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CO-CONSTRUCTING EARLY ADOLESCENT EDUCATION THROUGH IMAGE-BASED RESEARCH

A thesis presented in partial fulfilment of the requirements for the degree of Master of Education at Massey University, Palmerston North

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ABSTRACT

Professional literature reporting the needs and characteristics, both educational and developmental of early adolescents presents a compelling case that students of this age group are distinct and require the development of a unique educational approach to best support their needs as learners and young people. Although much has been written about these students, little has been written with them, and even fewer studies have involved students themselves as co-researchers to investigate their own experience and understandings. The research reported in the thesis describes the implementation into practice of an image-based research methodology with early adolescent students themselves constructing and articulating their voice as the core focus of the research. The research was predicated on the belief that 'student voice' is the element vital in an educational approach developmentally responsive to students of this age group, and an element all too often missing.

Extended Visual Dialogue, the methodological approach devised to implement the research, was employed to conduct exploratory voice research with 38 early adolescent students in Years 7 and 8, across three participating schools in 2004. The approach combined elements from the research genres of voice research, participatory action research and image-based research and the students used a combination of autophotography (participant-generated photography) and photo elicitation interviews to investigate how they perceive school and learning, perceive their identity as young persons and learners, and perceive the world in which they live. Through the processes of the research progressively, the students shared their perspectives with the adult researcher and brought themselves, and the researcher, to a deeper understanding of their unique point of view as learners in our schools, and as young persons in their own right. The findings of the research revealed the sound understanding the students have about their educational and personal needs, preferences, and agendas, and organised these into a framework representing the perspective of the students, accessible to their teachers as key stimulus for their development as distinctly middle level practitioners and their schools as authentic middle level education providers.

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I would like to acknowledge and thank the teachers who volunteered to participate in the research. Each teacher brought a unique perspective to the research commensurate with their teaching interests, and all were excited to hear and take seriously the voice of their students as a valuable opportunity in their development as authentic middle level practitioners.

Most importantly I acknowledge the 38 students who participated voluntarily in the project and who taught me so much about being young, and about the experience of schooling and the world through adolescent eyes. The dignity, wisdom, and earnest reflection that the students brought to the research will stay with me forever.

This project has been reviewed, judged to be low risk, and approved by the researcher and supervisor under delegated responsibility from the Massey University Human Ethics Committee.

TABLE OF CONTENTS

ABSTRACT		i	
ACK	NOWLE	EDGMENTS	ii
INTR	ODUC	ΠΟΝ	1
СНА	PTER O	NE: RESEARCH CONCEPT AND DESIGN	3
1.0		Introduction	3
1.1		Conceptual Framework	4
1.2		Origins	7
1.3		Student Participation as Co-researchers	8
1.4		Image-based Methodology	10
1.5		Extended Visual Dialogue - A Research Conversation Over	
		Time	12
1.6		Making Sense of the Data Generated	14
1.7		Interpretive Conceptual Framework of the Researcher	15
1.8		Constant Comparative Analysis	17
1.9		Establishing Trustworthiness	19
1.10		Ecological Approach to Reporting Results	20
1.11		Extended Visual Dialogue Design Strategy	22
СНА	PTER T	WO: RESEARCH DESIGN APPLIED	25
2.0		Introduction	25
2.1		Developing the Research Plan (Jan. – Feb. 2004)	28
2.2		Establishing the Research (Nov. 2003-Feb. 2004)	29
	2.2.1	Selecting Schools, Students and (Liaison) Teachers	29
2.3		Data Generation (March - May 2004)	32
	2.3.1	The Research Questions	32
	2.3.2	The Photo Focus Guide	33
	2.3.3	Auto-photography	35
	2.3.4	Photo Elicitation Interviews	37
2.4		Data Analysis (June-Dec. 2004)	39

	2.4.1	Image Inventory	40
	2.4.2	Collaborative Analysis of Data	40
	2.4.3	Meta-analysis	45
	2.4.4	Participation in and Experience of the Image-based Process	45
2.5		Validating the Research Analysis (June-Aug. 2004)	45
2.6		Reporting Research Findings (Oct. 2004-Dec.2005)	47
CHAP	TER TH	IREE: STUDENT ENGAGEMENT WITH THE RESEARCH	
		PROCESS	49
3.0		Introduction	49
3.1		Patterns of Student Engagement with the Image-Based	
		Methodology	50
3.2		Student Perceptions of the Research Process	53
3.3		The Research Process: Positive Aspects Identified	54
	3.3.1	Intellectual challenge: Thinking outside the square	55
	3.3.2	Alternate Mode of Expression	55
	3.3.3	I Could So What I Wanted: Autonomy and Self-direction	56
	3.3.4	No Possibility of Failure	57
	3.3.5	Learning About What Matters to Me	57
3.4		The Research Process: Negative Aspects Identified	58
	3.4.1	Technical issues: I lost my photos	58
	3.4.2	Missing Out	59
	3.4.3	To Plan or Not to Plan	60
	3.4.4	Not Enough Time	60
	3.4.5	Social Dynamics: Individual Preferences	61
	3.4.6	Nothing: I liked It All	61
3.5	The Re	esearch Process: Improvements Identified	62
	3.5.1	Access to Cameras	62
	3.5.2	Interpreting Focus Statements: Talking at Cross Purposes	62
	3.5.3	Time Pressure	64
CHAP	TER FO	UR: RESEARCH RESULTS	65
4.0		Introduction	65
4.1		Microsystem Influences: School, Learning and Learners	66
	4.1.1	Pathway to Opportunity	69
	4.1.2	Foundation for Career Success	72
4.2		How Learning Works	74

	4.2.1	Conceptions of learning	74
4.3		Learning Preferences and Conditions Necessary to Optimise	
		Learning	78
4.4		Learning Preferences: 'I Prefer'	79
4.5		Learning Processes	81
	4.5.1	Ways of Working - Collaborating with Peers	81
	4.5.2	Teacher Disposition and Competence	84
	4.5.3	Learning Style	88
4.6		Self-Assessment: 'I Am'	89
4.7		Need More of: 'I Need'	89
	4.7.1	Personal Autonomy	90
	4.7.2	Metacognitive Opportunity	90
4.8		Aspects of School that Impede Student Learning	90
	4.8.1	The Effects of Bullying	91
4.9		Mesosystem: Influence of Family, Peers and School Community	y
		on the Learning and Wellbeing of the Students	93
	4.9.1	The Effects of Bullying	94
	4.9.2	The Importance of Having Friends	96
	4.9.3	Advice and Guidance of Parents	97
	4.9.4	Parental Knowledge	99
	4.9.5	Personal Safety	99
4.10		Exosystem Events, Opportunities and Practices that Impact on	
		the Lives of the Students	100
	4.10.1	Worry: Health of Family and Extended Family Members	102
	4.10.2	Being Heard in a World of Adults	103
	4.10.3	Consequences of Taking Drugs	105
	4.10.4	Others	106
	4.10.5	Worry About the Future	107
	4.10.6	Access to Experience: Infrastructure and Opportunities for	
		Youth	108
4.11		Macrosystem: Influence of Macro-level Events, Practices and	
		Societal Values on the Lives of Students	110
	4.11.1	Pollution: Powerlessness, Apathy, and Solutions	112
	4.11.2	War and Terrorism	117
	4.11.3	Misplaced Social Emphasis	118
	4.11.4	Racism	119

CHAPTER FIVE:		VE: DISCUSSION, CONCLUSIONS, AND	
		IMPLICATIONS	121
5.0		Introduction	121
5.1		Discussion of the Findings of the Research	121
	5.1.1	The Perspectives of the Students	122
	5.1.2	The Methodology	126
5.2		Conclusions	133
5.3		Implications of the Research Findings	134
	5.3.1	Future Research with Early Adolescent Students	135
	5.3.2	Pedagogy and Curriculum Design	136
5.4		A Final Note	136
REFI	ERENCE	S	138
APPI	ENDICES	5	142

Appendices

Appendix One:	Information Pack	142
Appendix Two:	Liaison Teacher Confidentiality Agreement	152
Appendix Three:	Liaison Teacher Consent Form	153
Appendix Four:	Transcriber's Confidentiality Agreement	154
Appendix Five:	Image Inventory	155

List of Tables

Table 1:	Characteristics of the Research Sample	31
Table 2:	Rationale for Research Sub-questions	33
Table 3:	Topics and Categories of the Emergent Conceptual Framework	41
Table 4:	Summary and Coding Categories Developed for Focus	
	Area Two - Miss Brooker (false name)	44
Table 5:	Participation across Focus Areas	51
Table 6:	Focus Areas Ranked According to Number of Photos Taken	52
Table 7:	Microsystem Influences: Topics and Perspectives	67
Table 8:	Domains of Influence on Student Decision-making	72
Table 9:	Domains of Teacher Competence	87
Table 10:	Mesosystem Influences: Topics and Perspectives	93
Table 11:	Exosystem Influences: Topics and Perspectives	101
Table 12:	Macrosystem Influences: Topics and Perspectives	111
Table 13:	Types of Pollution and their Effects on the Environment	112

List of Figures

Figure 1:	Conceptualising Student Voice: Traditions and Elements	5
Figure 2:	Ladder of Participation	9
Figure 3:	Extended Visual Dialogue: Interdependence of Three Research	12
	Genres	
Figure 4:	The Interpretive Conceptual Framework of the Researcher	16
Figure 5:	The Ecological Model of Development	21
Figure 6:	Design Strategy of the Research	23
Figure 7:	Extended Visual Dialogue Design Framework	26
Figure 8:	The Photo Focus Guide	34
Figure 9:	Organisation for Auto-photography	35
Figure 10:	Photo Elicitation Interview Organisation	37
Figure 11:	Photo Elicitation Interview Guide	38
Figure 12	Interview Transcript Extract – Miss Brooker (False Name)	43
Figure 13:	Microsystem of School	67
Figure 14:	"[School's] like a path to new beginning because you've got	
	to make your own choices when there's a path to choose.	
	Like there are so many different paths that you can choose	
	(Popeye)"	69
Figure 15:	Generative Concept of Learning	75
Figure 16:	The Mind as a Construction Site	76
Figure 17:	The Co-constructive Nature of Learning - Bark, Twigs and Dirt	77
Figure 18:	Mind Map: How the Students See Themselves as Learners	79
Figure 19:	Being Told Off	83
Figure 20:	Mesosystem Influences on the Students at School	93
Figure 21:	Bullying	95
Figure 22:	Being 'Lonered'	97
Figure 23:	Photo Elicitation Interview Transcript – Frank and Megaman	98
Figure 24:	Exosystem Influences Identified by the Students	100
Figure 25:	Macrosystem Influences Identified by the Students	110
Figure 26:	Pollution: Concerns, Effects and Prognosis	114
Figure 27:	Solutions: Beliefs, Actions, Consequences and a Healthy	
	Prognosis	116

Introduction

The research reported in this thesis carried out an exploratory study using a methodological approach combining elements from voice research, action research and image-based research genres. The purpose of the research was to investigate how early adolescent students perceive school and learning, perceive aspects of their identity as young persons and learners, and perceive the world in which they live. The findings produced from this investigation in turn, were intended to inform the design and development within the participating schools of pedagogy, curricula, and learning environments developmentally responsive (Stewart and Nolan, 1992) to the needs, characteristics, interests, agendas and preferences of the students of their early adolescent students.

The research involved working with 38 early adolescent students selected from Year Seven and Year 8 classrooms across three participating Intermediate and one newly established middle school in Hawke's Bay in 2004. The students worked as coresearchers (Atweh, Christensen, and Dornan, 1998) in the project alongside a university researcher. The teachers of the students participated also primarily as liaison teachers, whose role was to support the students as the key participants in the study. As coresearchers the students used image-based research methods of auto-photography (participant-generated photography) (Taylor, 2002) to explore their perceptions and experience in relation to the research focus outlined above. The photographs the students generated formed the stimulus for photo elicitation interviews (Clark, 1999) with the researcher that involved the students explaining their perspectives, and how these were represented in the images they constructed. The students participated in every phase of the research playing an advisory role to the researcher during the data analysis phase and verifying the authenticity of the analysis as reflective of their understandings and perspective at regular intervals.

The results generated revealed ways of working with, and studying, the perceptions of young people in ways that are different from most research conducted with students. Most often students are scripted roles as the subjects or objects of research (Graue and Walsh, 1998). The methodological approach devised for this research enabled the students to be positioned centrally as co-researchers investigating and exploring their own experiences and as partners in the research.

The findings of the research suggest new ways of understanding the perspectives of the students, theorising education for early adolescents and the role students should play ideally within the educative process, and suggest new ways of carrying out research with young people developmentally responsive to their needs and preferences and respectful of their voice.

The thesis report is structured in five chapters to address the five main components of the research as follows:

- Chapter One: Concept and Design describes how the research was
 conceptualised and how this conceptualisation led to the design of the
 methodological approach and overall design strategy used to implement the
 research.
- Chapter Two: Research Design Applied describes how the research was
 executed in practice using the image-based research methods to generate the
 perspectives of the students in relation to the focus of the research, reporting the
 research process chronologically through six main phases.
- Chapter Three: Student Engagement with the Research Process presents the
 results generated by the research relating to how the students participated within
 and across the focus areas of the research and how they perceived the efficacy of
 research process they participated in.
- Chapter Four: Research Results presents the perspectives expressed by the students using the image-based research methods as the results of the research. Bronfenbrenner's Ecological Model of Development (1979, 2005) was employed as the organising framework for the results.
- Chapter Five: Discussion, Conclusions, and Implications highlights key
 findings from the perspectives expressed by the students in Chapter Four as well
 as key findings from the trial of the methodological approach devised for the
 research reported in Chapter Three. The implications of the findings for future
 research with early adolescent students, and for pedagogy and curriculum design
 in the context of middle schooling are identified.

Chapter One: Research Concept and Design

1.0 Introduction

The research reported in this thesis is a work in progress. It originally was conceived as student voice research, co-constructed with 38 early adolescent students in two parts:

- Exploration of how students of this age group, experiencing the developmental
 phase of early adolescence, perceive the schooling in which they participate,
 perceive aspects of their identities as young persons and learners, and perceive
 the world they live in; and
- 2. Co-construction of an account of the perspectives of the students to inform the development of the participating schools as authentic middle schooling providers (and the teachers within them as distinctly middle level practitioners), that is, responsive to the needs, characteristics, preferences, and agendas expressed by early adolescent students (aged 10-15) themselves.

The co-construction was made possible through the use of image-based research methodology. This methodology vested the locus of control over the research with the students. Some elements of Participatory Action Research (Atweh, Christensen, and Dornan, 1998) were employed to facilitate the co-construction aspect. The elements included: the participation framework developed by Hart (1997), participants scripted roles as co-researchers (Atweh, et al. op. cit.; Jones, 2004; Nieuwenhuys, 2004), non-hierarchical engagement - or parity of esteem (Atweh, et al., op. cit.), dialogue, inclusion of multiple perspectives, and collaborative reflection on the research (Kemmis and McTaggart, 1989). In this way the adult researcher responsible for initiating the research was able to work with and alongside the students developing the research agenda and programme.

Working alongside students, and co-designing the research process with them, yielded an unanticipated realisation that later centrally became vital to understanding the nature of the research:

The research was not so much a process of documenting the voice of students but of the students constructing their voice.

As the students progressively developed this realisation themselves, they increasingly also began to express their voice and articulate and develop insights and understandings, about themselves, that otherwise might not have been revealed or developed. The process of dialogue was the key to achieving this outcome. The students frequently

surprised themselves, and the researcher working with them (and their teachers too) with the depth and extent of the knowledge and understanding they possessed, and they valued the intellectual challenge of the process. In this way as a work in progress the students progressively helped their adult co-researcher grasp something of the true nature of voice research.

1.1 Conceptual Framework

Voice research not only is a methodology for doing research that locates students centrally in the research process as co-researchers but also, as a philosophy of research, it has emerged over the period of a century from within the four educational and intellectual research traditions below that taken together provided a conceptual framework for the research:

- Progressive Education research (Dewey, 1916) that locates students' learning by experience and teachers developing the emergent curriculum with them as core components of highly effective early adolescent education;
- Middle schooling development and research (Beane, 2004, 1997; NMSA, 2003, 2001; Stewart and Nolan, 1992; Manning and Boucher, 2001) as a sub-set of progressive education that conceives education across the middle years ideally as student-centred, developmentally responsive and respectful, with teaching as improvisation;
- 3. Children's rights legislation and research (United Nations Convention on the Rights of the Child, 1989; Roche, 1999) with its twin foci on the rights of children and young persons actively to participate in all matters affecting their interests and wellbeing, and adults primary responsibility to take account of and respect the views of children and young persons; and
- 4. The contribution of socio-cultural (co-constructivist) theory (Vygotsky, 1978; Smith, 2002) that highlights the role of expectations and their influence on development, notably the dependency relationship between learning, social environment, and internalisation.

Voice research thus conceived, meant that the conceptual framework could play the twin roles of bringing together elements from the four traditions, for conceptual and analysis purposes, and it suggested the actual form of the research, the methods to be employed, and the manner for employing them.

This conceptualisation of the way voice research both guided and featured centrally in the research process is represented diagrammatically in Figure 1 below.

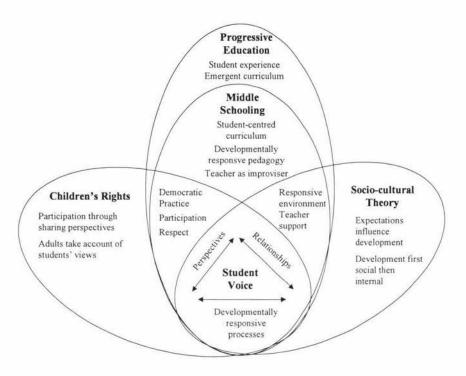


Figure 1 Conceptualising Student Voice: Traditions and Elements

The way the four traditions surround 'student voice' in the diagram, located in the intersection sub-set at the base of the diagram indicates how when taken together all the elements centred on student voice formed a dynamic system. The four traditions provided the theoretical concepts and ideas with which to interpret and explain the data and information that the students generated through the voice research process, using the image-based research methodology referred to at the outset.

Each of the words located along the three sides of the triangle surrounding 'student' voice denote concepts and processes that played a particular purpose that needs to be explained. 'Relationships' refers to the commitment that adults must make to acknowledging that students actually have a voice, make room for that voice in their relationships with students, and take the voice of students seriously. In the context of schools, teachers are the key adults who must see this notion of relationships as necessary. Cook-Sather (2002) describes this process as teachers 'authorising' students' perspectives. They are a legitimate, valuable, and unique source of concepts, knowledge, and experiences available to the teachers and their students for making decisions about the rate and nature of learning, and the design and content of the curriculum.

'Perspectives' refers to the points of view, 'lifeworld' understandings (Smyth, 1999), attitudes, beliefs and agendas (Beane, 2004) that young persons bring to the situation and upon which they draw to position themselves in their relationships with others.

Sometimes the students declare their perspectives as the basis of a relationship and a conversation. At school very frequently however, they do not. Yet such declaration is vital in order that the students may engage in durable and indepth learning, and their teachers scaffold and support them (Cook-Sather, 2002; Smith, 2002).

'Developmentally responsive processes' refers to the extent that adults teaching and working with young adolescents, and the young adolescents themselves, know and understand how the distinctive needs and characteristics of this age group and developmental phase define the contexts within which perspectives can be expressed, and relationships enacted and realised.

Collectively the three elements: perspectives, relationships, and processes, lie at the heart of the system in Figure 1. The extent to which the system actually could operate in practice as the framework of the research depended on the levels of awareness and understanding that the participants (participating students) had of the nature of the research process and the roles they would play in it as co-researchers.

Democratic practice, participation, and respect along with the responsive environment and teacher support located on either side of the student voice triangle together refer to conditions in the immediate environment of the system, required in order that students may express their voice, and permit their education and development to flourish.

Research by Alderson (in Roche, 1999) recently has shown that teachers according their students respect (parity of esteem) is, a key factor leading to the students developing as competent learners. According students parity of esteem satisfies a key developmental need of early adolescents to experience mastery and competence (Manning and Bucher, 2001). Importantly, this way of conceptualising and constructing the educative process tacitly acknowledged also that student voice lies not only at the centre of the educative process but at the heart of the research process also.

A direct implication was that the students be invited to participate in the research process as partners (Atweh, et al., 1998; Pole, Mizen and Bolton, 1999). Acting on this implication meant three things, (i) the students would be invited rather than required to participate, (ii) the researcher responsible for coordinating the research would seek students 'educated' consent (David, Edwards, and Alldred, 2001) actively to participate,

not merely their 'informed' consent; and (iii) the students would be included in all aspects of the processes of conducting the research – auto-photography processes, photo elicitation interviews, focused follow-up sessions, and some aspects of data analysis and reporting.

In summary, the conceptual framework outlined in Figure 1 developed over time directly in relation to emergence of the idea that the research centrally was a matter of students constructing their voice, developing a research relationship that would permit this to happen, and doing this in a way that was developmentally appropriate for students in the early adolescent stage of development.

The conceptual framework embodies the nature of the understanding of the research achieved at the point of its completion. It is highly likely that with ongoing research the framework will continue to be refined, added to, and further developed. The design of the image-based research methodology of the thesis and its initial use in getting the research process started catalysed the development of the conceptual framework. Discussion of image-based methodology features later in the chapter.

1.2 Origins

The generic middle schooling concept as embodied in middle schools of Hawke's Bay and in research and development initiatives that those schools were involved with was the context within which the research initially was conceived as part of a larger research programme. The commitment of the principals and teachers of three schools to the idea of doing student voice research in their schools, despite the failure of central funding agencies to support the programme, resulted in the schools agreeing to participate in a pilot project which they funded and supported themselves. All of the principals had visited leading middle schools and progressive education researchers in the United States and they had become convinced that their own work in New Zealand would benefit by conducting school development-based research in their schools that included their students centrally as participants and partners. While they appreciated and valued their experience of North American middle schools, they resolved to adapt the experience and practice they had observed, and to consult with their students regarding their perceptions about the schooling they participate in, so as to produce middle schooling solutions uniquely suited to their schools and their students in New Zealand.

¹ Central Region Intermediate Schools Project, 2001-02

The principals earlier had responded positively to a university proposal that image-based research methodology might feature centrally in the methodology of the larger development-research programme. Even though the programme did not eventuate, the principals in supporting the pilot project also agreed that image-based research methods should be retained as the core components of the pilot project to be carried out instead of the larger programme. They thought that upon completion the pilot might provide the evidence that funding agencies required, to support a larger programme. In the meantime the central challenge posed by the research was to take the general and specific strategies and methods of image-based research methodology developed for use in contexts other than early adolescent education and adapt and operationalise them as the principal research methods of the student voice research pilot. The specific strategies adapted to operationalise the voice research methodology are reported later in the chapter.

1.3 Student Participation as Co-Researchers

The concepts of participation framework (Hart, 1997), non-hierarchical engagement, dialogue, scripting roles for participants as co-researchers, and collaborative reflection, identified earlier were employed in the following ways to initiate students into the research as co-researchers and establish both the framework and the process for doing the research.

The participation framework is represented below as a 'ladder' of degrees of participation (Hart, op. cit.) was used to identify the thesis research as being between levels five and six on the ladder. Each of the eight rungs on the ladder identifies possible levels of the participation of children and young people in research projects. The levels divide into two broad categories - non-participation and degrees of participation. Research, across the 'non-participation levels' (Levels 1-4), involves children and young people in research projects superficially. Truly participatory research (Levels 5-8) involves children and young people centrally in the research process, in varying degrees. The degree of involvement reflects the extent to which children and young people initiate the research and make decisions, and the willingness of adults to share responsibility for the decision-making with them.

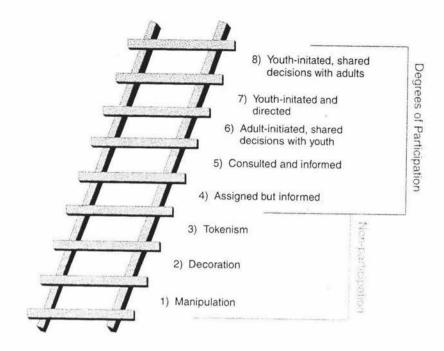


Figure 2 Ladder of Participation²

The process of securing agreement with the schools and the teachers that the research would be conducted between levels five and six on the participation framework ladder involved the following three steps:

- Discussion with teachers about the meaning and implications of involving students in the research process as co-researchers;
- Securing the agreement of the teachers that the students could participate in this way and that they would support both the students and the researcher to implement and carry out the research in the manner proposed; and
- Scripting roles for class teachers to act as liaison teachers in the research process, specifically to support the participating students to work as co-researchers.

The teachers were made aware from the outset of the research that the participation of the students in the research as co-researchers would necessitate a new and novel way of the teachers interacting with and supporting them. In particular the concept of 'non-hierarchical engagement' was emphasised (Atweh, et al., 1998), meaning that for the purposes of the research the students were considered equal in status with the adult researcher and the participating liaison teachers (all three worked together in different roles as partners). The corollary of viewing the students in this way was that a support role was scripted for the adults who participated in the research. The adults assisted the students to construct and articulate their voice authentically in the ways outlined below.

² Taken from Nieuwenhuys, 2004, p. 218

In practice adults participating in the project provided the scaffolding and support needed for the students to participate successfully in the research as co-researchers. This meant respecting the ability of the students to make decisions in their own interests within the research process, devising support material such as guidelines for taking photographs that would enable the students as much as possible to use the image-based research methods independent of adult assistance and influence, respecting the privacy of the images students generated and the dialogue they were privy to, and making adequate class time available for the students to construct the images they needed to represent their perspectives. Most importantly the concept of non-hierarchical engagement necessitated that the adults participating in the research, afford the students respect as 'colleagues' in the research in much the same way they would afford each other. At the same time acknowledgment was necessary that the students were not adults and would need support to act as co-researchers, a role very different in nature to the role familiar to them as students.

1.4 Image-based methodology

The image-based research methodology developed for the research constituted also an important scaffold that enabled the students to work in the research as co-researchers. The use of participant-generated photography, or 'auto-photography' (Taylor, 2002; Collier, 1967) and photo elicitation interviews (Clark, 1999, Cappello, 2005) firmly vested the locus of control over the research with the students because they were able to control the process of constructing the image-based data that represented their perspectives and their voice, and the process of making sense of the images through a process of dialogue. The core underlying assumption of auto-photography is that the images individuals construct, as photographs, reflect the tacit beliefs they have about the concepts represented visually. These beliefs guide the selection of appropriate subject matter, and inform the manner in which the photograph is composed. In this way the photograph produced is a partial or full representation of the perspective of the photographer – the students - that can be explored and made explicit through a process of dialogue (Taylor, 2002).

Inviting participating students to take photographs that represented aspects of their perspectives and explain these to the researcher permitted the views of the students to emerge unmediated and influenced by adults. Auto-photography became a powerful tool for voice research with the students because it enabled them to construct and express

their voice authentically and to represent their world from their unique viewpoint as young persons. Assigning the students the first opportunity to make sense of the images they constructed through dialogue, helped also to ensure that it was their voice and unique perspective the research captured. In this way auto-photography was used in line with Collier's (1967) original intention that it was the prerogative of the photographer to assign meaning to the images they constructed since it is their beliefs that are embodied in the image.

Photo elicitation interviews provided the mechanism by which to co-construct an account of the meaning of the images the students generated, with students themselves playing an active and central role. A process of collaborative dialogue and reflection was employed to make explicit the beliefs embodied in the photographs the students constructed. In practice this involved the students initiating and leading discussion with the researcher centred on the images they constructed, and how the subject matter of the image represented their point of view. The adult researcher played the role of 'inquirer' asking the students questions to find out more about their perspectives and the meaning of their images.

In contrast to traditional verbal interviews guided by an interview schedule of predetermined questions, in the photo elicitation interviews to a large extent the images themselves formed the interview schedule (Cappello, 2005). The questions asked to probe the perspectives of the students in more depth were drawn from elements of the photographs themselves and from elements of the explanations the students gave about the photographs³. In this way the images the students constructed served as the stimulus for co-constructing the meaning of their perspectives, and as an avenue for the students to lead the adult researcher to a deeper understanding of their point of view. Taken together the auto-photography process and the elicitation interview dialogue and reflection provided the means by which the students could construct and articulate their voice, and the means by which the adult co-researcher could make sense of their unique point of view.

³ Generic probe questions were adapted from the guidelines of Arksey and Knight (1999) to better prompt and support the reflective engagement of the students in the elicitation process.

1.5 Extended Visual Dialogue – A Research Conversation Over Time

Collectively, the image-based research methodology developed for the student voice research, supported by the elements of participatory action research in the ways outlined and explained earlier in the chapter, comprised the methodological approach devised for the research called Extended Visual Dialogue, represented graphically in Figure 3.

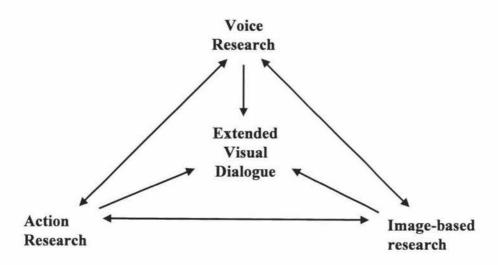


Figure 3 Extended Visual Dialogue: Interdependence of Three Research Genres

A triangle is used to depict the three research genres: voice research, participatory action research, and image-based research each forming one side of the triangle that taken together form a robust methodological approach that scaffolded and supported the students to participate as co-researchers, actively to construct their unique voice. The use of image-based research methods privileged their point of view, permitted them to construct their voice in ways compatible with their particular needs, characteristics, preferences, and agendas as early adolescents, and vested the locus of control of the research with them. A commitment to authentic participation and consultation of the students in all aspects of the research process in action further positioned them in control of the research, and communicated to them the value placed on their involvement and their voice by the adult researcher, their teachers, and their principals. The elements of the three research genres that together constituted the Extended Visual Dialogue methodological approach can be superimposed on the student voice triangle in Figure 1 as the method by which student voice was constructed and facilitated in the research.

Extended Visual Dialogue draws on the metaphor of the research as a 'conversation over time' between partners. Dialogue and reciprocal participation in conversation are key elements of authentic social communication (Coleman, Catan, and Dennison, 2004), voice research (Smyth and Hattam, 2001), socio-cultural development theory (Smith, 1992), Children's rights discourse, and a contemporary middle schooling perspective (Beane, 1997, 2004). Viewing the research as a conversation informed also the design of the research enacted to implement the research into practice. How this was achieved is addressed in Chapter Two.

The research conversation enacted in the voice research was stimulated by the images the students constructed to represent their perspectives. In this respect the conversation was visual in nature. Using photographs as stimulus for collaborative dialogue in this way is a process socially familiar to the students in their lives at school, home, and in their relationships with peers (Musello, 1980; Walker and Wiedel, 1985; Clark, 1999). Photographs are used extensively in western society as a means of communicating aspects of social and personal importance within families, friendship relationships, school communities, and via the media. Photographs are used also to communicate and create shared meaning between people and to stimulate discussion, reflection, and investigation within the context of a conversation. In this way the research used a familiar social process of communication to support the students to participate in the unfamiliar activity of research (Graue and Walsh, 1998).

The use of photographs as stimulus for dialogue created a context mutually accessible to both the students and the adult researcher, helping to bridge the cultural gap between the different ways the adults and the students viewed the world and their experience within it due to their differing ages, gender, ethnicity and culture, and levels of authority (Collier and Collier, 1986; Clark, 1999; Taylor, 2002). Traditional interviews rely heavily on the ability of the participant to clearly paint a word picture of the context for their account and on the ability of the researcher to accurately interpret the meaning of the participant from their words (Cappello, 2005). The function of the photographs as a mutually accessible context to both the researcher and the students lessened the reliance of the linguistic ability of the students to communicate their perspectives and shifted the emphasis in the process onto the images rather than the relationship between the students and the researcher.

The research conversation was 'extended' in that a progressive understanding of the voice of the students was developed over time as a result of repeated conversations with the researcher within and across the full programme of research (outlined and described fully in Chapter Two). Re-visiting the perspectives of the students and re-checking the authenticity at regular intervals with the students acting as advisers, permitted the progressive co-construction of an account of the voice of the students in a way that included the students themselves centrally.

The Extended Visual Dialogue methodological approach informed the construction of the climate of the research context, the research relationship between the students and the researcher, and the developmentally responsive processes that enabled the students to construct and share their voice authentically. Complementary strategies were needed additionally to make sense of the data generated in a way that preserved the power, subtlety, and complexity of the voice of the students, took accurate account of their indigenous constructs, that is the categories, topics, definitions and themes suggested within the perspectives of the students and located their voice within the wider conceptual and educational context of the research.

1.6 Making Sense of the Data Generated

The data analysis process devised continued the commitment of the research to collaborative reflection on the data, non-hierarchical engagement between the researcher and the students (and the liaison teachers), and sense making through dialogue as key processes. In practice largely the researcher took responsibility for the analysis process. Involving the students at regular intervals as referred to earlier, was possible because they had earlier provided directly the first analysis of the data in the form of the perspectives they shared in relation to their photos during the elicitation interviews.

The liaison teachers worked alongside the researcher initially to make sense of the data generated by the students. Inclusion of the teachers in this way permitted a collaborative analysis of the data that, reflected the perspectives of the teachers as insiders in the educational context of the students (Kemmis and McTaggart, 1989), prompted the teachers' deep engagement with the perspectives of the students in a way not accessible to them currently in the classroom context, and contributed to the trustworthiness (Silverman, 2005) of the analysis by requiring that the five teachers and the researcher reach consensus through extended dialogue on how the same instances in the data were interpreted.

In this way collaboratively, the three research partners engaged together through an extended dialogue process, each with differing roles, responsibilities and periods of involvement, but with equal standing in the process, to make sense of the data.

Organising the analysis process thus meant that the students and the teachers could engage with the research process on an ongoing basis but without undue disruption to their core focus on learning in the classroom. The roles assigned each partner at this point in the research signalled the divergence of purpose of each partner; the researcher adopted responsibility for making sense of the overall patterns reflected in the data, students clarified and authenticated the analysis produced, and the liaison teachers contributed their professional perspective to the analysis.

The process devised to execute the data analysis comprised three elements:

- 1. The Interpretive Conceptual Framework of the researcher;
- 2. The Constant Comparative Approach to analysis (Silverman, 2005); and
- 3. Focus Group sessions (Bloor, Frankland, Thomas, and Robson, 2001)

The three elements in combination made sense of the data and permitted the construction of an analysis that reflected the indigenous constructs of the students and the topics they emphasised in the auto-photography and photo elicitation processes, the interpretive and conceptual influences the researcher brought to the analysis process, and the conceptual framework underpinning the research outlined in Figure 1 at the beginning of the chapter.

1.7 Interpretive Conceptual Framework of the Researcher

The interpretive conceptual framework of the researcher comprised theoretical and explanatory constructs derived largely from three broad traditions:

- 1. Middle Schooling Philosophy
- 2. An Ecological Orientation to Development (Bronfenbrenner, 1979; 2005)
- 3. Learning and development theory

The framework contained a 'reservoir' of descriptive-interpretive and sensitising-explanatory concepts, theories, and theoretical constructs from each of these broad traditions for the purposes of analysing and making sense of the data and information, accounts and observations that the students who participated in the research generated using the range of image-based methods made available to them. The framework is represented graphically in Figure 4 below.

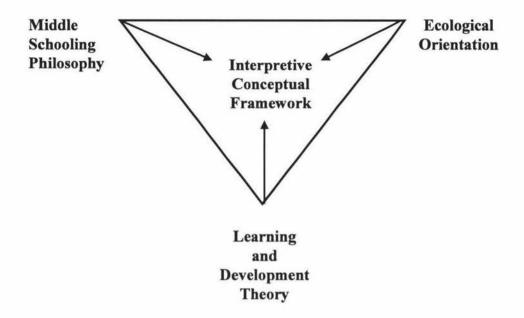


Figure 4 The Interpretive Conceptual Framework of the Researcher

Figure 4 represents the interpretive conceptual framework as an inverted triangle to show that it mirrored the Extended Visual Dialogue methodological as a complementary framework for making sense of the data generated by the students. The elements of Extended Visual Dialogue continued to inform the process of making sense of the data by influencing the selection of analysis process and tools that would enable the students to remain involved integrally in the process, and preserving the authenticity of the voice of the students and how it was expressed.

Middle schooling philosophy is positioned at the top left corner of the inverted triangle, as the key sensitising framework for the research. Drawing on middle schooling literature (Stewart and Nolan, 1992; Manning and Bucher, 2001, Beane, 2004), elements of the perspectives shared by the students were identified and organised to provide guidance for the teachers and participating schools in the process of designing developmentally responsive educational programmes and practices for their students.

In particular Beane's (2004) conditions of effective middle schooling programmes influenced how the perspectives of the students were viewed and made sense of. Beane argues that in addition to being academically challenging, developmentally responsive to the physiological needs of students as early adolescents, and socially equitable to the individual needs of students, effective middle schooling programmes need also to be

intellectually stimulating - engaging the curiosity and imagination of students, developmentally respectful – viewing students as young persons in their own right with legitimate agendas, concerns, and perspectives, and socially conscious – involving young adolescents in solving and resolving real issues, concerns and problems that face them in their school and lives beyond school. The three elements described latterly sensitised the identification of the contexts and opportunities the students identified themselves that capture and stimulate their imagination, consume their attention and constitute problems real to their lives.

Three elements from the broad tradition of learning and development theory provided the sensitising concepts that enabled the researcher to make sense of the theoretical perspectives the students themselves expressed about how learning worked and was best supported to facilitate their learning:

- 1. Socio-cultural theories of development (Vygotsky, 1978);
- 2. Piagetian conceptions of the development of cognition (Wittrock, 1989; Smith, 1992; Gage and Berliner, 1991); and
- Claxton's (2002) four elements of powerful learners resilience, resourcefulness, reciprocity, and reflectiveness.

Bronfenbrenner's Ecological model of Development (1979, 2005) with its conception of the development of individuals as the interaction between the individual, their developing perceptual abilities, and their environment sensitised the analysis to the events, activities, and practices, identified by the students that influence their learning and development as young persons. The identification of this knowledge would allow the redesign of the educative process to better reflect the concerns of the students and assist them in turn to influence their own development. The elements of the model and how these were used in practice are outlined later in the chapter.

1.8 Constant Comparative Analysis

Adopting a constant comparative approach to data analysis (Silverman, 2005) allowed the construction of an account of the perspectives of the students that addressed and accounted for systematically the data in its entirety. Three elements that comprised the constant comparative approach were adopted and operationalised as the analysis process of the research:

 Identification of categories, patterns, and relationships within the data through a process of coding;

- Continuous testing and falsification of the analysis within a progressively larger corpus of data of the emergent conceptual framework built from the categories identified, to take account of all aspects of the analysis;
- Comparison and application of the conceptual analysis systematically as it is generated with the data already analysed to ensure a the coding framework was consistently and progressively applied; and

In practice the researcher and the liaison teachers worked together initially to conduct a constant comparative analysis of the data generated by the students contained in interview transcripts. The researcher continued this process alone using the conceptual framework developed collaboratively with the teachers as a guide. The students were included as advisers in the process by inviting them to participate in a series of focus group sessions (Bloor, et al., 2001) where they reviewed the analysis produced by the researcher and the teachers and clarified aspects that did not accurately capture their understandings until they could authenticate the analysis. The clarification provided by the students constituted additional data that was incorporated into the ongoing constant comparative process until a representation of the collective voice of the students deemed authentic by them was achieved.

It is important to note that the photographs constructed by the students as the initial data of the research, played a particular role in the data generation process that had implications for the data analysis process. The images stimulated the dialogue between the students and the researcher in the photo elicitation interviews but were not analysed directly as part of the data analysis process. In this way the meaning of the images was 'embedded' in the dialogue of the elicitation interviews. The constant comparative analysis process analysed the exploratory dialogue between the students and the adult researcher stimulated by the photographs. Taylor (2002) describes this as an 'indirect' approach to analysing images. The images stimulate dialogue and it is this dialogue that is analysed rather than the images themselves. Using an indirect approach was a strategy adopted also to maintain the locus of control in the research with the students, by treating the images as if they had no objective meaning; the students assign the photographs meaning as the photographers (Collier, 1967).

The constant comparative approach was selected in favour of a content analysis approach, which was trialled initially but discarded. The content analysis approach permitted the identification of broad topics and themes within the data but was too 'blunt' an instrument to identify elements and interrelationships of elements within the data.

Reliance on counting to establish dominant patterns within data - the key strategy of content analysis, meant that the detail within the themes and perspectives expressed by the students was lost. Counting assisted the reporting of the findings once these had been identified through the more comprehensive constant comparative strategy.

1.9 Establishing Trustworthiness

'Establishing trustworthiness' best described the approach taken in the research to ensure the processes and tools for generating data and the processes devised to analyse the data generated were systematic, robust, and rigorously applied (Silverman, 2005). The emphasis taken was to produce findings that were well grounded in the data and reflected the understandings of the students themselves (Bray, Lee, Smith and Yorks, 2000; Heron, 1996), through a research process they perceived as efficacious.

The constant comparative approach has a high degree of reliability as a process that applied consistently produces trustworthy research results, that is results that are credible – to the participants' knowledge of the research context and well grounded in the data (Bray, et al., op. cit.). Additionally the research processes devised and the workings of the analysis process are described explicitly in the reporting of how the process of analysis was implemented into practice (Silverman, 2005). In the research the selection of the constant comparative approach increased the potential for trustworthy results because of its central commitment to the comprehensive treatment of all data generated by searching actively within the data for instances that challenge or threaten the analysis (Silverman, op. cit.). The conceptual analysis is revised to take account of the properties of the 'divergent' instances so that the analysis produced incorporates and explains all aspects of the data consistently.

The Extended Visual Dialogue approach implementation framework (described in Chapter Two) worked to maximise structurally the potential for trustworthy findings by using the metaphor of a 'conversation over time' as a design guide with frequent and extended opportunities built in for the students to generate data in a developmentally responsive and appropriate manner, (represented by auto-photography and photo elicitation interviews), and participate in an ongoing and integral basis to the analysis of the data and the formulation of the final research findings (through focus group sessions). In this respect the concept of 'authenticity' was used as a criterion of trustworthiness. In practice establishing authenticity involved ensuring that the students were involved in the research process centrally as co-researchers (and that the students perceived these

processes as efficacious), the processes chosen to analyse the data preserved the form and perspectives of the students, and the analysis developed received their approval as reflective of their understanding.

1.10 Ecological Approach to Reporting Results

A narrative account was developed to report the results of the research in keeping with the research as a conversation, and the centrality of dialogue as the process that preserved the authenticity of communication in the research design. Narrative prose enabled the topics, threads and perspectives identified in the data and the analytic component of these to be woven together with the interpretation of these through the interpretive conceptual framework of the researcher and the conceptual framework underpinning the research. The resulting account illustrated and contextualised the voice of the students as a cohort.

The narrative account treated the accumulated data generated by the full cohort of participating students in effect as one voice to be presented as the ecological and conceptual perspective of the students themselves. Selection of the four broad structural elements of Bronfenbrenner's Ecological Model of development as the organiser for the results permitted the narrative account to highlight and describe the activities, events, and relationships of importance to the students within the varied settings in which they operate. The four structural elements (i) microsystem, (ii) mesosystem, (iii) exosystem, and (iv) macrosystem also represented a feature present in the results themselves, namely the emphasis of the students on identifying 'influences' as a key focus in their discussions. The analysis of the data revealed progressively that the students in expressing their perspectives about school, themselves, and their world, emphasised the events, activities, and practices of others, and the influence these have on their learning, feelings of self-efficacy, and wellbeing. In this way the perspectives of the students suggested the structure appropriate to reporting the results of the research, and the four structural elements of the Ecological Model constituted the meta-structure of the results themselves.

Initial attempts to report the research findings within the framework of the photo focus tasks (see Chapter Two, Section 2.4), failed because although the framework permitted the presentation systematically of the topics, and perspectives within these, the links, interrelationships and two-way influences between the elements could not be illustrated as they could using the Ecological Model.

Bronfenbrenner's Ecological Model of Development and its component parts are represented graphically in Figure 5 below.

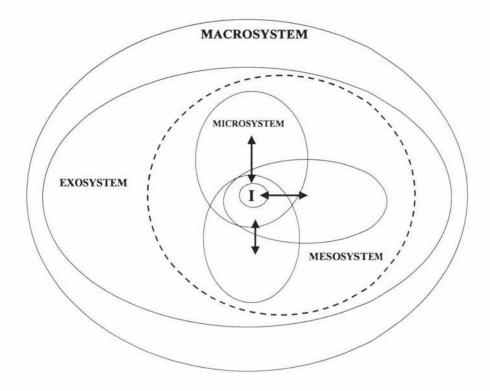


Figure 5 The Ecological Model of Development

The diagram depicts the four environmental settings identified as the contexts in which the development of the individual takes place as nested and intersecting ellipses. The nesting of the ellipses indicates their proximity to the life of the individual, e.g. the microsystem constitutes the environmental setting in which the student operates directly and the macrosystem constitutes the beliefs, policies and events that form the consistent societal level setting of the students' lives. The four levels of the environment are listed and described as follows:

- 1. Microsystems;
- 2. Mesosytems;
- Exosystem; and
- Macrosystem;

As referred to above, microsystems constitute the activities and relationships within the settings that the students operate in most directly e.g. the family. The microsystems are depicted in Figure 5 as the small circles linked by a two-way arrow to the individual (I) represented by the small circle in the centre of the diagram. The two-way arrow indicates that the individual both influences and is influenced by involvement in the microsystem.

The quality and characteristics of the relationships formed within microsystems and the appropriateness of activities in which the individual engages influence their development.

The Mesosystem depicted in Figure 5 as the dotted ellipse that bounds the microsystems constitutes the link between two or more microsystems e.g. the link between home and school, and scouts. The knowledge and attitudes that members of the various microsystems have towards and about other microsystems constitute mesosystem influences also e.g. parental attitudes towards student achievement at school influence the development of the individual within that microsystem. The mesosystem sometimes but not always includes the student directly.

The exosystem, depicted as the ellipse and the space within it that surrounds the microand meso-systems identified in Figure 1, represents the setting more distant to the life of
an individual that still exerts influence on their life and development. The macrosystem
depicted as the outer ellipse of the diagram in Figure 1 and referred to earlier, represents
the setting most removed from the lives of individuals. The macrosystem embodies the
cultural values, expectations, attitudes, and practices that together constitute what it
means to be a member of a particular culture or sub-culture. Events in the macrosystem
such as acts of war, or the event of technology that allows people to communicate
impersonally with each other rather than more directly face-to-face constitute
macrosystem influences that affect the lives of individuals. It was the macro-level
elements the students identified and their perceptions of the effects of these on their
quality of life, aspirations, and feelings of personal safety that suggested the Ecological
model as an appropriate organiser for the results.

1.11 Extended Visual Dialogue Design Strategy

The overall design strategy devised to implement the Extended Visual Dialogue methodological approach and the complementary strategies devised to make sense of the data into practice is depicted graphically in Figure 6 below. Two 'mirrored' triangles represent how these two methodological foci reflected each other symmetrically and taken together constituted a balanced, robust, and systematic approach to the student voice research. The placement of the Extended Visual Dialogue methodology triangle atop the Interpretive Conceptual Framework triangle indicates the influence the Extended Visual Dialogue approach played in facilitating the data generation phase of the project, and the form of the research methods employed, as well as influencing the development of the data analysis process executed to made sense of the data generated by the students

in the research. The placement of the Interpretive Conceptual Framework as the bottom triangle indicates the influence of the conceptual knowledge of the researcher on the analysis of the data.

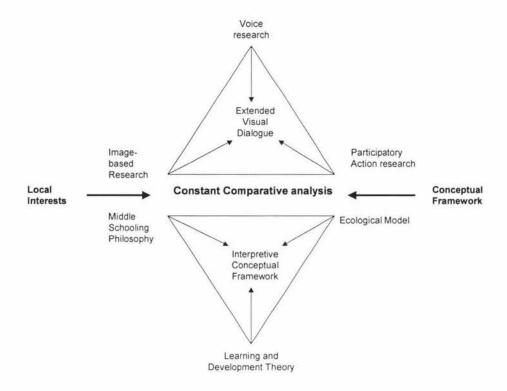


Figure 6 Design Strategy of the Research

The area between the two triangles represents the 'interface' between the two methodological foci, where the elements of the Extended Visual Dialogue approach, the data generated by the students, the Interpretive Conceptual Framework of the researcher, the local interests of the teachers and principals of the participating schools, and the conceptual framework underpinning the research and outlined earlier in the chapter merged (the latter two indicated by arrows entering the interface space from each side of the diagram). The interaction between these and the influence of each on the others was mediated through the collaborative analysis processes employed, to produce an authentic account of the voice of the students situated within the wider educational and conceptual context of the research.

Taken together the two distinct methodological foci and the elements of their design outlined in this chapter assisted the research to progressively and co-constructively build an understanding of the unique voice of the participating students. The research was a

work in progress since the process of working with young adolescents as co-researchers persistently and increasingly necessitated drawing insights and understandings identified from the conceptual framework of the research both to understand and interpret what the students were saying and to challenge and stimulate the students systematically to explore in depth the knowledge and understanding they already possessed. In this way the research helped the students realise they were authorities in their own right. The Ecological Model of the students presented in Chapter Four documents, as part of the results of the research, that which the students already know tacitly but the image-based research methodology revealed it to them through a process of introspection and self-exploration. The resulting account in effect presents the theoretical perspective of the students themselves and by sharing this account with the teachers in the participating schools, the students albeit indirectly participate in the conversation, debate and design of an educational approach uniquely designed to address their personal and developmental needs, challenges, and preferences as early adolescents and young persons in their own right.

Chapter Two: Research Design Applied

2.0 Introduction

Chapter One established the research as voice research designed to assist early adolescent students to construct and articulate their voice in a way that is developmentally responsive to their needs, characteristics and preferences. The chapter introduced the central notion of the students working as co-researchers in the project supported to investigate their experience by an adult researcher, and their class teachers acting in a liaison role. The conditions, research relationship, and research processes necessary to support the students to work as co-researchers were identified and how this would be achieved in the project described.

The Extended Visual Dialogue methodological approach was devised as a way to carry out the research complemented by strategies, in keeping with the its key elements, adopted to make sense of the data. Chapter Two describes how the Extended Visual Dialogue design outlined in Chapter One was applied systematically in the research context to implement into practice the Extended Visual Dialogue Design Strategy introduced at the conclusion of Chapter One. Organised in six phases, the research programme devised unfolded sequentially in each of the three participating schools over the course of 2004.

Phases were selected as the organising concept so that the participants (the students and the teachers) could view the research programme in its entirety, how it would fit within the organisational structure of their schools, and the commitment it would require of them before deciding to participate. The research was executed in six phases outlined as follows:

- 1. Developing the research plan
- 2. Establishing the research
- 3. Data generation
- 4. Data analysis
- 5. Validating the analysis
- 6. Reporting the research results

Figure 7 represents the research framework graphically. Each phase of the research indicated by a rectangle comprised a number of key research activities, eight overall. The research activities are depicted running through the centre of the diagram as a schematic. Four of the rectangles depicting the phases overlap to indicate that within

these phases the research activities had more than one function that overlapped phases, i.e. focus groups were principally a forum for validating the research analysis but also presented an opportunity for generating additional data with the students to clarify and augment aspects of the analysis.

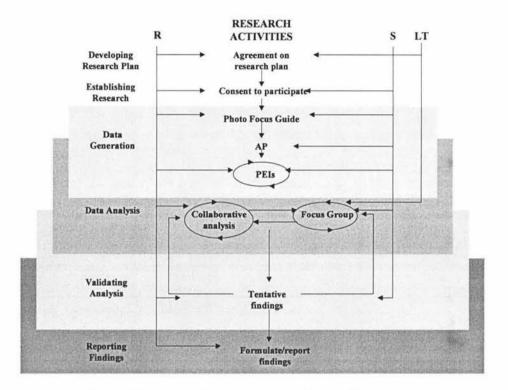


Figure 7 Extended Visual Dialogue Design Framework

The eight core research activities comprising the research programme are listed as follows:

- 1. Generating agreement on the research plan
- Gaining the consent of the students to participate
- 3. Introduction to the Photo Focus Guide
- 4. Auto-photography
- 5. Photo elicitation interviews
- 6. Collaborative analysis of data
- 7. Focus group sessions
- 8. Formulating and reporting the research results and findings

The activities unfolded progressively through the phases as indicated in Figure 7. Each activity informed cumulatively the next because the knowledge and data generated provided the material in each that informed the next producing a progressive understanding of the data that grew over the course of the research.

The participating students (S), the adult researcher (R), and the liaison teachers (LT), the partners in the research, are represented by arrows running parallel to the research activities and through the six phases in Figure 7. The extent of their participation in each of the eight research activities is indicated by a perpendicular change in the direction of their particular arrow in toward the activity to indicate their involvement. By way of illustration, the participation arrows indicate that the students and the researcher participated together in the photo elicitation interview process, whereas all three partners contributed collaboratively to the analysis of the data.

The research programme continued the concept of the research as an 'extended conversation' over time that included the students, the adult researcher, and to a lesser extent the liaison teachers. The design framework employed the research methods in a way that mirrored the communication patterns that occur in authentic conversations between people in social contexts (Coleman, Catan, and Dennison, 2004) based on the notion of taking turns. Figure 7 shows how each of the research activities and the participation of the partners is organised to initiate a collaborative exchange, with time for reflection and re-visiting the data and cumulative analysis progressively through dialogue. Informal sessions where the students and researcher met regularly to discuss the research process in action represented another conversational thread running through the research alongside the research activities (indicated by the dotted line in Figure 7).

A feedback loop included in the research operationalised the notion of taking turns, creating systematic opportunity for re-visiting, checking, and adding to the analysis over the course of the research. The feedback loop is indicated in Figure 7 by two-way arrows running between the 'collaborative analysis' and 'focus group' activities and between the 'data analysis' and 'validating' analysis phases⁴.

Given the structure of the Extended Visual Dialogue framework as six broad sequential phases the main body of the chapter is organised as a timeline of the research process and is reported in six sections that correspond to the six phases of implementation:

- 2.1 Developing the research plan (Jan. Feb. 2004)
- 2.2 Establishing the research (Nov. 2003-Feb. 2004)
- 2.3 Data generation (March-May 2004)
- 2.4 Data analysis (June-Dec. 2004)

-

⁴ The term 'feedback' is used to capture the sense that the students 'nurtured' the shape, content, and veracity of the data analysis throughout its construction helping to ensure that the findings produced reflected their understandings and their voice (Wolcott, 2001).

- 2.5 Validating research analysis (June-Aug. 2004)
- 2.6 Reporting research findings (Oct. 2004-Dec. 2005)

Each section describes the research activities within each phase, the research tools developed, and how the implementation of these was organised and executed systematically as the programme of research.

2.1 Developing the Research Plan (Jan. - Feb. 2004)

Key Research Activity: Agreement on the Research plan

To accommodate the research programme within the existing organisation of the participating schools and keep teachers informed of events, the following research plan was constructed and discussed with teachers at a meeting prior to commencing the research.

The plan comprised the following seven steps:

- Construct a research timeline for the participating principals, teachers, and students, so that dates could be finalised to fit in with existing school commitments;
- Develop the Photo Focus Guide comprising nine photographic tasks and the procedures the students would use to carry out the tasks;
- Develop a photo log document that the students could use to document their photographs and record the reasons behind the images;
- Develop an Information Pack for the students and their parents comprising an information sheet about the research, student and parental consent forms, and a demographic questionnaire;
- Trial the auto-photography process with a local school principal to identify the sequence of steps necessary and the support material needed to facilitate the image-based data generation process with the participating students;
- Trial the photo elicitation interview process with a local principal to identify the support needed to facilitate the process with the students.
- Develop a broad interview guide to facilitate the photo elicitation interview process.

The teachers agreed to the research plan, the outline of the research programme, and the proposed timeframe. The teachers and the researcher customised the timeline to schedule the research activities within the organization of their school.

2.2 Establishing the Research (Nov. 2003-Feb. 2004)

Key Research Activity: Gaining student consent to participate in the research

2.2.1 Selecting Schools, Students and (Liaison) Teachers

In November 2003, two Intermediate schools and one newly established middle school agreed to participate in the thesis research. The principals saw this as an extension of the school-based development research they had participated in during 2001-2002. The schools were representative of the full range of students and teachers from all seven schools with respect to the socio-economic and cultural diversity of the Hawke's Bay Region and the perspectives of its students influenced by geography and location, e.g. urban Napier, Hastings, Havelock North, or rural lifestyle blocks. The most recent Education Review Office Reports, available for each school, provided information to confirm that the schools selected actually fitted the criteria. The selection process comprised four steps as follows.

Firstly, the principals agreed to support and endorse the purpose, concept and design of the research as outlined in Chapter 1. They agreed in particular that up to twenty Year 7 and Year 8 students in each school could participate during 2004 and that one to two liaison teachers, who also were class and form teachers of the students would support their students' participation. Student participation in the research was limited to Years 7 and 8 students because two of the three schools that agreed to participate were Intermediate schools catering exclusively to Year 7 and Year 8 students. The decision was made to conduct the pilot research with these students and Year 7 and Year8 students from the middle school to create a research sample with a consistent age cohort across the three schools.

Secondly, the principals nominated teachers for the role of liaison using four criteria, namely: possession of sound art and ICT skills that supported the research; rapport with students so as to support them in roles of students as co-researchers; minimal extracurricula responsibilities and a workload allocation; and willingness to participate in educational research.

Thirdly, five class teachers, deemed to meet the criteria, volunteered to be the liaison teachers (they completed confidentiality and consent agreements prepared in accordance

29

with Massey University Human Ethics Committee guidelines (2002) (Appendix 2 and 3 respectively). Chapter Five (Section, 5.1.2) discusses the extent to which the teachers actually met the criteria and the effects of meeting them in varying degrees on the research process.

Fourthly, in early March 2004, a 45-minute interactive discussion session with 180 Years 7 and 8 students (from the Liaison Teachers' form classes) introduced and explained the research and the role that the students would play as co-researchers. They would be doing research in their own right, supported by the adult researcher and the liaison teachers. The discussion session:

- Introduced the concept of research to the students and explored their understanding of the term 'research';
- Outlined the purpose and anticipated outcomes of the research and the role they would play as co-researchers;
- Described how they would use image-based research methods to create data and explore that data and its meaning via elicitation interviews;
- Explained the process of formally obtaining consent to participate in the research; and
- Explored probable effects, negative and positive, of participation in the research.

The Meeting introduced the research project to the students. An Information Pack, compiled in accordance with Massey University Human Ethics Committee guidelines (2002), provided them and their parents/caregivers with the information needed to make an informed decision about participation, and what this meant and would involve. The information Pack (Appendix 1) contained:

- A Student Information Sheet;
- A Parent/caregiver Information Sheet;
- · Two consent forms one for students and one for parents; and
- A Participant Questionnaire for students.

The Information sheet (Item 1 above), presented in a question and answer format (David, Edwards, and Alldred, 2001), ensured that essential information, written in language understandable to a broad range of readers, was provided under nine headings framed as questions:

- 1. What is this study about?
- 2. How will you be chosen for the study?

- 3. What happens once the photos are taken?
- 4. What are your rights if you choose to participate?
- 5. What about missing my schoolwork?
- 6. How much will my teacher be involved?
- 7. Who might read what we find out?
- 8. Who will see the photos I take?
- 9. Who is Emily and why is she conducting this project?

A similar approach was adopted for the Parent/Caregiver Information Sheet (Item 2 above) with language and questions amended to better suit adult readers (adapted from. David, Edwards, and Alldred, 2001).

Completed consent forms and demographic questionnaires (Item 4) were returned to the liaison teachers within one week of issue. Completed questionnaires yielded basic demographic information about the student research group, including full names, age, gender, ethnic affiliation and Year group at school.

Thirty-eight students volunteered to participate in the research and all were selected. Table 1 presents the characteristics of the student research sample. Fifty percent were Year Seven students and 50% were Year Eight students. Thirty-two percent of the participating students were male and 68% were female. Eighty-seven percent identified New Zealand European/Pakeha as their ethnic group, 18% identified Maori and 5% identified ethnic groups other than those explicitly identified (students were able to nominate more than one ethnic group to which they felt affiliated.)

Table 1
Characteristics of Research Sample

Criteria		Scho	ol A	Scho	ol B	Scho	ol C	Total
Year Group		Y7	Y8	Y7	Y8	Y7	Y8	
Number of Participants		7	7	5	10	7	2	38
Gender	Male	2	1	2	3	2	2	12
	Female	5	6	3	7	5		26

Ethnicity	NZ	7	6	5	10	4	1	33
	European/Pakeha							
	Maori	1	1			5		7
	Pacific Nation			1				
	Other	1					1	2

2.3 Data Generation (March – May 2004)

Key Research Activities: Introduction to the Photo Focus Guide, Auto-photography, Photo elicitation interviews

2.3.1 The research Questions

The data generation phase of the research utilised the tools and methods of autophotography and photo elicitation interviews. The participating students completed a
'photographic assignment' between March and May of 2004 comprising nine
photographic tasks that prompted them to represent their perspectives in relation to the
focus areas of the research visually. Photo elicitation interviews conducted following the
auto-photography process involved the exploration of the photographs taken through a
process of collaborative dialogue between the students and the researcher. The main
research question of the research asked:

How do early adolescent students perceive school and the learning they participate in, perceive aspects of their identity as young persons and learners, and perceive their experience of their world?

To operationalise the main research question and enable the students to explore it fully, nine research sub-questions were formulated

- 1. How do you believe learning happens?
- 2. How would you describe yourself as a learner?
- 3. What concerns do you have personally in your life?
- 4. What concerns do you have about the world in which you live?
- 5. How would you summarise your view of school?
- 6. What aspects of school help you to learn
- 7. What aspects of school impede your learning?
- 8. What does being young in Hawke's Bay mean to you?
- 9. What aspects of your community do you feel most connected with?

Each question explored an aspect of the main research question and was designed to generate findings that would assist the design of developmentally responsive educational programmes and teaching approaches in the participating schools based directly on the perspectives of the students.

The nine questions and the rationale for each are presented in Table 2.

Table 2
Rationale for Research Sub-questions

Resear	rch Sub-questions	Rationale
1.	How do you believe learning happens? How would you describe yourself as a learner?	To gain insight into the students' understanding of the learning process and their role within it.
3.	What concerns do you have personally in your life?	To generate contexts and foci for curriculum inquiry directly relevant to the
4.	What concerns do you have about the world in which you live?	lives of students.
5.	How would you summarise your view of school?	To explore the role school plays in the lives of students.
6.	What aspects of school help you to learn?	To develop pedagogy and curricula that incorporate the elements identified by
7.	What aspects of school impede your learning?	students that support their learning. To eliminate or minimise elements of school that impede student learning.
8.	What does being young in Hawke's Bay mean to you?	To generate contexts and foci for curriculum inquiry rooted in the lives and
9.	What aspects of your community do you feel most connected with?	community connections of students.

2.3.2 The Photo Focus Guide

The nine questions were re-worded to form the nine photographic tasks of the Photo Focus Guide (Figure 8 below). The Photo Focus Guide assisted the students to generate photographs as the initial data of the research. Re-structuring the questions as tasks meant that the students were given both the focus of each task and the instructions for completing the task in one document at the outset of the photography process so they

could work independently on the assignment outside of the research sessions scheduled and with minimal adult input. Open-ended wording of the tasks encouraged the students to explore broadly within the nine topics. Having the complete assignment at the outset meant also that the students could decide where to begin their photography in line with their personal interest and self-knowledge. The liaison teachers were each given a copy of the Photo Focus Guide to enable them to support the students with the auto-photography process in the absence of the researcher.

Your guide to taking photographs ...

- Take one or two photos that best show your understanding of how learning works.
- 2. Take one or two photos that show how you see yourself as a learner.
- 3. Take one or two photos that show concerns you have about the world in which you live.
- 4. Take one or two photos that show personal concerns you have in your life at the moment.
- 5. Take one or two photos that best show your view of school.
- 6. Take one or two photos that show aspects of school that help you to learn.
- Take one or two photos that show aspects of school that get in the way of you learning.
- 8. Take one or two photos that show what being young in Hawke's Bay means to you.
- Take one or two photos that show aspects of your community you feel most connected with.

(Remember, if you can't capture the image you want with a photograph, you can create – a poster, a visual map, or a drawing. Or you can make a note of the image you want and collect it from a magazine, newspaper etc, or use freeze-frame drama with some of the research group to create the image you want.)

Figure 8 The Photo Focus Guide

The Photo Focus Guide outlined a range of alternative strategies the students could use to represent their perspectives visually if a photograph difficult to construct or obtain. The strategies included drawing maps and diagrams, taking photographs of their peers in

freeze-frame tableaux, and creating posters containing original and found pictures to represent their perspectives.

2.3.3 Auto-photography

In practice the image-based data generation process involved three steps as follows:

- 1. Planning and preparing for photography
- 2. Image creation sessions
- 3. Photo Elicitation Interviews

The organization necessary to support the process and how the steps of the process were executed with the students is outlined in Figure 9 below.

Organisation for Auto-photography

- Each school provided still cameras, including digital, 35mm point and click, and disposable cameras for the project at a ratio of around one camera per five students.
- The students used the cameras freely within the scheduled research sessions and by negotiation with their classroom teachers during class time.
- Disposable cameras were made available to enable the students to take photos
 out of school hours in their home environments and local communities. The
 students shared the disposable cameras among themselves with 1-2 disposable
 cameras provided for each research group over the course of the data
 generation phase.
- The adult researcher assumed responsibility for film processing. The
 processed packs of photographs were returned to the students directly
 unopened.
- The Liaison teachers developed electronic storage processes for the digital photographs taken by the students that enabled image storage within the students' individual files within each school's ICT network⁵.

Figure 9 Organisation for Auto-photography

5

⁵ Storage and retrieval systems were designed to permit the students to independently download, save, and retrieve their photographs without the input of the participating adults. The independent access protected the privacy and anonymity of students in relation to their images by ensuring that prior to the photo elicitation interviews the adult researcher and the liaison teachers did not see the images, did not influence the content of the images, or censor the images in any way.

Firstly, a 45-minute research session was held with the students in each of the three schools to distribute the Photo Focus Guide and establish the focus of each task. The researcher shared photographs taken to demonstrate the auto-photography process and the focus of the nine tasks. Each student received also a planning scrapbook and a Photo Log record sheet to record and keep track of their images, the relationship of each image to the Photo Focus Guide, and their thoughts at the time the photographs were taken. The students planned where they would start on the Photo Focus Guide and the content and form their initial photos would take, and took photos of each other to familiarise themselves with the cameras.

Additionally during the session, the purposes of the research, the role of the students as researchers, and the procedure and timeframe for the auto-photography process were reviewed. The students chose also the false names (pseudonyms) that would be used to identify them during the project (their data, electronic image storage file, scrapbooks, and written material they composed throughout the research process were labelled with their false name).

Guidelines were formulated and communicated verbally to the students during the introductory session relating to the ethical use of photographs taken by the students especially of other students in the data generation process:

- Photographs were to be kept private during the data generation process and not shared with others:
- Verbal permission of other students was required before photographs that captured their likeness and were identifiable could be taken.
- In seeking the permission of others to be photographed, the students participating
 in the project were required to inform the individual the photograph would be
 used as data in the research project, that could be shared with others and/or
 published;
- Photographs of large groups of people taken in spaces such as school assemblies, and during break times in the school grounds could be taken without the permission of those captured because these were photographs in public spaces in line with accepted image-based research practice (Prosser, 1992).

The guidelines developed protected the research rights of students involved in the research (and other students not involved) to give informed consent to their likeness being captured and used as data in the project and ensured photographs were used ethically.

Secondly, weekly 40-45 minute image creation sessions were scheduled over a five-week period (March/May 2004). The students worked independently during the sessions taking photographs and producing other visual images that represented their perspectives in response to the Photo Focus Guide. The adult researcher worked alongside the students assisting them as necessary to clarify the intention of the focus statements, coordinate the use of cameras among the group, and to address any technical and logistical issues that arose. At the conclusion of each session the students downloaded their photographs to their individual network files and recorded the content and the intention behind each of their images in their Photo Log.

2.3.4 Photo Elicitation Interviews

Thirdly, Photo Elicitation Interviews were conducted between Weeks One and Four in Term Two, 2004. The students chose to participate in either an individual or paired interview with the students themselves deciding the makeup of the pairs. The organisation necessary to facilitate the photo elicitation process and how this was executed is presented in Figure 10 below.

Photo Elicitation Interview Organisation

- Forty-five minutes was scheduled for each interview (to fit within school time period slots).
- Each participating school was assigned a specific week for photo elicitation interviews - the liaison teachers drew up interview timetables for the students. Additionally a follow-up week was scheduled to conduct photo elicitation interviews with the students who were absent or unavailable during their scheduled timeslot.
- Elicitation interviews were held in private, enclosed rooms within the school.
- Images were displayed on a computer laptop and the interviews were recorded as digital sound files.

Figure 10 Photo Elicitation Interview Organisation

Photo elicitation interviews were conducted in three phases:

- 1. Demographic questions
- Auto-driven (student initiated) exploration of the photographs taken by the student; and

3. Questions about the experience of the students with the research process.

A broad interview guide (see Figure 11 below) developed for the research facilitated each phase of the elicitation interviews as follows:

- Part One Student's rights as research participants in an interview;
- Part Two Demographic questions;
- Part Three Generic prompt questions to support the students to explore their perspectives and their photographs; and
- Part Four Questions exploring how the students experienced the research process.

Interview rights

- · You have the right not to participate in this interview.
- You have the right to withdraw from the interview process at any time.
- · You have the right to ask me to turn off the recorder at any time.
- You have the right to see a copy of the transcript of this interview.
- You have the right to ask any questions you may have about the interview process at any time.
- A typist who has signed a confidentiality agreement will transcribe this interview.
- This interview will be analysed by the liaison teachers and Emily, but your false name will replace your real name to protect your privacy.
- The liaison teachers for the project have agreed not to share information they learn from the interview transcripts with anyone outside the project.

Do you have any questions about the interview process? Do you have any questions about how information from the interview will be used?

I am going to ask you some general questions to find out a bit more about you and to build up a picture of the students in the research group.

Demographic

- What is your name?
- How old are you?
- Where do you live?
- Who do you live with?
- · Do you have brothers and sisters? How old are they?
- · Do your parents work? What do they do?

You can start wherever you like on the photo-focus list and tell me about the photos you have taken.

I will ask you questions too if there is something I want to know more about, or if I need to understand better what you tell me.

Photo-focus guide (use these questions to explore the list as necessary)

- Why did you take this photo? (What photo-focus statement does this photo relate to?)
- What is in the photo?
- Why is the image important to you?
- · What does the image show?
- Why did you choose this particular image?
- What other images would you have included on this topic if you had had more time?

• Is there anything else you would like to add?

Probes

- · Can you tell me some more about that?
- Can you give me an example of what you mean? Or tell me a story about it?
- Could you help me to understand better why you feel this is important?
- That's interesting. I've heard other people say [something rather different]. How do you feel about that? Why?
- Do other young people you know feel/think/act like this too?

Exploring the research process so far

- · Have you enjoyed the project so far?
- What has been your favourite aspect? Why?
- · What has been you least favourite aspect? Why?
- · How would you improve the research process?

Figure 11 Photo Elicitation Interview Guide

In all 32 photo elicitation interviews were conducted, 28 individual interviews and 4 paired interviews. The students took charge of the exploration of their images by deciding the order these would be introduced and how they would be described and explained. The researcher supported the students to explore aspects of the photographs more deeply and to discuss the perspectives associated with the images using the probe questions outlined in the Interview Guide (Figure 11). The students moved the interview along when they had exhausted their perspective in relation to a photograph. The researcher concluded the elicitation interviews with the questions regarding how the students experienced the research process.

Professional typists were engaged to transcribe the recorded elicitation interviews. They completed, signed and returned Transcriber's Confidentiality Agreements in accordance with Massey University Human Ethics Committee guidelines (2002). Verbatim transcripts were produced, reviewed and checked for accuracy. Following the return of the transcripts to the students for review and annotation as necessary to clarify or add to their perspectives all names and identifying features were removed.

2.4 Data Analysis (June-Dec. 2004)

Key Research Activities: Collaborative analysis of student-generated data, focus groups

Four facets comprised the data analysis process conducted in the research:

- 1. Construction of image inventory (Collier, 2001) (Appendix 5);
- 2. Collaborative analysis of data

- 3. Meta-analysis
- 4. Analysis of how the students used the image-based methodology in practice

2.4.1 Image Inventory

An Image Inventory was constructed to categorise and record the subject matter of the photographs taken in the research within photo focus areas (Collier, 1967). The inventory in the form of a table (Appendix 5), displayed image categories alongside the research focus area, the number of photos taken within each category, the number of students who did not engage with the focus area; and the number of students who expressed a perspective without a supporting image. Arrangement of the data in this way permitted an exploration of the links between the visual imagery used by the students and their perspectives⁶, as well as establishing patterns of student participation within and across focus areas.

2.4.2 Collaborative Analysis of Data

The liaison teachers and the adult researcher conducted a constant comparative analysis (Silverman, 2005) of the data contained in the photo elicitation interview transcripts, over a two-day period in June 2004 using the broad approach outlined in Chapter One (see Section 1.8). The liaison teachers were released from their classroom teaching for two days and met with the researcher to analyse the data recorded in the elicitation interview transcripts collaboratively. In practice the constant comparative analysis approach conducted collaboratively involved a five-step process as follows.

- Prior to meeting the liaison teachers were given the same single transcript to analyse. They were asked to:
 - Identify key topics, patterns, threads, and constructs they noticed in the data;
 - b. Indicate categories on the transcript; and
 - c. Justify their categories with data extracts.
- The team met and discussed the analysis developed by each member. Coding categories were compared for the same instances in the data. The analysis produced individually was debated until the group agreed on the meaning of the

⁶ This line of analysis was abandoned - with the exception of using trees to represent the learning process and them within it, and photographs of rubbish to represent their concern about littering, it became apparent early in the analysis process that the visual imagery the students used to represent their perspectives cut across the boundaries of the focus areas and themes within them and could not be associated to perspectives in this way.

- descriptive categories used. The coding categories developed were recorded on a chart as an 'emergent conceptual framework'.
- 3. The coding categories developed were applied progressively to a broadened data set (five additional transcripts one per team member) and revised as new descriptive and more conceptual categories emerged. New categories were defined collaboratively by the analysis team through a process of discussion and justification with data extracts until consensus within the group was reached. The process of revision was followed by re-application of the revised categories to data analysed earlier to ensure the analysis framework was consistently applied to all the data.
- Thematic files containing data extracts relating to each of the category topics were compiled, and the constant comparative process resumed within the files.
- 5. Additional questions regarding areas of the data and analysis that remained unclear or ambiguous were prepared for the students to consider in the Focus Group Session held in Term Two. Additional data generated from this process was incorporated into the ongoing data analysis process conducted by the researcher alone.

Table 3 presents the broad topics and some of the descriptive categories of the emergent conceptual framework that resulted from the collaborative analysis of the data outlined in the five-step process above.

Table 3

Topics and Categories of the Emergent Conceptual Framework

Topics	Categories
Identity	Identity crisis
	Culture
	Uniform
	Gel-hair
	Need to do the right thing
	Friends –importance of
	Fitting in/being different
	Independence/dependence
	Family -belonging
	Others' perceptions influence them – parents – teachers

41

	Need for security/guidance/clarification				
School	'Freedom' - wanting the power to choose				
	Paths				
	Sequential				
	How it operates/the appeal of/getting out of school work				
Teachers	Good teachers/grumpy teachers/fear of a telling off/the appeal of				
	warnings over yelling				
Learning	Communication				
	Active/not passive learning preferred				
	Lifelong				
	Structure/routine – (only applied in some settings)				
	Learning as information transfer				
	Incomplete knowledge and understanding of consequences				
Power	Adults make decisions				
	Bullying – affect on concentration in class – depression				
	Helpless – parents – community more powerful				
Affiliation	Pets/outdoors/grandparents/family				
	members/friends/teachers/school/teams/places				

Following the collaborative analysis process the analysis was extended to explore how the students responded to the research focus tasks specifically, (operationalised as the photo tasks in the Photo Focus Guide). The nine focus areas and the three broad questions relating to how the students experienced the research process formed the predetermined categories that were applied to the data contained in the elicitation interview transcripts.

The constant comparative analysis process within research focus areas involved eight steps as follows.

- Compilation of thematic files containing the perspectives of the students within each of the nine focus areas and the three research process questions;
- 2. Summaries of the perspectives of the individual students within focus areas prepared. Two types of summary document were prepared:
 - i. Individual Student Summary documents across focus areas; and
 - ii. Cohort Summary within focus areas document.

- Accuracy of the summaries checked against the unreduced data contained in the interview transcripts to ensure that summaries reflected their original meaning and context;
- 4. Open-coding of individual student summaries to identify descriptive categories within focus areas. Figure 12 and Table 4 below show how this process was executed in practice within Focus area Two for one student Miss Brooker (false name). The descriptive codes were then reviewed and relationships between these explored to generate conceptual-level codes. The process of developing higher-level more inclusive conceptual codes continued until no new categories emerged;
- Coding categories were re-applied to the unreduced data (contained in the interview transcripts) to check that the categories developed were congruent with their wider context, and that the categories generated were grounded in the data;
- 6. Additional questions to explore areas of the data still unclear or ambiguous were formulated and administered to students in written form and through oral discussion during the focus group session in Term Three. The written responses of the students to the questions were incorporated as data into the ongoing analysis process; and
- 7. Visual data display strategies were used to 'think with' the coding categories (Wolcott, 1994) to assemble a coherent analysis that incorporated relationships between aspects of the data and their properties and the broader topics identified by the analysis. Data was displayed in tables, diagrams, continuums, mind maps, and Venn diagrams and manipulated in an intuitive creative process (Wolcott, op. cit.). The reservoir of theoretical and explanatory constructs contained in the Interpretive Conceptual Framework of the researcher (outlined in Chapter One) was also employed to make sense of the conceptual elements of the analysis.

Figure 12 and Table 4 below illustrate the process of developing categories from unreduced data contained in the elicitation transcripts referred to in Step 4 above.

MB:	2 of the numbers together. I did no 1 and 2 as the tree. I see myself as reaching up to the top of the tree, as climbing to the top of the tree, and reaching a goal.
E:	As a learner?
MB:	Yes.
E:	Right. Who sets your goals?
MB:	Me. I see myself like Improving it's like steps like a tree. I'm down the bottom, cause I'm a very slow learner. So every time I learn something new I make my way

	up then when I finally get better I reach the top of the tree.
E:	So what makes you a slow learner? What makes you think you are a slow learner?
MB:	Well I feel like I'm a slow learner because I don't learn too fast.
E:	Takes you a while to put the pieces together?
MB:	Yes it takes me quite a while to, like if someone tells me a joke or something, it takes me awhile to understand it.
E:	Ok
MB:	When people tell a joke it takes me a while to understand it.
E:	So you have put that for no.1 and 2 so as a learner you are climbing the tree towards your goals each bit you learn is getting you closer to the top.
MB:	Yes
MB:	I think it relates to No. 2 as well because, how learning works like a lot of people learning something and they keep on reaching their goals because they maybe like really good at it so they keep on reaching the top of the tree.

Figure 12 Interview Transcript Extract – Miss Brooker (False Name)

Table 4 shows the summary constructed from the interview transcript extract included in Figure 12 and a sample of the codes generated from the summary to form descriptive and conceptual level coding categories that formed the building blocks for the analysis.

Table 4
Summary and Coding Categories Developed for Focus area Two – Miss Brooker
(False Name)

Summary	Codes
I am improving like steps on a tree.	Learning stages
	Learning as improvement
When learning is achieved "when I get	Tree represents learning
better"—the top of the tree is reached.	Learning definition
I am a very slow learner.	Bottom to top
Takes a long time to get other people's	Self-assessment – critical
jokes.	Comparison with others
	Justification

2.4.3 Meta-analysis

Application of the constant comparative process to the data produced two parallel

analyses:

1. The conceptual analysis framework developed by the researcher and the liaison

teachers

2. The elements and interrelationships between elements in the data organised in

research focus area categories.

The two parallel analyses were made sense of in turn by imposing the broad framework

of Bronfenbrenner's Ecological Model (1979, 2005) (Chapter One, Section 1.10) to

them. The parallel analyses were considered as a whole and sorted into the categories of

the model depending on whether the focus of the perspectives and topics discussed were

micro-, meso-, exo-, or macro-level influences. The resulting analysis constructed the

'ecological model' of the students and emphasised the influences and interrelationships

between concepts identified by the students within the photo elicitation interviews.

2.4.4 Participation in and Experience of the Image-based Process

To establish and explore how, and the extent to which the students engaged within and

across each of the Photo Focus areas a table was constructed from the data contained in

the Cohort Summary Documents in each of the focus areas to identify three types of data:

1. The responses the students gave during the elicitation interviews that were

initiated or supported by photographs,

2. The responses given without photographs, and

3. How many students did not engage in any way with the focus area

The results were displayed on a table (Chapter Three Section 3.1) along with the average

number of photographs taken by each student within each of the focus areas and the

range of photographs taken within each focus area also.

In order to explore the reasons why the students engaged with the focus areas or did not

engage, data contained in the photo elicitation interview transcripts relating to their

participation was identified and the reasons the students gave organised within

categories.

2.5 Validating the Research Analysis (June-Aug. 2004)

Key Research Activities: Focus Group Sessions, Ongoing data analysis

45

In practice establishing trustworthiness (introduced in Chapter One) within the research process involved employing three strategies to ensure the conclusions, explanations, and interpretations of the data generated by the students was credible and authentic and well grounded in the data and informed by the multiple perspectives of the three research partners (Kemmis and McTaggart, 1989; Maxwell, 1996; Heron, 1996; Bray, et al., 2000):

- Comparative data analysis process (see previous section). Most specifically, searching for discrepant evidence (Maxwell, 1996) within the data contained and incorporating these into the analysis;
- Collaborative involvement of the liaison teachers in the analysis of the studentgenerated data and in devising questions for additional data generation with the students during focus group sessions;
- 3. Ongoing involvement of the students in the data analysis process as 'advisers'. This was achieved through instigating 'member-checks' (Mitchell, 1983) involving the return and presentation of the analysis developed to the students for their clarification in focus group sessions; and

Figure 7 illustrates the feedback loop instituted in the research process as a device to enable the ongoing involvement of the students in the data analysis process through focus group sessions acting as 'advisers' to the researcher. Focus group sessions (Arksey and Knight, 1999; Bloor, Frankland, Thomas and Robson, 2001) afforded the students opportunity to clarify, augment, and validate the authenticity of the analysis constructed by the liaison teachers and the adult researcher, through a process of group dialogue and interactive activities.

In practice three focus group sessions were held at the end of June 2004, August 2004, and October 2004. During the sessions the analysis was presented to the students through the use of a PowerPoint presentation, a summary document, and interactive activities respectively. Interactive activities used data extracts from the interview transcripts as stimulus for the students to explore and clarify specific aspects of the data.

Data produced during the focus group sessions was recorded on charts, PowerPoint presentations, maps, questionnaires, and as notes recorded by the researcher and the liaison teachers and incorporated into the ongoing comparative analysis process.

Conducting the focus groups over a six-month period allowed the analysis to account for the changing perspectives of the students, and to establish the perspectives that remained constant over the period. Continued involvement of the students as advisers to the data

analysis process allowed them to participate without disrupting unduly their classroombased commitments.

The initial focus group session involved the students across the three schools meeting and working together and functioned also as a celebration of the end of the data generation phase of the research. The following sessions were held separately with the research groups in each school. Meeting with the students in separate focus group sessions allowed the perspectives of the students regarding the authenticity of the analysis to be compared across schools, and lessened the influence of 'groupthink' on the overall authentication of the analysis (Bloor, Frankland, Thomas and Robson, 2001). Affording the students the opportunity to individually record their perspectives in writing contributed an individual perspective to the authentication and validation process.

2.6 Reporting Research Findings (Oct. 2004-Dec. 2005)

Key Research Activity: Formulate and report research findings

The research findings were reported in two separate chapters:

- · Chapter Three: Student Engagement with the Research Process; and
- · Chapter Four: Research Results

Reporting the findings in two chapters allowed the results that illustrated how the students engaged with the image-based methodology and the perspectives of the students in relation to the photo focus tasks reported through the Ecological Model (Bronfenbrenner, 1979, 2005) to be presented cohesively.

Chapter Three was positioned first in order to show the broad pattern of participation among the students with the research focus areas and their perceptions of the research process, as a lead in to their perspectives presented in Chapter Four.

Six devices assisted the reporting of the research results as a narrative account:

- Headings and sub-headings permitting the delineation of the description of key topics and perspectives within the account;
- 2. Diagrams permitting the presentation of aspects of the analysis and relationships that were established between the analytic elements;
- Tables permitting the broad topics and perspectives of the students within these to be highlighted in relation to the text of the report;

- 4. Photographs images taken by the students were inserted selectively to illustrate aspects of the perspectives and topics the students identified and also to present a range of the visual metaphor the students used to support their perspectives in the photo elicitation interview process;
- 5. Data extracts in the form of quotations assembled from the interview dialogue contained in the photo elicitation interview transcripts. The perspectives of the students only were presented to emphasise their voice and to reduce the space taken up by interview transcript extracts⁷; and
- 6. Narrative prose used to present a coherent conversational account of the main topics and perspectives within these the students contributed through conversation in the data generation process. The narrative includes elements of argument, analysis, description, interpretation and illustration to weave together the results generated, the argument of the analysis, and the corroborating and dissenting evidence found in the data.

⁷ Where the meaning or focus of the student perspective is altered extensively by the contribution in the dialogue of the researcher, the question or prompt used is inserted in the quotation using [] parentheses.

Chapter Three: Student Engagement with the Research Process

3.0 Introduction

Chapter Two outlined and described how the Extended Visual Dialogue methodological approach devised for the project was implemented into practice as the programme of the research through the Extended Visual Dialogue Design Framework. The programme of research centred on the participating students responding to the nine photo focus tasks contained in the Photo Focus Guide (Chapter Two Section 2.3.3) using the image-based methods made available to them. The sense the students made of the images produced using the data generation methods and their associated perspectives were collected as data through the photo elicitation interview process and analysed using the constant comparative analysis process.

Chapter Three reports how the students engaged in practice with the image-based data generation process and how they perceived the research process in which they participated. Accordingly the chapter is structured in two sections under the headings:

- 1. Patterns of Student Engagement with the Image-based Methodology
- 2. Student Perceptions of the Research Process

Section 3.1 illustrates how the students participated within and across photo focus areas using tables to highlight aspects of their participation and the sense that can be made of the data. The reasons the students gave to explain the extent of their participation are outlined and the influence these reasons may have had on the participation patterns evident within the data are explored.

Section 3.2 reports how the students perceived the research process in which they participated. The perspectives the students expressed are organised and presented under three headings that incorporate the three broad focus areas the students were asked to comment on towards the end of their photo elicitation interview:

- 1. The research process: Positive aspects identified
- 2. The research process: Negative aspects identified
- 3. The research process: Improvements identified

Within each of the three sections the perspectives of the students and the themes identified are outlined and described using narrative prose supported by illustrative data

extracts from the photo elicitation interview transcripts, and the written responses of the students generated during the second focus group session in Term Three.

3.1 Patterns of Student Engagement with the Image-Based Methodology

This section presents results of an analysis of how the students engaged with the nine focus areas of the research represented as photo tasks 1-9 on the Photo Focus Guide. Tables illustrating the patterns of participation of individual students within and across focus areas were constructed from data contained in the Individual Student Summary Documents, Cohort Summary Documents constructed as part of the constant comparative data analysis process, and the Image Inventory.

The number of photographs (including sketches and drawings) that the students took across research focus areas varied. Discussion with the students revealed that they took photographs in response to the Photo Focus Guide according to:

- Their personal interest in relation to certain research focus areas e.g. photographs that represent how the learning process works;
- Their rate of progress through the nine photographic tasks within the timeframe available for the data generation process;
- Their understanding of the concept of each research focus area; and
- Whether or not they could construct an image that represented their thinking and perspectives as they envisaged.

Table 5 illustrates the participation pattern of the students across the nine focus areas. Six categories are included that taken together give an indication of how and where the students focused their attention in relation to the Photo Focus tasks:

- 1. Number of students who engaged with the focus area;
- 2. Number of responses with photos*;
- 3. Number of responses without photos;
- 4. Number of students who did not take photos or respond;
- 5. Average number of photographs; and
- 6. Range of photographs per focus area.

^{*}The term 'response' is used to indicate a discrete topic initiated and discussed by the students in relation to a particular research focus area.

Table 5
Participation across Focus Areas

Focus area	1	2	3	4	5	6	7	8	9
Number of students	33	32	33	31	31	26	27	29	23
who									
engaged									
with focus									
area (n=38)									
Number of	42	33	39	37	40	37	22	29	15
responses									
with photos									
Number of	5	10	15	15	6	3	7	10	11
responses									
without									
photos									
Number of	5	6	5	7	7	12	10	5	15
students									
who did not									
take photos									
or respond	1.2	1.0	1.0	1.0	1.2	1.4	0.0	1.0	0.6
Average number of	1.3	1.0	1.2	1.2	1.3	1.4	0.8	1.0	0.6
photographs									
Range of	0-5	0-6	0-5	0-4	0-5	0-4	0-2	0-2	0-2
photographs	0-3	0-0	0-3	0-4	0-3	0-4	0-2	0-2	0-2
per focus									
area									
arca									

Inclusion of the average number of photographs taken by the students indicates where the students directed their photography. The highest calculated average was within Focus Area Six where the students took 1.4 photographs each to discuss how their learning could be best supported. The lowest calculated average was Focus Area Nine where the students took only 0.6 photographs, meaning the students took less than one photograph each to talk about the connections they felt with their community(ies). Inclusion of the

range of photographs taken within each focus area indicates wide variation between students in respect to the number of photographs they took. By way of illustration Focus Area Two shows the largest range in the number of photographs individuals took to represent themselves as learners ranging from 0-6 photographs. In contrast the final three focus areas have a smaller range with the students taking between 0 and 2 photographs to respond to represent their perspectives in relation to these topics.

Table 6 reorganises the number of photographs taken within each research focus area in rank order to identify the focus areas the students took the most photographs for through to the focus area the students took the least number of photographs for.

Table 6

Focus Areas Ranked According to Number of Photos Taken

Focus Area	Number of Photos
1	42
5	40
3	39
4	37
6	37
2	33
8	29
7	22
9	15

The research focus area supported by the most photographs was Focus Area One – how learning works. Forty-two photographs were taken by the students to explore this focus. Interestingly research focus areas four, and six were supported by the same number of images with the students taking 37 photographs for each of these focus areas respectively. These areas explored the personal concerns the students had in their lives, and the aspects of school that support student learning, areas closest to their personal experience. The research focus area least supported by photographs (n=15) and the least number of students (n=23) was Focus Area Nine – community connections. The students gave four reasons for their non-engagement with Focus Area Nine:

- 1. The wording of the focus task was confusing;
- 2. Not enough time to explore the focus area;

52

- Difficulty gaining access to the locations needed for photographs e.g. the beach;
 and
- 4. Insufficient access to cameras out of school hours.

Other students who did not engage with the focus area did not give a reason for their non-engagement. The reasons expressed by the students and presented above indicate aspects of the research methodology and organisation of the research process that impeded their ability to engage fully with the research task, and areas that need to be addressed in the design of future research of this nature.

Category 3 in Table 5 presents the number of responses made by the students within focus areas without supporting photographs. This pattern of participation illustrates a distinct feature of the participation of the students using the image-based methodology - students who did not produce an image but had thought of a photo they would have taken, or had taken but misplaced, could discuss the perspective associated with the image(s) they would have taken. It appears that the process of mentally identifying an image that would signify and support their perspective enabled the students to explore their viewpoint and discuss it in depth.

In contrast the students who did not take a photo and had not spent time addressing the focus area could not in most cases give a spontaneous and coherent viewpoint. This suggests that the image-based process in some way aided the process of formulating, exploring, and espousing a personal viewpoint. The image-based process appears also to have worked in a way outlined by Taylor (2002) and Collier (1967) who emphasise the power of photographs in elicitation interviews to stimulate recollections, connections, and spontaneous associations within the mind of the participant.

3.2 Student Perceptions of the Research Process

Towards the end of the Photo Elicitation Interview each student was asked to comment on his or her experience of the research process. The data generated was inconclusive in some respects and additional questions were posed to students during the focus group session in Term Three. The findings reported in this chapter combine the results of the analysis of the data contained in the elicitation interview transcripts and the analysis of the written responses of the students to the additional questions. The findings are reported under three headings corresponding to the three broad categories of responses to the questions posed in the elicitation interviews:

1. The research process: Positive aspects identified

- 2. The research process: Negative aspects identified
- 3. The research process: Improvements identified

3.3 The Research Process: Positive Aspects Identified

Thirteen students identified getting 'time off school' as a reason why they enjoyed the auto-photography process specifically and the research process more generally. The phrase came up regularly during informal discussions with the students and during the photo elicitation interviews but was rarely elaborated. To find out more about what 'time off school' meant to the students, the students were asked to discuss the phrase further during the focus group session and to record their individual responses. 'Time off school' presented the students with four main opportunities:

- The opportunity to participate in something different to the usual routine of school;
- 2. Involvement in a variety of activities and ways of working;
- Missing class activities not personally preferred such as tests, maths (depending on the student) and worksheets; and
- 4. The opportunity to get outside (as part of the photography process).

These benefits identified by the students indicate that they value diversity of experiences, being involved in activity that interests them, and with learning that is not confined to the classroom. In this respect the research process provided them with experiences in line with two of the identified developmental challenges essential for early adolescents, namely involvement in diverse activities using varied ways of working and the opportunity to participate meaningfully in school and community (Stewart and Nolan, 1992).

Twenty-eight students identified 'taking photos' as the most valued aspect of the project. Two-thirds of these students elaborated further and justified their perspective with reasons and examples. Five main themes emerged as follows:

- 1. Intellectual challenge: Thinking outside the square;
- 2. Alternate mode of expression: We didn't have to write;
- 3. I could do what I wanted: Autonomy and self-direction;
- 4. No possibility of failure; and
- 5. Learning about what matters to me.

3.3.1 Intellectual Challenge: Thinking Outside the Square

'Thinking outside the square' was the phrase used by the students to describe the highly abstract process of choosing aspects of the school environment to represent aspects of their perspectives.

You had to think about what you think of, say a flax bush is like what you think is hands reaching out which is me thinking outside the square" (Bella)

The students identified three elements of the image-based process that afforded them intellectual challenge:

- 'Looking for photos' involving selecting objects and aspects of their environment and relating these mentally to their perspectives;
- Explaining the relationship between the photographs they constructed and their perspective; and
- Creating and crafting images and visual symbols that meant something to the students personally.

The personal nature of photographs constructed was highlighted also; only the students themselves could assign meaning to and explain the meaning of their images. Kate notes "No one but your self [sic] knew why you were taking certain photos". The illustrative example is inconclusive but seems to suggest that the process as it was designed did shift the locus of control in the research to the students in a way that they enjoyed and valued.

Intellectual challenge through stimulating the imagination and curiosity of students is an essential aspect of programmes for early adolescents if these are to effectively provide opportunity for the students to engage meaningfully in the educative process. It seems the auto-photography process provided the students the opportunity within a scaffold to develop their ability to think symbolically, strategically, and creatively, all essential aspects of higher-order thinking that emerge and need to be developed during this developmental phase (Beane, 2004).

3.3.2 Alternate Mode of Expression

Creating photographs to represent their perspectives and explaining these verbally provided the students with a welcome alternative to the dominant practice of representing meaning through writing at school. The visual process combined with oral explanation shortcut the process of communication making it more direct. This aspect was also closely linked by the students with the symbolic aspect of 'thinking outside the square'. It seems that being able to communicate their meaning directly through images and

dialogue kept the emphasis in the process on the students conveying meaning without the delay necessitated by conveying that meaning through writing.

"It was fun and we didn't have to write everything down we could just take a photo to show every thing [sic] that would take pages. U [sic] had to think outside the square." (Waffle Kitty)

Bugs Bunny noted in the elicitation interview how the process of explaining the photographs was enjoyable also, "I enjoy like taking photos and then I enjoy explaining them, what they're about most times, afterwards". It appears that thinking of ways to express perspectives through a medium alternative to writing was as much the engaging aspect as not being required to write.

Eight students identified the dialogue component of the auto-photography process as important to them. They enjoyed expressing their views and discussing these with someone else. This aspect of audience dominated the process from the outset, the students knew they would be explaining their photos to the researcher and took them with this in mind. In this respect the auto-photography process had a relevant and real life application that the students could see and engage with, an element of learning that they identify as essential if they are to engage fully in the process.

3.3.3 I Could Do What I Wanted: Autonomy and Self-direction

Being able to take photographs personally relevant to them during school time and make decisions about the form and content of their images constituted an aspect of the image-based process the students valued. The reasons for this identified and expressed by the students include:

- The freedom to walk around the school;
- · Opportunity to work informally with peers; and
- Freedom to do what they wanted (within the boundaries of the project).

When asked what was cool about taking photos Kate responded "Well the fact that we had a camera that we could express our opinions with, and it's kind of like the freedom to do what we wanted". The autonomy and self-focus built into the methodological approach essential to supporting the students to work as co-researchers, appears to have empowered the students and provided the motivational impetus they needed to engage independently with the focus questions. One student noted how the autonomy and self-focus mobilised her to fully engage with the auto-photography process, "because you had to do it yourself not like have the teacher do most of it for you... [you] just have to know what to do and listen" (Angel).

3.3.4 No Possibility of Failure

The students valued that their images, the quality of their interpretation of the photo focus guide statements, and the quality of their explanations of their photographs were not evaluated or judged against any criteria within the research process, "I could go and take photos and plan them there's no wrong answer" (Brendon). They enjoyed the freedom to interpret the photo guide as they wished and that the adult researcher was genuinely motivated to understand their point of view rather assess the quality of their contributions.

3.3.5 Learning About What Matters to Me

A belief common among the students was that the image-based data generation process assisted them to learn about themselves and identify what was important to them in a way that surprised them.

"It made me realise what really matters to me, and I love taking photos." (Sam)
"I like taking the photos and thinking about what I'm going to take the photo of that
made me think like what the answers were. I've never really asked myself those
questions before." (Sam)

In this respect it seems the research process contributed to opening up the self-awareness of some of the students in a way that scaffolded and supported self exploration, a challenge essential to the development of the students as early adolescents (Stewart and Nolan, 1992) and a skill essential to developing the quality of 'reflectiveness' necessary for powerful learners (Claxton, 2002).

One student commented that the research process as a whole rather than just the photography process taught him that he could trust others to keep their word.

"...it's really helped me, like not just to learn about school but it's really helped me inside ... I can trust people ...like with this interview if I don't want to hear it or say it, it doesn't actually have to be on there like some people say everything is going to be recorded and some people just go well you can just go and cut bits out." (Frank)

The research process accorded the students respect as persons able to make decisions in their own interests, respect essential to their development (Beane, 2004). Throughout the research process especially in the elicitation interviews the students showed surprise that they could decline to participate and/or participate to the degree they were comfortable. Frank's perspective indicates that respecting the rights of the students and affording them respect as persons contributed to their trust in the adults in the project and the research process itself.

One student identified that the value in the research lay in the emphasis placed on the students exploring aspects of their own experience, "the project focus was about us when most of what we do at school is learn about others and the world" (Da Grinch, paraphrased from research field note 30.6.04).

3.4 The Research Process: Negative Aspects Identified

The students were asked during photo elicitation interviews to identify any aspects of the research process that they experienced as negative so that any future research of this nature could take account of the experiences of the students in the design of the revised methodology. Six themes emerged from the perspectives the students shared that illustrate some of the difficulties they experienced at points during the research process:

- 1. Technical issues: I lost my photos;
- 2. Missing Out;
- 3. To plan or not to plan;
- 4. Not enough time;
- 5. Social dynamics: individual preference; and
- 6. Nothing: I liked it all.

3.4.1 Technical Issues: I Lost My Photos

Nine students identified their frustration at having to share a camera with other students within the research group and share the cameras with students and classes throughout the school. Some of the images constructed by the students were lost as a result of losing control of the camera. Students and teachers from other classes who checked out the cameras deleted photos from digital cameras at times before the students participating in the research saved these.

Varying ICT abilities resulted in the loss of some of the photographs and presentations prepared by the students for their photo elicitation interview.

"I did do one [PowerPoint presentation] with all my photos but when I went to open it, it wasn't there, so I had to start again and I didn't have time, and I only got to finish three photos" (Popeye).

Two students conducted their photo elicitation interview without photos, having taken but misplaced them. They used the notes they had recorded in the Photo Log about their photos, thoughts and perspectives.

Other students highlighted their frustration at not having as much access to cameras during research sessions and during class time as they would have liked. This included

comments that their class teacher did not give them enough time during class to take the photographs needed for the project.

"The only think I don't enjoy is cause my friends are saying that it's annoying because they don't have time to do anything. That's the only thing that I don't like as well because our teacher didn't give us that much time. We didn't have much time to complete our photos. So when we did get time we had to quickly take as many photos as we could." (Bugs Bunny)

The variable level of support afforded the students by the liaison teacher in practice is an aspect discussed in Chapter Five. In some cases liaison teachers did not give students the support they promised at the outset of the project and this caused inequities in access to cameras, and time to take photographs, within the student research group, causing frustration and feelings of being pressured for some students.

3.4.2 Missing Out

Four students identified missing out on school activities and some class work as a negative aspect of being involved in the project over time. This was in part because research sessions were scheduled on the same weekday and at the same time over a sixweek period so the same activities were missed. For some students missing class work had ramifications.

"We missed out on some things...[E: class stuff?] yeah...like how to do it. Like how to do the homework. Because if we had homework on the same subjects as what we were learning we wouldn't really know about it. But we did end up by getting it because he'd explain it to us." (Jane Sampson)

In other cases the activities that students did not like missing give important clues as to subjects and activities that they enjoy at school such as ICT.

I think there's a couple of times when we're going to do something different [in class] but ended up we had to go away, but I've learnt to deal with that...like today we're doing ICT. (Megaman)

An aspect related but not considered in conducting the research in the research context was the importance of keeping the specialist teachers informed about the project and the agreement regarding missed class work. Being made to catch up on class work sent the students mixed messages about the importance of the research and the value of their contribution within it and added to their workload in a way that impacted negatively on the time they had to take the photographs they needed.

3.4.3 To Plan or Not to Plan

Five students identified a dislike for the planning stage incorporated into the image creation process. For some students the planning guide did not suit their learning preferences and they indicated a preference for taking images without written planning.

Well, I'm one of those types of people that, like, I just like to go out and do it but I plan like the main thing first but I don't do the planning, like when I'm doing it I plan but for example when I'm about to take the photo that's when I do all the planning... I can't follow [a plan] because it's just going to change anyway. (Da Grinch).

For one student absence of planning was identified as the issue. Collier talked about how she initially raced around with her friends taking photographs and then found that the photos she had taken were not appropriate to her perspective and she needed to repeat the process with more forethought.

For others the planning process would have been enough preparation for their photo elicitation interview.

...and when you're planning it just takes so long it sort of puts you off because you take ages planning, ages taking the photos, loading them onto the computer, saving them, altering them, doing all that and then you have to go and then, you have to go do it all over again with a couple more photos, different photos, and the thing was like I did most of mine, drew pictures, the thing is doing that is to some people, like for me it's good because it's still fun... (Joan of Arc)

Planning for images to prepare for the photography process was not a requirement of participation but was strongly encouraged. The responses of the students to the preparation and planning stage indicate their varied preferences. Ultimately the students made the decisions about the extent to which they planned their images.

3.4.4 Not Enough Time

Within the theme of 'not enough time' were three discrete perspectives:

- Not enough time allocated by liaison teachers for students to take photographs led to feelings of being rushed and under pressure to complete the data generation;
- The planning process and inadequate access to cameras slowed some students down; and
- Time management skills were needed to manage the demands of the project and extra homework incurred because students missed lessons.

Waffle Kitty identified a solution to the issue of students involved in the research being disadvantaged from missing class work, "I think you should make like a time maybe after

school or some time where you actually had a place and that, that they can take pictures and that rather than having it in our own time and school and that." It is interesting that a decision to conduct the research at school during school time to indicate the importance of the project within the wider development context of the school was perceived differently by some of the students themselves; the viewpoint from which the students viewed the project in the wider context of their lives differed from the viewpoint of the adults.

3.4.5 Social Dynamics: Individual Preferences

The data generation phase of the project was designed as an individualised process. Students were expected to take photographs that represented their individual perspectives in relation to the research focus statements without collaboration with peers. However because students had to share cameras at a ratio of one camera per five students, students often went off to take individual photographs but in a group and collaboration occurred informally.

One student commented that working with her friends was a negative aspect of the process because it did not afford her the privacy she wanted around her perspectives and the photographs she wanted to take. When asked about aspects she did not enjoy she responded

If anything it would probably be, and I would have to say this, like with doing the project that [friend's name] and them all will see it and then...

Elaborating she continued,

Well it was probably the fact that I wanted to do it on my own a bit. I wanted to do it with [friend's name] but as well as on my own, and my friends wanted to do it, take photos with me. I said well you had to do it on your own. So we did in the end. (Gaye)

This extract shows how the research process as it was designed was not always implemented into practice as intended, with unforseen factors such as the ratio of cameras to students coupled with friendship dynamics influencing the way the students could generate data.

3.4.6 Nothing: I liked It All

Seven students could not identify any negative aspects of the research process and responded that they enjoyed every aspect that they experienced.

3.5 The Research Process: Improvements Identified

The students were asked towards the end of the photo elicitation interview to identify any ways in which they saw the research process could be improved for future research of this nature. Six students were happy with all aspects of the research process and would not change any aspect for future research. Thirty-two students identified aspects they would like to see improved. Three themes emerged and form the three headings of this section:

- 1. Access to cameras:
- 2. Interpreting focus statements: talking at cross purposes; and
- 3. Time pressure.

3.5.1 Access to Cameras

Eight students identified access to cameras as the aspect of the research design they would like to see improved. The most dominant solution suggested was to have a camera for every participating student (either disposable or digital) so that students could work individually, have better control over what happened to their images, enjoy more time to engage with the photo guide, and cut down the waiting time for a camera.

The students indicated also that they would prefer greater access to cameras outside of class time and school hours. Having limited disposable cameras to share among the group outside school time did not give students the access they needed to community and regional locations.

It was really hard getting the cameras out after school. We weren't allowed them during the weekends. And that's pretty stink, because having them during the weekends is sort of like, weekends when I go to my Dad's house, weekends is when I do horse riding, weekends is the only time that I go to the pool. (Joan of Arc)

One student experienced the process of distributing the disposable camera by the class teacher as inequitable. Despite other students being allowed to take the camera home Phoenix was denied the camera, "so that felt a bit, little bit stink". The incident not only affected her ability to take the photographs she needed, it diminished also her trust in the research process.

3.5.2 Interpreting Focus Statements: Talking at Cross Purposes

Four students found the wording of some of the photo focus tasks confusing and suggested more time be made available in the preparatory step of the auto-photography process to explore and clarify the meaning and intention of the focus statements in more depth. Photo Focus Tasks Eight and Nine were identified as especially confusing:

- Take one or two photos that show what being young in Hawke's Bay means to you.
- Take one or two photos that show aspects of your community you feel most connected with.

Nuclear Gerbil explained the problem,

They're really hard and like it might be easier to say it in a different way...Well for number eight being young in Hawke's Bay, I'd put ... take photos that show what Hawke's Bay means to you, not what being young, because that's the part that confused me. But then after that you could have another sentence that relates to being young as well.

Asked about focus statement nine Nuclear Gerbil continued

Well instead of putting community you could have your school, or your family or the shops where you go shopping or something like that.

Nuclear Gerbil's perspective shows that the notion of 'community' needed to be better defined through more focused discussion within the research group or by using an alternative term in the wording of the statement.

One student noted that although he did not have difficulty interpreting the Photo Focus statements he thought other students might and suggested that future research of this nature include an open-ended option that students suggest their own focus areas in addition to those formulated by the researcher.

Give [students] like, just well not really for me like I enjoyed these topics that you had to take the photos of, but some people might not be able to do that and they might not be able to like they would just have to like make up their own ones that would suit them better... you could give them the option to follow these topics or just like let them make their own up, like make sure they know what it's all about and that. (Da Grinch)

One student noted that having a better understanding of the focus statements at the beginning of the project would have helped make the auto-photography process more focused and useful.

I would think about what I'm going to say first. Because otherwise I would have been finished ages ago, like weeks ago...

Asked if she took photos without knowing why she was taking them she replied,

Kind of. Like I just took any photos cause I didn't think anything of it, like when I took
the photos I didn't think, oh, what the hell I might use this for. And then I'm like, don't
use it. Kind of... Yeah, like I actually looked at the questions wrong, like these don't
really fit in. (Mr Wiggles)

These perspectives indicate that the process selected because of its potential to be used independently by the students, contained terms and areas of focus unfamiliar to them. Spending more time exploring the intentions behind and concepts contained in the different focus areas of the Photo Focus Guide could have further enhanced their participation.

3.5.3 Time Pressure

'Time pressure' refers to the need for the students to improve their own time management skills to cope successfully with the independent role they had in the project. Given the new skill involved in the image-based research approach for the students, six students identified the need for the availability of more class time to complete the auto-photography and organise photographs in preparation for photo elicitation interviews.

Chapter Four: Research Results

4.0 Introduction

Chapter Three reported how the students participating in the research engaged with the image-based methodology to generate photographs and images representing aspects and elements of their perspectives in relation to the research questions presented to them as photo focus tasks in the Photo Focus Guide. Additionally the chapter reported how the students perceived and experienced the research process more generally and the auto-photography process and photo elicitation processes more specifically. The students identified the many benefits they gained from participation in the process that suggested the value of the image-based research process as a way of supporting early adolescent students to construct, explore and articulate their voice. The students identified also aspects of the research process they experienced negatively and concluded by presenting the aspects of the research process the students identified that could be improved to better support their participation in future research of this nature.

Chapter Four reports the perspectives the participating students expressed in relation to the research questions presented to them as the nine photo focus tasks outlined in Chapter Two (Section 2.3.3). Bronfenbrenner's Ecological Model of Development (1979, 2005) introduced and described in Chapter One (p. 21) played a pivotal role in the analysis and organisation of the results generated through the constant comparative process. The model is used in this chapter as the broad framework for presenting the perspectives of the students in relation to the influences that affect their learning, identity development, self-efficacy and well being as young persons. 'Perspective' is used in this sense to indicate the general stance, concept or point of view expressed by the students in relation to a defined topic (Dahl, 1995). By organising the perspectives of the students and the analytic features that constitute these within the Ecological framework, in effect the ecological perspective of the students themselves is presented.

Accordingly the structural elements of the Ecological Model are retained as the four main headings of the chapter but are re-worded to show the sense in which they are employed in this chapter as follows:

- 4.1 Microsystem Influences: School, learning and learners
- 4.9 Mesosystem Influences: The Influence of family, peers and the wider school community on the learning and wellbeing of students;

- 4.10 Exosystem level events, opportunities and practices that impact on the lives of the students; and
- 4.11 The influence of macro-level events, practices and societal values on the lives of students.

The perspectives shared by the students within each of the four sections are organised and presented in turn under thematic topic headings that refer to distinct topics identified and described by the students within their response to the photo focus tasks. The topics are introduced and listed at the beginning of each section and expanded on in order of introduction as the section unfolds. The topics and perspectives discussed within these and the number of students associated with each, are presented in tables positioned at the beginning of each section. Additionally the topics are depicted graphically within a diagrammatical representation of the ecological model of the students positioned at the beginning of each section. The use of the model indicates also the relationship of the topics contained within each section with the other environmental settings and factors that influence the learning and well being of the students.

Data extracts taken from the student photo elicitation interview transcripts are used to support and illustrate the analysis and description of the perspectives of the students. Diagrams developed as part of the analysis are included to illustrate and represent the interrelationships identified between elements that taken together constitute the concepts, stances and viewpoint of the students presented within the topics. The number of students associated with each of the viewpoints described is included to indicate the strength and dominance of the theme within the student group as a whole. Additionally where the perspective presented is associated with a small minority of students this is indicated also.

4.1 Microsystem Influences: School, Learning and Learners

Three discrete settings in which the students operate directly and extensively were identified from the research results:

- 1. School
- 2. Family
- 3. Peer and friendship

This section outlines and describes the aspects highlighted by the students that influence their learning and wellbeing within the microsystem of School.

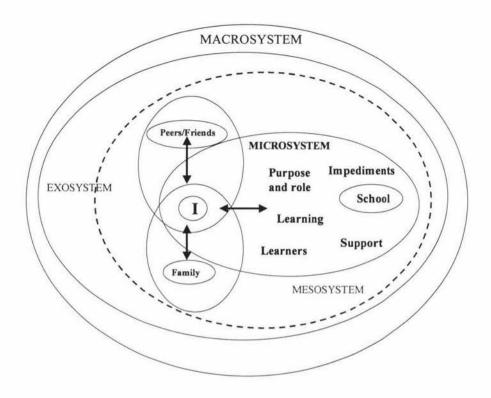


Figure 13 Microsystem of School

The scope of the school microsystem (Figure 13) includes the perspectives of the students on aspects of themselves as learners, aspects of school that support and impede their learning, and the role and purpose school plays in their lives. The influences of the family and peer and friendship microsystems on the students as learners and on their engagement within the school microsystem are described as mesosystem influences later in the chapter.

Table 7 below presents the topics and perspectives within these reported and described in this section.

Table 7

Microsystem Influences: Topics and Perspectives

Topics	Perspectives	Number of students
Pathway to opportunity	What happens at school affects my life beyond school You have to make the most of your opportunities	8

	Personal goals motivate achievement	
	at school	
	• The views of others support or	
	discourage perseverance with	
	personal goals	
Foundation for	Success at school helps me get the	9
career success	job I want	
	 Relevance between school activity 	
	and real life is important	
	People can take steps to achieve	
	success at school and their actions	
	can also lead to failure beyond school	
How learning works	Generative conception of learning –	6
	learners make sense of their	
	environment	
	Transmission conception of learning	5
	- learning is communicated by	
	teachers and the environment	
	Co-constructivist conception of	3
	learning - learners create meaning by	
	interacting with each other within	
	their environment	
	I am a passive recipient of learning	8
	I make choices and use strategies that	
	influence my learning directly	13
How learning is best	Having the conditions and using the	19
supported	strategies preferred and the flexibility	
	to choose what suits the situation	
	Opportunities to collaborate with	19
	classmates and peers	
Market Control	Having a 'cool' and competent	18
	teacher	
How learning is	Being distracted by others makes it	13
impeded	hard to concentrate	
	Bullying creates anxiety and makes it	10
	hard to concentrate	

The perspectives of the students suggest that engagement in and success at school influence the quality and opportunities of their life beyond school. This section presents how the students view the purpose of school in their lives and highlights the factors that they suggest influence their progress at school. The account presented reports results generated by the students in response to the photo focus task 'take one or two photos that best show your view of school'.

Three main themes embody the perspectives of the students in relation to the purpose and role school plays in their lives:

- 1. School as a pathway to opportunity;
- 2. School as a foundation for career success; and
- 3. School as a social and cultural community.

Themes one and two are described and expanded in this section. Theme three is described as a mesosystem later in the chapter.

4.1.1 Pathway to opportunity

For the students school seems to represent their 'ticket' to future fulfilment in life. Their perspectives indicate that opportunities available to them once they leave school depend on the choices they make and the success they have at school – success is cumulative; the choices made now have far-reaching consequences for their lives.



Figure 14 "[School's] like a path to new beginning because you've got to make your own choices when there's a path to choose. Like there are so many different paths that you can choose (Popeye)"

Eight students identified school as a 'pathway' studded with opportunities and decision points. The terms they used to describe school in this way included also 'path', 'labyrinth', and 'journey'. By making choices and taking advantage of available opportunities at school according to their personal interests, goals, and aspirations the students create an individualised school pathway. Their behaviour, motivation, and choices influence the direction the pathway takes and in turn the outcome for their lives.

You've always got different places to go and there's all these different ways you can go to them... it's really up to you which way you go and if you choose – it's up to you to decide the path you take, so if you muck around you might not get to the place you wanted to get to in the end. (Cassie)

Figure 14 illustrates the view one student has of school as a path to new beginnings. It appears that the students recognise school as a place of diverse opportunities that have far-reaching consequences for the direction and quality of their lives, affected by the decisions they make, the opportunities they engage with and the level of commitment they sustain. From this perspective the students place emphasis on the difference they can make in their own lives as a result of the choices they make.

Opportunities that motivate the students to engage and participate in learning at school and within the extracurricular activities offered include:

- Being with friends;
- Developing skills relevant to future career aspirations;
- Taking advantage of opportunities not offered elsewhere i.e. use of sports equipment and musical instruments;
- To increase personal knowledge and ability; and
- To get a good education.

The examples provided suggest personal goals and interests motivate the students along with future-focused, strategic goals centred on gaining the skills and credentials they believe they need to succeed in life beyond school. The examples suggest also that the social dimension of school and the availability of a range of organised activities in line with the personal interests of the students act to cement the relevance of school to their lives.

Six factors appear to influence the progress of the students along the pathway of opportunity they construct at school as follows.

- 1. Personal aspirations;
- 2. Level of effort, commitment, and motivation to achieve goals;

- 3. Advice and guidance of others;
- 4. Perceived value of activity;
- 5. Perceived consequence of actions; and
- 6. Affective state

Although the personal aspirations of the students are diverse their perspectives suggest that they align commonly the schooling activities in which they participate with their personal aspirations in order to establish clear relevance between school and their life aspirations.

My personal goal is to be a better person and get a good education so I can teach other people, because I want to be a teacher. (Patrick Star)

As students progress along their self-constructed pathway their level of effort, level of commitment, and motivation to achieve their goals varies. It appears their success at school and feelings of self-efficacy depend on how well they recover their dedication to achieving their personal goals.

If you're really keen it can be a good path or like it may get up and down a bit. But say if you're not really keen on anything it can go down and up and down and not very good. (Patrick Star)

The goals and aspirations the students adopt are flexible and prone to change. The students indicate they will change their goal if their interest and attention is drawn elsewhere and that their goals are motivated by personal interest.

Sometimes, like see this arrow for instance, you think you're going great and then all of a sudden there's a turn, ... sometimes in school you might be heading towards a goal but then all of a sudden you see something better so you go towards that instead. (Cassie)

The progress of the students towards achieving their goals is also influenced by the advice, guidance, and support offered by others in the form of encouragement and inspiration.

We all play netball and my friends tell me like 'just concentrate on yourself and not on anybody else...now I just concentrate on getting the ball in the hoop. (Phoenix)

In a similar way disparagement from others influences also the level of perseverance and resilience the students apply to achieving their goals.

I listened to the bad things, and I thought I don't like this, so I stopped and let it all go and did something else. That's the thing, people won't tease me for...like I thought, well, I want to do running, and people say 'oh that's stupid', and so like I just wanted to be accepted and stuff... and so I quit that goal and did something like other people were getting into other sorts of sports like netball and stuff. So I got into that, and I got put off

by my running. So I wasn't as fast at the netball. I was kicked off the team because I wasn't good enough, and so I mean, I should have gone for what I did. And I've gone back to it, and I'm a real good runner. (Patrick Star)

The factors that influence school success identified from the perspectives of the students suggest three domains of influence on students' decision-making presented in Table 8 below.

Table 8

Domains of Influence on Student Decision-making

Domain	Factors
Personal	Affective state
	Personal aspirations
	Level of commitment and motivation to
	achieve goals
Extrinsic	Advice/guidance/disparagement of others
Perceptions	Perceived consequences of actions
	Perceived value of activity

The personal domain contains factors that students themselves generate and that are changeable over time. The extrinsic domain contains the perspectives of others that influence the choices the students make to gain approval, be accepted, or avoid disparagement. The perceptions of students appear to be generated in relation to notions about what is important in life gained from their own experience, observation, and the views of others such as parents and teachers. For example one student expressed a belief that she needed to 'buck up her ideas' to prepare for secondary school, based on the advice of her mother and perceptions she has about secondary school,

When I get to high school I'm going to have to buck up my ideas anyway because in high school they don't treat you like and intermediate kid, they treat you like an adult and so I thought if I'm going to start bucking up I may as well start now. (Angel)

This aspect is explored further as a mesosystem influence later in the chapter.

4.1.2 Foundation for Career Success

Nine students identified the purpose of school as gaining the skills and knowledge needed to achieve personal fulfilment in their life and access to their desired career aspirations. The students prefer to be engaged in learning that has direct relevance to their future career aspirations and to application in life beyond school.

You come to school to learn – we come to school to work and we learn from our work.

Because a lot of people don't like coming to school, when they come to school they work and they learn from it and they can get a career like later if they learn from their work.

(Nuclear Gerbil)

I prefer to ... know why I'm doing it [learning activity] because sometimes you learn things that you don't actually know the reason why you need to learn them, and I'd like to know the real meaning for learning them – does that make sense? (Cassie)

The need to understand the relevance of the activities they are involved in at school is not confined exclusively to those students who see school as linked to career opportunities. It appears however that the students 'create' relevance between school and their future aspirations as a way of engaging with school.

The students who discussed the link between school success and future career aspirations look forward to involvement in careers that make a useful contribution to knowledge or to people's lives, or that offer them experiences above the mundane.

I wanted to be a professional drummer for a little while but then I changed my mind and wanted to do a different job...I wanted to get paid to go around the motels and rate them...or I want to be a designers...I wanted to do university in either Wellington or Auckland and then open a fashion store with a couple of friends... Wellington's probably got a really cool university because when I was a little younger I wanted to go there because Dad said that's where I can learn to be in the CSI [Crime Scene Investigation], I was going to be in the FBI but I changed my mind. (Sponge Bob)

These students also seem to have a well-developed sense of social success and social failure. Even when students do not identify specific career aspirations they show an understanding that some jobs are socially desirable and others symbolise failure and limited life opportunities.

I don't know what I want to do when I'm older. I don't know what I want to achieve really. I want to go to university, like in a while...I want to get a proper job. I don't just want to be someone who works in a supermarket or something for their whole life. I want to do something, not sure what though ... (Gaye)

Asking for help and taking steps to maximise one's own potential are strategies valued by the students and associated with success at school and increased career options. Students who do not ask for help and give up on themselves fail and as a consequence are limited to perform mundane jobs.

Like if you don't ask, you don't get that help. People who stop and they're not that good because they can't do it, so they go off and try and find a job and they can't get one, except for road works...standing there just going stop, go, stop, go sort of thing. (Collier)

4.2 How Learning Works

The perspectives of the students reported in this section illustrate that many could in some way define learning, articulate how the learning process works, and articulate characteristics that define them as learners and influence their learning. Claxton (2002) identifies the ability of students to reflect in this way indicative of reflectiveness – a characteristic of learners who are "ready, willing and able to become more strategic about learning" (Claxton, 2002, p. 30).

The section reports the perspectives of the students under three headings:

- 1. Conceptions of learning: how the learning process works;
- 2. Learning preferences, and conditions necessary to optimise learning; and
- 3. Meta-learning: assessment of self and strategic opportunities.

4.2.1 Conceptions of Learning

Sixteen students discussed their concepts of how the learning process works and their conceptions can be organised in three categories that relate to three established theories of learning:

- 1. Generative model (n=8)
- 2. The transmission model (n=5)
- 3. Co-constructivist (socio-cultural) model (n=3)

The generative concept of learning (Wittrock, 1989) expressed by eight students emphasises the importance of the personal acumen and sense-making strategies the students themselves employ in the learning process to make sense of new concepts and information. They describe learners making sense of information obtained from their environment, from learning experiences, and others including teachers, and organise the information they gain according to what seems reasonable to their experience.

Everything is all messed up and you know that you have to sort it out and you have to learn by getting parts of information and then putting them together to make something that sounds sensible, or right. (Nuclear Gerbil)

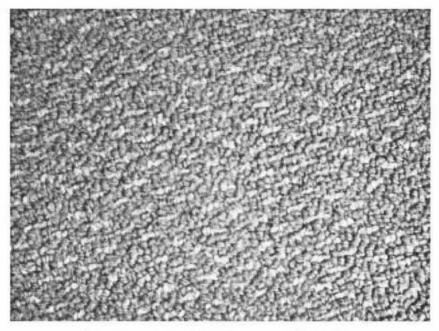


Figure 15 Generative Concept of Learning

Interaction between students and the knowledge to be acquired is the core learning relationship highlighted from a generative perspective. Learning is the process of adapting existing understandings to include new knowledge in a process described by the students as 'joining stuff on' and 'fitting new concepts in'. The process takes place over time and is motivated by the interests of the students, and their desire for diverse learning experiences. One student explains how curiosity and personal interest motivate her learning using an analogy of coloured carpet flecks standing out from a monochromatic background (Figure 15).

When I learn something I try to fit it in to the rest of the stuff I learn and then there's like the normal learning stuff and then there's the colourful stuff, and the colourful stuff is more ...I seem to make more of an effort towards it. (Cassie)

From a generative conception, immersion in the knowledge to be learned over time is a key component of the learning process.

When you learn something you've got to be it...you've got to see something and let it work up in your brain kind of...you learn something by experiencing it... (Cassie)

Overload is caused if too much new learning is attempted within too short a timeframe. The brain going 'cuckoo' (Cassie) without consolidation phases required to 'get [one's] head back into place' (Bob).



Figure 16 The Mind as a Construction Site

Five students articulated a conception of learning as a passive absorption by the learner of knowledge transmitted from teachers and the environment. This perspective shares features with the transmission model (Gage and Berliner, 1991) of learning in three respects:

- Learners come to the learning context with an empty mind that is filled by direct transmission of knowledge from the teacher and environment;
- Prior knowledge, life experiences and skills the learner brings to the learning context on the process of learning are not acknowledged as influencing learning;
 and
- 3. Learning involves passively absorbing the intended meaning of the teacher.

One student uses the analogy of the process of construction to illustrate how the learning process works from this perspective (see Figure 16 above).

My mind is a construction site. Like, before it used to be nothing and you're like putting it together and that's what life and teachers and stuff does with my mind. (Popeye)

The learning relationship includes the student and their teacher predominantly; the influence of peers and the environment are not discussed explicitly.



Figure 17 The Co-constructive Nature of Learning - Bark, Twigs and Dirt

The co-constructivist conception of learning articulated by three of the students emphasises learners engaging reciprocally with each other to explore new concepts within the classroom environment, supported and facilitated by the teacher.

"...there was the paper and ...that's like school and then there's like the chips which is all the people and then like there's all the grease and it's spreading – like it's each – like the paper and each chip is like spreading grease onto another chip and so the grease is like learning and so everyone's learning something new, because like they're getting a new bit of grease every time." (Da Grinch,)

From this perspective learning is consolidated over time and through repeated exposure to concepts via interaction and communication with classmates. The concept of learning expressed by these students appears to align with Vygotsky's emphasis on learning as a process that is stimulated through the interaction of individuals with more competent others in their environment, and the facilitation of learning through communication and language (Smith, 1992). The visual analogy of bark and twigs (Figure 17) mirrored also the co-constructive nature of learning but with dirt representing the concepts learned, passing between students (twigs) within a garden environment (classroom learning context).

The three conceptions of learning outlined above are included to illustrate how the students themselves view the learning process in which they participate. How the students conceptualised the learning process indicate two broad contrasting views as to their degree of influence as learners within the process:

 Passive – learners have no influence on the learning process, learning 'happens' to them; and Proactive – learners use strategies actively to make sense of and accommodate new concepts with their existing knowledge.

The students who view themselves as the proactive centre of the learning process, identify and discuss strategies that they use to make sense of new concepts, that are associated with resilient, and resourceful effective learners. These include:

- Perseverance and persistence;
- Consistent effort:
- · Reaching for goals;
- · Making sense of information;
- Asking for help;
- Research;
- · Interaction with others; and
- Trying new things.

These actions and strategies exhibit characteristics identified by Claxton (2002) as associated with building learning power and give a clear indication for teachers as to the types of opportunities to build into their programmes to support student learning. The perspectives of these students indicate also their preference for reciprocity in the learning process, characterised by interaction with others and mutual support, as a core component of learning (Claxton, 2002). In contrast the students who view themselves as passive in the learning process depend on the development of their cognitive capacities, maturation, and the skill of their teacher to learn.

4.3 Learning Preferences and Conditions Necessary to Optimise Learning

Photo Focus Task Two asked the students to take photographs that represented how they viewed themselves as learners. Figure 18 shows the mind map constructed during the analysis process to represent the aspects the students identified and their interrelationships.

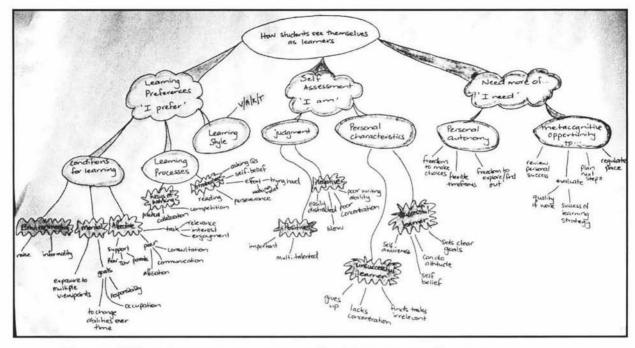


Figure 18 Mind Map: How the Students See Themselves as Learners

Three broad categories emerged from the perspectives the students expressed:

- 1. Learning preferences: 'I prefer'
- 2. Self assessment: 'I am'
- 3. Need more of: 'I need'

The perspectives and themes identified within these categories in relation to how the students see themselves as learners are presented below using each category as a heading.

4.4 Learning preferences: 'I prefer'

Within the category of 'learning preferences' nineteen students identified the conditions, learning processes, and learning styles they preferred as individuals. Their preferences are reported under three headings:

- 1. Conditions for learning
- 2. Learning processes
- 3. Learning style

Conditions

Three types of conditions were identified within the perspectives of the students:

- 1. Environmental;
- 2. Mental; and
- 3. Affective.

Environmental conditions included a preference for informality of classroom design, availability of formal and more informal workspaces such as chairs and desks, as well as couches, cushions, and soft spaces.

Sometimes I get home and if I want to sit at a desk I will sit on my desk, but most times I can sit on my bed and watch some TV. Like cos' I'm multi-talented, I can do both at the same time." (Bugs Bunny)

The important aspect of this perspective was that the students would like the freedom to decide the working environment that would suit the task they are engaged in. It appears from their perspectives that this freedom is not available to them currently and that they are limited by the decisions their teachers make about how they can work in the classroom context.

Two students discussed a preference for a low-noise environment with the presence of sound necessary to aid concentration and task focus. Silent classrooms were identified as off-putting and the students compensated for the silence with 'mind chatter' that distracted them from their learning and class work. Phantom explains, "it needs to be like okay to concentrate. I find if it's very, very quiet I can't work very well. Because you have got to focus on being very quiet."

Mental conditions identified that the students preferred comprised two aspects:

- Exposure to multiple viewpoints of their peers as part of the learning process;
 and
- 2. Having personal goals to focus their learning.

The preference of the students for access to the viewpoints of their classmates and the benefits for learning that the students associate with collaboration with peers is described fully later in the chapter. The goals that the students identify relate to their future aspirations regarding the occupations that interest them (discussed earlier in the chapter), a focus on changing their abilities either to improve areas of weakness or existing strengths or to pursue goals they consider will increase their responsibility within their learning and beyond school. By way of example Patrick Star describes her goal of getting a good education as a means to become 'a better person' and to help others in a meaningful way.

The affective conditions refer to the emotional influences the students identify and prefer. Three affective influences were identified within the perspectives of the students:

- 1. Support or parents, teachers, and peers;
- 2. Structure of tasks in line with the personal interests of students; and

 Affiliation with peers characterised by opportunity to consult and communicate as a central aspect of the learning process.

The affective influences on student learning of teachers and peers are described in combination with the preferred ways the students like to work presented below. The preference of the students for tasks that are relevant to their lives, and in line with their personal interests was described as an aspect of Section 4.1.2. The influence of family members on the learning of the students is described as part of Section 4.9.3.

4.5 Learning Processes

Within the perspectives of the students two categories of learning processes were identified:

- 1. Ways of working collaborating with peers
- 2. Strategies preferred

The preference of the students for working collaboratively with peers is reported and explored below. The learning strategies the students prefer to employ were outlined earlier in the chapter in Section 4.2.1.

4.5.1 Ways of Working - Collaborating with Peers

Nineteen students identified collaboration with their peers as the key factor that supports their learning and eighteen students identified the characteristics of the importance of their relationship with their teacher as key to supporting their learning. Together these two factors comprise dominant aspects of school discussed by the students in relation to their learning preferences and aspects of school that support their learning.

Collaboration refers to students talking and interacting with their peers to explore learning together. Collaboration as the students described it includes the opportunity to:

- Talk with peers as a strategy to increase their understanding of concept;
- Work with others in class;
- Participate in class discussions and brainstorming;
- · Generate ideas interactively in groups and on a whole class basis; and
- Assist each other with advice, feedback, and support.

The students identify many benefits that the opportunity to work collaborative with peers contributes to their learning that are paraphrased and listed below:

• Communication with others aids personal understanding (n=4);

- Peers translate expectations associated with learning tasks in a way more easily understood (n=8);
- The example, demonstrated skill, mistakes, and achievements of classmates provide guidance for learning (n=2);
- Peers support each other with aspects that teachers do not like to help with i.e. spelling;
- Working with others engenders feelings of belonging to a group (n=2);
- Exposure to multiple viewpoints (n=2);
- Provides individual motivation to learn because the process is enjoyable;
- Opportunity to generate ideas collectively;
- Provides emotional support (n=2);
- · Confirms own ideas; and
- Lessens the worry of being wrong by being able to develop a perspective in relation to the viewpoint communicated by others.

Exposure to the multiple viewpoints of their peers appears to open up unanticipated possibilities for the students in their learning as well as give them the sense that they are part of a learning community.

- "I'd like it [the classroom] to be like people talking more and like sharing their ideas
 instead of just sitting there and being quiet...I reckon that if everyone shared their ideas
 they'd learn more because you're getting like information from a whole lot of other
 people, not just yourself' (Popeye).
- I like working in groups than working as an individual because you get more point of
 views and you get some ideas for later on and it's just more comfortable...it's just easier
 like having everybody saying their ideas than you just thinking of all these ideas for
 yourself and they might be wrong. (Leah)

The perspectives of the students indicate that they have a sense that working together allows individuals to be productive in ways that working in isolation does not and that communicating freely and interactively is an essential element of learning as a generative process.

Three of the students identified the role technology can play in facilitating collaboration within the learning process. In particular the students from two of the research schools expressed their preference for smartboards, large screen interactive computer equipment that enabled large groups of students to work together to generate and explore ideas and gain benefit from each other's ideas.

[Talking about the benefits of the smartboard] Because everyone can see, like we're all helping each other, we're all learning on one thing. Like we can all see other people's and then we can learn from each other kind of. (Mr Wiggles)

According to the students the smartboard provides a focal point for the group that channels and presents the knowledge generated by the group for all to see and participate with. The students that identify facilitative benefits of smartboard technology for collaboration also highlight the openness of their teachers toward student collaboration as an important teaching strategy. The perspectives of the students highlight indirectly the importance of the pedagogical philosophy, awareness and skill of teachers on the availability of rich opportunities for the students to work collaboratively as a core aspect that support their learning.

The benefit identified by the greatest number of students (n=8) - the ability of the students to teach each other in a way superior to their teacher - indicates that this preference and belief incorporates four factors:

- 1. Understanding is gained more easily from peers;
- 2. The opportunity to assist each other in the learning process;
- 3. Shared concerns, communication styles and general viewpoint; and
- 4. Equal power relations between students.

Expressed in this way, the factors taken together and used to inform teaching practice and classroom organisation, could afford the students learning experiences developmentally responsive to their needs as early adolescents and conducive to their development (Stewart and Nolan, 1992; Bronfenbrenner, 1979, 2005).



Figure 19 Being Told Off⁸

⁸ The teacher featured in this photograph posed for the photographers and is not associated personally in any way with the perspectives the students regarding 'fear of being told off'.

Power relations between students and their teachers seem to figure strongly in the preference of the students to seek assistance from and give assistance to each other, as the perspective of one student indicates.

There's some people in my class that help out people that aren't very good at working and I think peers can help people more than some teachers can... I don't think they [students] look up to teachers in a way. I think they're learning off their friends and the people who they like working with, rather than the teacher yelling at them because they're not doing something right... I've learned heaps form my friends, and I think we tell each other things and you usually remember them easier when one of your friends has told you ... because it's somebody you know and somebody that you can talk back to. (Waffle Kitty)

The preference of the students for reciprocal peer teaching may indicate a tacit understanding of Bronfenbrenner's (1979) hypothesis that "interrelationships that encourage development are those where there is a balance of power" (in Smith, 1992, p. 28). The preference expressed for seeking assistance from each other indicates that an imbalance of power between students and their teachers characterised by the threat of 'yelling' and being told off, depicted deliberately by the teacher captured in Figure 19 above, and the anxiety this causes, impacts the choices the students make in relation to seeking help in the learning process.

4.5.2 Teacher Disposition and Competence

Teacher disposition and competence was a topic identified by eighteen students as a key aspect that supports their learning, and as a potential impediment to their learning also as indicated in the previous section. The supportive qualities and attributes of teachers that the students emphasise include the ability to:

- Connect personally with the students and address their individual concerns as part of the teaching process;
- Support the students to make choices within the learning environment but also provide strong direction and boundaries;
- Demonstrate commitment to students as people by listening closely and acting on the information they acquire; and
- Establish trust with students by reacting predictably to requests for assistance and taking a low-key approach to discipline that preserves the dignity of the students.

Teachers who appreciate the importance of connecting personally to the students and taking action to resolve their particular issues and challenges are valued over those

teachers who have sound subject knowledge but who teach the subject rather than the student.

If they [teacher] understand you, if they're not just there to teach, if they're there for you as well, like they understand. Because when they're just there to teach it's sort of like they don't really care what you know they're just there to tell you what to do and make sure you get along with it. And if you've got a problem with it they usually don't tell them, they care about it and help you work it out. (Sam)

Teachers who work with students in this way, tailor the learning process to suit the varying learning preferences of the students indicating a reciprocal, dynamic relationship rather than a didactic one.

'Cool' Teachers

The personal qualities of teachers appear to influence how the students engage with the learning process and subject content at school. Five students took photos of individual teachers they classified as 'cool': 'Cool' teachers display personal attributes and dispositional characteristics the students relate to, that in turn increase the credibility of the teacher in the eyes of the students, and increase their willingness to engage with the programmes they provide.

He's nice. He's got a good sense of humour, and I mean, he's just someone that you would like to know...[E: is it important for a teacher to be that kind of person?] yes, so then the kids will get on with them, otherwise you're just sitting there like ohh this is so dumb and just sit down there and go through the motions. And just fall asleep and don't listen. Which means you won't be learning. (Patrick Star)

The implication implicit in this extract is the 'default' arrangement of didactic, transmission-based pedagogy that places even more importance on the ability of the teacher to engage and sustain the attention of the students if they are to learn.

The students characterise 'cool' teachers as:

- Committed to students and to their job;
- Approachable;
- Lively and expressive;
- Respectful of students when disciplining them, using humorous warnings to diffuse potential conflict;
- · Well-balanced, able to be funny and serious where appropriate; and
- Humorous.

Far from a 'glib' colloquial expression the characteristics identified by the students suggest their ability to learn is optimised when they are engaged with respectful and reciprocal relationships with their teachers.

The importance of respect as a core component of a relationship between teachers and their students that supports learning can be illustrated by the perspectives of students regarding the effects 'disrespectful' relationships have on their feelings of self worth and willingness to seek assistance in the process of learning.

That's a photo of happy teachers. If you don't sort of have a happy teacher then you get all nervous about saying anything, because they will just go snap it right back at you. Children need a smiley teacher that makes you say good things and put up your hand and give them the answers and you feel good about yourself, and not just keeping it in to yourself thinking 'oh no, what if do I do this or do I not?' (Collier)

Four students identified explicitly the unpredictable and disrespectful actions of their teachers in relation to seeking assistance as a key impediment of their learning. The fear of being told off distracts the students by tying up their attention, creating anxiety and delaying them from seeking necessary assistance.

The respectful disposition of 'cool' teachers was emphasised strongly by the students in discussing the subject of discipline. The students indicated their respect for teachers who take a low-key approach, and act to preserve the dignity of the students as an integral part of the discipline process.

• He's good, say like if someone got into trouble, he won't raise his voice and say 'oh ra ra ra' and growl them like huge but he'll keep his voice down, he may have a little bit of a tone if it's real bad but otherwise he's real cool about it...He just spoke like he normally does, so it means, oh well, your heart was pounding when you go in. It's like ohh, then he makes you calm down with his voice. It's like oh phew, it's not bad. (Patrick Star)

The perspectives of the students indicate that they are well aware of the serious message buried within the humorous warnings teachers give them, and are more likely to respect and respond to the underlying message, with teachers who treat them respectfully.

Competent teachers

The perspectives of the students suggest they have also a well-developed concept of the attributes that taken together constitute teacher competence and professional skill. Table 9 presents the key attributes and competencies identified and paraphrased from their perspectives that support student learning. The attributes and competencies are organised in four domains as follows:

- 1. Pedagogical knowledge;
- 2. Knowledge of the curriculum;
- 3. Knowledge of students; and
- 4. Relationships with students.

Table 9

Domains of Teacher Competence

Domain of practice	Attributes and competencies
Pedagogical knowledge	 Teaches through demonstration and modelling Allows student interaction and group work Uses technology as a teaching strategy Gives clear instructions Establishes clear boundaries, limits, and rules
Knowledge of the curriculum	 Possesses sound subject knowledge Teaches full range of subjects
Knowledge of students	Knowledge of individual student learning preferences Able to create inspirational learning environments Able to create a supportive class culture
Relationships with students	 Prompts students to persevere Encourages students Focuses students on desired and helpful behaviours Guides the choices of students

The students identify the attributes of competent teachers as a way of highlighting their preferences as learners. From the elements of their perspectives presented in the table above it seems the students prefer demonstration and modelling as ways to engage with

learning, gain benefit and support from teachers who balance the need to create a responsive learning environment with strong guidance that protects the opportunity for all students to learn, appreciate teachers who demonstrate sound subject knowledge and a commitment to teach all curriculum subjects, and teachers who 'coach' student learning with frequent and specific feedback.

4.5.3 Learning Style

One surprising aspect to emerge from the discussion of the students about themselves as learners was the depth of their knowledge about their personal learning style preferences. The students referred to the perceptual mode and/or the dominant strategy that they preferred to use to learn in classroom contexts as their 'learning style' i.e. learning through hearing, learning through seeing, learning through doing, and learning through communicating.

Fifteen students discussed their learning style and how it assisted their learning. Seven students identified a preference for kinaesthetic learning characterised by trying new things and participating in hands-on demonstrations led by teachers or peers. These students noted they would like more opportunity for hands-on learning in class where learning is facilitated mainly through listening and visual modes. The students identified the technology and arts-based subjects as the subjects that afford them the most opportunity to engage in practical, hands-on projects, supported by teacher modelling and demonstration, followed by the students imitating the process modelled.

The essential thread that ran through the student discussion of their preferred learning styles was their desire for the flexibility and opportunity to use and learn through their preferred learning style within the classroom context. The perspectives of the students challenge teachers also to include more hands-on learning opportunities and opportunities to learn through all perceptual modes.

A small minority of the students (n=3) indicated their knowledge of their learning style was provided by their teacher or included centrally as an aspect of the classroom programme. While only a minority expressed this view it reinforces the influence the teacher has on the learning process and on the aspects that are valued within the classroom. The students absorb or take on board proactively as independent abilities, aspects that are introduced initially to them through their external environment (Vygotsky, 1978; Bronfenbrenner, 1979, 2005).

4.6 Self-Assessment: 'I am'

Three of the six students who evaluated themselves summatively as a learner, identified their lack of competence as learners. The reasons for their self-assessment included being:

- Slow to pick up concepts;
- · Not good at writing;
- · Easily distracted; and
- Not a good worker.

The judgments these students make about themselves give an indication of the sorts of attributes that the students tacitly understand indicate successful and valued learners in the context of the classroom. It is interesting to note that the students who emphasise their lack of competence discuss also at other points in their interviews instances and examples of competence, ingenuity, perseverance, and commitment valued as attributes of effective learners (Claxton, 2002). It appears that the students' assessment of themselves as learners is referenced to their ability to engage successfully with classroom-based learning rather than a more inclusive reference point that takes in their abilities outside the classroom also.

4.7 Need More Of: 'I need'

A minority of students (n=3) discussed their enthusiasm for the opportunity to take increased responsibility in planning, review, and decision-making within the learning process. Although this perspective was raised explicitly by a small minority only the discussion of the wider group of students about the learning strategies they prefer to use, their indication that they would like more opportunity to use their preferred learning styles of learning through doing and learning through communication, and their overwhelming identification of the importance of collaboration, indicates that the students need more opportunity to participate in the learning process in the way described explicitly by three students.

More specifically two categories where the students would like more input and involvement in the learning process emerge:

- 1. Personal autonomy
- 2. Metacognitive opportunity

4.7.1 Personal Autonomy

The students identified their desire for increased freedom as learners to make decisions in their own interests, including the freedom to:

- Decide on their personal learning timetable;
- Explore and follow their interests;
- Attend to their basic needs without permission i.e. toileting; and
- Decide on their level of participation in planned activities e.g. classroom units, sporting activities.

4.7.2 Metacognitive Opportunity

The students identified their need for more input into:

- · Reviewing personal success;
- Evaluating the quality of their work;
- Evaluating the appropriateness of the learning strategies selected to perform a task;
- Planning next learning steps; and
- Regulating the pace of learning.

The aspects highlighted by the students are reflective of Claxton's (2002) concept of 'meta-learning' - opportunity and ability to reflect on experiences and draw lessons from the process to apply to further learning. The students indicate explicitly and tacitly that the majority are ready to adopt a more strategic involvement in their learning and take on responsibility for aspects of the learning process currently undertaken by their teachers.

4.8 Aspects of School that Impede Student Learning

The students identified aspects of school that impede their ability to learn in response to the photo focus task 'take one or two photos that show aspects of school that get in the way of you learning'. The aspects identified focus strongly on the practices and actions of others and the influences these have on the wellbeing of the students and on their ability to concentrate.

Aspects identified by the students that impede their learning are listed below:

- The effects of bullying (n=10);
- Being distracted by others (n=13);
- Fear of being told off by the teacher (n=4);
- Pressure of workload demands (n=2);

- Time lost from learning tasks because of poor personal organization (n=3); and
- Teachers interrupting students' class work to discipline disruptive individuals (n=3).

The effect bullying has on learning is highlighted and described below. The effect bullying has on the general wellbeing of the students is re-visited further in the chapter as a mesosystem influence.

4.8.1 The Effects of Bullying

The perspectives of the students suggest that if they feel anxious or fearful in the learning context their ability to learn is impeded. Ten students discussed the effect being bullied has on their ability to concentrate on learning in class.

When you come to school you like to be a happy kid and things like that and start learning and you don't like it ...and when you get threatened and things like that you don't actually want to come to school. Or if you do you're like really upset and you can't work cause you're like upset 'are they going to smash me or get me after school' and things like that. (Frank)

Even students not involved directly in bullying commented on the adverse learning climate bullying created both inside and outside the classroom.

Practices and behaviours identified as bullying include students teasing each other and hiding each other's personal equipment in the classroom so that the student being picked on cannot start work.

We play a little game but after a while it gets a little annoying because I pull out my
pencil case and they will take it but it has been going on for a wile and I just, it's getting
annoying – you say 'ohh, hand it over!' They always hand it back, it's just, you know
how it gets. (Mercedes)

This type of bullying is considered minor and an annoyance rather than full-scale intimidation. Minor annoyance gives way to intimidation in the classroom when bullies physically intimidate other classmates.

As a rule [classmate] is shoving people out of the way, if your bag's on a hook he'll purposely just shove it off the hook and go 'hey, my bag was here first' or whatever...[they go around] talking saying mean things they all go around saying mean things and nobody actually likes them, ... the fact that they can hurt you, the fact that they can say mean things and it hurts, they can do mean things and it hurts. (Joan of Arc) Covert classroom intimidation appears to be linked by the students to classroom cultures in which students do not feel safe to express themselves, are routinely put down by peers

and physically harassed, that in turn lead to diminished self-esteem and lack of concentration.

4.9 Mesosystem: Influence of Family, Peers and School Community on the Learning and Wellbeing of the Students

This section reports aspects the students highlight within their wider school environment, family, and peer and friendship settings that affect their sense of wellbeing, their learning and the choices they make at school. The mesosystem influences comprise also the knowledge and beliefs existing in one setting and their influence on the individual in another (1979, 2005). By way of example, the perspectives of the students suggest attitudes that their parents have about school and the world affect the attitude of the students towards school and their knowledge about the world. Figure 20 below identifies the mesosystem as the link between the family, peer and friendship, and wider school environment, depicted by a broken dotted circle.

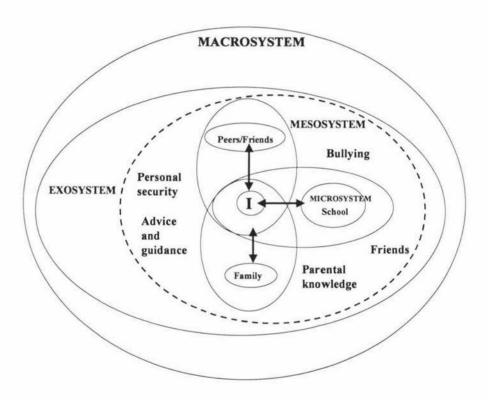


Figure 20 Mesosystem Influences on the Students at School

Table 10 shows the topics and perspectives within these that feature in the description of the mesosystem influences on the learning and wellbeing of the students. Each topic is outlined and described separately within the section.

Table 10

Mesosystem Influences: Topics and Perspectives

Topics	Perspectives	Number of

		students
The effects of bullying	 Playground bullying negatively affects wellbeing 	6
The importance of friends	 Having friends makes school more enjoyable You have to have friends to be accepted Students who do not have friends are 'retards' 	15
Advice and guidance of parents	 The advice and guidance of parents influences decision- making and actions at school 	6
Parental knowledge	 My mum says Parental knowledge provides a base for student knowledge about the world 	6
Personal safety	 Whatever happens at school home is a safe place where I can be myself 	5

4.9.1 The Effects of Bullying

The effects of bullying have been reported as a key impediment to the learning of students within the classroom. Six students described how bullying in the wider school environment affects their personal feelings of self-worth and efficacy, and the social climate of school in which they participate between classes. One student composed a photograph that typifies bullying highlighting (Figure 21) where size and intimidation as key factors and one student described the effects of bullying on student wellbeing, "well it kind of frightens you to be around people, some people, and it stops you from learning, yes...it brings down people's confidence" (Megaman).



Figure 21 Bullying

Bullying in the playground ranges from verbal intimidation to violence. Seeing peers being intimidated raises a personal dilemma for students, whether or not to intervene to assist their peers and friends, or to keep themselves safe by not taking action.

I just think that you want to stand up to other people but you've got to also keep yourself safe and like think about yourself for your safety before you go think of someone else's. Like if I was, if I saw someone bullying and if I think about it, and if I didn't want to get hurt I'd go tell a teacher quickly. Os they could stop it...like they can control other people easily. (Bugs Bunny)

Asked about whether or not teachers act to intervene in fighting and bullying incidents one student responded,

Sometimes they do and sometimes they don't – like when I was watching a huge fight the other day and someone went flying through the air and landed near me on the concrete...noone told and the teachers didn't see anything...[E: why do you think they didn't tell?] I don't know, maybe they're too scared that the person that did the bullying will bully them or something. (Sam)

However a minority of students (n=3) indicate that they do intervene to stop bullying by insisting the bully stops, by telling teachers, and by walking away from conflict as a preventative strategy.

The degree of harmony in the wider school social environment appears to influence the general wellbeing of the students. Phoenix took a photo of students playing together on the school field to indicate social harmony.

People playing happily – like not fighting and that...'cause there's not much fights, I haven't seen much fights – yeah I like it here...my friends who I had last year they always used to fight with other people and I didn't like it so I'm quite happy that they've gone and I've got new friends...I'm quite happy this year 'cause I've got all new friends and I don't want to fight this year, I want to be good. (Phoenix)

The school field was identified by three students as representative of the social world of school and the freedom the students feel, and value, to be themselves outside the rules and expectations of the classroom.

It is where kids can just go like go free and you don't work...because you have been cooped in a small classroom all day, you can just fly away out onto the field...just being yourself in a not like in class where you have got to answer questions. (Mercedes)

The field was associated negatively also by the same students with <u>having</u> to be outside during break times because of the actions of others such as stealing from classrooms.

4.9.2 The Importance of Having Friends

Fifteen students identified 'having friends' as an important influence on the personal well being and learning of students at school. Having friends supports individuals to:

- · Be themselves;
- Settle in to a new school;
- Explore personal concerns; and
- Be inspired by the example of others.

Four of the fifteen students equate the absence of friends with loneliness, being a 'retard' or a social reject, unable to concentrate or enjoy school.

I think that one of the most important things at school are your friends. Although you can sometimes get into trouble. If you don't have friends you kind of, you won't be enjoying school. And then, I was saying before, you wouldn't be willing to learn if you don't enjoy school. Yeah, to concentrate, well you're by yourself all the time, it wouldn't be that great. (Gaye)

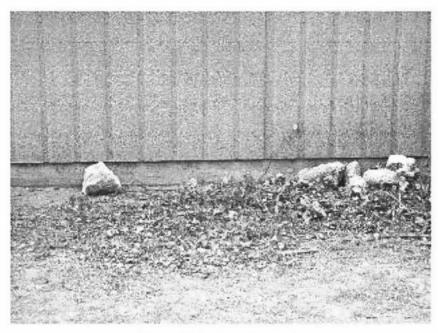


Figure 22 Being 'Lonered'

One student took a photo of a group of rocks with one rock separate from the others (Figure 22) to illustrate the concept of feeling 'lonered' – a term used to describe students who have no friendship connections. The term implies that the wider social group consciously 'loners' others who are different or new to the school. The student explains that having friends is a criterion essential for being accepted by the peer group and that learning suffers from the treatment of others incurred by the absence of friends.

If you have friends then you tend not to be picked on, and if you're being picked on you can't concentrate, you know, you sink into depression and yeah. (Kate)

4.9.3 Advice and Guidance of Parents

The family and the relationships the students have with family members are of central importance in the lives of the students. The importance assigned to their family by the students is exemplified by the sentiments of Bob.

I feel connected with my family, I love all my family; my family's like the world to me. If everything else is gone I'd still be able to trust my family.

The love and implicit trust the students have for their family and the advice and guidance of their parents, influences their decision-making, beliefs and actions at school and the information they draw on to understand the world in which they live. The perspectives of the students suggest that their parents initiate and perpetuate the belief that choices made at school have serious and lasting consequences in the lives of their children beyond school.

Friends sort of help each other learn, but some people are bad influences and they don't help you learn they help you go backwards and mum always says you've got to pick your right friends because you go one way or the other, you only get one chance at it. (Flower)

The belief 'that you only get one chance' in turn influences the goals the students choose to focus on at school, and even the friends they choose.

I've got six best friends and they're my favourite friends...just six friends will do because mum said not too many friends will do...because if you've got lots and lots of friends some friends try to take you away from others. (Sponge Bob)

The perspectives of their parents influence also the activities the students choose to participate in at school, including this research. Two students noted that their reasons for participating in the project were influenced by the approval their parents expressed for the research.

My mum said this would be a good way to express your feelings and ...thought it would be a good idea. (Bob)

I thought it would be quite good to take part in a project and my mum and dad both went to Massey University so they said it would be good as well. (Phantom)

The sense these examples engender is that the students use the perspectives of their parents to corroborate and add weight to their own decision-making process.

The perspectives expressed below in a portion of a photo elicitation interview between the adult researcher (E) and Frank (F) and Megaman (M) (Figure 23) illustrate that the advice parents give students does not always fit with accepted school codes of behaviour but is adopted and used by the students to guide their actions.

M: I've had an incident with a kid and two girls and me and I had (indistinct) necklace and not a nice thing and I had another girl threaten me, not nice.

E: So you get a bit of like girls bully boys as well as boys bullying each other and girls bullying each other.

M: Yes

F: Well we're not calling ourselves weak or anything we just don't hit girls even though how much it tempts us.

E: Why don't you hit girls? Why are they different to boys?

F: Because your parents tell you that you don't hit girls it's unfair and things like that.

E: Right

F: So we don't but when girls beat up boys and things like that it alright it just a girl, things like that.

E: But it's actually quite hard to take aye whoever it is beating you up?

M & F: Yes

M: My Mum she told me that if a girl hits you or hits another boy and that boy needs help you help him out or then if she slaps you then you fight back.

E: Right

M: After she hits you. If you hit her first she can go and tell on you.

E: But if she hits you first you can fight back.

M: Yes, its self defense. That's what I've learned.

Figure 23 Photo Elicitation Interview Transcript - Frank and Megaman

4.9.4 Parental Knowledge

The perspective of one student illustrates how the students use information from their parents as the basis for their beliefs about the world. Nuclear Gerbil indicates that bullying and violence is on the increase in society based on the belief of his mother.

Because now at this time there's a lot of people getting hurt more often and like in the 1980s or even before that my mum said that there were hardly any people getting hurt and there's a lot of bullying going on at school as well and there never used to be that much she said. (Nuclear Gerbil)

The interesting aspect of this illustration is that the student views his mother as an authority whose interpretations of patterns of behaviour in society constitute facts that can be relied on as a basis for the student's own beliefs about society.

4.9.5 Personal Safety

The students indicate that they associate their home with safety. This perspective was expressed explicitly by only one student but is supported also by the perspectives of twelve students identifying their family as the aspect of their community that they feel most connected to. Discussing aspects of school that support her learning (photo focus task six) Sam states,

Because that's homework and stuff and my mum's always there to help me out and I feel safer there because I'm, it's home so I feel like I'm safe and...sometimes when there's people bullying people in the playground and stuff when there's bullies it's like those people aren't nice so they could turn on anyone.

It appears that these students value the security their home and family offer them within the world of school often characterised by problematic social dynamics.

4.10 Exosystem Events, Opportunities and Practices that Impact on the Lives of the Students

This section reports the events, practices of others, and personal concerns identified by the students that affect their lives as young people but originate at a level of their environment that does not include them directly. For instance the decisions made by parents about where they will live as a family influence the social acceptability and positioning of the students within their peer group, and influence in turn how they are treated by their peers and how they treat others. The topics identified by the students and the perspectives they hold within these are positioned with the framework of the Ecological Model in Figure 24 and listed along with the perspectives within these topics in Table 11 below.

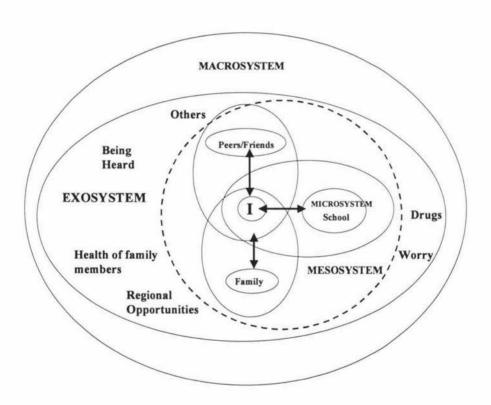


Figure 24 Exosystem Influences Identified by the Students

The perspectives expressed by the students represent aspects of their responses to photo focus tasks 'take one or two photos that best show the concerns you have about the world', 'take one or two photos that best show personal concerns you have in your life', 'take one or two photos that best show what being young in Hawke's Bay means to you' and 'take one or two photos that show aspects of your community you feel most connected with'.

Table 11

Exosystem Influences: Topics and Perspectives

opics Perspectives		Number of students	
Worry: Health of family and extended family members	 Fear of losing loved ones through illness and injury Feel powerless to influence the habits and health of parents Old age changes relationships with grandparents 	15	
Being heard in a world of adults	 The views of young people are marginalised by adults Young people have good ideas and a valid viewpoint Decisions made for the good of all New Zealanders should be representative of the views of young people also 	17	
The consequences of taking drugs	The behaviour of others becomes unpredictable with drug-taking	3	
Others	Certain attributes are necessary for social acceptance Stereotypes limit real experiences of people as they are	5	
Worry about the future	 Everyone deserves a second chance Someone might 'chop me down' 	2	
Opportunities for youth in Hawke's Bay	 There is not much on offer for young people in Hawke's Bay Connections are developed with others through shared activity 	1 17	
	Having fun with friends is essential to being young	11	
	Hawke's Bay is where I belong	3	

4.10.1 Worry: Health of Family and Extended Family Members

The predominant theme within the perspectives shared by fifteen students was 'worry about what might happen to family members (immediate and extended) either as a consequence of current medical and health complaints or as a result of their continued addiction to destructive habits such as smoking, alcohol abuse, and lack of exercise. The topic could have been located as a mesosystem influence because in some instances the concerns expressed by the students are regarding immediate family members such as their parents. The decision was made to locate the concern within the exosystem of the students because as part of the discussion of the issues raised, the students talk about habits and social arrangements and decisions that do not include them but are accepted social practices that have an impact on their lives.

The students identified their continuing anxiety about the effects of their parents' destructive habits on their health. Smoking, drinking, and lack of exercise were identified most commonly along with fear about the continued threat of existing health complaints such as heart problems.

...because smoking's like, it kills people and people say 'don't smoke and die, smoke drugs and get high' – I think that's a real stupid thing to say because you can still die from drugs, because that's even worse than normal smokes I think because Mum says it kills your brain cells...they wreck your liver, oh they give heart conditions because on the packs of smokes it says it, and smoking harms your baby...smoking kills you and I always get like worried that if Mum keeps smoking she'll die or something because you really need your mum. (Flower)

The students feel powerless to influence their parents' habits and feel anxious about the effects of these habits that become more visible over time i.e. loss of athletic ability, chronic coughing, and surgery.

One student in contrast to the others decided to accept her father's smoking habit and focus instead on the quality of the relationship she has with him.

I suppose him dying of smoking worries me except it doesn't get in the way. I love him and that and if I'm constantly worrying then it's harder to have fun. If I constantly worry about Dad dying of smoking, if I constantly did that I'd probably constantly be crying and constantly, um, nagging at him and hey – that's not fun...and he's been smoking for, he's like 52 now he's been smoking since he was about 15 or 16, and that's a long time and, if he really wanted to stop, which he doesn't, but if he did then it would probably just make him sick because his body's just done it for so long. (Joan of Arc)

It appears that the students are able to view issues from multiple angles and make decisions on a reasoned basis even when their emotions indicate another cause of action i.e. nagging Dad to stop smoking.

Worry about the health of family members includes also fear about the consequences of aging and current arrangements for the elderly on the relationship the students enjoy with their grandparents. One student identified the effect old age and residence in a rest home has had on his relationship with his grandmother, and by extension with his cousins. He can no longer stay with her and by extension the access he has to his cousins has been reduced.

My nana's real old and she's in a rest home and I've heard that she might die...we like seeing her heaps because we don't see her that much...now we can't go and stay out with her because she's in a rest home...me and my cousin used to always go up there with her. (Alex)

Another student expressed similar concerns noting his sadness regarding his grandmother's declining independence indicated by losing her licence to drive.

The concern the students expressed about their changing relationships with their grandparents directly influenced the advice one of the liaison teachers was able to give to support one of her students and his parents during a parent interview. An extract is included from the fieldnotes to illustrate.

[Teacher] mentioned there has been what she considers 'direct spinoffs' between the project and her work with the kids. One student whose behaviour has been of increasing concern over the past few weeks broke down during his parent interview – the parents are frustrated with him as is the teacher. When confronted for the problem he admitted it was his Nana, she had moved away – he had been staying with her and was worried he would not see her again. [Teacher's] knowledge of the tentative themes coming through the data helped her recognise the student's concern as something important to this age group. (Researcher field notes, 27.6.04)

The student mentioned in this illustrative extract was not a participating student in the project but the liaison teacher was able to put his concern in the context of the perspectives shared by the students in the research group.

4.10.2 Being Heard in a World of Adults

Three students voiced their frustration with having their views marginalised by adults in decision-making processes at a national and community level and feeling powerlessness to influence how they are viewed and treated by adults. Examples provided indicated that the students would appreciate:

- The views of their age group taken account of in the decisions made in the interests of all New Zealanders at a national level;
- Parents taking account of the views of their children in decisions that directly
 affect their lives e.g. choice of secondary school; and
- A general recognition of the views of young people as valid.

One student discussed her interpretation of the view of adults towards the perspectives of youth, and her resignation that her views will not be listened to until she is an adult.

It's like the bigger plants are the adults of this world ...but it's like they don't always know best you know? Sometimes I get the feeling that like my parents think that like what they know is best you know ... I just get the feeling that no one listens to me. I know that I have a few good ideas and yeah, you know when I'm an adult I'm going to let them be heard... I guess that most of the adults I know just like...how can I put it? That they just kind of have their ideas of their own and they don't see the flaws in what they are doing and so they don't listen to me because they think their ideas are just so great that it can't have anything wrong with it. (Kate)

Fourteen students echoed this perspective during a focus group session towards the end of the research. The students expressed concern that the researcher had an unrealistic expectation that the project and the views expressed by the students would influence the way their school operated. They backed up this belief with evidence drawn from their experiences with adults in retail situations, in the local community and with teachers at school. The evidence they shared included having to wait for adults to be served even when they (the students) were first in line, not being taken seriously when complaining about faulty goods, and teachers applying double standards to the behaviour and expectations of the students e.g. teachers wearing coats to keep warm during fitness, but not allowing the students to wear jerseys and sweatshirts during warm-ups and warm-downs.

The perspectives of the students indicate that they have a view and a desire to have their views taken seriously within the settings of their lives currently dominated by the views of adults, a hallmark of their development as early adolescents (Beane, 2004). The students call for adult recognition of their point of view has already been granted at a macro level through the ratification by Zealand of the United Nations Convention on the Rights of the Child (UNCROC, 1989). The experiences described by the students indicate that the rights afforded them to participate in their affairs and to have their view

taken into account have not filtered through in practice to the settings that directly and more indirectly influence their lives.

4.10.3 Consequences of Taking Drugs

Three students discussed explicitly the consequences of their peers taking drugs as a key personal concern. This concern is included as an exosystem level influence because the student discussion centres on the pressure to take drugs as a future aspect and expectation of adolescence rather than a pressure the students experience currently in their lives (although one student in the group has been offered drugs and does have friends that take drugs). The perspectives expressed suggest that the students recognise the negative impact that taking drugs has on the lives of individuals and on the wider community. It is from this perspective that the students discuss the effects on their lives of others taking drugs.

The perspectives expressed by the three students indicate their concerns embody three elements:

- 1. Implications of the habits of others for personal safety and feelings of security;
- Cause and effect links between the drug taking of individuals on the social fabric of communities; and
- Cause and effect links between the drug taking of individuals and subsequent depression and youth suicide.

Although the students express a belief in the right of individuals to make choices about taking drugs they fear the consequences that others exercising this right could potentially have on their quality of life, feelings of security and the long term culture of their community.

Well, I don't really mind because it's their choice if they're going to do it but it's just annoying when it like has to be involved with you when you're walking around the street and that... [drugs] – it stuffs up people and that and like when - that there is where it starts, it starts at smoking and then it will go onto other things like marijuana and that and then it will go onto like the high price drugs and that and then people are like – and then comes peer pressure and things like that and it will go through and it will be like – and then they'll try and spread it to other people and then it will just keep going round until, yeah eventually something happens. (Da Grinch)

The three students recognise that peer pressure influences young people to start taking drugs but feel confident themselves that they are immune to this pressure.

One of the students notes that although she has a concern about the effects of smoking drugs, and tobacco more generally, she will probably try drugs at some point during her teenage years.

I know a few people that do do drugs and have offered it to me but I've just gone 'no' and yeah, I don't know what else they've done, there's only about two people that I know that do drugs...I'll probably try it at some stage but I'm like, I know for a fact I'm not gonna get hooked, like yeah, 'cause every teenage person experiments, and yeah. But I don't think I'll, I don't really want to try it but I probably will at some stage, yeah.

Although she feels strong enough to say no to drugs at this stage, her belief that even if she does try drugs she can avoid becoming addicted indicates a naivety about the addictive properties of drugs and the effects of the social pressure to conform as peer affiliation grows.

4.10.4 Others

The visible and behavioural characteristics and actions of others discussed by five of the students indicate their emerging social theory, and growing awareness and judgment of others. The term 'others' refers to people within the immediate and wider community of the students that they do not necessarily know or interact with personally but who they view as different from them in some way, such as belonging to a different social class, ability grouping, and/or ethnic group.

The perspectives of the students in relation to others generated insight into the attributes they consider essential to their identity, and the stereotypes on which they operate. They indicate also however their understanding that these stereotypes and judgments can limit the connections they make as a consequence.

Before I came here, everyone was saying, everyone at my old Intermediate was saying stuff like 'oh Havelock people are so stuck up, you know you shouldn't be hanging out with those kinds of people'. But then I started thinking that as well, and then I got here and I realised how many people weren't stuck up and ...so it's kind of like a stereotype of Havelock, because Havelock's real flash and yeah. (Kate)

The students make explicit that social positioning in relation to others is an important guide to how they view and treat others. Bob (false name) experiences discomfort interacting with 'high' people but also with those 'lower' than her. Another student expresses this notion of social positioning when discussing the social order in her school community.

There's always a main group of people who are going to have everything and then there's always the social rejects, put it that way...who don't have as much as them...I'm sort of

in between. I have a lot of things but I don't have as much as the people up the top. My friend she was picked on last year because she – well my Dad knows her Dad because they work together and they live in a flat – and like her Mum makes her clothes and stuff ...she was made fun of heaps... (Waffle Kitty)

Certain personal and social attributes appear to classify individuals as acceptable and unacceptable i.e. affluence, conformity to socially accepted behaviours, approved sources of clothing, and desirable geographic location. Students who do not possess some or all of these attributes are socially ostracised and made fun of. It is ironic that many of the aspects that students use to judge each other are aspects they have little control over; they originate with the decisions their parents have made within the opportunities available to them in their wider environment.

In contrast one student highlighted the benefits diversity in cultural and artistic tradition adds to a community.

There's heaps of different cultures of art work in my community. All people and stuff. So I can, so you've got to kind of respect that it's not just you in the community, there's other people. (Bugs Bunny)

Bugs Bunny uses this example to highlight the need for respect between community members from diverse backgrounds and the cumulative benefit for everyone of a more inclusive view of others.

4.10.5 Worry About the Future

Two students discussed their worry about their future. One student talked about a vague fear that people would 'chop her down' in the future and cause her to feel uncertain about herself. The student used the visual metaphor of a tree stump to represent her worry that others will irrevocably affect her potential through their words and actions.

The second student identified a concern that people should get a second chance in life despite the mistakes and unwise actions they had made. Popeye used the visual metaphor of the changing sky to present his belief that people can change.

Yeah. And people <u>can</u> change...you might make an accident, like maybe go to prison or something, and you could change the way you do things so you don't go there again.

The emphasis on the word 'can' was added to reflect the emphatic assertion of the student that as they grow and develop people do not have to remain who they are confined by the consequences of their mistaken actions. The tone of the student captured in the recorded interview indicated that as well as asserting the possibility of change he was also seeking reassurance that change was possible as if a personal situation was weighing heavily on him.

4.10.6 Access to Experience: Infrastructure and Opportunities for Youth

One student who lives rurally identified Hawke's Bay as essentially a horticultural and agricultural region with little to offer young people.

I think it's really boring here. Because it's all about farming and it's like the 'fruit bowl of New Zealand'. Yeah, there's nothing here...[I've taken a photo of] a farming hat and fruit to show what it's like here and I think we need like, when I went to Australia with my Grandparents I thought I'd really want to live there because it's so much better like their transport, it's like every five minutes there's a bus stop down the road and the bus goes past every 15 minutes and it's so busy and there's shops for everything, we have one or two shops and that's pretty much it, like the main shops and that's The Warehouse and K-Mart, and I think they should build a mall in Nelson Park... and where I live we're outside a main road so I'm pretty confined to our street... (Waffle Kitty)

Waffle Kitty was the only student in the research group to feel this way about living in Hawke's Bay as an early adolescent. However her perspective highlights a theme that ran through the perspectives of the students that much of their recreational activity is related to the personal interests and involvement of their parents. This is unsurprising given that the students are not able to drive, but this factor does not limit the majority from enjoying the opportunities of their local community and region.

Analysis of the responses of the students to the photo focus task 'take one or two photos that show aspects of your community you feel most connected with' indicated that seventeen students take advantage equally of recreational and leisure activities available within the domains closest to them such as their family, through to their more distant community domains such as their local community, and their region. It appears the students are as adept at creating fun and personally motivating activity close to home as they are at taking advantage of the opportunities available to them within wider Hawke's Bay.

The perspectives of the students indicate that they form connections with others (friends and family members) through shared activity. Shared activity includes sporting, and recreational opportunities available around their home and at organised tourist and youth ventures in Hawke's Bay such as Laserforce, marineland, Ocean Spa Pools and more generally through retail shopping.

Eleven students identified the importance of having 'fun with friends' to being young in Hawke's Bay. Being with friends seems to give the students a sense of belonging and

licence to be themselves and to go 'hypo' (Mr Wiggles) - loosely translated as 'letting their hair down'. Having friends 'around you' was identified as an integral aspect of the ideal structure of friendship and activity with friends. It appears that the surrounding friendship group acts as a 'mirror' for the individual, and as a community, where a reciprocal exchange of teaching, learning, shared interests and support occurs amongst peers through the context of recreation.

Three students discussed being young in Hawke's Bay more abstractly and emphasised 'belonging'. They identified the aspects of their wider environment that make them feel secure that included:

- Being able to navigate the small scale of town and be known by people;
- The friendliness of strangers;
- · Connections with the family home; and
- The familiarity that comes with living in one place for an extended and continuous period of time.

Tub used the visual imagery of a young tree to portray her perspective that she and the tree were both young and would probably grow old together, indicating a sense of place as an anchor for growth and development.

4.11 Macrosystem: Influence of Macro-level Events, Practices and Societal Values on the Lives of the Students

The findings reported in this section derive largely from the responses of the students to the photo focus task 'take one or two photos that best show the concerns you have about the world' and 'take one or two photos that best show personal concerns you have in your life'. Predominantly the students identified practices and events that occurred in their immediate environment and linked these with macro-level events, practices and values that concerned them.

The topics and perspectives within these that the students identified and discussed correspond with the events, concepts, values, and practices represented graphically as comprising their macrosystem depicted in Figure 25. The words presented in bold represent the topics the students discussed; the words presented in normal typeface represent the values and associated human states related to each of the topics the students identified. The words presented in italics represent the solutions and values that the students suggest may reverse the condition of the world as they view it and contribute to the world as they would like to see it develop. These concepts represent also a possible starting point for an approach to curriculum based directly on the concerns and agendas important to the students (Beane, 1997, 2004) that involve students in local action that makes a difference in the wider global world.

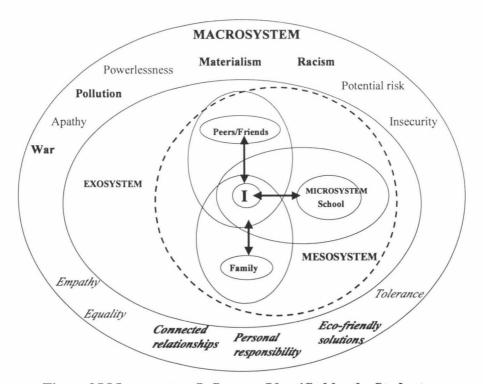


Figure 25 Macrosystem Influences Identified by the Students

The perspectives of the students suggest that activities, events, and practices that happen out of their immediate environment and largely out of their control, influence centrally how they view themselves, perceive their personal influence, and in many cases, view the possibilities of their lives.

Table 12 presents the topics and perspectives within these described in this section.

Table 12

Macrosystem Influences: Topics and Perspectives

Topics of concern	Perspectives	Number of
		students
Pollution	The actions of others affect the lives	23
	and prospects of everyone	
	The de-motivating beliefs and	
	destructive actions of individuals	
	contribute to a negative prognosis for	
	the global environment	
	Individuals feel powerless to change the	
	global prognosis	
	If everyone took positive action the	
	prognosis for the global environment	
	could be reversed easily	
War and	The stand New Zealand takes on the	10
terrorism	War on Terror has the potential to affect	
	the lives of the students	
	 Empathy with affected families 	
	Resolution of conflicts between	
	countries is complex	
	War is bullying on a global scale	
	Violence is on the increase in society	
	Misplaced emphasis on materialism	
	rather than relationships	
Misplaced social	People spend too much of their	1
emphasis	attention on material things	
	Attention should be on developing real	

	connections with other people Cell phone technology allows young people to hide who they are in communication with others	
Racism	 Everyone has the right to live wherever they like in the world Privilege should not be given to people 	1
	because of their first nation status or because of birthright	

4.11.1 Pollution: Powerlessness, Apathy, and Solutions

Twenty-three students discussed a range of pollution variants and their effects on the environment and on the lives of individuals. Their perspectives indicate partial and more complete understandings of how the actions and practices of individuals and industry impact on the lives of individuals, and how on an individual level the actions of individuals contribute collectively to the pollution of the global environment. Table 13 presents the five main variants of pollution that the students explored and discussed.

Table 13

Types of Pollution Identified and Their Effects on the Environment

Number of students (n=23)	Type of pollution	Effects identified
15	Rubbish and littering	Messy environment Water pollution Marine mammals harmed
7	Air pollution including vehicle omissions, nitrogen pollution, chimney smoke and damage to the ozone layer through burning rubbish	People poisoned Death Climate change Ice age Loss of atmosphere
4	Deforestation	Habitat destruction Negatively affects the quality and amount of available oxygen

1	Oil spills	Pollution of waterways and
		harm to marine life
1	Burying toxic waste	Soil poisoning

The perspectives of the students expressed within the exploration of these topics, suggest their core concern was the effect the destructive actions and inactions of others have on their current quality of life and their hopes for quality of life in the future. Talking about pollution Angel points out,

A lot of people do it...they just chuck things wherever they chuck them and pour things wherever they pour them and don't really care about the environment...I have to live in the environment too...they should check how I'm feeling.

It appears that the students feel powerless to change the apathy of others towards the environment. Ironically the powerlessness the students feel translates into apathy with regard to their own actions within their immediate environment.

The students identified four main motivating beliefs that influence their decisions (and the decision of others) to continue polluting the environment that can be paraphrased as:

- 1. People can't be bothered;
- 2. My actions don't make a significant difference it doesn't matter;
- 3. Someone else will do it; and
- 4. I'm only one person what can I do?

Nuclear Gerbil's (False name) perspective explores the motivation of others in relation to littering.

I've noticed that as time goes by a lot of people – there's a lot more littering going on and they're running out of room in the dumps and stuff and it's – people are polluting the whole planet just by littering, and they, like just even if they're real close to a bin they'll just chuck their rubbish wherever they want...because they just can't be bothered, they don't think it matters. Because it's just a small little piece of paper or whatever they're chucking down...maybe they don't understand what they're doing, or they think it's just little and so it's not going to harm anything.

Apathy was a state widely discussed as a motivation for littering in particular. The students acknowledged that even if viable solutions were available such as the provision of more rubbish bins, their apathetic attitudes and the apathetic attitudes of others would mean the extra bins would not get used.

The perspectives of the students suggest they have a keen understanding of the global effects an apathetic approach to looking after the environment has at an individual, local level. Their perspectives comprise collectively four elements:

- 1. Beliefs De-motivating beliefs that the students hold;
- Individual actions The destructive actions they and others engage in that add to the pollution of the global environment;
- Consequences/effects The effects and consequences these actions have on the environment; and
- Global picture Aspects of the global prognosis that the students identify as resulting from apathy.

Figure 26 presents the collective concept of the students graphically using an expanding arrow divided into four sections. Each section corresponds to each of the four elements listed above. Two continuums run parallel to the expanding arrow to illustrate how a bleak global prognosis for the environment has its inception in the beliefs and actions of individuals.

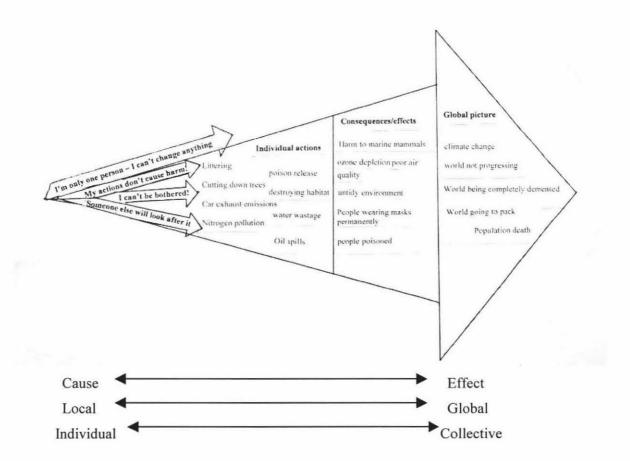


Figure 26 Pollution: Concerns, Effects and Prognosis

One student expressed the bleak prognosis for the global environment through the visual metaphor of a tree stump – the tree stump represents the current state of the world,

This stump also represents for the world all the sad spots. I think that stump's basically dead because it looks like that basically all the time I see it ...[it indicates] that the world might not progress in the right way. In life you have to grow to progress...the world might not progress in the right way. (Cassie)

Inkozi's perspective in this respect is perhaps the most graphic, "by about the year 2200 or 2300 this place will be completely demented. Like there's going to be a thick layer of snow everywhere...yeah it won't be much longer until our Earth is completely stuffed".

Within the discussion about pollution and its effects many of the students suggested solutions or partial solutions that if adopted would lead to an optimistic global prognosis. This indicated also their understanding of the power of individuals to bring about change. Three underlying beliefs can be identified from their perspectives essential to initiating a more hopeful prognosis for the global environment:

- 1. Do what you can;
- 2. Think of others; and
- 3. People respond to incentives.

One student acknowledged that if every individual took responsibility for their actions and acted to protect the environment e.g. by throwing rubbish in the bin, positive change could be effected easily, "if everyone helps then it would be so easy to fix it" (Inkozi). Another student noted the individual stand she takes in favour of the environment by buying drinks in bottles rather than cans that are joined with plastic rings to prevent the strangulation of marine mammals.

Figure 27 represents the cause and effect relationship the students identify between their motivating beliefs, positive actions, effects of these, and a healthy environmental prognosis. The concept of the expanding arrow is repeated to illustrate the core beliefs that if adopted by everyone would lead to beneficial actions, effects and consequences for the lives of individuals, the collective, and the global environment.

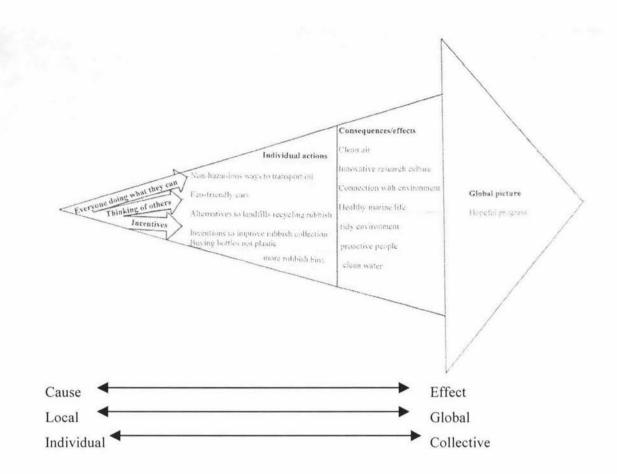


Figure 27 Solutions: Beliefs, Actions, Consequences and a Healthy Prognosis

The solutions that the students put forward include specifically: developing eco-friendly cars, developing alternatives to landfills, and exploring non-hazardous ways to transport oil. The effects of these solutions, presented in the 'Consequences/effects' segment of the expanding arrow are paraphrased as:

- Clean air and water;
- Healthy marine environment;
- · Greater human connection with the environment;
- Tidy environment;
- · An innovative research culture; and
- Proactive people.

Two students recognised explicitly that addressing pollution and destructive environmental practices raise two dilemmas for ways of living in the world currently:

- The need to protect habitat and ecological balance but have access for wood to build shelter and heat homes; and
- The difficulty of halting air and environmental pollution when the processes involved are integral to daily life.

Joan of Arc (False name) notes in her planning scrap book that "pollution cannot be stopped as most of it is made by things we use daily e.g. cars etc". These two dilemmas indicate that some of the students are beginning to engage with and understand the complexity of issues facing society. It is these types of dilemmas that could form rich starting points for debate and curricula inquiry within classrooms; especially because there are no simple answers and they involve creating and prioritising societal values that will guide social action into the future.

The perspectives of the students in relation to pollution and its effects on the prognosis of the planet, embody an understanding of cause and effect relationships characteristic of their cognitive development as transitional between concrete operational thinking and formal operational thinking (Manning and Bucher, 2001). The students exhibit an ability to make links between their beliefs and outcomes of these beliefs and the effects personal beliefs have on quality of life for others.

4.11.2 War and Terrorism

Ten students identified war and terrorism as their core concerns about the world. Their perspectives centred on the possible implications for New Zealand of becoming involved in the war on Terror sponsored by the United States and its allies on Iraq. Two of the participating students had family members and family friends involved in the conflict and were concerned with their safety, but other students were scared by the potential for terrorist attacks to occur in New Zealand if the Government decided to support the war effort in Iraq.

A poignant anecdote illustrates the fear the students felt in relation to the conflict brewing in the Middle East. One student described the countdown to the invasion of Iraq.

When wars are on I get all scared like because you know how that war between America and that other one? [E: Iraq?] And George Bush or whatever his name is he said 'I'll send my troops over to attack you at one o'clock in the afternoon' and everyone at school started counting down from ten when it got to ten seconds to one, and then like they were counting down and then all these jet planes flew over real fast and we got all scared. (Flower)

This extract shows that although the military invasion of Iraq was taking place on the other side of the world the students were aware of the possible implications for their lives that may have resulted from the conflict.

⁹ This is not surprising given that the data generation process was conducted in the lead-up to America's invasion of Iraq in 2004.

The perspectives of the students suggest a wide range of views as to the legitimacy of the invasion of Iraq but also emphasis on the underlying issue of the human cost of war. The students expressed empathy with the families of Iraq and the families of American soldiers who would suffer as a result of the decision to go to war. Gaye notes

I think it's real hard for them, it would be hard for them to move out, because if you're over there you'd want to move out straight away. Because lots of people are getting blown up.

Hayden noted that families die in wars and supporting war was tantamount to the sanction of the killing of her loved ones. These examples indicate the ability of the students to empathise with and identify the common unifying connections between people in diverse cultures and circumstances, and an ability to consider multiple viewpoints when formulating their own views.

A number of students identified a link between bullying between individuals in a school and social setting with war – identifying war as bullying on a larger scale between countries. "Like real big countries they try and take over small countries because they think they're bigger and more powerful and usually they don't need it anyway, they just want to have more power (Nuclear Gerbil)". The strategies for resolving war ranged from simplistic solutions such as "they should talk to each other" to an understanding that the reasons for countries going to war with each other are complex:

It would be better if it was all peace, but it's not black and white easy like that. (Gaye)

War isn't something that you can go up and ask them to say stop it if someone was killing someone. But people have got to change or the people doing all the bullying and stuff they need to be taken like Saddam Hussein. He needs to be killed or something because he killed all those other people. He needs to know what he has done to other people they need to put him through the pain he put other people through. (Miss Brooker)

The students who discussed war and terrorism as their principal concern about the world felt powerless to resolve and influence these events "I'm not a political party or anything, I can't do anything about it" (Gaye) but most were affected by them in some way.

4.11.3 Misplaced Social Emphasis

One student used her discussion of the reasons why nations go to war as a lead in to a discussion of the misplaced emphasis society places currently on technology and the pursuit of materialism rather than developing satisfying and real social connections with others.

I don't really understand why people go to war. Because people are getting kind of getting sucked into things and not thinking so much about others anymore, like people used to be a little bit more nicer to others... (Cassie)

This perspective expressed by two students appears to illustrate a belief that disconnection and violence between people is on the increase. Nuclear Gerbil presented a similar view when discussing the prevalence of violence and bullying between people in society currently,

...now at this time there's a lot of people getting hurt more often and like in the 1980s or even before that my mum said that there were hardly any people getting hurt and there's a lot of bullying going on at school as well and there never used to be that much, she said...

The idea that society today is speeding up in terms of environmental degradation, the prevalence of violence, and disconnection between people comes through strongly in the perspectives the students share about the world, and in the way they share their perspectives – namely in reference to a past 'utopian' society.

One student identifies the opportunity cell phones afford young people to 'hide behind' technology rather than communicate with each other in a real way.

I reckon that some teenagers are trying to hide behind cell phones and stuff...you quite often see a person like just walking down the street just playing with [cell phone] and it's kind of sad because they could have been spending their time on something else – I don't know... other things can actually need people's attention more than just technology, like technology's good don't get me wrong but sometimes it just kind of moves too fast.

Asked where people's attention should be directed, Cassie replied,

Other people. Other people's attention should be more on, say their kids. If they had kids right. I think too many people are trying to fake who they are to please the rest of the world, when actually people should just be okay with who they are.

This perspective shows the ability of the student to reason and explore the motivations of others as well as express a strong viewpoint. This viewpoint and the viewpoints of other students expressed in this section indicate the fertile issues, dilemmas and concerns that could form the basis for rich discussion, engagement and inquiry in curriculum programmes.

4.11.4 Racism

One student identified the effects of 'racism' on how and where people feel they belong in society as a major concern she held about the world. The perspective expressed was that people should not be discriminated against as citizens of any country because of their skin colour and the length of time they have lived in a country in relation to others.

They think they should reign because they were here first sort of thing. Sort of like, like over there [Zimbabwe] that's what the government think, they think that the blacks should have the reign because they were there first. (Waffle Kitty)

I think that like with this foreshore and seabed thing that's getting really old and just because they [Maori] were here one hundred years before us doesn't mean that they should have more right than anybody else, and it's just like the people who think that Japanese and that shouldn't come over here just because we were here one hundred years before them, it doesn't mean that we should have more right. (Waffle Kitty)

Three examples of racism were highlighted:

- 1. Students being bullied for being white by Maori students;
- 2. White farmers losing their farms in Zimbabwe to black Africans; and
- Maori claiming ownership of the foreshore and seabed because they are indigenous to New Zealand.

As with the discussion about pollution and war, the student who identified racism as her key concern about the world identified an incident that happened at a local level to someone she knew (Item 1) as the connector to discussing the issue of privilege by birthright and first nation status at a macro level.

Chapter Five: Discussion, Conclusions and Implications of Findings

5.0 Introduction

Chapter Four reported the perspectives of the students in relation to the photo focus tasks within the broad framework of Bronfenbrenner's Ecological Model of Development (1979, 2005). The framework employed in this way constructed the ecological model and perspective of the students themselves, highlighting the events, practices, and relationships that influence and affect their learning, development and wellbeing within and beyond school.

Chapter Five identifies and discusses key findings of the research both in terms of the perspectives the students shared and themes evident within these and in terms of the methodological approach and the insights gained from implementing the approach into action. Conclusions and implications for future research of this nature, and the design of pedagogy and curricula developmentally responsive for early adolescent students are identified. Accordingly the chapter is organised in four sections:

- 5.1. Discussion of the findings of the research;
- 5.2. Conclusions;
- 5.3. Implications of the research findings; and
- 5.4. A final note.

Section 5.1 discusses the key findings generated from the analysis and consideration of the perspectives of the students in response to the photo focus tasks and presented in Chapter Four. The section discusses also the efficacy of the methodological approach devised to conduct the voice research with the students in light of the results presented in Chapter Three showing (i) the pattern of their participation within and across the nine focus areas of the research and (ii) the perspectives the students expressed regarding their perception of the research process. Section 5.2 identifies conclusions that can be drawn as a result of the research and Section 5.3 identifies key implications of the findings for future research with early adolescent students, and the design of pedagogy and curriculum within contemporary middle schooling contexts. The chapter concludes with a final note of reflection on the research overall in Section 5.4.

5.1 Discussion of the Findings of the Research

This section identifies and discusses the key findings of the research under two headings:

- 5.1.1. The perspectives of the students; and
- 5.1.2. The Methodology

5.1.1 The Perspectives of the Students

Although it is impossible to say in a few words what the findings of the research add up to, five key findings stand out:

- 1. The central importance the students assign to having the opportunity to work collaboratively with their peers as a key learning support;
- The central importance the students assign to having competent, personable, committed teachers as a key learning support;
- The depth of knowledge held by the students about their preferences, needs, and aspirations as learners;
- The degree of consensus across the student group regarding their personal and global concerns; and
- The potential of the Extended Visual Dialogue process as a tool for stimulating intellectual challenge as identified and articulated by the students themselves.

In respect to item One, the emphasis the students place on the opportunity to work collaboratively with their peers within the learning process, encompasses a number of elements that seem to work in combination to support student learning. The elements include:

- Exposure to multiple and diverse viewpoints;
- Parity of esteem power is more equally distributed between peers;
- Opportunity to receive and give each other tailored support and feedback;
- Confirmation that individual viewpoints are legitimate; and
- Feeling of camaraderie being part of a group that is working toward a common purpose.

Collaboration with their peers seems to provide many of the elements identified as essential to the educational and personal development of early adolescent students by middle schooling commentators and developmental theorists (Beane, 2004; Bronfenbrenner, 1979, 2005; Vygotsky, 1978; Claxton, 2002). With so many established benefits that work together to support learning, and with such strong support from 50% of the students participating in the research, the current 'default' arrangement of students working independently of each other, in relative silence, with access only to the support and viewpoint of their teacher to support them is called into question.

In respect to Item Two – when discussing elements within the schooling context that support their learning the students assigned almost as much importance to the relationship they have with their teacher as they assigned to the opportunity to collaborate with their peers. The perspectives of the students provide clear guidelines to their teachers about the aspects of their personality and professional skill that influence student learning most positively, and the aspects that impede their learning. Within the diversity of the personal preferences the students articulated five key aspects of the role of the teacher that combine to support student learning stand out:

- 1. Commitment to teaching students not subject matter;
- 'Coaching' student learning through a combination of listening to the students, providing encouragement, and taking action in response to the needs expressed by the students;
- Demonstrable personal attributes that convey a personable, lively, and spontaneous identity;
- 4. Predictable and willing provision of assistance to students when requested; and
- Provision of choice and freedom within strong and explicitly managed boundaries.

In respect to Item Three – the wealth of knowledge the students shared about how they learn and how their learning would best be supported suggests a vast untapped resource freely available to their teachers. The knowledge of the students could be accessed and used in conjunction with the professional knowledge of the teacher to inform and assist the design, implementation, and evaluation of pedagogy, curricula, and learning environments developmentally responsive to the needs of the students. More specifically the perspectives of the students indicate that they have a sound knowledge of:

- The goals they are working towards at school both in relation to skills and abilities they need to improve and aspirations beyond school that the students perceive require them to gain certain skills and develop certain attributes through the schooling process;
- The conditions necessary to support their learning, including environmental, affective, and mental preferences,
- The learning strategies they prefer to use and where they would like more opportunity to employ these; and
- The benefits of hands-on learning through doing, supported by demonstration and modelling as well as specific feedback relating to the task.

The students also expressed a desire to take a more strategic role in making choices and decisions about the direction of their learning; the tools appropriate to aid their progress, and the freedom to participate in the review and evaluation of their progress.

However, a minority of students view themselves as powerless to influence and enhance their learning in any way, emphasising instead the influential role of the teacher as the agent who brings about and transmits learning. These students who view learning as a process of passive absorption of knowledge from teachers didactically, need scaffolds within the learning process that explicitly develop their knowledge of strategies and processes they can employ to enhance and influence their learning if they are to become independent and powerful learners (Claxton, 2002).

It is interesting to note however that all the students who identified themselves as passive participants in the learning process were able to take photographs to represent their view, or in the case of some, discuss the photographs they would have taken if they could have worked out how to translate such an abstract concept into a semi-abstract representation. In this respect the image-based process with its dual emphasis on representational images and explanatory dialogue proved a useful scaffold to circumvent and overcome the limited self-efficacy the students feel within the classroom-based learning process. The ability of the students to participate successfully in the image-based process, which required initiative and a high degree of self-management, also suggests that the students were limiting their comments about the learning process and themselves as learners to the classroom learning context.

Taken together Items One, Two, and Three suggest that student learning is best facilitated and supported by affording the students opportunities to:

- Identify and act on the self-knowledge and preferences they have already as learners; and
- Develop connected learning networks with their peers as a core element of the learning process.

For student learning to be supported fully these opportunities need to be underpinned by a pedagogical relationship between the students and their teachers characterised by personal connection, predictability of response, parity of esteem and demonstrated advocacy in action.

In respect to Item Four - The consistency of the concerns and influencing events the students identified in discussing the more macro-level concerns and influences on their lives was surprising. The concern current at the time of the research regarding the potential threat of war and terrorism is easily explained as are the topics of pollution that the students emphasised as these are common foci of school curriculum units. However the widespread agreement on the underlying concerns these topics and events represent for the students was more interesting. Without exception the students highlighted the influence others' practices, and values have on their feelings of efficacy as an individual and their feelings of personal security and wellbeing. This convergence suggests that curricula for the age group rather than focus on exploring thematic topics should explore the effects issues underlying these topics have on the students themselves, most especially their feelings of self-efficacy within their environment.

The issues raised and discussed by the majority of the students provide opportunity within the educative process to develop integrative curricula (Beane, 1997, 2004) that involve the students learning more about themselves and their world. Such curricula programmes could involve students in inquiry-based social action projects designed explicitly to increase their feelings of self-efficacy, connectedness with others, and ability to make a discernible difference in their immediate and wider environment.

The concerns and issues raised by the students point the way to some of the questions and exploratory topics that might be explored using an image-based inquiry approach:

- Why do people choose not to do the right thing and follow rules?
- Feeling powerlessness as an individual leads to apathy
- The effects of the actions of others and the policies of nations on the personal security of individuals what can be done?
- How do you stand up for friends and keep yourself safe?
- Coping with changing family relationships.
- How to navigate in the world and keep a sense of identity.
- How can the issue of pollution be resolved when the practices that perpetuate it are central to a western way of life?
- You only get one chance?!

Additionally the photographs and images the students constructed as part of the visual exploration of these issues, would yield valuable insight into their beliefs around, and within, the topic (Taylor, 2002). These beliefs could form the starting point for inquiry or inform the direction of investigation and focused teaching sessions. The list above is

by no means exhaustive but illustrates some of the issues articulated by the students in response to the photo focus tasks exploring their perceptions about their world.

These issues and concerns indicate also that the image-based methodology was able to stimulate and support the students to identify the complex moral issues and dilemmas that face individuals and society as a whole and that concern them centrally as young persons (Beane, 2004). Given their tendency to self-doubt and insecurity (Stewart and Nolan, 1992) a curriculum that involves early adolescents exploring issues of the type listed above, and involves participation in local social action projects would contribute to involving the students also in meaningful participation in their own interests and their community essential for their academic and social development as early adolescents (Manning and Bucher, 2001; Beane, 1997; 2004; Stewart and Nolan, 1992).

5.1.2 The Methodology

Five key findings stand out in relation to how the Extended Visual Dialogue methodological approach worked in practice:

- Supporting the participating students to work as co-researchers was more difficult in practice and influenced by preconceptions all parties (students, liaison teachers, university researcher) brought to the research;
- The reactions of the participating teachers in the project indicated the degree to which Extended Visual Dialogue methodology challenged existing expectations of students and preconceptions about their role;
- Students' comparison of the research methodology and classroom pedagogical practice led to insights about their learning preferences and values;
- 4. The design of the research was essentially adult-centric,
- The students and their teachers identified links between the elements of the research methodology and a developmentally responsive educative process for early adolescent students.

In relation to Item One, the image-based methodology and the wider Extended Visual Dialogue approach adopted centrally the criteria that the students would participate and be supported to participate as co-researchers in the research. In practice this was harder to achieve than it was to propose and justify. The students, the adult researcher, and the liaison teachers all brought pre-conceptions of their role that influenced the extent to which the students could work as co-researchers in practice.

The students participated in the research for their own reasons (Collier, 2001), reasons that in some cases did not align with the adult-centric conception of the project as an opportunity for the students to share their voice and have their voice taken seriously by their teachers. The students gave a number of reasons as to why they participated in the research that included:

- Acting in accordance with their parents' approval of the project;
- The project was an opportunity to be involved in something different;
- Their friends were taking part;
- Involvement in the project released them from school work; and
- The project was an opportunity to have a say.

The students did not seem to expect to act with authority as researchers in the project, but the majority engaged fully with the role that was scripted for them, as an opportunity primarily to experience something different. The parameters and conceptual framework developed for the research was broad enough to accommodate the varied motivations of the students to participate but it was not until the project was nearing completion that the students 'grew into' their role as authorities and equal partners in the research. This growth seemed to coincide with the request for their participation in approving and validating the analysis of the research results.

Before this conceptual transition occurred, the students participated in 'Emily's project', or 'the Massey project', signifiers used by their teachers to describe the project and to indicate research sessions on the class timetable. The terms used in this way subtly undermined the emphasis the research was attempting to shift onto the value of the students and their participation as the central element. However, with the research constituting a temporary addition peripheral to the central business of the classroom programme, the association of the research with the researcher and the university can be understood.

In practice the students were happy to have the freedom to take photographs of their own design within the broad parameters of the Photo Focus Guide, free from the expectation that their photographs would be critiqued and assessed. Without exception, and not limited to their actual ability to do so, the students appreciated the opportunity to talk about and explain the photographs they took and aspects that mattered to them. Their role as co-researchers in the sense adopted conceptually for this research seemed to elude the students for the most part. However, participation in the analysis phase appeared to demonstrate the value the research placed on the expertise and voice of the students, and

perceptibly the attitudes of some of the students changed as they experienced a sense of partnership with the university researcher in the process of identifying the findings of the research.

In respect to Item Two, an unexpected means of identifying the 'edges' of the research role scripted for the students as co-researchers and the more familiar role they played in classroom settings emerged. The liaison teachers were invited to participate in the research primarily in a support role to ensure the students could engage with the auto-photography process effectively in the absence of the researcher. However their reactions to the perspectives expressed by the students in the research, conceptions of what was appropriate, and the variable support they provided the students, served as a 'litmus test' that indicated how and where the research methodology implemented in practice constituted a very different way of working with students than is currently the norm in many middle level classrooms.

The 'insider perspectives' the teachers brought to the research, consisting of their knowledge of the students, the culture of the school, and the expectations that accompanied this culture, indicated specific ways in which the research methodology was making a difference, and helped indicate the 'limits of support' (Kemmis and McTaggart, 1989) the teachers were prepared to give within the project. Despite knowing intellectually that the research required ways of working with the students that shifted the locus of control to the students, the teachers continued in varying degrees to impose their familiar expectations and preconceptions on the students in the research process.

Some of the ways this occurred in practice are outlined as follows:

- Questioning the commitment of the research to supporting the voluntary
 participation of the students and the rights of the students to practice their
 'informed dissent' in the form of non-participation;
- Breaking agreements to provide class time for the students to take photographs and to work actively on their behalf to ensure technological support was available and workable:
- Viewing the students as 'assistants' to the researcher able to be left out of research activities if the organisation for their inclusion seemed too difficult to overcome;

- Treating the research as a privilege to be made available only to those students whose behaviour in the classroom context and wider school environment was acceptable;
- Disciplining students in front of the group during research sessions in much the same way as would be acceptable practice in the classroom; and
- Allowing one student to take home a digital camera and denying another the same opportunity.

These incidents highlighted areas where the role designed for the students as coresearchers, differed from the role they play in the classroom and in their relationships with their teachers. More specifically the research process afforded them:

- · High degrees of autonomy and trust;
- · Parity of esteem and respect;
- · Rights and protection as participants in research; and
- Positioning centrally as experts.

In order to support the students to work as co-researchers in research it is essential that the adults working with them commit to providing and honouring the values at the core of the co-researcher relationship.

The reactions of the participating teachers helped also to identify some of the outcomes of the research of professional value to them. They were especially surprised at, and engaged by, the knowledge and depth of knowledge the students expressed about themselves as learners, about aspects that work to support their learning in the classroom and the aspects that impede their learning. The teachers gained this knowledge through participating collaboratively in the constant comparative data analysis process. Initially the teachers brought a 'critical eye' to the analysis process and focused largely on attributes the students appeared to 'lack'. However as the analysis process progressed and they expanded their consideration to include data generated by increasing numbers of the students, they began to see the conceptual themes and threads running through the perspectives and their comments became more reflective, and centred on patterns emerging through the student research group as a cohort. In this way the teachers were drawn into the perspectives of the students progressively until they were empathising with the topics and themes being expressed and engaging in solid debate amongst themselves about the implications the perspectives of the students held for their practice as teachers.

Three of the five liaison teachers adopted and adapted aspects of the research methodology, most specifically the image-based data generation strategies, and the recursive focus of the research activities and used these in parallel with the research with the students in their classes. One teacher integrated the use of cameras into an organic garden project with her class. Additionally, two teachers explored one of the research questions with their students using PowerPoint presentations to represent how they see themselves as learners. These spin-off adaptations of the research methodology for pedagogical purposes indicated the educational value the methodology suggested for pedagogy with the early adolescent age group. The teachers shared the results of their impromptu 'mini-researches' with great excitement. They recognised firmly the value of the self-knowledge the students expressed and the value of the image-based process as a creative pedagogical scaffold. The teachers recognised immediately also the value of involving their students co-constructively in the design of the classroom environment, pedagogy, and culture. The image-based methodology provided a pedagogical strategy they could use to explore these aspects further with their students.

In respect to Item Three, without exception the students reported the value they gained from the auto-photography process, and the research process more generally. To communicate how the process was valuable they employed a comparative approach. They compared the valued aspects of the research process with the deficiencies perceived in the organisation and practices in their classrooms. The aspects identified by the students indicated the 'edges' that existed between the research process and its attendant methods, and current classroom contexts, pedagogy and culture, in much the same way the perspectives of the teachers helped identify the edges of the role of co-researcher scripted for the students in comparison to the role they play as students.

The comparative strategy the students employed to discuss the value of the research process from their perspective yielded information about their preferences not emphasised in their responses to Photo Focus Task Two.¹⁰ Participating as coresearchers in the research provided the students the following five benefits:

- 1. Ongoing intellectual challenge that engaged their imagination
- Autonomy in the sense of having the freedom to make their own decisions regarding the photographs they took, extent of participation in the research;
- Opportunity for self-exploration via the recursive focus of the photo focus tasks emphasising the knowledge the students have about themselves;

130

¹⁰ Take one or two photos that show how you see yourself as a learner.

- 4. Extended time to formulate their perspectives; and
- Absence of judgment about the quality of their images and perspectives, and their contribution overall to the research.

In respect to Item Four - as indicated by its position on Hart's Ladder of Participation (1997) the project was 'adult-initiated' and shared decisions with the students throughout. Building on the knowledge generated in this research that the students themselves have extensive knowledge about school, learning and their lives, the focus of future student voice research could be established by the students themselves building on any one of the findings of this pilot research for instance.

The Ladder of Participation was used to plot the desired level of student participation within the spectrum of levels of participation. At the outset of the project it was envisaged that the extended visual dialogue design would enable students to participate at level six characterised by 'adult-initiated, shared decisions with youth' (Hart, 1997). The research design as implemented did enable students to influence the process and minor changes were made to better reflect their preferences such as expanding the options for photo elicitation interviews to include paired interviews. Students continued to be consulted and included throughout the project during the data analysis phase as advisers and changes were made to the analysis informed by their perspectives. However to a certain degree the interests of the students and those of the researcher diverged during the latter part of the data analysis phase and during the formulating the research findings phase where the researcher took overall responsibility for producing the final coherent organisation of the research findings. From this point until the conclusion of the research the participation level of the students dropped from level six to level five. Participation on this basis is characterised as being 'consulted and informed'.

The auto-photography and photo elicitation interview process implemented in the research involved the students on an individual basis. In light of the clear preference of the students for opportunities to work collaboratively with each other, future research of this nature could adopt a more collaborative approach to the auto-photography process and especially to the exploration of the meaning of the images produced. In practice the students took the initiative and collaborated informally with each other to plan and execute the photography moulding the methodology to better suit their preferences.

Continuing the elaboration of Item Four - the Photo Focus Guide formed the interface between the students and the research questions and constituted both the central strength and weakness of the methodological approach, as it was operationalised. Positively the Photo Focus Guide encouraged the students to take photographs about aspects of their experience and themselves that they had not considered before and presented the data generation process of the research in a form and format that they could engage with autonomously.

However, engaging with the Photo Focus Guide and translating the abstract focus areas into concrete images and perspectives personal to them challenged the students to think in ways unfamiliar to them that necessitated scaffolding and support unexpected at the outset. Supporting the students centred on helping them to understand the parameters of the focus tasks without influencing unduly the images produced or the perspectives they originated. The understanding the students brought to their consideration of the Photo Focus Guide influenced the photographs they took and the perspectives they shared and their interpretations were diverse in some areas and eerily aligned with each other in others e.g. their central concern about the health of their family, and their concern about the more global effects of pollution on their lives and environment.

On the other hand the focus of the Photo Focus Tasks challenged the students to think about their identity and their preferences in ways that although they were unfamiliar with, they enjoyed and wanted to continue. It seems the Photo Focus Guide and the support of the researcher formed the scaffold the students needed to work in their zone of proximal development (Vygotsky, 1978) and in this way participation in the data generation extended their cognitive abilities, their personal confidence, and their engagement with their environment.

In respect to Item Five - the educative process is linked with the research process deliberately. In the process of sharing their perspectives as data through the Extended Visual Dialogue methodological approach, the participating students learnt new skills essential to negotiating the current developmental challenges facing them as early adolescents. The skills endemic in the research process devised are central also to their development as resilient, resourceful, and reflective learners who engage actively in reciprocal relationships with others to boost their own learning power and understanding (Claxton, 2002). The excitement with which the teachers and the students viewed the image-based data generation process and the research relationship enacted indicates the potential of such an approach as a pedagogical strategy and way of working with students of this age group in classroom settings more generally.

5.2 Conclusions

Utilising the Extended Visual Dialogue approach produced insights into the students' perceptions of school and learning, themselves as learners and young persons, and their world that indicate the value of the methodology for voice research with early adolescent students. From the analysis of the perspectives expressed by the students the methodology proved effective for four key reasons:

- The focus of the research sub-questions was on students and their experience and elicited their perspectives in a way developmentally responsive to their characteristics and preferences as early adolescent students;
- The research process afforded the students significant respect and autonomy as co-researchers but also provided strong adult support and guidance throughout;
- 3. The image-based process prompted and exercised students' metacognitive abilities requiring them to consider their schooling experience, aspects of their personal identity and their perspectives in relation to the wider context of their lives. Dialogue with the external researcher provided the scaffold needed for students to extend their ability to reflect and articulate their perspectives; and
- 4. The process accessed students' lifeworld understandings in a way that involved them in authentic engagement with an adult who was genuinely interested in understanding their position of viewing their world. The adult was also representing a wider commitment on the part of the principals and staff of the schools to take cognisance of students' perspectives as a central facet of their development as middle school practitioners.

The research process gave students an extended experience of the seven developmental challenges identified by Stewart and Nolan (1992) as essential to the academic and social development of early adolescent students but it gave the students this experience in the context of research.

The educational value of the research methodology devised is without question. The participating students and their teachers saw the potential of the image-based research methods for their work in the classroom, with both the students and their teachers reporting follow-on experimentation and transfer into the teaching and learning process. It is the conclusion of the research however that more important than the image-based methods is the applicability of the research relationship as a relationship that could be enacted between students and teachers in classrooms. The research relationship positioned centrally the notion of parity of esteem between adults and students, and was grounded in the belief that young people have a unique perspective of value to share and

a perspective integral to the design of developmentally responsive and respectful education for early adolescents.

Four features taken together constitute the scaffold essential for supporting the students to construct and express their voice as a core focus of the educative process.

- A genuine invitation to the students from their teachers to share their unique view of the classroom and their world combined with a commitment to act and take seriously the viewpoints shared;
- Focus questions for inquiry that ask students to articulate and explore their perspectives, concepts, and points of view;
- Use of image-based methods as a way of shifting the locus of control of the learning process to the students and as an alternative to the current dominance of writing as a mode of communicating meaning; and
- 4. The commitment to treating students as co-constructive partners in the educative process by honouring agreements, affording the students esteem, and making space within classrooms for their preferences to be enacted.

These four elements in combination introduce the students to their voice in the process of constructing it and utilise the potential of the external environment for developing desired internal processes, abilities, and beliefs.

If educators are serious about their role of supporting early adolescent students to develop the skills and attributes they need to engage as competent and vibrant citizens in their community beyond school (Beane, 1997, 2004), then explicit design is needed to include and emphasise these skills within the learning culture of classrooms. Students cannot be expected to internalise qualities, abilities, and metacognitive strategies they have not first been introduced to in their external environment (Vygotsky, 1978). The invitation was vital, the extended and ongoing commitment to scaffolding and supporting the process more so.

5.3 Implications of the Research Findings

The following section outlines key implications of the findings of the pilot study presented under two headings:

- 5.3.1. Future research with early adolescent students
- 5.3.2. Pedagogy and curriculum design

5.3.1 Future Research with Early Adolescent Students

- For research continuing the exploration of student voice to be successful the following elements need to be addressed:
 - Choice of Methods participatory, hands-on research tools developed from the preferences of the students;
 - Locus of Control Shift the locus of control in the research process to students through the methods developed and the processes adopted and employed;
 - Opportunity to Collaborate Afford students opportunity centrally to work collaboratively with other students to explore their views;
 - Preserve and Privilege Student Perspectives and Understandings extend research timeframes, build in opportunity to revisit data and perspectives generated cyclically, employ image-supported conversations as methods, enact research relationships based on mutual respect;
 - Reciprocity process must 'give back' to the students in some way i.e. facilitate self-understanding, increased thinking skills, use of preferred activities and strategies;
 - Research Relationship non-hierarchical, negotiated, willingness to understand, balanced distribution of power.
- Before teachers become involved in future research of this nature they will first need to be inducted into the conceptual framework and elements required specifically to engage with students as co-researchers.
- 3. Teacher involvement in school-based development research of this nature is essential to their development as authentic middle level practitioners. (The teachers participating in the pilot project agreed that their involvement in the analysis of the perspectives expressed by their students enhanced their understanding of the age group, the issues and interests that concern them, and their preferences as learners).
- Research needs to continue to look for ways to involve early adolescent students in research, or research as curriculum inquiry that investigates foci initiated and identified by them.

5.3.2 Pedagogy and Curriculum Design

To meet the needs, interests and preferences of early adolescent students as expressed by them in this research educational programmes and pedagogy need to include extensive opportunity for:

- Explicit focus on student self-exploration within negotiated topics, using imagebased tools adapted to accommodate the technology available in the school and broadened to include – collage, freeze frame drama, comparison with symbols, PowerPoint presentations, and visual maps and organisers;
- Co-constructive design of classroom environments taking account of the preferences of the students;
- Time for students to engage in a metacognitive, strategic role in the design, implementation, review and evaluation of the programmes, teaching, and learning in which they participate;
- Explicit focus on providing intellectually challenging tasks, projects, and learning experiences within classroom programmes;
- An approach to inquiry learning that includes the perspectives of students
 regarding topics and issues alongside current emphases on prior knowledge by
 exploring questions such as 'what do the students think about the topic/issue
 currently?' and 'how does this topic and the issues within it influence already the
 lives of the students?' as the basis for the inquiry process.
- Implementation of school-wide processes that generate, collect, and analyse the
 topics of interest and concern to the lives of students as the basis for the
 development of student-centred curricula.

5.4 A Final Note

At the conclusion of this pilot study a number of reasons have been identified to indicate the value of the Extended Visual Dialogue methodology as a developmentally responsive methodological process for conducting voice research with early adolescents, worthy of further investigation. However it is difficult to establish quite why, or which elements of the design were the 'active ingredient' of the process. Taken by themselves the elements of the methodological approach were effective but not sufficient to produce a comprehensive and supportive way of doing voice research of this nature with early adolescent students. The value it appears, lies somewhere in the combination of the research relationship and role scripted for the participating students as co-researchers, with the image-based methods that gave them autonomous and creative licence to explore

aspects of themselves and their lives in a way personal to them, and the belief that the students had a valuable perspective that needed to be shared.

In keeping with the research as a 'work in progress' and to investigate the methodological approach devised and the voice of the students further, a new project was started with the teachers and students of one of the schools that participated in the thesis research. The project is ongoing and continues to use the methodological approach and image-based methods developed for the thesis research and adapted to take account of the implications for future research outlined in the section above, to explore questions relating to the perceptions the students have regarding school, learning, aspects of their identity as learners and young persons, and perceptions they have of their world. Building on this research the current project has engaged the students and their teachers collaboratively to explore the same questions using auto-photography (extended to include collage, PowerPoint, and visual symbols) and group-based photo elicitation interviews. Organising the research in this way allows the teachers and the students to communicate their multiple perspectives directly with each other because ultimately it is the teachers and the students together who will decide how the knowledge generated through the research process will be applied to inform teaching and learning contexts and processes within their schools.

The students continue to surprise the researcher and their teachers too with their insights, and the conversations between the adults and the students continue to illustrate the 'edges' between their views of the educative process. Many of the perspectives the students shared in the pilot continue to be corroborated by successive participants, and the catch-cry 'you're onto something – but we're not quite sure what it is yet' continues to be heard from the participating teachers and the principal. The students are too busy taking photographs and exploring aspects of themselves to comment, preferring to enjoy the experience for what it gives them in line with their pragmatic reasons for participating from the beginning.

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Appendix One

The Information Pack

Contains: Participant Consent Form

Parental Consent Form

Information Sheet for Students

Information Sheer for Parents/caregivers

Demographic Questionnaire

Co-constructing Early Adolescent Education through Image-based Research

Participant Consent Form

This consent form will be kept for a period of five (5) years

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

• /X	(place tick or cross in box)	
	I agree to participate in an individual interview	w that will be audiotaped.
	I agree to participate in a focus group intervie	w that may be audiotaped.
	I agree that my teacher can analyse my transcreemoved.	ript once my name has been
	I agree to participate in this study under the co- Information Sheet.	onditions set out in the
	ture: Name: (please print)	Date:
****	mine. (Presse Print)	

Co-constructing Early Adolescent Education through Image-based Research

Parental Consent Form

This consent form will be held for a period of five (5) years

I have read the Information Shee that I can ask questions about the	t that outlines details of the study. I understand e study at any time.
I agree that	
(ch	ild's full name)
has my permission to participate Information Sheet.	in this study under the conditions set out in the
Signature:	Date:
Full Name: (printed)	
Relationship to child participa	nt:

Co-constructing early adolescent education through image-based research

A research project that listens to the views of young people about school, about growing up in Hawke's Bay, and how they feel about themselves and their world.

Information for parents/caregivers

Researcher: Emily Nelson

Research Supervisor: Associate Professor Pat Nolan Centre for Research in Middle Level Education Massey University, Palmerston North (06) 356 9099, P.Nolan@massey.ac.nz

This project has been reviewed, judged to be low risk, and approved by the researcher and supervisor under delegated responsibility from the Massey University Human Ethics Committee. If you have any concerns about the conduct of this research, please contact Professor Sylvia Rumball, Assistant to the Vice-Chancellor (Ethics & Equity), telephone (06) 350 5249, email humanethics@massey.ac.nz

What is this study about?

This project is about how, as students, your children might take part in shaping learning programmes at their school and at other schools in Hawke's Bay. Students will be asked to take photographs that best sum up what they think about:

- · Themselves as learners
- Things at school that help them learn
- · Things at school that make it difficult for them to learn
- Growing up and living in Hawke's Bay
- Themselves as young people
- The world in which they live now

The photographs and other information that the students provide will help them and their teachers design learning opportunities that best suit their needs, build on their interests and reflect their views.

How will students be chosen for the study?

Students may volunteer to take part in the Project. Because the project is a pilot (small test-run) for a bigger project, however, I can only work with 12 students (six Year 7 students and six Year 8 students) who will be the research group from their school. This means that I am limited to choosing just 12 students from all those who may want to participate.

Students in the research group must be a mini-version of the students in their school.

For example, if the school had 58% male students and 42% female students then I would choose seven boys and five girls for the research group.

If the students in the school were 60% New Zealand European, 20% Maori, and 20% from other ethnic groups (like Pacific Islands and Asian groups) then I would choose seven New Zealand European students, three Maori students and two students from other ethnic groups.

What happens once the photos are taken?

When the students have taken all their photos and have finished any artwork that they have done to communicate their views, the students and I will sit down together and talk about their photos and the ideas they represent in an interview.

The interview will be recorded and when it is finished it will be typed out as a transcript (record) of what was said. The students will be invited to look through their transcript and highlight anything that was said that they think is especially important.

When I have had a look through all the interview transcripts and highlighted all the information in them that I think is important, I will meet with the student research group to talk some more about all the things that the research group thinks are important (a focus group interview).

Together we will decide which information to pass on to teachers, so that they can better design learning activities that suit students' needs, and that build on their interests and views (*reporting findings*).

Students will be involved in every stage of the research project – their views are really important!

What are your children's rights if they choose to participate?

- Most importantly, they have the right not to be involved in the project.
- They can decide to withdraw from the project at any stage once it has started.
- They (and their parents) can ask me questions about the project at any time.
- They can ask me to turn off the tape recorder at any time during our interview together.
- They can choose to use another name during the project so that they can say what they think without anyone knowing who they are.
- A summary of the research findings will be available for your children (and you) to read in your school library.

Questions you may like to ask me:

How much time will students need to commit to the project?

Students are likely to be involved in the project for around 1-1 ½ school days (7 Hours) spread over Term One and Term Two. The student research group will meet during class time and students' class teacher will ensure they do not miss important lessons and school activities. Your child's school is committed to this research and believes it to be a valuable part of student learning.

Who might read the research findings?

My research supervisor and the larger research project team will read the findings of this pilot study. What we find out in the project will be used to design a larger research Project with more students. The findings of the research will also be used in staff meetings with the teachers from your school and other schools in Hawke's Bay. They will work together to develop learning opportunities that better suit students' needs and reflect their views about ways to learn that work best for them.

Who will see the photos that students take?

Only my research supervisor and I will see the photos, unless students give us permission to print a particular photo in the research report or share it with teachers in staff meetings. Photos can only be used in this way if everyone in the photo also gives their permission.

Who is Emily and why is she conducting this project?

I am conducting this project as a research thesis for my Masters degree in Education at Massey University. I have been a teacher in the past, as well as working with teachers in both inservice and preservice contexts. For this project, I am a person who is interested to find out how to make schools and learning better suited to the needs, interests and concerns of early adolescent students.

Co-constructing early adolescent education through image-based research

A research project that listens to the views of young people about school, about growing up in Hawke's Bay, and how they feel about themselves and their world.

Information for students

Researcher: Emily Nelson (06) 870 0244, e.nelson@actrix.gen.nz

Research Supervisor: Associate Professor Pat Nolan Centre for Research in Middle Level Education Massey University, Palmerston North (06) 356 9099, P.Nolan@massey.ac.nz

This project has been reviewed, judged to be low risk, and approved by the researcher and supervisor under delegated responsibility from the Massey University Human Ethics Committee. If you have any concerns about the conduct of this research, please contact Professor Sylvia Rumball, Assistant to the Vice-Chancellor (Ethics & Equity), telephone (06) 350 5249, email humanethics@massey.ac.nz

What is this study about?

This project is about how, as students, you might take part in shaping learning programmes at your school and at other schools in Hawke's Bay. You will be asked to take photographs that best sum up what you think about:

- · Yourself as a learner
- Things at school that help you learn
- Things at school that make it difficult for you to learn
- Growing up and living in Hawke's Bay
- · Yourself as a young person
- The world in which you live now

The photographs and other information that you provide will help you and your teachers design learning opportunities that best suit your needs, build on your interests and reflect your views.

How will you be chosen for the study?

If you wish you may volunteer to take part in the Project. Because the project is a pilot (small test-run) for a bigger project, however, I can only work with 12 students (six Year 7 students and six Year 8 students) who will be the research group from your school. This means that I am limited to choosing just 12 students from all those who may want to participate.

Students in the research group must be a mini-version of the students in your school.

For example, if your school had 58% male students and 42% female students then I would choose seven boys and five girls for the research group.

If the students in the school were 60% New Zealand European, 20% Maori, and 20% from other ethnic groups (like Pacific Islands and Asian groups) then I would choose seven New Zealand European students, three Maori students and two students from other ethnic groups.

What happens once the photos are taken?

When you have taken all your photos and have finished any artwork that you have done, you and I will sit down together and talk about your photos and the ideas they represent in an interview.

The interview will be recorded and when it is finished it will be typed out as a transcript (record) of what was said. You will be invited to look through your transcript and highlight anything that you said that you think is especially important. This is called data analysis

When I have had a look through all the interview transcripts and highlighted all the information in them that I think is important, we will all get together to talk some more about all the things that the research group thinks are important (this is called *a focus group interview*).

Together we will decide which information to give to your teachers, so that they can better design learning activities that suit your needs, and that build on your interests and views (*reporting findings*).

You will be involved in every stage of the research project – your views are really important!

What are your rights if you choose to participate?

- Most importantly, you have the right not to be involved in the project.
- You can decide to withdraw from the project at any stage once it has started.
- You can ask me questions about the project at any time.
- You can ask me to turn off the tape recorder at any time during our interview together.
- You can choose to use another name during the project so that you can say what you think without anyone knowing who you are.
- A summary of the research findings will be available for you to read in your school library.

Questions you may like to ask me: What about missing my school work?

Your school is happy for you to be involved in the project during school time. Your teachers and I will work together to make sure you don't miss any really important lessons or school activities. If you add up how much time you will be involved in the project, it will be somewhere around 1-1 ½ school days (7 hours) spread over Term One and Term Two.

How much will my teacher be involved?

Your teacher has volunteered to organise times for interviews with you and other things we may need in your school, like cameras, downloading photos, timetables, art materials etc. The project could not happen without their support.

I also would like your teachers to look at all the interview transcripts (once your name has been removed!) and highlight what they think is important from their point of view, but only if you give your consent.

Who might read what we find out?

My research supervisor and the larger research project team will read the findings of this pilot study. What we find out in the project will be used to design a larger research Project with more students. The findings of the research will also be used in staff meetings with the teachers from your school and other schools in Hawke's Bay. They will work together to develop learning opportunities that better suit your needs and reflect your views about ways to learn that work best for you.

Who will see the photos I take?

Only my research supervisor and I will see your photos, unless you give us permission to print a particular photo in the research report or share it with teachers in staff meetings. Photos can only be used in this way if everyone in the photo also gives their permission.

Who is Emily and why is she conducting this project?

I am conducting this project as a research thesis for my Masters degree in Education at Massey University. I am a mum with two children and I have been a teacher in the past. For this project, I am a person who is interested to find out how to make schools and learning better suited to the needs, interests and concerns of students of your age group.

Co-constructing Early Adolescent Education through Image-based Research

Participant Questionnaire

Full Name:	
What year group are you in? (cir	·cle Year group)
Year 7 Year 8	
Which gender are you? (circle yo	our gender)
Male Female	
What ethnic group do you belong	g to? (circle your choice)
New Zealand European	n/Pakeha
• Maori	
Pacific Nation	(which group?)
Other	(which group?)

Appendix Two: Liaison Teacher Confidentiality Agreement

Co-constructing Early Adolescent Education through Image-based Research

Liaison Teacher Confidentiality Agreement

I	agree to keep	
confidential all information con Adolescent Education through	oncerning the project Co-constructing Early in Image-based Research.	
I will not retain or copy any in	formation involving the project.	
Signature:	Date:	

Appendix Three: Liaison Teacher Consent Form

Co-constructing Early Adolescent Education through Image-based Research

Liaison Teacher Consent Form

This consent form will be kept for a period of five (5) years

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

v /X	(place tick or cross in box)	
	I agree to take part in auto-photography the elicitation interview.	at will be discussed in a photo-
	I agree to participate in an individual interv	view that will be audiotaped.
	I agree to participate in this study under the Study outline.	e conditions set out in the Pilot
Signat	ture:	Date:
Full N	Vame: (please print)	

Appendix Four: Transcriber's Confidentiality Agreement

Co-constructing Early Adolescent Education through Image-based Research

Transcriber's Confidentiality Agreement

I	_ agree to transcribe the sound files
provided to me.	
I agree to keep confidential all the information	n provided to me.
I will not make any copies of the transcripts of than those required for the project.	r keep any record of them, other
Signature:	Date:

Appendix Five: Image Inventory

No. Photos	Category	No. Photos	Category
9	Trees	1	School construction
6	People	1	Fish'n'chips
4	Books	1	Jigsaw puzzle
3	Computers	1	Ladder with happy person
3	Sky/clouds	1	A line
3	Eyes/ears	1	Tangled skein of cotton
3	Bark/twigs	1	School mural
1	Ball in guttering	1	Pens
1	Rubbish bin	5	No photos/response
1	School sign	5	No photos/no response

Focus Area Two - Take one or two photos that show how you see yourself as a learner				
No. Photos	Category	No. Photos	Category	
9	Trees/bushes	1	Sine wave	
5	Parts of body	1	Jigsaw	
5	Individuals in action	1	Chicken wire fence	
4	Books	1	Eagle	
2	People working together	1	School sign	
1	Plane in sky	10	No photo/response	
1	Carpet	6	No photo/no response	
1	School mural			

Focus Area Three - Take one or two photos that show concerns you have about the world in which you live				
No. Photos	Category	No. Photos	Category	
14	Rubbish	2	War/terrorism	
5	Car exhaust	1	Panda bear	

People fighting	1	Newspaper page
Trees/variants	1	Cutout figures
Drugs	1	Person's foot
Graffiti	15	No photos/response
Water wastage/pollution	5	No photo/no response
	Trees/variants Drugs Graffiti	Trees/variants 1 Drugs 1 Graffiti 15

No. Photos	Category	No. Photos	Category
8	Personal interests	1	Newspaper page
7	Friends and/or family	1	House
3	Smoking/drugs	1	Words: netball coach
3	People fighting	1	Person in canoe
3	Construction	1	2 seagulls
2	Pets	1	Collection of rocks
1	Emergency sign	1.	Clock
1	DARE motto	15	No photos/response
1	Bush	7	No photo/no response
1	Tree stump		

No. Photos	Category	No. Photos	Category
7	School signs/mottos	1	Office lady
7	School locations	1	Classroom working
6	Peer interactions	1	Axe
4	Books	1	Flagpole
3	Ball games	1	Help key
3	Trees	1	Teacher
4	School assembly	6	No Photo/response
		7	No photo/no response

Focus Area Six - Take one or two photos that show aspects of school that help you learn				
No. Photos	Category	No. Photos	Category	
15	Teachers	1	School councillors at Assembly	
4	Students working together	2	Books on library shelves	
4	Peer interactions	1	School equipment	
3	Computers	1	Smiley face magnets	
2	Smartboard	1	Stick figures holding hands	
1	Class timetable	3	No photo/response	
1	House	12	No photo/no response	
1	A mistake			

Focus Area Seven - Take one or two photos that show aspects of school that get in the way of you learning				
No. Photos	Category	No. Photos	Category	
8	Individuals in action	1	Open desk	
5	People fighting	1	Hi-note	
3	Books	1	Tree stump	
2	Deadlines	7	No photo/response	
1	Maths equation	10	No photo/no response	

Focus Area Eight - Take one or two photos that show what being young in Hawke Bay means to you				
No. Photos	Category	No. Photos	Category	
8	Peers	1	House	
7	Symbols of Hawke's Bay	1	Traffic	
7	Recreational activities	1	Person with arm around tree	
1	Donkey	1	Garden seedlings	
1	School field	10	No photo/response	
1	Dictionary page	5	No photo/no response	

Focus Area Nine - Take one or two photos that show aspects of your community y feel most connected with				
No. Photos	Category	No. Photos	Category	
6	School related	1	Family gathering	
5	Places/locations	1	Boy on bus	
1	Neighbourhood Watch phone tree	11	No photo/response	
1	Dolphin toy	15	No photo/no response	