness about the business of learning. These children have very definite opinions about their learning and their classroom experiences. This was evident in both boy and girl learners (Observation 15/6/99).*

A classroom culture can develop which at times so immerses the learners in a classroom learning experience, that it can be viewed as a multi-layered and spiritual experience for teacher and learners. A group deep and meaningful 'peak', 'flow' and, or 'spiritual' experience can emerge given the right conditions in meaningful learning.

7.2.2 Feedback and energy in the enjoyment of flow in learning

Csikszentmihalyi mentions energy related to flow in different ways. Csikszentmihalyi (1997, pp.64-65) writes of the initial energy to begin a task as the 'activation energy' where 'One needs such disposable 'activation energy' to enjoy complex activities'. Csikszentmihalyi (1992) claims that the reason many people don't engage in flow producing activity is because an initial energy drive is needed to organise the self to engage with an activity. It is easier, in effect, to 'veg out' and

watch TV than to organise for a game of tennis, or paint a picture. Csikszentmihalyi writes of this occurrence:

> If a person is too tired, anxious, or lacks the discipline to overcome that initial obstacle, he or she will have to settle for something that, although less enjoyable, is more accessible (Csikszentmihalyi, 1997, p.65).

The most obvious trigger for 'activation energy' in learning is extrinsic motivation. Other factors include the learner's inclination to perform the task and his or her perception of the ability to do so. Because an individual uses activation energy and engages with the task, it is not automatically enjoyable.

Csikszentmihalyi (1997, 1992), with Rathunde and Whalen (1997), and Jackson (1999), writes of the energy of attention, or concentration as psychic energy which Csikszentmihalyi (1988, p.19) notes is the engaged attention paid to an activity. This psychic energy is used at different rates for different tasks and at different levels. Csikszentmihalyi also mentions energy deriving from flow:

> Optimal experience is a form of energy, and energy can be used either to help or destroy. …Energy is power, but power is only a means. The goals to which it is applied can make life either richer or more painful (Csikszentmihalyi, 1992, p.69).

The power of that energy is available from enjoying any activity. Csikszentmihalyi (1992, p.69) claims law breaking, violence and war are all sources for the power of enjoyment energy. These comments suggest the importance of ensuring that children in schools learn about enjoying learning as David had when he remarked, 'Yeah! It gives me power' (David 22/6:26).

I believe the research indicates the energy needed for flow in primary school learning, involves a 'spark of energy' that starts because the learner becomes interested when feedback ensues. This 'beginning to enjoy' from the learner success

when identifying task related feedback, creates an emotional response, and a drive to fully engage the psychic energy of the learner. The 'spark of enjoyment' and subsequent energy from this experience will subsequently be identified as *engagement energy*.

Thirteen children in the case study mention this phenomenon in some way. Comments made by Jeffrey and Michael are used to demonstrate when the respondents started to enjoy their assignment:

> *29/6:12 JEFFREY: When we started doing all the project and doing all the –bringing things –and learning about the beaches.*
> *1/6:59 MICHAEL: When I actually started looking for myself. Yes!*

Csikszentmihalyi (1992, p.68) characterises it:

> Most enjoyable activities are not natural; they demand an effort that initially one is reluctant to make. But once the interaction starts to provide feedback to the person's skills, it usually begins to be intrinsically rewarding (Csikszentmihalyi, 1992, p.68).

In this process, the learner uses *activation energy* to begin the task. The outcome, when enough effort is involved, is learner identified task related feedback. This feedback outcome generates a sense of success which is enjoyable. The *engagement energy,* which is the intrinsic response to this outcome, is important to the learner's continued attention to achieving the task. As Csikszentmihalyi writes:

> The autotelic experience, or flow, lifts the course of life to a different level. Alienation gives way to involvement, enjoyment replaces boredom, helplessness turns into a feeling of control, and psychic energy works to reinforce the sense of self, instead of being lost in the service of external goals. When experience is intrinsically rewarding, life is justified in the present, instead of being held hostage to a hypothetical future gain (Csikszentmihalyi, 1992, p.69).

I have given this lift a name '*engagement energy'* because it is important for teachers to understand the shift from extrinsic to intrinsic effect, because it is possible for

teacher and children to learn these conditions and so experience flow. It is also important for teachers to understand that the reverse is true. For some children, who have trouble understanding instructions, or have a limited perception of their learning ability, or are frustrated with issues of insufficient time to complete learning tasks, accessing engagement energy can be a problem.

7.2.3 Natural competencies and past success: enabling flow in learning

Child (1997, p.71) comments that 'confidence in oneself and the need for respect from others were felt to be crucial in providing a base for intellectual pursuits.' Some children like Anne, note how confidence and concentration come from having a natural competency for the task: *'...I really like adding and I've always been good at it'* (Anne: 15/6:40). Anne, in her interview, indicates her natural competency for maths as the source of her deepest enjoyment in learning because of her continued experience of success. Goleman (1996, p.94) suggests that schools should identify learner profiles of natural competencies because the child 'will enter flow more easily in that domain'. Mrs Critcher, when expressing her amazement at the children engaged in singing, commented:

> *42-46: 30/6 T: It makes you feel good. And the little things that they do –and <u>everyone's got strengths. I certainly believe that.</u>* (emphasis mine*) If they haven't got academic strengths, they're really good at interpersonal strengths, or they're a really good little friend to somebody, or they can solve problems, or they're very arty. They've got some kind of strength that's there; it's just finding that strength and making other people aware of that strength, you know?*

Developing a physical type, and skill profile, is a process that is presently used to identify potential players for specific sports. A natural competency profile, if used wisely, could be a useful tool for facilitating flow for individual learners.

For other learners, having been taught how to succeed, or having succeeded in learning, which led to enjoyment, is an important factor for continuing to learn. As Brett tells us, *'Well, learning more and more and getting confident and stuff...I don't think anything stops me enjoying learning' (Brett: 22/6:109&111).* The need for a profile of natural competencies and the importance of confidence from recurring success in learning, both support the priority of the facilitation of flow from earliest school years.

7.2.4 Success and confidence, a possible relationship with Maslow

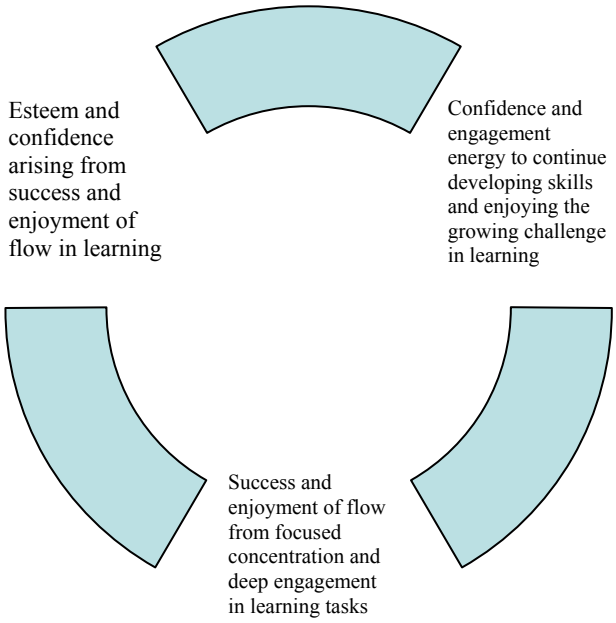
The growing confidence, from recurring success and enjoyment in learning, may be related to Maslow's hierarchy of needs. The research indicates that when the learner experiences flow, esteem needs, competence, and mastery are enhanced, and confidence and motivation to continue learning grows. These then become factors for continued engagement in enjoyment and flow in learning. As Csikszentmihalyi comments:

> Thus the flow experience acts as a magnet for learning –that is, for developing new levels of challenges and skills. In an ideal situation, a person would be constantly growing while enjoying whatever he or she did (Csikszentmihalyi, 1997, p.31).

In the cycle of continuing enjoyment of learning, like a hermeneutic spiral, the esteem from recurring success, enjoyment, and confidence moves to be a continually refiring trigger for growth and continued learning toward self-actualization (Model

7.1). So the study underlines the need for the earliest years of learning to assure learner success, enjoyment, growth in skills and confidence. As the effect of success in learning can be profound, so can the lack of success, confidence, and enjoyment in learning. This effect also proceeds in a cyclical manner. The eventual outcome is stress and resistance to engagement in and enjoyment of learning. For instance Jeffrey (29/6:54) just gave up; Elise says her perception of her skill level negatively influences her capacity to enjoy learning: *'I don't know, sometimes I think it is hard but when I get it, it is easy.' (Elise: 29/6:115)*; and Peter tells us, *'Most learning I don't really enjoy' (Peter: 29/6:15)*. The continuing inhibited view and lack of confidence in learning ability can become cyclical, unless a teacher breaks that cycle.

Figure 7.1 A visual format of the cycle for continued growth and development in learning



The intention of this figure is to convey a hermeneutic spiral where the success and enjoyment of flow lead to confidence and esteem and then further engagement energy and a desire to continue engaging with tasks of learning because of a continuing desire to experience flow in learning.

These findings are consistent with much contemporary literature on academic learning (Riner, 2000; Roberston, 2000; Shriver, Schwab-Stone & DeFalco 1999;

Merry, 1998; Woolfolk, 1998; Eggen & Kauchak, 1997; Woods & Jeffrey, 1996). For teachers to apply the principles involved with teaching for some flow in the classroom from earliest school years, it is important they understand all the conditions necessary for its facilitation in learning.

7.2.5 Collaboration and the fun of flow in the classroom

Collaboration can be important in the primary classroom for facilitating concentration and flow. The literature suggests that a range of factors influence the learners' capacity to concentrate on the task: school ethos and classroom management procedures (Riner, 2000; Robertson, 2000; Woods & Jeffrey, 1996); the learner's attitude to school and schooling (Moore, 1995; Richey, 1986); the learner's aptitude for the task; ability to understand instruction; perseverance; quality of teaching (Merry, 1998; Richey, 1986); and factors influencing the learner's emotional growth (Shriver, Schwab-Stone, & DeFalco, 1999). These factors can become barriers to enjoying learning.

This research identifies collaboration as a means to overcome some barriers to learning, by providing peer support for achieving the various components of flow. The results indicate that:

> Twelve of the seventeen respondents noted the importance of sociability, shared skills, ideas and resources, and seven of those associated collaboration with the 'fun' of learning from and with each other (Chapter 4, p.128).

David is used here as an example of the children's type of comments.

> *22/6:8 DAVID: Yeah, it was fun looking on the computers for information and swapping with others and working in a group.*

22/6:12 DAVID: Because if you do it by yourself it isn't as fun, because if you work with others they can have ideas that you wouldn't think of.

Cooperative learning can assist clarification of goals, and task related feedback processes 'by enabling the connection with past learning, through cross-fertilization of previous knowledge and present learning within the group' (Katz 1995, p.56). This can facilitate concentration which 'requires more effort when it goes against the grain of emotions and motivations' (Csikszentmihalyi, 1997, p.25).

The importance of cooperative learning cannot be underestimated because the impact of social development on cognitive development, enables children and adults alike 'to learn more, achieve more and enjoy the experience of learning more when they work in cooperative learning groups' (Hill, & Hill, 1990; p.1). Csikszentmihalyi agrees:

> It has been argued that this public sphere of action is the most important for developing one's potential, the one where the highest risks are run but the greatest growth occurs (Csikszentmihalyi, 1997, p.13).

Importantly this research has identified that collaboration can aid in overcoming barriers to engagement in learning and so can facilitate enjoyment or flow in learning. The findings confirm that if collaboration is to ensure the experience of flow, children should be taught the skills for learning cooperatively in the classroom.

7.2.6 The need for conceptual change: motivation and flow in learning

This research suggests that a change is needed in acknowledging a relationship between the deep enjoyment of flow and the motivation to continue learning. An academic understanding of what it is that enables effective learning in the classroom is evolving. Lefrancois (1972, p.9) claims behaviorism was the reaction that lead

learning away from feeling and emotion. Goleman (1996, p.95) more recently stresses the importance of emotional issues in learning. Contemporary commentators on education however, do not include the enjoyment of teaching and learning, or the energy and the substantive factor of the enjoyment of flow for influencing intrinsic motivation in their discussion.

This lack of acknowledgement exists, even though Csikszentmihalyi has written about enjoyment and its connections with growth, learning, energy and motivation from the early 1970's, and these connections have been validated in world wide research. Csikszentmihalyi (1997a, p.30) has established that 'the attention of students is related to the flow of the teacher in almost every subject'. He believes (Csikszentmihalyi, 1997a) that educational psychologists have made a mistake when they have addressed learning as primarily cognitive, and not fully acknowledged the emotional components. Podilchak (1992) notes that even in the leisure literature the topic of fun was not addressed until the 90's.

The literature review indicates that much contemporary education literature (Riner, 2000; Kauchak & Eggen, 1998; Woolfolk, 1998; Child, 1997) embraces discussion of each of the various components of the deep enjoyment of flow without acknowledging them as such. The findings of the research also indicate that teaching for enjoyment in learning is consistent in many ways with other contemporary commentators on teaching and learning, particularly the work of Collis, Dalton, and T.E.C.S.S.A. (1991), and that of Eggen, and Kauchak's (1997, pp.364-6) model for promoting student motivation:

In a learning-focused classroom with

- teaching characteristics of:
    - modelling, enthusiasm, caring, expectations;
- climate variables:
    - order and safety, success, task comprehension, challenge;
- instructional variables:
    - introductory focus, personalization, involvement and feedback

A conceptual change would identify and acknowledge the importance of the energy arising from enjoying challenging and successful learning. Jackson and Csikszentmihalyi (1999, p.141) claim that, 'often the words we use to describe the flow state are similar to those that describe fun'. The children in this research often identified enjoyable and meaningful learning with the descriptor 'it's fun'. A conceptual change would mean fresh expectations of classrooms as a forum of meaningful learning and energy producing fun. A change would mean the teachers' time warn phrase, 'You are not here to enjoy yourself or have fun, you are here to learn,' (Pers Com. H. Sydee, 8/2/03), with its subliminal message that enjoyment and learning don't belong together, should become obsolete. This would involve changes to many teacher attitudes, communication, teaching strategies, and discipline. Acknowledgement should be made, as Jackson and Csikszentmihalyi (1999), Rea (1997), Allen (1992), and Armstrong (1991), indicate, that real learning and skill development can be highly motivatory and 'seriously fun'.

7.3 RECOMMENDATIONS

The following section includes the recommendations for teachers, teacher educators, curriculum writers, and policy makers that arise from the findings of the research. This research identified strategies for teaching and learning currently available that foster a flow facilitating classroom culture.

7.3.1 Recommendations for teachers

It is therefore recommended that teachers:

- identify and apply the strategies of teaching characteristics; social, emotional and academic climate variables; and instructional variables, which facilitate a flow culture in the classroom.
- understand that the flow of learners is directly related to the flow of the teacher.
- provide frequent and formative feedback in learning to promote engagement energy.
- pay particular attention to the need for recurring success in classroom learning from the earliest school years, where the teacher appreciates each learner's CS (challenge/skill) balance, and his or her personal best (PB) is the standard for comparison.
- teach the skills for collaborative learning for the facilitation of flow.
- identify each child's natural competency as part of a developing competency profile (linked to learning outcomes) for more readily facilitating flow in learning.

- develop a classroom ethos, that while promoting clear expectations for learners, generates a sense of fun and learner energy.

7.3.2 Recommendations for teacher educators

It is therefore recommended that teacher educators:

- identify ways of achieving and promoting change in the teaching and learning ethos, from one of upholding the importance of the seriousness of successful and meaningful learning, to imbuing that learning with the enthusiasm, confidence and energy arising from the experience of flow.
- identify, explain and promote the structure of a flow facilitating classroom culture.
- identify, explain and promote the skills for collaborative learning as a source for facilitation of flow.
- ensure teacher preparation relating to the component characteristic qualities of flow viz. sufficient time for the task, clear, comprehensive and relevant lesson introductions, learner identified task related feedback, deep concentration, and challenge and skill relationship are understood.
- ensure that both learning as making meaning, and reproductory learning, are made explicit for structuring relevant lesson introductions.
- ensure pre-service and in-service education include sufficient mentoring to assist the growth of flow and personal confidence for the trainee teacher.
- ensure the opportunity for continuing professional development.

7.3.3 Recommendations for curriculum writers

It is therefore recommended that curriculum writers:

- promote the teaching, climate and instructional variables inherent in a flow facilitating classroom culture throughout the curriculum.

7.3.4 Recommendations for policy makers

It is therefore recommended that policy makers:

- provide purpose-build, flow facilitating physical environments in all schools.
- create policy that promotes change in the teaching and learning ethos from one of upholding the importance of the seriousness of successful and meaningful learning, to imbuing that learning with the enthusiasm, confidence and energy arising from the experience of flow.
- create policy identifying the 'ideal' teacher/student ratio for teacher and learner flow during the Years Kindergarten to 4, to maximize the opportunity for recurring learning and flow.
- create policy ensuring that all teachers are afforded the opportunity to upgrade their skills to those required for creating a flow facilitating classroom culture on a continuing basis.
- create policy that provides for the identification of the natural competencies of all learners, as a basis for facilitating flow.

7.4 SUGGESTIONS FOR FURTHUR RESEARCH

> It is not only what should be taught to children that is important, but also how it should be taught (Csikszentmihalyi, 1975, p.20).

1) While it is not anticipated, that flow will be experienced in all learning activities in the classroom, it is important that teachers and teacher training institutions understand the implications of enjoyment and flow in teaching. My research has identified that there are teaching characteristics; social, emotional and academic climate variables; and instructional variables, which facilitate the experience of flow in learning. Also, there are many consistencies between the literature regarding teaching, learning and classroom management, and those conditions needed to facilitate flow or deep enjoyment while engaged in successful and meaningful learning in the primary classroom.

Future research should:

* seek to replicate or extend the findings of this study, viz. identify the strategies of teaching and learning that produce the experience of flow and deep enjoyment, and the motivatory nature of this phenomenon for successful and meaningful learning.

* seek to reconceptualise the nine components of flow used in this research to identify further categories that may be relevant to deep enjoyment, or experiences analogous to those of flow.

2) The issue of the learners' and teacher's enjoyment of successful and meaningful teaching and learning has particular application for the Years Kindergarten through 4 because my research indicated that children appear to have developed their belief about their learning selves by Years 5 and 6.

Future research should:

* address how the strategies and methods for teaching for flow in learning might be applied in Years Kindergarten through 4, and that teacher/student ratio within those five years be investigated as a factor.

3) There is need for a change in the ideology and ethos of school systems and teacher training institutions from the 'seriousness of learning', to an ethos where the deep enjoyment of fun (learners' word for flow) is experienced.

Further research should:

* address ways and means for achieving classroom, school and systemic change, from upholding the importance of the seriousness of successful and meaningful learning, to imbuing that learning with enthusiasm, confidence and energy.

4) My research demonstrated the importance of applying an initial concentrated attention, identified as activation energy (Csikszentmihalyi, 1992) to the learning task for sufficient time to gain the success of learner-identified, task-related feedback. It also found that a majority of students identified this experience of initial success as the beginning of their enjoyment. This enjoyment (intrinsic reward) stimulates enthusiasm, and the confidence energy (engagement energy) to proceed with the task. My research also confirms what Csikszentmihalyi (1975, 1992, and 1997) refers to as the confidence, the energy and at times the sense of power that arises from the success inherent in the deeply enjoyable flow experience.

Future research should: * explore the operation of activation and engagement energies, and the energy and the sense of power that can occur from engaged psychic attention leading to flow.

5) My research has identified the importance of collaborative learning for facilitating the experience of flow and deep enjoyment in many of the learners' classroom activities.

Future research should:

* explore the implications and effects of collaborative learning skills on flow, and the skills needed to engage in successful classroom collaborative learning.

6) The need for a natural competency profile for each child, as a basis for promoting flow, was addressed in the discussion.

Future research should:

* develop a more sophisticated means of identifying the broad-based natural competency profiles of students and explore the usefulness of such profiles for facilitating flow in the classroom.

7) My research identified some of the specific individual teaching and learning issues which can impact negatively on a learner's potential to learn and capacity to enjoy learning.

Further research should:

* explore the component structure of flow, and the ideology of the enjoyment of learning, as a basis for identifying learner capabilities and individual problem areas of learning.

7.5 FINAL WORDS

> The whole purpose of this inquiry as to what makes flow possible is to see how we can apply it to everyday life, to work, to school, which are not structured to make flow happen, but where you can make flow happen if you know how to do it (Csikszentmihalyi, 1997a, p.12).

I can not tell at this point whether the idea that started me on this journey, that children and their teacher could interpret enjoying learning as a leisure experience, is true. If Csikszentmihalyi is right that 'optimal' occurrences of work, leisure and learning are experienced intrinsically the same way, then I can affirm that the children and teacher do experience the 'optimal' experience of flow in learning. This experience includes enjoyment, growth of esteem, confidence and autotelic behaviour in learning. These are all intrinsic qualities that have been valued historically in leisure. In whichever learning activity children attain the experience of flow, whether it be from socially acceptable or unacceptable activity, children will seek to repeat the experience. This is one reason academics and socially concerned individuals have promoted the value of recreation and leisure in schools and society.

Children have consolidated their view of their learning selves by Years 5 and 6. It is important therefore that they attain some concentration of their psychic attention in flow experiences from learning for meaning, as well as information processing and artistic learning early in their primary years. To facilitate this, schools should: i) recognise and value the flow experience for primary classroom learning: the sense of control, confidence, success, well-being, energy and motivation to learn that is generated from the experience; ii) identify and implement the teaching and learning strategies available that facilitate the experience of flow; iii) identify profiles of individual learner's natural competencies, and iv) ensure learner recurring success.

Creating a flow facilitating classroom culture is attainable. The teacher and learner will find joy in that classroom culture, and will experience the deep enjoyment of flow that is a major motivation to continue learning.

APPENDICES A

DATA COLLECTION INSTRUMENTS

A1 Interview questions for the children

A2 a,b,c,d,e Interview questions for the teacher

APPENDIX A1

Question Guide 15/6/99, for children's interviews

1. Did you enjoy doing the Bali assignment?

    1.2. Why did you enjoy it/ not enjoy it?

    1.3. What did you do that made you enjoy it/ not enjoy it?

2. Tell me some of your favourite things about studying about Bali.

    2.2. Can you tell me, how did it make you feel?

    2.3. Why did it make you feel like that?

3. Think of a (another) time when you really enjoyed learning something in the classroom.

    3.2. Tell me what that feeling was like and why you think you enjoyed that learning.

    3.3. Can you tell me what did you do that made you enjoy that learning?

4. In the beginning when you started to learn about Bali you wrote some questions you thought you'd like to answer about Bali. You didn't use those questions for the assignment. You used the teacher's questions for the assignment instead. If you had used your own questions would that have made any difference to your enjoyment in doing the assignment?

5. You made a time line plan for what you'd do each week in your Bali assignment. Was that useful? Did the planning help you in doing the assignment in any way?

6. In your writing lessons you have learned to use criteria to assess how well you are doing. You also assessed each other's Bali presentations. Does assessing your own and your schoolmates' lessons help you enjoy your learning more or not? Why?

7. What is the main thing that helps you enjoy?

    7.1. What stops you enjoying learning in the classroom?

APPENDIX A2a

Teacher Interview 10/5/99

1. Talk to me about the multi-age classrooms. How do you perceive them and their purpose?

2. What difference does it make you giving the children the same work? They are presently all doing exactly the same thing?

3. What difference will it make Year 5 going into Year 6?

4. What is your concept of self-direction? I sense there's a lot of trying to give the children the opportunity for choice and self-direction. Will you talk about that?

5. The experience of flow requires the children to create goals, so they'll recognise feedback,--small goals within the larger task. How do you think that might work in learning?

6. We need to have limited goals for experiencing flow. The way the critical question is set up, it is one goal. Is there some way that you could see that particular goal broken into smaller goals to ensure identifiable feed back along the way?

7. Can I ask you which group you suggest I work with and why?

8. The idea of breaking the tasks down into workable goals the children can relate to the feedback immediately –how would you see that working in maths?

APPENDIX A2b

Teacher Questions 2/6/99

Question for teacher following Observation of the lesson 1/6/1999

Q1. Does your understanding of what it means to be a teacher influence how you introduce a lesson? If you think it does influence how you introduce the lesson, what do you think that influence is?

Q2. Does your understanding of the learning task influence how you introduce the topic?

Q3. (An observation of a lesson introduction was recalled for the teacher). What other things could you have said at that point and still continued to share the excitement of learning with the children? Not that I think the children lost that excitement altogether but how to use the excitement is the issue here I think.

Q4. (The issue of feedback was raised with the teacher.) The big question is 'Can we teach about identifying the signs of feedback in what we do?' If we are concentrating on identifying little bits of feedback then we are concentrating on the task. Is there any value in the thought?

APPENDIX A2c

Teacher Interview 8/6/99

I asked the teacher to talk about the following issues:

I want to try and identify what the 'given events' are that combined in the two separate introductions, one to create the suspension of time, the other (from the previous week) to create the excitement in what was being shared.

- respect for others in your classroom, and how you feel about respect in your classroom
- what you do to create respect in your classroom
- your joy in learning and sharing that with the children
- the ownership or non ownership of space in the classroom, and what that means to you
- your knowledge of and expectations in regard to the children
- team teaching and what that means to you
- how you feel about doing things or finding things out for the children
- how you handle different feelings you have for different types of children in your classroom
- what you think and how you feel about self-directed learning in your classroom. Your expectations for children regarding this.
- the place of fun in classroom relationships and learning.

APPENDIX A2d

Teacher Interview 25/6/99

The background to each question was provided for the teacher.

1. Talk to me about the social issues of children in the classroom and working in small groups. How do you think their relationships might affect their capacity to learn?

2. What was it that you did with the small groups?

3. Will you talk about your time restrictions? You know how you say, 'I'll give five minutes', what is your intention with that?

4. I've been thinking about the idea of the children actually having opportunities to compare work they are doing, or they have just done, and comparing it with work they finished two weeks ago. How does that work in your classroom?

APPENDIX A2e

Teacher Interview 30/6/99

The background to each question was provided before asking the questions.

1. Just talk about enjoying teaching.

2. What effect do you think teacher insecurity about reflecting on their own teaching practice, might have on the learning efficiency and enjoyment of children?

3. From your observations what part do you think that effective social relationships might play in enhancing efficiency of learning, and enjoyment of learning?

4. What part does the seating of everyone together on the floor around you, play in efficiency of learning and enjoyment of learning?

5. You don't seem to care about the obstacle race that is the entrance to your classroom. What difference do tidy bags make?

APPENDICES B

ETHICS AND APPROVALS TO CONDUCT THE RESEARCH

B1 Permission to conduct research from New South Wales Department of School Education and Training, SYDNEY, NSW.

B2 Permission to conduct research from The Ethics Committee, University of Technology Sydney, Broadway, SYDNEY, NSW.

B3 *Please note:* A letter requesting the parents consent to conduct research with students in the Year 5/6 classroom of the New South Wales school was administered by the school and is not available for this appendix.

B4 The Teacher's Consent Form

APPENDIX B1

Permission to conduct research from:

New South Wales Department of School Education and Training, SYDNEY, NSW.

APPENDIX B2

Email from

Susanna Davis
Research Ethics Officer
University of Technology, Sydney

22 December 1998

Dr Kim Walker
Faculty of Education
Kuring-gai Campus

Dear Kim

HREC 98/72 - WALKER, Dr Kim (for HARLEY, Ms Joan M - Ed D Student) - "How
may the application of leisure theory influence teaching attitudes and
strategies and enable learning as a leisure experience in the primary
school classroom?"

The Committee considered the above application at its meeting of 8 December and made the following comments:

i) the layout and language of the consent form could be simplified, preferably to be on a single page,

ii) the issue of what to do if one or more parent or child did not consent to join the research has not been addressed;

iii) the consent form should state what will happen to students who do not wish to participate in the research;

iv) the Committee suggested that a "negative approval" approach might be best, ie that parents only return a consent form to indicate that they did not wish their child to participate in the research;

v) evidence of approval should be supplied from Holy Cross Catholic Primary School;

vi) the issue of confidentiality has not been sufficiently considered. If the school and teachers are identified, then it will be possible to identify the children concerned. Additionally, the application itself contains details of the teachers concerned, which means that their confidentiality has already been compromised ;

vii) approval from the NSW Department of School Education should be provided if necessary;

viii) you should note the AVCC recommendation that data should be stored for a period of at least 5 years after publication in the academic unit in which it was generated; and

ix) a reason should be supplied as to why the school Principal will have access to the data. If the Principal is to have access to such data, then this should be mentioned on the consent forms.

So as not to delay the research unnecessarily, the Committee has authorized me to approve the application on provision of a satisfactory response.

Your reply should be sent to Susanna Davis, Research Ethics Officer, Research Office, Broadway. In the meantime, if you have any queries please do not hesitate to contact either Susanna or myself.

Yours sincerely,

Associate Professor Ashley Craig
Chair
UTS Human Research Ethics Committee

Susanna Davis
Research Ethics Officer
University of Technology, Sydney

Ph: 61 2 9514 1279 Fax: 61 2 9514 1244

*** Please note:** Permission was subsequently given by phone following receipt of the required information from me.

APPENDIX B3

Please note: A letter was sent to the parents of the school children by the school, but is not available for this appendices.

APPENDIX B4

B4 The Teacher's Consent Form

APPENDICES C

ANALYSIS OF INTERVIEW DATA

C1 List of NUD*IST codes developed for this research

C2 List of all interviews transcribed and coded for this research

C3 Example of NUD*IST search for data coded (1 1)

C4 Example of NUD*IST search for data coded (1 3 1)

C5 Example of NUD*IST search for data coded (1 4 1)

C6 Example of NUD*IST search for data about fun in learning

C7 Example of NUD*IST search for data related to working with friends

C8 Example of NUD*IST search for data where learners said the work was too hard

C9 Example of NUD*IST search for data related to respect in the classroom.

APPENDIX C1

List of NUD*IST codes developed for this research

```
:;GCV1|1
:;GCA1|2|NUD.IST 4.0, Project: case study enjoyable learning, User:
joan harley
:;GCZ34

1=(1) Learning as Experience
2=(1 1) Enjoys Learning Information
3=(1 1 1) Enjoyment
4=(1 1 1 1) learning response
5=(1 1 1 1 1) choice preference
6=(1 1 1 1 2) no preference of choice
7=(1 1 1 1 3) prefers to organise learning
8=(1 1 1 1 3 1) doesn't prefer to organise for learning
9=(1 1 1 2) Control of Task
10=(1 1 1 2 1) time to complete the task
11=(1 1 1 3) Clear Goals
12=(1 1 1 4) Has or Lacks Concentration on Task
13=(1 1 2) Lack of Enjoyment
14=(1 1 2 1) learning response


15=(1 3) Enjoys Manual and Rote Tasks in Learning
16=(1 3 1) Enjoyment
17=(1 3 1 1) learning response
18=(1 3 1 1 1) choice preference
19=(1 3 1 1 2) no preference of choice
20=(1 3 1 1 3) prefers organisation of task
21=(1 3 1 1 4) clear goals
22=(1 3 1 2) control of task issue
23=(1 3 1 2 1) Time to Concentrate Issue
24=(1 3 1 4) has or lacks concentration
25=(1 3 2) Lack of Enjoyment
26=(1 3 2 1) learning response


27=(1 4) Collaborative Learning
28=(1 4 1) Enjoyment
29=(1 4 1 1) information feedback
30=(1 4 1 2) aids control, lessens anxiety
31=(1 4 1 3) social feedback
32=(1 4 2) Lack of Enjoyment
33=(1 4 2 1) disturbs concentration
34=(1 4 2 2) repeating known learning
35=(1 4 2 3) control of task issue
```

APPENDIX C2

List of all interviews transcribed and coded for this research

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Q.S.R. NUD.IST Power version, revision 4.0.
Licensee: ticehurst.

PROJECT: case study enjoyable learning, User joan harley, 10:35 am,
Jun 5, 2003.

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++ Coded at 14 nodes.

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++++++++++++
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+++ Document Header:
One of 17 children in case study

++ Coded at 18 nodes.

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++++++++++++
+++ ON-LINE DOCUMENT: Anne
+++ Document Header:
One of 17 children in case study

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++++++++++++
+++ ON-LINE DOCUMENT: Brett
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One of 17 children in case study

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+++ Document Header:
* No Header

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++++++++++++
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++ Coded at 5 nodes.

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+++ ON-LINE DOCUMENT: Children, entering assignment (J
+++ Document Header:
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+++ ON-LINE DOCUMENT: Classroom Organisation
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* No Header

++ Coded at 13 nodes.

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++++++++++++
+++ ON-LINE DOCUMENT: Conceptualising a lesson
+++ Document Header:
* No Header

++ Coded at 2 nodes.
```

```
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++++++++++++
+++ ON-LINE DOCUMENT: Dallas
+++ Document Header:
* No Header

++ Coded at 2 nodes.

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++++++++++++
+++ ON-LINE DOCUMENT: David
+++ Document Header:
One of 17 children in case study

++ Coded at 15 nodes.

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++++++++++++
+++ ON-LINE DOCUMENT: Developing assessment criteria
+++ Document Header:
* No Header

++ Coded at 3 nodes.

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++++++++++++
+++ ON-LINE DOCUMENT: Elise
+++ Document Header:
One of 17 children in case study

++ Coded at 15 nodes.

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++++++++++++
+++ ON-LINE DOCUMENT: Ella
+++ Document Header:
One of 17 children in case study

++ Coded at 12 nodes.

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++++++++++++
+++ ON-LINE DOCUMENT: Grant enjoying learning
+++ Document Header:
* No Header

++ Coded at 17 nodes.

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++++++++++++
+++ ON-LINE DOCUMENT: Jeffrey
+++ Document Header:
One of 17 children in case study

++ Coded at 19 nodes.
```

++
++++++++++++
+++ ON-LINE DOCUMENT: Joy
+++ Document Header:

One of 17 children in case study

++ Coded at 15 nodes.

++
++++++++++++
+++ ON-LINE DOCUMENT: Kerrie
+++ Document Header:
One of 17 children in case study

++ Coded at 19 nodes.

++
++++++++++++
+++ ON-LINE DOCUMENT: Lesson Introduction
+++ Document Header:
* No Header

++ Coded at 7 nodes.

++
++++++++++++
+++ ON-LINE DOCUMENT: Lesson Introduction 2
+++ Document Header:
* No Header

++ Coded at 8 nodes.

++
++++++++++++
+++ ON-LINE DOCUMENT: Lisa
+++ Document Header:
One of 17 children in case study

++ Coded at 22 nodes.

++
++++++++++++
+++ ON-LINE DOCUMENT: Lunchtime Observation
+++ Document Header:
* No Header

++ Coded at 10 nodes.

++
++++++++++++
+++ ON-LINE DOCUMENT: Maeve
+++ Document Header:
One of 17 children in case study

++ Coded at 19 nodes.

```
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++++++++++++
+++ ON-LINE DOCUMENT: Marton and Entwistle
+++ Document Header:
* No Header

++ Coded at 13 nodes.

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++++++++++++
+++ ON-LINE DOCUMENT: Matt
+++ Document Header:
One of 17 children in case study

++ Coded at 20 nodes.

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++++++++++++
+++ ON-LINE DOCUMENT: Multi-age Classrooms
+++ Document Header:
* No Header

++ Coded at 11 nodes.

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++++++++++++
+++ ON-LINE DOCUMENT: Peter
+++ Document Header:
One of 17 children inc ase study

++ Coded at 14 nodes.

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++++++++++++
+++ ON-LINE DOCUMENT: Robert
+++ Document Header:
One of 17 children in case study

++ Coded at 14 nodes.

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++++++++++++
+++ ON-LINE DOCUMENT: Ross
+++ Document Header:
One of 17 children in case study

++ Coded at 16 nodes.

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++++++++++++
+++ ON-LINE DOCUMENT: Seating Allocations
+++ Document Header:
* No Header

++ Coded at 6 nodes.
```

```
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++++++++++++
+++ ON-LINE DOCUMENT: Self Observation
+++ Document Header:
* No Header

++ Coded at 2 nodes.

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++++++++++++
+++ ON-LINE DOCUMENT: Stephen
+++ Document Header:
One of 17 children in case study

++ Coded at 9 nodes.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++++++++++++
+++ ON-LINE DOCUMENT: Tania
+++ Document Header:
One of 17 children in case study

++ Coded at 14 nodes.
```

APPENDIX C3

Example of NUD*IST search for data coded for (1 1), learners who express enjoyment, or lack of enjoyment, in the category learning as meaning or gaining information.

Node Data for children nodes of (1 1) /Learning as Experience/Enjoys Learning Information.
Table body shows whether coding exists (1) or not (0).

Documents	Enjoyment	Lack of En~
Andrew	1	1
Anne	1	1
Brett	1	0
David	1	1
Elise	1	1
Ella	1	1
Jeffrey	1	1
Joy	1	0
Kerrie	1	1
Lisa	1	1
Maeve	1	0
Matt	1	1
Robert	1	1
Ross	1	1
Tania	1	1

APPENDIX C4

Example of NUD*IST search for data coded (1 3 1), instances where a learner expresses enjoyment of rote or information processing in learning, indicating a sense of control and where the learner has or lacks concentration.

Node Data for children nodes of (1 3 1) /Learning as Experience/Enjoys Manual and Rote Tasks in Learning/Enjoyment.
Table body shows whether coding exists (1) or not (0).

Documents	learning r~	control of~	has or lac~
Brett	1	1	1
David	1	0	0
Jeffrey	1	1	1
Kerrie	1	0	0
Lisa	1	0	0
Maeve	1	0	0
Peter	1	1	1
Stephen	1	1	1

APPENDIX C5

Example of NUD*IST search for data coded (1 4 1), instances where collaboration aids learning, control and provides social feedback.

Node Data for children nodes of (1 4 1) /Learning as Experience/Collaborative Learning/Enjoyment.
Table body shows whether coding exists (1) or not (0).

Documents	informatio~	aids contr~	social fee~
Andrew	0	1	0
Anne	0	1	1
Brett	1	1	0
David	1	1	0
Elise	1	1	0
Ella	1	1	0
Jeffrey	0	1	0
Joy	1	1	1
Lisa	0	1	0
Maeve	1	0	0
Matt	1	1	1
Peter	0	1	0
Ross	1	1	0
Tania	0	0	1

APPENDIX C6

Example of NUD*IST search for data about fun

++
+++ ON-LINE DOCUMENT: Andrew
One of 17 children in case study
++
[Andrew : 87 - 87]
just fun, like we did all the studying and

++
+++ ON-LINE DOCUMENT: Brett
One of 17 children in case study
++
[Brett : 85 - 85]
38. 22/6 BRETT. Orrr - doing fun things -

++
+++ ON-LINE DOCUMENT: Children's Goals
* No Header
++
[Children's Goals : 74 - 74]
73. leisure thing that's pretty fun sometimes.

++
+++ ON-LINE DOCUMENT: David
One of 17 children in case study
++
[David : 14 - 14]
8. 22/6 DAVID. Yeah it was fun looking on the

++
+++ ON-LINE DOCUMENT: Elise
One of 17 children in case study
++
[Elise : 99 - 99]
the institute of sport and that was fun,

++
+++ ON-LINE DOCUMENT: Ella
One of 17 children in case study
++
[Ella : 59 - 59]
19. 22/6 ELLA. Um. Exciting. (Yer) Fun

++
+++ ON-LINE DOCUMENT: Grant enjoying learning
* No Header
++
[Grant enjoying learning : 10 - 10]
4 1/6 GRANT. sort of lifestyle. That's fun.

++
+++ ON-LINE DOCUMENT: Joy
One of 17 children in case study
++
[Joy : 85 - 85]
38. 15/6 JOY. -------- Because it's fun

++
+++ ON-LINE DOCUMENT: Lisa
One of 17 children in case study
++
[Lisa : 15 - 15]

was fun to find the music side to do about their music and it was
++
+++ ON-LINE DOCUMENT: Maeve
One of 17 children in case study
++
[Maeve : 6 - 6]
4. 15/6 MAEVE. It was really fun because like,

++
+++ ON-LINE DOCUMENT: Marton and Entwistle
* No Header
++
[Marton and Entwistle : 9 - 9]
work can be fun, with things like art and

++
+++ ON-LINE DOCUMENT: Matt
One of 17 children in case study
++
[Matt : 87 - 87]
just fun, like we did all the studying and

++
+++ ON-LINE DOCUMENT: Peter
One of 17 children inc ase study
++
[Peter : 288 - 288]
fun - rushing --it, it, it, was like a

++
+++ ON-LINE DOCUMENT: Tania
One of 17 children in case study
++
[Tania : 7 - 7]
4. 22/6 TANIA. Yeah it was fun.

APPENDIX C7

Example of NUD*IST search for data related to working with friends in learning.

```
Q.S.R. NUD.IST Power version, revision 4.0.
Licensee: ticehurst.

PROJECT: case study enjoyable learning, User joan harley, 11:59 am,
Jun 2, 2003.

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++++++++++++
+++ Text search for 'friends'

+++ Searching document About enjoyment...

+++ Searching document Andrew...
I'd walk over to my FRIENDS house and we'd
18
computer, I go to my FRIENDS house (Yes) and
193
+++ 2 text units out of 285, = 0.70%

+++ Searching document Anne...
my FRIENDS are at school and everything and
212
FRIENDS. (15/6 ANNE. Yes) A subject you
216
+++ 2 text units out of 269, = 0.74%

+++ Searching document Brett...
it's um - you see I learn from my FRIENDS.
276
that you learn as much from your FRIENDS
278
and your interaction with your FRIENDS as
279
+++ 3 text units out of 285, = 1.1%

+++ Searching document Child Anxiety...

+++ Searching document Children in Groups...
242. 9/6 T.  I'm a big one on non-ownership of space.  I guess space
comes from-- I didn't want children coming into this classroom with
established FRIENDS and sitting next to those friends all year and
not
being able to um expand their friendship groups.
243
243. 9/6 T.  So at the beginning of the year we just let FRIENDS sit
together.   I just let people sit together.  'cause it doesn't
happen in
(other teacher)'s room.  It's different in her room.
244
244. 9/6 T.  To me it was really important that they just didn't
stay
with the same group of people, that they actually expanded their
```

FRIENDShip groups.
245

250. 9/6 T. And gradually, I let them stay in their little FRIENDShips
for about 3 or 4 weeks and then I started changing it and I would 'pick
them out of a hat' and I would 'make it girl/boy' on a lot of occasions.

251
264. 9/6 T. They actually had to expand even if they didn't make FRIENDS
- they'd expand their friendships and get to know other people. So that
was fairly important to me.
265
279. 9/6 R. Speak to me about (amid the general noise there was a comment
by a child related to his punishment for some infringement of a rule, the
teacher answered 'Righteoh, off you go' the response was 'thank you,
bye'. The teacher then commented 'they'd take all their FRIENDS with
them now.' Another child came wanted a particular work sheet. The
interesting thing about all this cheerful activity is that it was the
children's lunchtime.)
280
+++ 6 text units out of 380, = 1.6%

+++ Searching document Children's Goals...
153. and everything with all my FRIENDS that leisure and everything
157
+++ 1 text unit out of 181, = 0.55%

+++ Searching document Children's Physical Appearances...

+++ Searching document Children, entering assignment...

+++ Searching document Children, entering assignment (J...
49. GARETH. Um just my FRIENDS, they kept doing
96
50. R. So it was your FRIENDShip that made you
98
+++ 2 text units out of 264, = 0.76%

+++ Searching document Classroom Democracy...

+++ Searching document Classroom Organisation...
85. 30/6 T. And particularly focusing on a lot of the social skills.
Academic skills a very, very, very important but you know these children
have to mix with other people. They have to have FRIENDS otherwise they
are going to have a very lonely existence.
88

114. 30/6 T. And to think that child has been here unhappy at
school at
school and the probably only thing that has kept him here at school
is probably his FRIENDS.
117
+++ 2 text units out of 222, = 0.90%

+++ Searching document Conceptualising a lesson...
+++ Searching document Dallas...

+++ Searching document David...
school FRIENDS work make it more enjoy able
131
+++ 1 text unit out of 163, = 0.61%

+++ Searching document Developing assessment criteria...

+++ Searching document Elise...
your FRIENDS.
277
226. Elise. Working together and your FRIENDS
288
229. R: So it doesn't have to be your FRIENDS,
300
+++ 3 text units out of 338, = 0.89%

+++ Searching document Ella...
FRIENDS. 'Cause I'm in the same class as
224
+++ 1 text unit out of 271, = 0.37%

+++ Searching document Grant enjoying learning...
10 1/6 GRANT. I've gone to my FRIENDS houses,
19
+++ 1 text unit out of 441, = 0.23%

+++ Searching document Jeffrey...

+++ Searching document Joy...
new FRIENDShip. (15/6 JOY. Yep) Good. Now
26
FRIENDS?) it's easier if you don't have to
194
your FRIENDS don't know and the teacher
199
hard doesn't it when your FRIENDS don't
203
+++ 4 text units out of 213, = 1.9%

+++ Searching document Kerrie...
FRIENDS won't you?
104
190. Kerrie. Lot's of my FRIENDS are going to
106
they'll tell it to all their FRIENDS if
277
to talk to my FRIENDS and all that (Yer)
314

+++ 4 text units out of 387, = 1.0%

+++ Searching document Lesson Introduction...

+++ Searching document Lesson Introduction 2...
16. 25/6 T. even though he's quite good we felt like he needs to
expand
some FRIENDShips, (25/6 R. Yes.)
17
17. 25/6 T. because he's got lots of year 6 FRIENDS that will be
going to
High School. They'll be going to High School so we have to
establish
also, a base of friends that he's going to be left with here,
18
39. 25/6 T. And then to actually come back and split up they had
time to
work with their FRIENDS, and they had time to you know, put their
information down and finish off that.
40
+++ 3 text units out of 212, = 1.4%

+++ Searching document Lisa...
you’re having fun with your FRIENDS and doing it, that’s good I
77
53. 22/6 R. Do your FRIENDS make it easier.
83
54. 22/6 LISA. Yeah it does like working with a couple of FRIENDS
84
FRIENDS to help you on that and stuff
91
58. 22/6 LISA. So it like makes it easier to do it with your
FRIENDS.   93
86. 22/6 LISA. Umm I don’t know kind of working with my FRIENDS
147
because you have done it with all your FRIENDS that’s ok there is
174
+++ 7 text units out of 176, = 4.0%

+++ Searching document Lunchtime Observation...
FRIENDShip group.
100
both a girls' and a boys' FRIENDShip group wants to
105
+++ 2 text units out of 124, = 1.6%

+++ Searching document Maeve...

+++ Searching document Marton and Entwistle...

+++ Searching document Matt...
I'd walk over to my FRIENDS house and we'd
18
computer, I go to my FRIENDS house (Yes) and
194
+++ 2 text units out of 285, = 0.70%

+++ Searching document Multi-age Classrooms...
175. And it's the talking with your FRIENDS and talking and
listening to

other children's ideas and that's fairly vital to any learning
situation.
212
242. be with their FRIENDS around the table, and you'll see...
279
248. R. It's part of the FRIENDShip part of learning.
285
+++ 3 text units out of 331, = 0.91%

+++ Searching document Peter...
FRIENDS.
115
1. R: You just like talking to your FRIENDS
117
FRIENDS.
148
FRIENDS were out there playing footie too
295
important than work (yes) like FRIENDShip.
399
+++ 5 text units out of 468, = 1.1%

+++ Searching document Robert...

+++ Searching document Ross...
62. 15/6 ROSS. I was able to go ask FRIENDS,
166
+++ 1 text unit out of 359, = 0.28%

+++ Searching document Seating Allocations...

+++ Searching document Self Observation...
Mrs. Critcher explained that the children would work in small groups
for
the purpose of this assignment. Those who had FRIENDShip groups
would
have the choice to work in those. Those who did not go into a
friendship
group would be allocated to a group without choice about that. The
teacher's intention in introducing this subject of Bali was that the
children would be introduced to the people and traditions of another
culture.
9
+++ 1 text unit out of 26, = 3.8%

+++ Searching document Stephen...

+++ Searching document Tania...
you don’t have any FRIENDS with you—and
198
fun to have FRIENDS around you when you are
202

FRIENDS but you weren’t together? (yer)
206
+++ 3 text units out of 210, = 1.4%

++
++++++++++++

```
+++ Results of text search for 'friends':
++ Total number of text units found = 59
++ Finds in 22 documents out of 37 online documents, = 59%.
++ The online documents with finds have a total of 5890 text units,
   so text units found in these documents = 1.0%.
++ The selected online documents have a total of 8105 text units,
   so text units found in these documents = 0.73%.
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++++++++++++
```

APPENDIX C8

Example of NUD*IST search for data where children said the work was too hard.

```
Q.S.R. NUD.IST Power version, revision 4.0.
Licensee: ticehurst.

PROJECT: enjoyable learning, User joan harley, 8:04 pm, Jun 2, 2003.

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++++++++++++
+++ Text search for 'too hard'


+++ Searching document Andrew...

+++ Searching document Anne...

+++ Searching document Brett...

+++ Searching document David...

+++ Searching document Elise...
232. Elise. Umm things that might be TOO HARD.
310
+++ 1 text unit out of 336, = 0.30%

+++ Searching document Ella...

+++ Searching document Jeffrey...
feel that the work was TOO HARD or something?
186
+++ 1 text unit out of 373, = 0.27%

+++ Searching document Joy...

+++ Searching document Kerrie...

+++ Searching document Lisa...

+++ Searching document Maeve...

+++ Searching document Matt...

+++ Searching document Peter...
TOO HARD-let's see if we can find the words
433
- if you look at it and it's TOO HARD,
434
+++ 2 text units out of 467, = 0.43%

+++ Searching document Robert...

+++ Searching document Ross...

+++ Searching document Stephen...
```

```
+++ Searching document Tania...
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++++++++++++
+++ Results of text search for 'too hard':
++ Total number of text units found = 4
++ Finds in 3 documents out of 17 online documents, = 18%.
++ The online documents with finds have a total of 1176 text units,
   so text units found in these documents = 0.34%.
++ The selected online documents have a total of 4736 text units,
   so text units found in these documents = 0.08%.
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++++++++++++
```

APPENDIX C9

Example of NUD*IST search for data related to respect in the classroom.

```
Q.S.R. NUD.IST Power version, revision 4.0.
Licensee: ticehurst.

PROJECT: case study enjoyable learning, User joan harley, 10:09 am,
Jun 6, 2003.

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++++++++++++
+++ Text search for 'respect'

+++ Searching document About enjoyment...

+++ Searching document Andrew...

+++ Searching document Anne...

+++ Searching document Brett...

+++ Searching document Child Anxiety...

+++ Searching document Children in Groups...
5. 9/6 R. In my perception of it was as if the children were somehow
floating above the ground and the RESPECT shared between the teacher
and
the children was so 'thick' and I thought to myself that I could
actually 'feel' that respect, it was so dense?
6
142. 9/6 T. say yes those children have RESPECT for other children -
but there are certainly some children in my class that don't.  They
have no respect for other children's
143
143. 9/6 T. belongings.  They have no RESPECT for um their feelings
- and it would be um mainly two or three of them or maybe even three
or four of them who would have little respect for anything
144
150. 9/6 R. during this first instance of suspension of time I got a
very deep sense of the degree of RESPECT that is felt and shown in
your classroom.  I was asking about
151
153. 9/6 T. there are some children that don't have any RESPECT  and
I guess you always
154
185. 9/6 T. Ah, we were just talking about RESPECT, and I was saying
there are some children who have no respect at all.  It is only
about three or four mainly from my class.  But most of (the other
teacher's) do.   186
186. 9/6 R. Because I thought that I saw a high degree of RESPECT.
187
197. 9/6 T. and to create RESPECT well you can only tick them
off?(?) giving examples - and putting feelings - we always - we
sometimes roll play and get children to act and say well 'would you
like it?               198
```

198. 9/6 T. Think of how you'd like to be treated and would you like someone to be saying that to you?' and they have that you know um and I guess that is how we create it, that RESPECT.
199
+++ 9 text units out of 380, = 2.4%

+++ Searching document Children's Goals...

+++ Searching document Children's Physical Appearances...

+++ Searching document Children, entering assignment...

+++ Searching document Children, entering assignment (J...

+++ Searching document Classroom Democracy...

+++ Searching document Classroom Organisation...

+++ Searching document Conceptualising a lesson...

+++ Searching document Dallas...

+++ Searching document David...

+++ Searching document Developing assessment criteria...
26. There is a sense of RESPECT and acceptance in this classroom that was noticeable even on this day when parents were visiting the classroom.
28
13. The teacher always treats him with RESPECT 'on the surface'. Certainly the teacher treats him with fairness.
63
+++ 2 text units out of 77, = 2.6%

+++ Searching document Elise...

+++ Searching document Ella...

+++ Searching document Grant enjoying learning...

+++ Searching document Jeffrey...

+++ Searching document Joy...

+++ Searching document Kerrie...

+++ Searching document Lesson Introduction...

+++ Searching document Lesson Introduction 2...
+++ Searching document Lisa...

+++ Searching document Lunchtime Observation...
+++ Searching document Maeve...

+++ Searching document Marton and Entwistle...

+++ Searching document Matt...

+++ Searching document Multi-age Classrooms...

```
+++ Searching document Peter...

+++ Searching document Robert...

+++ Searching document Ross...

+++ Searching document Seating Allocations...
33. A negotiation had been made between teacher and children
regarding the necessity for RESPECT during the presentation of each
group.              34
35. The teacher then reminded the children of the worthwhile aspects
of that presentation.  Following this reminder the children
appeared, not only RESPECTfully attentive but were supportive of
each performance as well.
36
+++ 2 text units out of 43, = 4.7%

+++ Searching document Self Observation...

+++ Searching document Stephen...

+++ Searching document Tania...


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++++++++++++
+++ Results of text search for 'respect':
++ Total number of text units found = 13
++ Finds in 3 documents out of 37 online documents, = 8.1%.
++ The online documents with finds have a total of 500 text units,
   so text units found in these documents = 2.6%.
++ The selected online documents have a total of 8105 text units,
   so text units found in these documents = 0.16%.
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++++++++++++
```

APPENDIX D1

Samples from observation diary

17 May 1999

No small group work skills were taught before the implementation of the small group task. This would appear to be necessary if flow is a desired outcome and small group activities are to be used. The importance of group dynamics in education has been discussed at length over many years (Hargreaves 1975, Dalton 1985 for instance). Howie (1969:60) wrote 'This is to say that schools and classrooms must be transformed into communities in which the social skills can be tested and refined.'

9 June 1999

The teacher had called the children to attention with the clapping pattern that the teachers use to attain quietness in the room. The children are very responsive to this clapping pattern. The teacher was seated at the low chair and all the children were seated on the floor in front of the teacher. Very soon after the teacher began to speak, it was as if time stood still. In my perception, it was as if the children were somehow floating above the ground and the respect shared between the teacher and the children was so 'thick' and I thought to myself that I could actually 'feel' that respect, it was so dense.

30 June 1999

While interviewing the children, one said that he was repeating Year 6, had been to school all of these years, and that this year was the first time he had any enjoyment in learning. I was just overwhelmed, and thought, how awful to go to school for so many years, and to wait until this year, to enjoy any learning.

APPENDIX D2

Samples from personal diary

30 May 2001

I am so thankful for Gai McMurtrie telling me of Luenig's cartoon about achieving a big task. Starting this thesis again from the very beginning has been very stressful. It's been handy to have Luenig's wise suggestion to sit down at the edge of the path and watch the sunset, then after a rest get up and start walking again. I've always told friends you don't have to be terribly bright to do a doctorate; you just need the capacity to 'plod on.' I now add the fact; you need a good supervisor as well.

15 January 2002

NUD*IST! Talk about tearing your hair out. Who invented it? I've struggled with this one. I'm on this course, I have to stay here.

30 April 2002

The teacher read all the NUD*IST transcripts and made comments. She is so supportive. As I read her comments and I work with the materials, I feel this deep sense of loving the teacher and the children, so much appreciation for their willingness and openness.

15 October 2002

Poor Laurie, He must be nearly tearing his hair out with me. I know when I talk I repeat myself. I have so much trouble when writing, because I use too many words to express myself. Worse, I don't even recognise it when I read it through.

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