

**Dancing into the classroom Te kanikaniki roto i te ruma:
The student and teacher experiences of somatic practices
in a New Zealand intermediate school**

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ABSTRACT

The primary purpose of this study is to explore the extent to which somatics are being taught in a New Zealand mainstream school. Integrated awareness of self and the environment are somatic tools used in tertiary education for dance students to learn about creative processes of choreography and performance and for injury prevention and management. Somatic practices fit well with the current New Zealand arts curriculum dance strand achievement objectives.

This qualitative exploratory case study explores the responses of thirty late-primary students and their teacher to the experience of somatic awareness activities. I have drawn a theoretical basis from three disciplines: somatics, arts education priorities and educational theory. Merriam and Caffarella's (1999) postmodern approach accommodates the basis for the study's design, which is at once subjective and propositional. To this end, the data collection phases posit research participants as interpreters or performers in the construction of a somatic experience at school (Berger & Luckmann, 1991).

Multiple data collection methods were used: a student questionnaire, observation of a dance rehearsal and implementation of a somatic session that was concurrently videotaped and journalled by the students. A subsequent focus group of seven self-selected students and teacher interview completed the data collection process. Throughout the data collection phases my reflections were recorded in a somatic journal.

By incorporating somatics and dance performance knowledge across the theoretical framework and data collection methods, similarities between awareness practices and students adapting to learning in a mainstream education setting emerge. I argue that dance education may not progress learning conditions for students through an "all children can participate" emphasis (Hong, 2000) and that dance performance as an outcome may miss the links between learning efficacy and the experiential applications of dance.

The students and teacher responded positively to the somatics activities, reporting main themes that connect postural awareness as a useful learning capabilities tool. The proposed somatics applications could be incorporated within the New Zealand curriculum framework alongside dance. Further research will involve studying different schools with less dance integration, as well as repeating the study over several years at the same school.

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LIST OF ACRONYMS AND TERMS

AIESOP	Acts of Congress of the International Association of the Higher Schools of Physical Education
APTA	American Physical Therapy Association.
DACI	Dance and the Child International
ERO	The Education Review Office (ERO) reviews schools and early childhood education services every three years, and publishes national reports on current education practice.
ISMETA	International Somatic Movement Education and Therapy Association
NZCER	New Zealand Council for Educational Research.
PPTA	Post Primary Teachers Association
SPARC	Sport and Recreation, New Zealand. A government funded agency which helps New Zealanders of all ages to be more physically active in sport and recreation.
UNESCO	United Nations, Educational, Scientific and Cultural Organisation
UNTS	United Nations Treaty Series. Convention on the Rights of the Child
UREC	Unitec Research Ethics Committee
Stage Challenge	A national secondary school dance and drama competition held annually in New Zealand

GLOSSARY

Divergent thinking - A creative form of thinking that involves generating novel ideas that diverge from the normal ways of thinking about something.

Emotion - A pattern of cognitive, physiological, and behavioral responses to situations and events that have relevance to important goals or motives.

Empathetic - The capacity for experiencing the same emotional response being exhibited by another person.

Heuristics - A method of problem solving characterised by quick and easy search procedures similar to rules of thumb.

Individualism - A cultural orientation, characteristic of many Western nations, that favours the achievement of individual over group goals; self-identity is based primarily on one's own attributes and achievements (compare with collectivism).

Interdisciplinary (-arity) (n.d.) - A term that refers to the integration of concepts across different disciplines. Interesting new disciplines often result from such syntheses. A few traditional disciplines are considered as more interdisciplinary than others: philosophy, mathematics, education, ecology and history among others. Some of the most important interdisciplinary work is achieved by people who have a definite "academic home" in one discipline.

Interiority - A term used to describe how what is occurring within somebody's mind may not usually be expressed out loud (Encarta, n.d.).

Interrelatedness - The pattern of concepts in a postmodern context (Bateson, Wilder-Mott, & Weakland, 1981, p.70). This pattern always includes both observer and the observed, subject and object. The search for interrelatedness runs counter to Cartesian logic.

Ontology - Ontology is an explicit specification of a conceptualisation. The term is borrowed from philosophy, where ontology is a systematic account of existence (Gruber, 1993).

Phenomenology - A philosophical approach that focuses on immediate subjective experience.

Postmodernism - A worldview that emphasises the existence of different worldviews and concepts of reality. Postmodernism emphasises that a particular reality is a social construction by a particular group, community, or class of persons (Anderson, 1990).

Propositional - (Philosophy) The meaning of a declarative sentence that expresses something that can be true or false (Encarta, n.d.).

Reflexivity - Automatic and involuntary, or unthinking (Encarta, n.d.).

Site specific - A dance is site-specific when the choreographer receives her spatial dictation, directions for audience placement, and theatrical inspiration from the site itself; in turn, the site becomes the framework for or map of the dance. The site-specific choreographer also generates the work's movement vocabulary and its content out of her excavation of, research into and interpretation of the site's unique cultural matrix of characteristics, whether architectural, historical, political, economic, social and/or environmental. (LeFevre, 2005).

Somatics - The professional field of somatic movement education and therapy spans holistic education and complementary/alternative medicine. Practices of somatic movement education and therapy encompass postural and movement evaluation, communication through touch, experiential anatomy and imagery, and movement patterning. These practices are applied to everyday and specialised activities for persons in all stages of health and development. Scope of practice definition: The International Somatic Movement Education and Therapy Association (ISMETA., n.d.)

Subjective - Subjectivist considerations include an awareness of the personal biases that can vary from person to person and effect how they perceive objects and behaviour.

Temporal (n.d.) - relating to measured time. (Logic) - The term is used to describe any system of rules and symbolism for representing, and reasoning about, propositions qualified in terms of time. Temporal logic is the ability to reason around a time line. So called linear time logics are restricted to this as a type of reasoning.

Temporal ontology - A linear approach to the experience of being in order to assert meaning and/or consensus between contexts. By placing concepts as linear, ambiguity is minimised for those with differing potentials and viewpoints. In this thesis the term temporal ontology has been expanded to include a phenomenological discussion about presence and the ways dance performers interact with their audiences (Kuppers, 2005; Cataldi, 1993).

Transdisciplinary (n.d.) - Describing a study which runs across traditional subject boundaries such as arts and science. Geography is often portrayed as a transdisciplinary subject since it has been concerned with the interplay between environment and humans.

Transmission - Shannon and Weaver's (1949) transmission model reflects a commonsense understanding of what communication is and is reflected in subsequent research in human communication closely allied to behaviourist approaches. In my study, I have drawn on American dance theorist, Kenneth King's (2003) discussion of a reciprocal concept of transmission between dance and writing practices.



Declaration

Name of candidate: Felicity Molloy

This Thesis/Dissertation/Research Project entitled, Dancing into the classroom Te kanikaniki roto i te ruma: The student and teacher experiences of somatic practices in a New Zealand intermediate school, is submitted in partial fulfillment for the requirements for the Unitec degree of Master of Education

CANDIDATE'S DECLARATION

I confirm that:

- This Thesis/Dissertation/Research Project represents my own work;
- The contribution of supervisors and others to this work was consistent with the Unitec Regulations and Policies.
- Research for this work has been conducted in accordance with the Unitec Research Ethics Committee Policy and Procedures, and has fulfilled any requirements set for this project by the Unitec Research Ethics Committee.

Research Ethics Committee Approval Number: 2007.736

Candidate Signature:Date: 21st April 2009

Student number: 1000462

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CHAPTER ONE: INTRODUCTION

1. Introduction

This qualitative study is about making an aspect of dance knowledge more available. Embodiment practices which are integral in tertiary dance education may not yet be offered in general learning situations. Therefore, the primary purpose of this study is to find out if somatics (Glossary), which is the title used to embrace a range of embodiment practices, is being taught in a mainstream school and, if so, whether the New Zealand Arts Curriculum dance strand supports the learning of it.

Although the notion of fitting another dance practice into already overloaded school curricula and to a more general group of students produces a project of daunting size, situating an exploratory case study in an intermediate school in New Zealand allows for an interesting perspective. In a global 'first' the New Zealand Ministry of Education has integrated dance as one of the four strands of its arts curriculum, which was made mandatory for all school children to level eight in 2003.

From recent informal conversations with my children and young friends about their experiences of dance at school I have concluded that the potential for advancing somatics through such an innovative curriculum is timely. More formal attendance at seminars with school teachers who are coming to grips with implementing a global first, confirm this notion.

The following headings outline the purpose, rationale and significance of this study. Each section elaborates key aspects that inform the study as well as describe connections to the main foci that form the theoretical framework.

1.1 What the study is trying to find or achieve

It is the intention of this thesis to produce a research process that retains the abstracted nature of dance movement and finds expression in the experiences of children at school

and, at the same time, retreats from a common understanding that performance is the only danced outcome. It is challenging to make an underlying desire for the knowledge that dancers hold to become available beyond the professional dance community. What has made this study worthwhile for me is that although it is evident that children in this school are not aware of somatics as a topic - that is, it is not part of their dance learning - they implicitly get it.

What became clearer as the study progressed was a notion of somatics as something which children naturally *do* to orient themselves in familiar environments, rather than as a distinctive separate dance skills practice. In relation to the findings of the case study, children experience somatics at school as tools for mediating behaviours, focus span and negotiation of their own body's moving in the school environment (postural wellbeing). But other than as a behavioural mediation tool to manage physical and mental distractions, somatics may not have yet become part of movement learning lexicons.

A passionate enquiry, such as this, and where my dance experience and embodiment learning fit like puzzle pieces into all parts of the study, aims to reach deeply into gaps between espoused theories about dance in education practices. I am trying to achieve a study in which somatic experience is emphasised as residing with each subject's experience of it. By resolving the problem of situating sensing/feeling motifs within my academic construct, alternative considerations about learning dance beyond performative expectations might equally be considered.

In order to respond sensitively to the ways in which dance affects children's learning the methodology has been developed from a broad conceptual framework and a range of theories. The conceptual framework, expanded below, provides a rationale for a reflective and personal narrative to be installed across the study, while the theories have been selected to support listening to the voices of those engaged in dance at school, to use a dance term, multi-axially. Interdisciplinary (Glossary) theory is synchronously woven into the methodology to detect inherently perceptual methods that are available when learning-through-dance.

1.2 Significance of the study

This study attempts to explore somatic and educational theory to identify whether learning awareness practices at school may provide a bridge between the expected learning outcomes of arts education and general learning priorities. What is important to note is that teachers teaching dance at school may be arts teachers of another discipline and even though dance has been endorsed as a valid academic subject, it is still primarily taught for fun, creativity and performance (Renner, 2006; Bolwell, 1998; Heathcote et al., 1984).

Buck (2005) further describes a “fixity in teachers’ expectation of children’s capacity for innovation coupled with the lack of confidence many, if not most, have in teaching any form of dance” (p.6). The potential for contemporary dance practices to be presented as a way to increase student wellbeing or learning capabilities has not been fully explored, implemented or realised. As part of the theoretical framework, issues about teachers’ motivation and children’s methods for negotiating wellbeing are profiled through teaching and learning theories.

Considerations about the expectation of education through arts subjects, which fundamentally promotes implementation of innovations, extend far beyond familiar parameters of teaching children how to make or appreciate art. To this end, several significant articles and reports, which track the results of philosophical shifts in educational curricula, have been included in the literature review (Buck, 2005; Holland & O’Connor, 2004; Ministry of Education, 2003; Hong, 2000). These articles and reports lay bare issues about how arts education seeks to support emancipatory learning, but, they also report the problems of making practical links for teachers to use these practices and skills across subject areas.

Through continuously using somatic principles to advance across the study’s parameters, dance properties of communication and relationship are expected to enrich data collection. I argue this use as a way of re-presenting students’ and their teacher’s voices and the multiple ways they mediate dance learning. This preliminary study also questions

the implementation of somatics, either as a new dance practice or throughout the essential learning skills framework.

The question about whether somatics has already been included during dance sessions at school in the critical middle school years of physical and behavioural development is expanded in a brief literature overview of other postural awareness and somatic-type school activities. It is important to the study to find out if embodiment values of wellbeing, postural awareness, and access to memory and expressivity skills have already been built into other learning potentials across the New Zealand learning framework.

Unraveling aesthetic and educational preferences has determined a way of encountering the challenge of selecting literature that identifies factors that support, inhibit or contribute to the dance experience at school. The distinctive, effortless grace of dancers moving bears little similarity to the pedestrian movements of almost any other body. Bodies not trained in dance move from instinctual patterns developed out of torquing, reaching, rolling and walking. Dancers learn to coordinate, control and refine movement as expressive, gestural, relational or virtuosic. For dancers and non-dancers alike, however, movement is firstly a negotiation of the individual body in relation to environments.

First in an inner impulse to attention to the space around him and what it included; second in the sense of his own body weight and the intention of the force of its impact; third to the awareness of time pressing for decision. All of this inner participation interrelated with the flow of his movement whose inner impulses fluctuated between freedom and control. Such inner participation is a combination of kinaesthetic and thought processes that appear to be almost simultaneous at different levels of consciousness (Bartenieff & Lewis, 1980, p.51).

Berleant (2002) depicts the environment as “people embedded in their world, implicated in a constant process of action and response. A physical reaction of body and setting...” (p.21). This statement forms the link and also gap between what dancers do with their bodies and what children at school might do with dance.

The tactile-kinaesthetic body is the sentiently felt body, the body that knows the world through touch and movement. It is not the body that simply behaves in certain observed or observable ways, but the body that resonates in the first person, a lived-through sense of any behaviour. It is the experienced and experiencing body (Sheets-Johnstone, 1990, p.5).

Bartineff, Lewis and Sheets Johnstone are describing ways in which bodies establish identity through movement that results from visceral, spatial and intuitive bodily organisation with their surroundings. What is important to the study is that a language for bodily experience is already supported and substantiated by contemporary dance metaphorical, organic and integrated processes. A detailed awareness of the body moving as opposed to simplistic, mechanical, positioning and conditioning approaches, which are more familiar components of dance training, has become an emphasis which underpins the study. By devolving similar expectations and assumptions about dance in the educational environment, this study gains access to dance objectives other than for performance in a search for a different kind of bodily presence when learning dance at school.

1.3 Research implications

This study relied on alternative interpretations of dance outcomes, coupled with the recognition that students' learning in the classroom is both collective and diverse. An applied dance practice such as somatics may provide benefits of increased physical wellbeing during other classroom learning activities. That is, somatics, once learnt, does not have to have its own curriculum: breath and postural awareness, self-reflection and use of imagery can be readily built into any learning event.

Further to this, if somatics were to be taught as physical applications for less active or able children, the need to situate the study in the dance curriculum may have been more or less significant. To this end, demographics about children's culture, gender, abilities, grades and backgrounds were taken into account in this exploratory study. The resulting profile for the data collection phases is of students from non-explicit cultural, ability and gender ranges who learn dance either in or away from school. Future studies would benefit from following a single cohort through the last years of middle school as well as

apply the case study methods to schools that have less dance integration in their regular curricular activities.

In relation to the wider constitution of school children's profiles, external observations about the impact of the most recent practice applications of dance in mainstream school settings are considered timely. Long-term postural health and wellbeing, in relation to growing statistics of childhood obesity and inactivity, are issues of current concern. Recent international research indicates that a common cause of postural strain occurs for school children when carrying heavy bags, with an increased risk of having back pain as adults (American Physical Therapy Association, 2007; Mackenzie et al., 2003; Cardon, De Clerq & De Bourdeauhij, 2002; Afshani, 1991). The reason for setting a preliminary somatics investigation at Levels 7 to 8 is to position awareness practice as a tool to be employed against the onset of physical conditions from detrimental postural loadings.

1.4 Research questions and summary of methods

It is too early to hypothesise about the result of somatics as counter-effective to habituating postural tendencies that lead to chronic pain, or whether by incorporating somatics into dance may be the best way to learn about skills of self-awareness. This initial study explores how a small sample of Level 7 and 8 students, who use dance in regular curriculum activities, respond to postural awareness practices at school, and what perspectives their teacher has about them: at the same time it is mindful that another goal is to set in place a number of data collection phases that could be replicated in future studies.

My other aim has been to develop a dialogic process based on a differentiated perspective of a tertiary dance educator researching dance in mainstream education. From these two aims, questions for this study which have emerged are:

- To what extent does a New Zealand intermediate school that employs the Arts Curriculum dance strand teach somatics as part of the practice?
- What are the implications of students' and their teacher's responses to somatic exercises, particularly in relation to learning and wellbeing at school?

The rationale for the questions design has been elaborated on in the methods section of chapter three under the subheading of: Research design: rigour and adequacy (3.7).

This qualitative exploratory case study incorporates post positivist understandings whereby the role and contribution of self and identity in social science research continue to be theoretically and practically interwoven into the methodology (Eisner, 1998; Patton, 1990; Wetherbee Phelps, 1988). Although I am researching a single student group and their teacher, data collected in several ways over a number of visits to the school in the allocated period of time enables multiple, unexpected layers to surface in the readings.

The study is an unfolding process in which emphasis is placed on observations and interactions within a micro-culture. Models of self-reflection, somatic imagery and articulated kinaesthetic responses have been secured as integral to a non-interventionist presence during the evaluative period of this study.

One of the insights secured through integrating somatic principles into my research process is the value of interiority (Glossary) as opposed to reflexivity (Glossary). While researching an existing situation in its natural setting, I have been able to draw out critical perspectives from teachers and students without otherwise intervening in normal school activities. An important question that kept surfacing throughout the preparation for the study and the writing of the thesis has been whether introducing a new focus via the dance curriculum relies on personal dance knowledge and experience.

A flexible qualitative theoretical underpinning produces a much clearer position from which to discuss the viability of a non-performed dance outcome at school. In spite of an expressed connection with dance and community, it is difficult to sidestep that this project reveals a tendency towards self-narrative. Merriam and Caffarella (1999) argue that by installing a postmodern context, where even the ingredients of language are contestable, a singular voice is more easily situated, in this case, in a general educational setting.

Regular reflection, on similarities between the creative act of learning dances and writing this thesis, has enabled a decision to situate journaling as meaningful text into the first data analysis phase as well as provide reflective notes for the discussion in chapter five. Intuitive aspects of the study recorded throughout the journal retrieved less obvious aggregates of previous exposures and applications of dance, both in the educational setting I intend to research and in my current academic environment.

Aspects of researcher bias, particularly from the standing and perspective that I have as a long-term dance practitioner, remain fundamental to the project's design, data collection events and subsequent analysis. Making the effort to articulate meaning from these premises accessible has added comprehensive depth and shade to the findings in chapter four. Subjectivity pitfalls have been further avoided by triangulating the data. An in-depth description about triangulation through three voices is followed up in chapter three as part of the method design.

1.5 Rationale for a conceptual framework – personal and theoretical standpoints

A standpoint of 'self' in relation to artistic experience has provided me with an important contextual framework for the methodology. Schopenhauer's early notion of aesthetic experience underscores choices for a qualitative paradigm that accommodates personal perspectives (Magee, 1997).

As an experienced dance performer, educator and researcher of somatics, it is my intention to contribute to a growing understanding that doing this kind of dance could make movement sensitivity and experiential awareness more available to a broader community for non-performed outcomes, non-dancers, different age groups and less active individuals (Kuppers, 2006). The specificity of Schopenhauer's individual and embodied theory opens the way for me, as the researcher, to use a receptive, responsive and expansive somatic style for the study.

This conceptual framework has been induced by an initial rummaging through my own set of dance-related memories. Accumulated, they form an account of nearly forty years of dance. As events and encounters, they define the relationship I have with dance and the way I think of its place in the community. Basic and relevant beliefs about the way dance learning has tangible and global effects across the accumulation of any experience have been informed by learning dance as a child both in and out of school. This experience was deepened by the arduous experience of leaving home to complete a tertiary qualification at a ballet school in Australia. Since then, performing, teaching, presenting at conferences and choreographing in companies, schools and communities across the world has contributed to the formation of a premise for proliferating applications of this distinctive art form back into the community.

Berleant (2007) promotes an artist's sensibility as a perceptual engagement with their world. Mature dance practitioners, like me, are accustomed to creating from images and memories for performing, choreographing, teaching and thinking. Schopenhauer (Pfau, 2001) suggests that 'inherently creative enquiries become irreducible to logical propositions and irrefutable in ways that other discursive representation can never be. He discusses the aesthetic idea, having once been conceived, as presence: embodied and material' (p.26).

Powered by information, contents, channels and contexts that have been previously established in this way, a dance practitioner's lived body is the vehicle of shifted perception or, more literally, a means of communication. These various statements, which match my dance knowledge base, inform each part of this study and the role of each participant. The bodies involved are not only potential objects of the study, but also in a permanent condition of their own experience (Merleau-Ponty, 1945).

By establishing subjective (Glossary) perspectives this early, the study is positioned as effectual and personal. Further to this, to support building a study from a preoccupation with introspection, Foucault's explanation of *I* as 'an individual without equivalent, and

who has completed a certain task' (Faubion, 2000, p.216), produces a notion that a research project is always a subjective encounter.

1.6 Structure of the thesis

The thesis is written in six chapters. Chapter one has introduced the thesis problem as well as tools for a conceptual framework that provides rationale for the study overall, supports the methodology and, more specifically, the data collection methods that have been adopted throughout as a sequence. This chapter situates the key categories of self-awareness and learning through an artistic practice in context for a deeply conceptualised study. Issues about teachers' motivation and children's possible exclusion from an important wellbeing practice have been considered in the light of my eclectic dance experience range and levels. This aspect has been carefully reflected on as a possible limitation throughout the study and discussed in more depth in chapter five.

Chapter two is an expansive search of literature that grounds the research as significant and relevant to whether somatic research studies will transfer across to other groups in educational contexts. This chapter focuses on the assumption that self-awareness has a place in general education. The two categories of self awareness and education have been reiterated as three foci: somatics, arts education, and educational theory. As discrete themes, the four headings generate an analysis template for the data analysis process and eventual categories for conclusions and implications in the final chapter. The conclusion at the end of the literature review also forms the basis for a summary of developing arguments for any new dance application in the mainstream education setting.

Chapter three describes the development of the methodology and rationale, which substantiates paradigmatic shifts for a flexible, reflective and accountable method. The study is qualitative with the methods, employed in the collection and analysis of information and data, presented in depth. This investigation prioritises children's views of themselves in their environments. That is, the design of the exploratory case study method has been informed by an enduring and careful respect for children's experiences and for them to be given the chance to be heard. To this end, a rationale for prioritising

the three research 'voices', the students', their teacher's and mine, is combined with detailed ethical considerations about researching children.

Chapter four then proceeds to analyse the research data phases as they result from the broader perspectives that have been imposed on this study. I have used a continuous, inductive design and descriptions are seen as part of an unfolding sequence. Data analysis unfolds as a descriptive analysis which, albeit unwieldy, filters the process in sequence towards an inductive result. This process incorporates a more prismatic reading through the three thematic lenses that initially shaped the form of this narrative.

Other dynamics which perpetuate empirical research hierarchies have been carefully considered. While maintaining important considerations about academic validity and transferability, this chapter will demonstrate the potency of self-reflection in all parts of the research process. Excerpts from the journal have been inserted both in this chapter and later in the discussion in chapter five. This demonstrates that the journal has functioned both as an important data collection phase in its own right and as a reflective tool for the researcher.

Chapter five is an in-depth discussion of the principal research findings. This chapter details the positive aspects of the students' and teacher's responses in a single school that already employs dance. At the same time, through the discussion, other research questions are explored for future research studies. Dance as fun, creativity and performance is reviewed to discover a different affective learning outcome.

The thesis concludes that by releasing the curriculum from these particular achievement emphases and, re-negotiating dance learning in ways that access more personal, postural and movement inventories, a notion has been driven forward about a more meaningful link with health and wellbeing. To this end, questions will be developed about why it may be difficult to effect changes in the dance curriculum and how mainstream schools may be resistant to somatic studies being included in day-to-day learning environments.

Chapter six is the final chapter of the thesis and offers some practical solutions to the two dilemmas that have been discussed. This chapter argues that the history and position of dance in the education curriculum is a major dynamic implicated in the access of a new dance practice. I will demonstrate that the thesis has moved in structure from ideas to practice-based applications, which necessitates the return to an even deeper integration of theory with practice.

Limitations are included in this chapter, as well as the complex issue of gatekeepers. Discussion about this issue defines a role that parents and community responses play in children learning dance at school. In summary, the ensuing confidence when dealing with educational innovation and reform defers to arguments that highlight the need for individualism (Glossary) in any learning environment. As much as qualitative research inevitably evolves as a continuous and substantive method, a study like this devolves somatic learning as an embodiment opportunity where all participants are prioritised.

CHAPTER TWO: LITERATURE REVIEW

2. Introduction

According to Montuori (2005), literature reviews are opportunities for creative enquiry. To a great extent, in laying the groundwork for the study's direction, paradoxical and alternative ways of thinking for arguments, implications and associations have been provoked by a familiar day-by-day experience of searching, interpreting and integrating movement. A similar thought, patience and disciplined approach that maintains the search for literature that explores the parameters of somatics in a mainstream education setting, combined with the repetitive practice of rewriting, reminds me of the process of learning a new choreography.

The literature review focuses on three areas of praxis which together provide a matrix of references for this study. The three areas of focus are:

- Somatics theories and practices, with particular reference to those aspects of the practice experienced by dancers and those experienced by New Zealand intermediate school students;
- Arts education principles, structures and expectations within the New Zealand curriculum and with particular reference to dance as a mandatory subject at intermediate school level;
- Educational theory, with specific reference to the context of learning and teaching in an environment of developing curricula.

Crossing boundaries in a transdisciplinary (Glossary) context, places the value of somatics in tertiary dance education as a context for enhanced learning processes in an intermediate school classroom study. Theoretical foci form the basis for separate and distinct questions about somatics, firstly as a dance subject and secondly, in the interplay between environment and students, whether their teacher thinks that increased self-awareness has an effect on students' wellbeing at school.

I argue that somatics studies are transposable to general education as they are practices that rely on an incremental increase of awareness to build and control interactions within

a range of environments. Issues of children's natural developmental relationships with their environment are explored through literature about somatics.

An account of the way somatic language has been formed out of the phenomenological theories of Sheets-Johnstone (1999), Godard (1995), Merleau Ponty (1962) and Husserl (1952) avails the study of concepts of consciousness, primacy and first-person specificity. These concepts are later retrieved to explore how children develop movement control in relation to memory and emotion (Glossary). Paradoxical claims about embodiment are discussed in literature on recent research developments about the physiology of memory and emotion.

Important references to Halprin's (2000) dance and somatic education theories, about systems that support or limit emotional responses as a norm, posit a link to the efficacy and potential of teaching somatics at school. In the latter part of this section it will be argued that this important practice is absent, yet equally beneficial on physical, emotional and mental levels, in educational settings prior to tertiary level. In summary, this section of the study proposes that dance learning tools of subjectivity and embodiment are a way forward in development of the learning capabilities of mainstream school students.

The second focus of this literature search explores an uneasy fit between dance as more than a performing activity and the New Zealand arts curriculum. Within a broad meta-level of ideals and intentions that have placed dance in the arts education context, a perspective emerges that amalgamates the relationship between art practices and increasing students' knowledge potentials (Hall et al., 2007; Hong, 2006; Garoian, 1999). To this end, an argument for and against situating somatics as part of the New Zealand arts curriculum dance strand is discussed, with literature that supports somatics as a possible link between dance education and other arts education potentials (Eddy, 2000; Ross, 2000).

Desjardins (2008) argues that postural awareness studies interconnect educational and therapeutic approaches by featuring holistic perspectives about the individual. Somatic

studies provide tools to recognise, enhance and link dance learning processes with wellbeing (Buck, 2005; Blom & Chaplin, 2000; Fortin & Siedentop 1995). Because of paucity in dance in education literature and texts that support somatics as a dance practice in the mainstream educational environment, the search has been expanded to literature which supports a broader position for postural health and wellbeing practices already in place at school.

The position of the dance curriculum as one of the four arts strands and not in the Physical Health and Education curriculum generates an important discussion. Directions for somatics may have already been clarified, albeit in the different subject domain of physical education. If somatics is to be presented as a physical health and wellbeing practice and potentially an holistic learning tool, the separation between physical education and dance learning exposes a critical problem. Physical wellbeing practices, contained by the physical education curriculum, do not include self-awareness or learning about the body as living and individual (Patten, 2007; Salk, 2005; Sevey Fitt, 1996).

A Maori holistic perspective, *Hauora*, has been included to acknowledge that a regard for integrated physical, emotional and mental considerations and as such, postural wellbeing, has been considered in the New Zealand education setting (Ministry of Education, 2003).

The purpose of the final phase of the theoretical framework was to employ literature that supports and establishes a methodological base for this study. The literature reviewed returns to somatics as an alternative approach in dance education with links to contexts and emphases of selected educational theories. Two perspectives of educational theory have been reviewed: learning theories that support students learning somatics and teaching theories about behaviours and skills that support the profile of a teacher teaching it.

Firstly, in order to study whether student learning behaviours may contribute to why somatics is or is not being taught at school, constructivist theories of Dewey, Piaget and Vygotsky have been elaborated. Dewey's early concerns of learning in an accelerated

world (Dewey, 1938) have been described in relation to Piaget's notion of adaptation in which Glasersfeld (1996) argues that:

...one cannot draw conclusions about the character of the real world from an organism's adaptedness or the viability of schemes of action. ...what we see, hear, and feel - that is, our sensory world - is the result of our own perceptual activities and therefore specific to our ways of perceiving and conceiving (p.4).

Thirdly, Vygotsky's schema (Wilhelm et al., 2001) defines a collaboration with physically situated activities that enables the scaffold of learning capacities. Combined, these theories are problematised as points to consider if students are to learn skills which make them more adaptable and available to volatile curricular and educational expectations. Aspects and critiques of experiential and independent learning theories have been overviewed to indicate a relationship between constraints of constructivist and reflective educational parameters and the potential for students to access somatics at school (Miettinen, 2000; Michelson, 1996).

The challenges faced by teachers teaching dance at school, as well as the role that their connection with their subject plays set the backdrop for a study that examines the difference between students' understanding of what it is they are learning and their teacher's expectations about teaching dance. Buck's doctoral thesis (2003/5) is a powerful document in this part of the study as it presents a variety of New Zealand school teachers' voices and their mutual concerns about teaching dance. The latter part of this section relegates teacher motivation and immediacy as a way of defining important qualities that make transformative educational practices like somatics (Ferrer et al., 2005) possible or impracticable in the mainstream school setting.

Two separate arguments follow: a decision amongst dance educationalists to emphasise participatory pedagogical discourses that have informed New Zealand's dance in education methods (Buck, 2005, Hong, 2000) and ignore the loss of the embodied knowledge base of dance performing practice is evaluated and secondly, decisions to include arts integrated into education without the provision of teaching skills to match are contested (Hall et al., 2007; Ministry of Education, 2003; Fortin & Siedentop. 1995).

In the conclusion of this literature framework, previous points are reassembled to confirm a rationale for a qualitative study that is at once personal, reliant on dance and somatic experience and theoretically driven. Background ideas and information about the research questions are synthesised and summarised to show developing insights into the issues of somatics success as a general postural awareness learning tool. The conclusion of this section supports propositions for this study to sit alongside other dance studies as a qualitative, subjective and reflexive encounter, as well as provide rationale for further studies about the potential of education through the dance art form.

2.1 Somatics

Contemporary dancers, trained like other precision athletes to combine physical and mental acuity for performance outputs, also study the interface of human communication, experience and expressivity. According to Laws (2002) “dance may be seen as visible science dealing with phenomena about the details of human experience less available to other means of deduction” (p.14). Dense exploration of choreographic intention and expression prioritises humans moving in a range of environments. As concepts of space these environments are built in relation to individual physical, psychological and emotional competencies.

Much of the writing and theory about cutting edge contemporary dance explorations and practices incorporate aspects of identity, gesture, interpretation and responsivity (Stasson, 2006; Stevens, 2005; Fraleigh, 1998; Shapiro, 1998); As a collaborative art form, where less demand is placed on an individual’s investment in learning and more on the process of experimentation, by combining different kinds of expertise, it crosses easily into other realms of learning disciplines (Blumenthal et al., 2003).

Creating and performing dance appear to involve both procedural and declarative knowledge. The latter includes the role of episodic memory in performance and occasional labeling of movement phrases and sections in rehearsal. Procedural knowledge in dance is augmented by expressive nuance; feeling and communicative intent that is not characteristic of other movement-based procedural tasks (Stevens & McKechnie, 2005, p.243).

Kinaesthesia, environment, memory, emotion, expressivity and responsivity are aspects incorporated into learning dance movement, and as topics, form the base of an exploratory study in the mainstream educational precinct.

I have been professionally involved in the creative practice of contemporary dance for thirty years and during that time participated in the development of education and training in the art form at several tertiary institutions. Providing physical dance excellence opportunities, from performance-based perspectives and experience, to a range of trained and untrained students has given rise to a search for more fully integrated and holistic dance practice applications. Stevens and McKechnie (2005) define dance movement as ‘deliberately and systematically cultivated for its own sake’ (p.243). But the diversification of a dance pedagogy derived from twenty years of exploration in tertiary dance studios combined with a continuous relationship with performing experience lends itself to a study about the potential for any body’s accumulation of embodied knowledge.

Contemporary dance is taught from several broad subject areas. Theoretical and practice based applications for technique, and vocabularies for choreography and performance are not only taught physically but contextualised in the study of dance and cultural histories, interdisciplinary theory and, more recently, somatics. Although initially introduced into dance training programmes to help students prevent and manage injury (Green, 1999 & 2002; Franklin, 1997; Sevey Fitt, 1996; Dowd, 1995; Fortin, 1993; Arnheim, 1975), somatic studies provide tools for students to recognise, accommodate and integrate complex dance learning processes. Individual postural, positioning and movement habits became a way to chart physical movement experience.

Eclectic theories about the human functioning as an holistic biological, cultural, emotional, psychological body form the premise of the subject (Hanna, 1970). That is, somatic studies investigate the body in relation to “internal anatomical scaffolding and externalised spatial perception through qualities of sensing and feeling” (Hanna, 1983, p.1). Previously somatics has been referred to as Mind/Body or Body/Mind practices;

distinctive and holistic forms of movement and awareness education and as such were initially founded by Thomas Hanna in the early 1970s. In recent times, dance educators at tertiary institutions have embraced this concept of holism as integral to student dancers learning about how their bodies explore moving and the conductivity of experience.

In this context, Descartes' dualist ontology accounts less for these kinds of mind/body contrasts and connections. Instead, vocabulary that supports various dimensions of somatic practices and philosophy that focuses on immediate subjective experience has been solicited from modern phenomenologists and psychotherapists. In light of this, phenomenological concepts of consciousness, primacy and first person specificity have been incorporated into and underpin this study (Sheets-Johnstone, 1990; Gibson, 1979; Merleau Ponty, 1962; Husserl, 1952). The methodology is not otherwise based on phenomenology (Glossary).

In developing consistent perspectives for human functioning and experience to be enriched through enhanced self-awareness, the Cartesian view of consciousness as private and internal has also been taken into account. More recent somatic practitioners and theorists such as Cooper Albright (2004), Fraleigh (2004), Lepecki (2004), Fortin (2002), Godard (1995) and Cataldi (1993) describe the somatic experience as an immersion in subjective embodiment. Godard (2002, pers. comm.) and Fortin (2002, pers. comm.) also argue that somatics takes a conceptual leap from mainstream thinking.

Some examples of how these authors delineate somatics as a skill-based practice, which holistically informs people, are as follows: Cataldi's (1993) work is developed from a premise where the suspense of internal knowledge and self-perception plays a critical role in how an individual negotiates meaning. She thus reduces the concept of self as coherent, feeling and pivotal to the site of its experience. Cooper Albright (2004) expands the concept of somatics as ecological, a situated self in relation to the world.

I have at times, described this somatic moment as facilitating an ecological consciousness, for in this dialogue between the self and the world one becomes aware of the intriguing possibilities of interdependence. With this comes a deeper

sense of responsibility, not an oppressive duty towards others, but rather as an ability to respond. (Cooper Albright, 2004, p.5)

Fraleigh (2004) argues that learning dance and movement becomes a way of exploring a continuum of being. What distinguishes their various statements from therapeutic or psychoanalytical models is the way they describe how embodiment results in a freedom for dancers to encapsulate performance skills, which have been promoted by their singular plethora of experiences, skills and interests.

Experiencing or awareness models like these contain movement concepts that are supported by Kim's (1998) theory regarding awareness as the nervous system processing of physical after-effects; a resultant phenomenon of the mechanical, bodily action relationship with the brain. As well as providing ways to understand deeper implications of complex mechanical action and effort, dancers' knowledge through rehearsal and performance practice is directed towards an integrated perception of themselves performing, bodily and expressively.

The individual dance student's reference to past familiar events, inscribed as experience or memory, generates a progression of thought to their movements. Integrated movement applied to dance performance may in turn create either an inhibitory or replicable response (Snodgrass & Shevrina, 2006). Kim and Sosa (1995) describe this as a kind of conscious action with reference to Locke's seventeenth century view of memory: "that it is memory that links together and unites into the history of a single person, the different parts of a person's life" (p.382). Bolton (1986) describes this as a dual tension which exists between the actual and the imaginary. Through somatic exploration of imagination, metaphor, imagery, and self-reflection, tertiary dance students develop skills for recording and articulating their experiences.

In an effort to expand a view that there are functional aspects of bodily systems which explain these latter concepts, a brief overview of recent research of the physiology of memory has been included. Former Chief Brain Biochemist at the Clinical Neuroscience Branch of the US National Institute of Mental Health, Pert found that the chemical

substances, neuropeptides, and their receptors are present in the brain but also throughout the physical body (Knaster, 1996). Pert calls them “the keys to the biochemistry of emotion. They (neuropeptides and their receptors) form the communication link between the brain, the immune system and the emotions” (Knaster, 1996, p.123). Olsen (2002) identifies the limbic system as the site of “emotional processing, which also processes memory and learning” (p.44).

Anna Halprin is one of the foremost American dance therapists who employs dance expressivity to support people moving from emotional responses to integrated experience. Her website elaborates a therapeutic model that supports a somatic application in the general educational precinct. She states that, “when explored and expressed consciously and creatively, resultant connections between the body, mind and emotions make a vital contribution to the artful development of the self” (Halprin, 2006).

Halprin (1995) explains that when movement evokes feeling it also inextricably contains it. Her rationale sets up a circular model where she reports that:

If you do not teach a traditional or idiosyncratic style and instead you set up a situation to move in, you systematically give people the opportunity to develop a full range of original movement. You set up movement situations that evoke emotional responses (Halprin, 1995, p.12).

However, she expresses a concern that even dance students rarely studied the access to expressive vocabularies in the studio, and, although movement generally does relate to feeling, she observed that no particular system had been defined for investigating those feelings that evoke movement.

There is little confusion about the properties of emotion or that it must be expressed to maintain a healthy body (Olsen, 2002; Halprin, 2000; Hartley, 1995; Maitland, 1995; Bainbridge Cohen, 1993). Yet the somatic practitioners’ definitions of emotion form a contrasting argument about the limitation of expressing it in any educational setting. While both Pert (1996) and Olsen (2002) expand the concept of the primitive limbic system, the seat of emotions in the brain, to the whole body, Maitland (1995) describes emotions as a prereflective form of intentionality. He defines ‘prereflectivity’ as a state of

recognising the transformative process of thinking. For Maitland (1995), emotions are “somatic ways of coming to presence, orienting, understanding and dealing purposefully with the world” (p. 224).

Halprin, (2000), reiterates that “emotions are (not only) the deepest responses to life experiences” but also “a surfeit of sensing or feeling” (p.20). Unfortunately, conspicuous cultural, social and psychological restraints and inhibitions limit emotional responses as a norm (Stanley et al., 2006; McCraty et al., 1999; Lawrence et al., 1951). Other than in therapeutic and performance fields, emotional and expressivity constraints are relegated to the label of “safety issues”. An active emotional life, beyond an acceptable mild range of conventional responsiveness, is often concealed.

Somatic use of organic and repetitive processes honed as cognitive skills has the potential for younger learners to collate different kinaesthetic, sense-based perspectives about learning. By using familiar postural conditions in different situations, dance artist and therapist Halprin (1995) has established skills of responsiveness as a means of working with individuals through more natural, less organised movements. Sheets-Johnstone’s (1999) theory of the primacy of movement and Petitot’s (1999) essay on the constitution of movement both elaborate on this sensory availability as a form of communication, which has already been established at a much earlier age.

Sheets-Johnstone (1999) notes that the first investigated movement capacities of children, which have been previously installed as emotions and memories, surface directly from postural activities. Petitot’s work lays bare another perspective in relation to one of the earliest phenomenological philosophers, Husserl.

Husserl sees in it an attempt to actively integrate the kinaesthetic systems of different organs in motion with a view to bringing them under control. It is as if the child does not so much agitate its limbs by chance but in order to explore the extent of its freedom of articulation to different forms of movement under its control through repetition. (Petitot et al., 1999, p.221).

In order to make my study about somatic practice more relevant to children's learning at school, further considerations of the relationship children make with their environment have been included. According to Bennet and Goleman (2001) it is the negotiation and transaction between the individual and what at the time constitutes their environment that forms the awareness experience. Social cognitive scientist, Bandura (1999) describes this as the "nature of the individual's adaptive processes operating within a triadic environmental context" (p.4). Mediation strategies between body, event and environment are equally considered as sites for enhancing, sustaining or improving the quality of life, health and wellbeing.

In the early days of dance movement science, a seminal work about the way the body collects and collates experience as part of its gestural and perceptual vocabularies, *The Thinking Body* was authored by movement psychologist Mabel Todd (1937). She initially sought to find the relationship between human physiology and the effect of conscious and unconscious thought on human movement. Since then science has revealed that in each human being there exists a sophisticated control system, which features a complex blend of voluntary and automatic control. Lin and Gage (1990) state that, "in order for movement to function systematically the brain must have rapid, precise information regarding the position of the body and each limb in space" (p.1).

Cognitive skills and patterns of thinking therefore are not primarily determined by innate factors, but, incipient activity byproducts of cultures and environments. According to Merleau-Ponty (1962), part of this kind of managing the environment is a kind of sensing, produced "when the body deviates from an optimal relationship with its environment" (p.297). In this reduced body-environment relationship, motion is an act that retrieves balance and reduces the resultant tension. Late nineteenth century architectural theorist Vischer commented that the "experienced phenomenon of nerve sensation stimulation, is one of self in sense or motor form" (Mallgrave & Ikonou, 2001, p.95). In both cases a theory has been generated, which proposes that the body holistically solicits the culture and environment that surrounds and supports it, to get into equilibrium with it.

Schneider (2001) declares that “for an interrelationship between the physical, emotional, and intellectual capacities to function optimally the child must feel at home in his physical body” (p.1). Piaget (Gallagher & Cleland Donnelly, 2003; Brainerd, 1978) described cognitive development of the critical first skills of perceptual assimilation and motor skills accommodation as efforts children make to adapt to their immediate environments. Read together, these theories are in accord with Vygotsky’s schema where children are enabled to scaffold their learning capacities through collaboration with physically situated activities (Wilhelm et al., 2001).

By drawing attention to developmental and social theory, this study is shaped to present the body/mind/movement practice of somatics to a wider audience beyond the dance community. As an experienced dance performer, educator and researcher of somatics and dance, it is my intention to contribute to a growing understanding that doing this kind of dance may play more of a part in the overall competency building of conventional education. Students engaging in somatic studies acquire abilities to structure and communicate ideas through feelings and physicality (Seitz, 2005). Precepts such as these support a research investigation where dance language and learning is made relevant in other contexts and inevitably other ways of thinking.

These arguments emphasise an eclectic and innovative prospect of somatic thinking to intersect with other educational requisites. Everyday somatic experiences at school, whether in the form of breathing with awareness to become more focused and attentive in class, the use of imagery to expand a concept or share a group feeling, or visualisations to retrieve the answer to a problem or achieve a personal best, may become powerful self-actualizing tools. In the discussion that moves dance from the intensive environment of professional training back into formative and non-performative expectations of mainstream education, this literature supports a critical move away from dualistic models of the body as object or body as machine, and toward an understanding where each child’s lived-in body is the subject: implicit as the site of its owned knowledge and indivisible from his or her experience (Kielhofner, 1995).

Gilbert (1969) argues that teachers describe the child who can verbalise his or her feelings as expressive, mature, empathic, and imaginative. Data from her study suggests that a child's affect awareness is a general orientation which she or he utilises in a selective response to other people and in relation to an awareness of self. A dynamic, artistic dance practice, integrated as somatic skills, is set to develop children's intuitive ranges to articulate and express themselves beyond speaking mechanisms and which, once mastered, becomes conjunct with processing sensations and awareness in a range of situations.

In summary, what is of relevance to this theoretical framework is literature that collates the elements of awareness: emotion, sensing and feeling for the purpose of increasing the range of understanding about personal wellbeing in the learning environment. While not seeking to address these as dance practice-based applications specifically, a literature overview provides indicia that somatics practice contains the potential to develop suitable emotional/expressional skills models to form part of experiential learning in the education of the individual.

2.2 Arts education

The primary purpose of an arts education focus in the literature is to draw out commonalities between arts education expectations and the aforementioned expansive learning potentials of dance. As there is a growing body of literature that explores the implementation of somatics for more integrated educational outcomes (Kaufman, 2006; Eddy, 2000; Ross, 2000), it has been important first and foremost to forge links where dance practices fit with arts education policies. This particular pathway is not clear and has relied on an expansive view of dance in education goals, which are underpinned by the following statement about transformative education.

After all, modern Western education focuses almost exclusively on the development of the rational mind and its cognitive functions, with little attention given to the maturation of other dimensions of the person (Ferrer et al., 2005, p.18).

In a recent United Nations Educational, Scientific and Cultural Organisation (UNESCO) compendium of global research reports, the arts are described as powerful forms of social and cultural expression (Bamford, 2006). In spite of their influence on creative industries and the media, this important research acknowledges the difference between policy and practice. In several reports and articles, Bamford (2006a, 2006b, 2006c, 2004, and 2003) raises questions about the clarity and purpose of teaching arts subjects at school. However, educational researchers over the last twenty years have reported the positive effects of the arts on academic and student development (Belliveau, 2006; Stinson, 1993). Both kinds of reports rely on differing explanations about education in the arts or education through the arts.

In another UNESCO driven explanation, Wyman (2003) redefines education *through* the arts as “a fostering of the development of the whole person” (p.2). An emergent, overarching educational perspective is that without schools’ curricula philosophically embracing a more holistic approach to students learning, opportunities for personal, social and health development remain fairly limited (Ministry of Education, 2002). Across the globe, educational reform documents include similar statements.

In support of these views, the following assertions make social skills relevant when defining the relationship art practices have with increasing students’ knowledge potentials (Hall et al., 2007; Hong, 2006; Garoian, 1999). Rozycki & Goldfarb (2000). Stimulation through the development of internal processing produces an ability that is an essential feature of children learning creatively. Social scientist and philosopher, Polanyi (1967) confirms that creative acts, especially acts of discovery, are already charged with strong personal feelings and commitments. Hipkins (2004) contends that students need chances to be performative; that is, to do activities that expand as individualised inventories of new knowledge.

Knowledge in this context has been defined through a theoretical frame. Lyotard (1979) comments that in the theorising of something that is fundamentally paradoxical, the

meaning of the word ‘knowledge’ changes. This observation parallels an important contribution by Polanyi (1967):

To hold such knowledge is an act deeply committed to the conviction that there is something there to be discovered. It is personal, in the sense of involving the personality of him who holds it, and also in the sense of being, as a rule, solitary; but there is no trace in it of self-indulgence. ...His act of knowing exercises a personal judgment in relating evidence to an external reality, an aspect of which he is seeking to apprehend (Polanyi, 1967, pp.24-25).

New knowledge becomes a deeper mimetic resource to negotiate relevance and meaning in arts educational learning sites (Kesten, 1987). Kesten’s point combined with O’Neill’s statement that “the arts represent a different way of knowing and responding to the world” (1991, p.24) forms a key link to my argument for setting somatics into mainstream education. O’Neill further states that:

Among the qualities that make them (the arts) special is their ability to give a voice to students, to allow students to locate their own experience in relationship to the art form and its heritage, and to give validity to the kinds of knowledge and experience the students bring with them to the classroom (O’Neill, 1991, p. 24).

The next part of this focus on arts education narrows the theoretical lens to examine how arts education priorities about knowledge have influenced dance in education, particularly in the New Zealand context. The recent New Zealand schools’ curriculum consultation draft’s goal states that “learning pathways should be the sum of a student’s learning activities and form a coherent experience with clear links between each phase of learning from early childhood to tertiary education” (Ministry of Education, 2006, p.32). Intentions of advancing arts education potentials across a more general spectrum have been written into the four content elements that run through each level of the New Zealand arts curriculum. These are:

- Understanding the arts in context
- Developing practical knowledge in the arts
- Developing ideas in the arts
- Communication and interpreting in the arts (Ministry of Education, 2000, p.14).

When planning learning programmes, schools are expected to understand and make use of connections between the curriculum learning areas (Ministry of Education, 2002). Yet this plan to increase reflection and deeper understanding about students' lived experience has been recorded as "learning through the arts in an environment of structured chaos" (Holland & O'Connor, 2004, pp.31-32). Chaos in this sense means a non-linear learning, where the results of the learning activity are produced as moments in diverse situations.

Lack of behavioural restrictions in arts classes is not enough by itself to accommodate the different perspectives and experiences individuals bring to learning activities. Important to the context of my study are comments by Note (2003), who says that children take any educational experiences and transform them through their imagination and Haskell (2001), who argues that "feelings somehow influence the way we encode, retrieve, relate and transfer information" (p.122). Defining these statements as arts educational processes provides the study with a deeper access for establishing more formal ways of students' defining learning via different perspectives.

Interest in developing an overarching response to issues of postural wellbeing being learnt at school led the study to explore some of the wider implications of dance in the arts curriculum framework. Bolwell's essay (1998), about the expanding vision for dance in education, argues that "framing of the arts as a generic entity is a contentious policy issue that has arisen from the development of national curriculum statements concerning the arts" (p.84). She describes the positive benefits for dance education as an upgrade of its previous status as a traditionally marginalised art form, but cautions an outcome where viewing the arts collectively allows schools to abdicate responsibility for the transformative potentials held in the distinctive nature of each separate art form.

At each portal of education, dance is revealed as a creative arts practice in its own right but in an inherent fixity, that defines anything written, dance knowledge has been traditionally lodged as less knowable (Sparshott, 1996; Cohen, 1969). Much of the literature about contemporary dance is poetic and abstruse. Initially it seems out of step

with the practical imperatives of current educational objectives. Yet one of the key developers of the New Zealand arts curriculum dance strand, Hong (2002), reiterates that dance is a significant way of knowing. Despite the dance literacy model being “imbued and substantiated by a postmodern vision of curriculum that is transformative, open, interconnected and pluralistic in nature” (Slattery, 1995; Doll, 1993 both cited in Hong, 2000), dance is still commonly taught so that outcomes are a school performance or at best a way of understanding about sociality and culture.

In spite of perceived intentions of both the arts curriculum and the broader education framework, the pedagogical implications of dance in New Zealand schools have remained narrow. Both Hong (2002) and Buck (2005) relegate dance knowledge at school as a participatory activity. In the effort to disentangle the subject from elitism and inappropriate levels of technical expertise, important components of professional dance practice developments have been lost. Texts and resources, which may have evolved to explain movement as a way of developing awareness, wellbeing and expression, are interpreted and applied as traditional dance in education content, formulae and information.

The qualities that make dance vital to retain vigorous, creative and effective art teaching in mainstream schools (O'Neill, 1991) have been diverted by the context in which the subject is realised. Further to this, although educating children in the subject of dance is a long-held tradition in many New Zealand schools (Hong, 2002; Bolwell, 1998), the more recent applications of dance are only just emerging, literally through the bodies of dance graduates of tertiary institutions.

This study does not seek to discuss espoused theories that finally set New Zealand as the first country in the world to make dance a mandatory subject in the mainstream schools curriculum. Nor does it identify different dance, cultural and performance styles used to engage a new range of perspectives for the main stakeholders: students and teachers. Emphasis for this theoretical framework resides on locating ways dance at school links to the more fundamental aspects of education with student access to holistic awareness of

wellbeing, self management techniques, social interactivity skills and confidence in self-expression (Lehman, et al., 2001; Lonigan et al., 1999; McNaughton, 1995). To this end, an argument for and against situating somatics as part of the New Zealand arts curriculum dance strand has been formed.

With a specified intention of identifying literature to support a cohesive argument about situating somatics in a mainstream school, I searched for texts about dance in education that integrated movement principles with physical health and wellbeing and thereby resolved the problem of whether or not somatics is a possible link between dance education and other arts education potentials (Eddy, 2000; Ross, 2000).

Dance language does not have a fixed vocabulary, but offers a preliminary framework to facilitate conceptual understanding. While this thesis does not venture into how learning dance impacts on specific literacy or numeracy building skills, it is useful to note that readiness in the emotional, social and motivational realms gives students ways to adapt the existing constraints of formal settings (Chappell, 2007; Hong, 2006; Kaufman, 2006; Shapiro, 1999; Stinson, 1995; Smith-Autard, 1994). As a formative document, the dance strand not only encompasses principles of literacy and appreciation of dance, but proposes a method accessing alternative, unique ways of knowing (Ministry of Education, 2002).

A perceived difficulty in situating dance-based awareness practices with a non-performed outcome at school is the challenge of questioning a prevalent belief that the measure of knowing dance is primarily realised by a performance-based activity (Hong, 2000). Related physical exertion otherwise is most often couched in the language of sport and physical education. My particular interest in this study was to link dance and education in such a way that I could gain access to a study about children in a mid-level mainstream school that already taught dance as an integrated subject. I wanted to locate a school where dance reaches more than a select few without the increase of their technical and physical proficiencies being prioritised.

For the purpose of developing core themes and clarifying some of the intricate ideas for research about a new dance in education practice, two interpretations of awareness have been reviewed. In the outline of the scope of practice document for the International Somatic Movement Education and Therapy Association (ISMETA, 2004), the purpose of somatic movement education and therapy is meant to enhance human processes of psychophysical awareness and functioning through movement learning. What becomes relevant is the way these statements expand the research scaffold so that somatic studies develop skills for school students to:

- Focus on the body as an objective physical process and as a subjective process of lived consciousness,
- Refine perceptual, kinaesthetic, proprioceptive, and interoceptive sensitivity that supports homeostasis and self-regulation,
- Recognise habitual patterns of perceptual, postural and movement interaction with one's environment,
- Improve movement coordination that supports structural, functional and expressive integration,
- Experience an embodied sense of vitality and extended capacities for living.

From these perspectives, somatics is discussed not just as a dance health and wellbeing practice but as an holistic learning tool. Alternative perspectives about integrated physical education reveal that postural awareness applications do not necessarily include high exertion practices. Subtle counter-exertive somatic practices may be more suited to the less active child. Poor integration of the sensory-motor system may be expressed by either the student's poor posture or inattentiveness and it is observable that in school physical activities, children who have less inclination to be active are often left out. One of New Zealand's earliest physical educators, Philip Smithells (1974), stressed the responsibility of physical education teachers towards the disabled, those with poor motor skills, and the average performer.

In an effort to increase the potency of postural observation he initiated a grid reference chart to measure children's postural imbalances and to discern what adjustments would

need to be made both physically and attitudinally. In light of these early, progressive efforts, it has been noticeable how difficult it still is to locate literature about principles of human movement learning at school in relation to the perception of the individual body dealing with their environment.

Dance is still also taught through the Physical Health and Education curriculum and the study sought to locate details about these practices in relation to bodily awareness. The curriculum was introduced into New Zealand mainstream schools much earlier than the dance curriculum, albeit primarily as a military readiness programme in 1877 (McGeorge, 1992; Stothart, 1974). Needless to say, the relationship between postural and militaristic bearing was implicit then, with control and discipline of the body ingrained particularly into male students.

There are interesting correlations with Foucault's objectivity about the body which has ensured that the healthy upright body remains critical to the health of an ongoing workforce (Culpan, 2004). That perspective is outside the ambit of this study. What I found was that, although attention to the relationship between posture and wellbeing is not foreign in New Zealand's mainstream schools setting, little is contained about the increased range and applications of knowledge about postural awareness and wellbeing.

Notwithstanding the presence of a few physical health and education exemplars which explore various details about the human body moving (Lineham, 2005); even in the early days of this investigation, there was little evidence to suggest that the early prevention of chronic postural patterns that may cause injury and dysfunction in later life was being taught at school. In the everyday world of school, developing specific skills to cope physically with previous and immediate experiences are assumed.

Emphases on the physical dynamics of an active anatomical body have remained tethered by separated curricula. Anatomically precise descriptions of human structures and mechanical function taught in the physical health and education curriculum remain independent of students' dance learning. Further to this physical education activities

typically reduce achievement outcomes of physical activity and fitness to sports related goals and challenges (Lineham, 2005). In contrast to broader key competencies of managing self, thinking and relating to others, at Year 12, Level 3, in the New Zealand physical education curriculum, movement concepts and motor skills are separated from personal health and physical development (Ministry of Education, 2006, p.43).

Separating physical acumen from feeling is incongruent with Smithells' groundbreaking integrated work. As important components of expressivity and human movement physiology are still taught through separate curricula, the question of posture and its relationship to education remains largely overshadowed. By further reducing the imbricated knowledge of self-awareness to competitive and performative models (Burgess et al., 2003), Smithells' emphasis on the aesthetic side of learning, albeit chiefly through dance, may not be realised in either the arts or physical education curricula (McEldowney, 2000).

In an effort to enrich the literature with an aspect of holistic wellbeing, the theoretical framework includes an increasingly influential commitment to embrace Maoritanga in the New Zealand educational context. This reveals that a critical aspect of integrated wellbeing has already been investigated. Selected in the last updated health and physical education exemplars were those that reflected underlying concepts of Hauora's four dimensions of wellbeing; taha tinana (physical wellbeing), taha hinengaro (mental and emotional wellbeing), taha whānau (social wellbeing), and taha wairua (spiritual wellbeing (Ministry of Education, 2004). This Maori holistic view of wellbeing opens up an existing and powerful base for educating school students through the somatic field.

In summary, this section is about locating previously determined contexts as possible connectors for somatics and arts educational potentials. Although I have initially suggested the potential for somatics via the arts curriculum dance strand, there remain unresolved questions about real connections between arts literacy potentials and the Ministry of Education's (2002) essential learning skills. In a potential crossover with somatic approaches, the valuable experiences of a child's typical movement learning

shift. Through the expansion of each child's imagination and thinking capacities (Berk & Winsler, 1995), pedagogical values of somatics as a non-discursive way of knowing, might better mediate cognitive tools used in maths and English language learning.

2.3 Educational theory

Finding literature where I can apply somatic potentials to “education in relation to wellbeing” (Desjardins, 2008, p.2) is not easy. Because the dance strand is a text where adjustments to new and/or social factors have already been considered, my selection of appropriate and distinctive education theories has been influenced by constructivist learning design (Gagnon & Collay, 2006). In a broader context, the constructivist stance, which maintains that learning is a process of constructing meaning and how people make sense of their experience (Merriam & Caffarella, 1999; Bruner, 1966; Glaserfeld, 1989), paves a clearer path for the study.

By dovetailing cognitive with behaviourist ideals (Caine, Caine, McClintic & Klimek, 2005), the learning context, where the individual develops abilities to take in information and the influence of the environment in order to learn, undoubtedly translates into learning styles. For example, Zelenski (2001) states that the New Zealand arts curriculum dance strand is a model of opportunities for physical experience and intellectual understandings through the accommodation of visual experience, analysis and comparison, which in turn forges ways to develop the status and connections for the kinaesthetic learner.

This example propounds a view that the multifaceted outcomes of learning creatively may affect broader learning imperatives. It is not within the scope of this thesis to develop perspectives about the different strengths and weaknesses of learning styles, but to acknowledge that as with any other stance, emphasis at times will be drawn to different theoretical models. In the meantime, these points suggest that learning styles in education are more about providing contexts where the learner is required to take initiative and be accountable for the results (Itin, 1999).

In preparation for making possible connections that aggregate a potential for an educational framework that would accommodate the widespread application of somatic study, I have viewed not only texts by leading dance kinesiologists Sevey Fitt (1996) and Laws (2002), but also the feminist investigations of Claid (2006). Their particular emphasis on physical and sensational imagination at play as focusing internally on the metaphorical dancing body rather than more literally focused out has led me to dividing this section into two subheadings.

The first subheading section includes literature that contextualises students' potential for an alternative learning rationale in the mainstream schools domain by amalgamating theories of independent learning with the experiential learning model (Adkins & Simmons, 2002; Starnes et al., 1999; Little, 1990; Kesten, 1987; Kolb, 1984). The second subheading includes literature that theorises the challenges presented to teachers teaching a less familiar subject.

2.4 Students learning somatics

A miscellaneous model about students' use of cognitive abilities combined with individual insights when negotiating their learning environment coincides particularly well with students developing their own ways of experiencing, and where that kind of learning is valued as an empowering activity of personal and social significance. A consultation document about the principles of teaching and learning was developed for Unitec, New Zealand in 2005. This document presents statements to parallel my search for descriptions to support expansive learning needs in current educational environments. Barrow (Unitec, 2005), proposes that:

- Learners are preparing for a place in a contemporary world that is uncertain, complex and rapidly changing;
- The development of theoretical understandings is best achieved in a context of situated practical application

Two other descriptions of independent learning provide a deeper contextual focus for somatics to sit alongside these considerations. Kesten (1987) describes independent

learning as a site where the “learner, in conjunction with relevant others, can make the decisions necessary to meet their own needs” (p.3). Although initially developed to describe attitudinal shift towards autonomous learning at tertiary level, Little’s (1990) definition of autonomy as “essentially a matter of the learner's psychological relation to the processes and content of learning” (p. 8) fits equally neatly with somatic applications of managing wellbeing at school.

Although schools provide children with some conditions and skills to adapt to environmental factors, Dewey noted that curriculum constraints prohibited a more flexible base for students to make relevant links to their individual potential (Starnes et al., 1999). For this reason the search for literature that incorporates students’ experience as a proviso for learning has been extended to include Kolb’s (1983) experiential learning model. Experiential learning theory provides substance for key arguments about situating the experiential practice of somatics at school. This theory was initially developed to integrate concrete experience abilities with reflective observation, abstract conceptualisation and active experimentation (Smith, 2001).

Though useful to deconstruct the experiential theory model because the language is actively similar to the vocabularies of awareness practices, two contrasting applications provide clear examples of why this is not an appropriate theory to adopt for this study. According to Brookfield (1983) and Houle (1980), experiential learning manifests a consequence of activity enhancement as opposed to an internalised, embodied somatic presence. They argue that, although on the one hand the term (experiential) is used to “describe the sort of learning undertaken by students who are given a chance to acquire and apply knowledge, skills and feelings in an immediate and relevant setting” (Brookfield, 1983, p.16), on the other hand experiential learning is “education that occurs as a direct participation in the events of life” (Houle, 1980, p. 221).

Miettinen’s (2000) critique of a simplistic experiencing model highlights that reflection occurs as “an isolated event, whereas a genuinely individual creative response may only be captured by the moment of the experience” (p.58). Boud et al. (1985) further comment

that it (Kolb's experiential model) does "not help...to uncover the elements of reflection itself" (p.13). In a different critique of the Kolb model, feminist theorist Michelson (1996) argues that reflective and constructivist views of development denigrate bodily and intuitive experience.

Although much of feminist phenomenologist theory is written with adult bodies in mind, Michelson's (1996) discussion about the construction and socially laden processing of knowledge is thus made relevant to this study. She claims that advocating a retreat into rational thought is a way of controlling raw experiences. She argues that experience and knowledge may be mutually determined. In this way she challenges a presumption about learning processes which, accrued with the previous lifelong learning critique, devolves an important approach to the actual physical and experiential dynamics and contingencies of somatic education at school.

2.5 Teachers teaching with variable knowledge about the subject

Perhaps more importantly for this study, a profile to encompass specific qualities of the teacher's motivation and immediacy in dance practice has been explored. As previously observed, the New Zealand Curriculum Draft for Consultation (2006) emphasises that teachers have to "find ways to make learning connections which draw out deeper outcomes of refinement, connection and transformation" (p.24). However, much of the available research about teaching practice is also constructivist and driven by programme assessment and qualification requisites as opposed to the development of holistic models of teaching for students' wellbeing (Battista, 1999; Brooks & Brooks, 1993; Dana, & Davis, 1993; Cohen & Manion, 1977).

In a teaching and learning consultation workshop at Unitec, New Zealand (2005), Barrow presented a document about the principles of teaching and learning. This document presents two points that form the basis of an argument for developing a teacher profile where motivation and immediacy are equally important educative components if students are to learn postural wellbeing at school. Barrow (Unitec, 1995) states that:

- Learning is best facilitated by teachers who maintain discipline currency and expertise and supplement this with understandings of pedagogy that informs learning in their discipline;
- Learning is supported when student assessment aligns with the aims of the curriculum and teaching and when it enables students to demonstrate the depth and breadth of their understandings in the discipline (workshop notes).

A normative requirement, implicit in the second point, was previously considered in the student learning capabilities section and reconsidered in the following paragraph. In the meantime, a statement by Martin, Benjamin, Prosser, and Trigwell (1999) depicts the scholarship of teaching as having three distinguishing activities, précised as engaging with existing knowledge about teaching, a developed self-reflective practice of their discipline and attendance to the dissemination of professional and disciplinary ideas. Shulman (1993) describes teaching practice as “substantive intellectual work which requires selecting, organising and transforming a topic or field so that it can be engaged and understood at a deep level by students” (p.6).

In direct contrast to Barrow’s notes, Heathcote (1984) defines a critical point about students’ reception of their teacher’s lack of specific knowledge. She claims that, “children will respect a teacher who doesn’t know everything - and even one who seems to know very little about something, so long as they see that person trying alongside them in learning endeavour” (p.38). Taken either way, Garoian (1999), Starnes (1999), Biehler and Snowman (1997) and Hutchings (1996) concur that teachers possess the power to create beneficial or detrimental circumstances and relationships to influence student learning in the classroom environment.

Reviewing the literature thus far has increased my awareness about why dance educationalists may have been excluded or may have excluded themselves from critical dance applications of physical and emotional wellbeing knowledge. When teaching creativity, teachers are expected to integrate development of the students’ social, cognitive and even emotional foci. Both the Holland & O’Connor (2004) report and Buck’s (2005) seminal work on “a sustainable dance education practice” (p.1) note a

recurrent concern. Teachers have difficulty integrating the performative knowledge of dance (Buck cited in Holland & O'Connor, 2004).

Although the capacity to teach somatics may be located in contained individual, historical and related dance experiences (Buck, 2005), applications for understanding their student's body from a physical standpoint may be further disadvantaged by the teacher's own memories and perceptions about dance. In the introduction to the Arts in New Zealand curriculum document (Ministry of Education, 2000), dance is described as "an holistic experience" (p.19). This statement parallels dance education as a way of learning about wellbeing. A more holistic teaching approach is synchronous with teaching theories where emphasis is placed on the subjective differences of students' learning capabilities.

This final section of the literature is predominantly presented to locate literature about an holistic teacher practice model and is not meant to reveal vocational or motivational factors that determine good practice. But, keeping in mind that learning about postural functionality requires the students' capacity to learn to be matched by the positive influence of their teachers' broad interest, knowledge and teaching skills (Fortin & Siedentop, 1995), two different perspectives about teaching theory have been introduced.

The concept of motivation in education highlights that a teacher needs to be focused and interested correspondingly with the students in the holistic content of the topic they are teaching. Interestingly, the next educational theory is most often used to address behavioural needs of the student, which as previously described by Merleau Ponty (1962), may simply be a way of managing deviations in functional levels in relation to his/ her environment. Biehler and Snowman (1997) state that:

Many teachers have at least two major misconceptions about motivation that prevent them from using this concept with maximum effectiveness. One misconception is that some students are unmotivated. Strictly speaking, that is not an accurate statement. What teachers really mean is that students are not motivated to behave in the way teachers would like them to behave. The second misconception is that one person can directly motivate another. This view is inaccurate because motivation comes from within each person (Biehler & Snowman, 1997, p.399).

Teacher immediacy is a term that has been coined to explain the issues students experience during online and distance learning. This study does not extend to communication technologies outside the classroom that have made distance education an alternative to traditional methods (Naidu, 2005). However, literature about teacher immediacy clarifies some of the implications of the relationship a teacher has with students in a 'live' classroom.

I have used the concept of immediacy to explain an integral, interactive relationship between students and teachers that underpins the potential for somatics at school. This concept was originally developed by Albert Mehrabian (1969), who defined immediacy as one of communication behaviors that “enhance closeness to and nonverbal interaction with another” (p.203). Mehrabian (1971) demonstrated that “the major communicative function of immediacy behaviours is that there are sets of verbal and nonverbal communication behaviours that can reduce the perceived physical or psychological distance between communicators” (Witt et al., 2004, p.1).

It is not in the scope of this thesis to examine the cognitive benefits of teacher immediacy, but to parallel the strength of nonverbal as well as verbal interactions for a movement-based self-awareness practice. According to Witt & Wheelless (2001), “the use of teacher immediacy techniques as a means of motivation can be a powerful tool for influencing cognitive learning”(p.288). This aspect is made relevant by Brophy's (2001) proposition that when planning and delivering units for alternative access to successfully teaching children to acquire any new subject, negotiated co-constructive learning relationships must be developed.

2.6 Summary

Particular and as yet unknown perspectives through the responses of teachers who teach dance and their students become critical layers for this and ongoing studies. Discussions so far have incorporated perceptions of the art form of dance as knowledge, body/mind practices and educational practice. Expansive correlations and controls for investigations

into the relationship between performance arts processes and practices and the educational objectives of New Zealand's educational curriculum framework at present are viewed as requiring integration.

Through analysis using a qualitative approach, the case study draws on critical perspectives from teachers and students with differences in experience and backgrounds of dance in education. Students' responses to the somatic session and their articulated impressions validate an intrinsic rationale for baseline principles about the consideration for placing humans in the vulnerable position of expressing from and about themselves. More particularly, teachers from schools who have adopted the dance strand may hold views about postural awareness applications from other learning areas. In this way somatic and educational theories increase my understanding about the viability of the practice for learning potentials. At the very least, these theories have provided me with a flexible platform for the enquiry.

In the process, possible reasons for the exclusion of a new dance from mainstreams school curricula have also revealed a persuasive argument about maintaining an exterior educational position from which to see and conduct the research. Like scientists and positivists who maintain a fundamental assumption that identifiable contexts may be viewed, studied, discerned, captured and understood as the truth, it seemed that what is being exposed in the weave of the literature is that the depth of knowledge written into the New Zealand arts curriculum dance strand has yet to be revealed, much less experienced.

The exploratory case study method with a selected range of data collection phases essentially aims to find out whether somatics is already being taught in a mainstream intermediate school and if there is a considered impact on students' learning styles. Although the literature lays bare the complexities of dance in the education environment, it also provides a basis for a long-term strategy where somatic practices could feature as part of any daily physical wellbeing regimes in mainstream schools. In the more immediate future, while distinctions between dance and dance learning remain unclear,

the pressure to reframe art as integral to education may have determined a new trajectory for dance already.

This study has been set to simultaneously explore how a dance artist's scholarly experience may be represented in dance in education research. Deliberating about the result of a repetition through the transmission (Glossary) practice of writing (King, 2003) has become a way of weaving the two strands of somatics and research methodology throughout this theoretical framework.

As well as developing a methodology to study somatics in a mainstream education setting, by incorporating dance performance knowledge into the theoretical framework, reflections about the rationale for a subjective and reflexive stance has been made available. Emerging similarities between dance practice knowledge and research practice have provoked a deepening understanding about the probability of learning dance, which is not developed to be performed, but instead determines self-awareness, as a normal part of the human occupation of thinking.

CHAPTER THREE:
(PART A) METHODOLOGY
(PART B) METHOD - CONDUCTING THE STUDY

PART A: METHODOLOGY

3.1 Introduction

A qualitative approach within a postmodern positioning allowed me to develop an enquiry that investigates somatics in a real-life context at a New Zealand school. The first part of this chapter presents why the study aims to explore the responses of a small sample of intermediate school students who are familiar with the dance curriculum. Keeping in mind that contemporary dance fits within a postmodern construct (Hong, 2000), the school teacher's voice will provide a different critical perspective.

According to Green (2004, p.44), dance theories, "find their voice through the dissection, fusion and cross-disciplinary synthesis of postmodern writings". The theoretical stance for this study has been deepened in the appraisal of postmodern concepts of subjectivity, interdisciplinarity and contextualism; this is explored from my point of view as a long-term dance practitioner and tertiary educator. In this way the articulation of sensing and feeling about knowing is prioritised to present and process ways that I, school students and their teacher construct postural wellbeing from associations with dance in their immediate environment. If dance knowledge is to be made more viable, this part of the thesis argues that the substantive possibility of dance knowledge must be lodged firstly, subjectively and kinaesthetically.

Emphasis is placed on the transformative potential of the intent and context of the New Zealand arts curriculum dance strand, as it already contains terms and objectives which could allow for postural wellbeing to be taught as more generalised practical knowledge. The dilemma of integrating arts education theory to support a study about somatic practices at school is foreshadowed by the history of dance in the education curriculum. A second dilemma surfaces about instigating an approach that maintains the previous

position of dance in education but advances a new dance practice across the borders of arts in education theory to practice based applications and without dislodging current content or achievement outcomes. It has not been my intention to employ a hermeneutic lens to read deeper meaning into the dance strand document, merely to uplift its language for the purposes of this preliminary study and suggest that valuable embodiment applications contained there are as yet unused (Ministry of Education, 2006). A summary of factors that have influenced the method design are:

- Education through the arts may or may not enhance an individual's self-awareness learning potential;
- Somatics may or may not be learnt as a dance practice at school;
- The subjective embodied experience of dancers may or may not be informing the current dance curriculum achievement outcomes

Dance as authentic in the educational context has thus been pivoted around to a perspective where doing dance is both individualised, and of its own culture. Themes of culture and community are expanded in the following discussion about structuralism and post-structuralism (3.3). A useful focus is found in a description of interdisciplinarity (Glossary), which alleviates tension between the two paradigms.

Connections, which have been generated by the theoretical framework and the research questions, are maintained as a somatic practice approach. To this end, the data collection phases, for example, posit research participants as interpreters or performers in the construction of their somatic experience at school (Berger & Luckmann, 1991). The three 'voices' of the teacher, students and me as a dance practitioner are thus rationalised as separate, integral and distinct.

A third way of producing relevant theory for the methodology has been to perceive the possibility of situating a dance study like this in a number of ways. By splintering expectations and assumptions about dance outcomes, my study gains access to traditionally bound objectives of contemporary dance performance for a different kind of

“presence”. The amount of data generated this way from a single case provides a rationale for a more heuristic (Glossary) model.

A complete outline of each of the proposed data collection phases and their schedules is attached in the appendices section. These detailed outlines demonstrate accumulative, practical aspects of each data collection phase, but also signal how they will lead to qualitative insights into how much students and their teacher are aware of a particular holistic dance practice and whether they also recognise the benefits of learning it.

3.2 The postmodern paradigm

“Paradigms are subject to the referential influences of previous constructs, generating a premise that all things may be more diverse, fluid, illusionary, and contestable” (Merriam & Caffarella, 1999, p.356). McNay (1992) states that “postmodernism theory relies on a desire for universality; the desire for totality is replaced with an equally totalising desire for contextualism, pluralism and heterogeneity” (p.130). Taken together, these statements have helped in defining the problem that I am exploring and around which the research questions were initially formed. That is, postmodernism (Glossary) provides me with a fluid meta-framework for a propositional and subjective research encounter in mainstream education. Merriam and Caffarella’s (1999) approach combined with the central postmodern concept of interrelatedness (Glossary) allows me to develop a system of meaning.

A key premise for using postmodern language and thought in the development of the methodology is that any and all knowledge may be contradictory. Kilgore (2001) makes a number of relevant assertions about the postmodern paradigmatic view of knowledge. Perhaps most importantly, for the context of this study, that knowledge is contextual rather than out there waiting to be discovered. Kilgore describes knowledge as fragmented and multifaceted and that it has been socially constructed. Because of the contextual nature of knowledge, she surmises that it is also possible for individuals to hold incongruent views about the same subject at the same time. Merriam and Caffarella

(1999) contend that neither is the authentic self of postmodern thought unified, or integrated. Rather, that the self is also collated, and ever changing.

The relational psychoanalytical theories operate in the same epistemological universe as postmodern literary criticism, (is) congruent with the postmodern idea of 'truth' as constructed and relational, and selfhood as shifting, contingent, and always-in-process (Souter, 2000, p.341).

The position, experience and constitution of each individual participating in this study is secured thus as centralised and transient. These assertions lead to the development of a profile, where what each participant thinks of themselves plays a significant role in how they articulate their role in the research. As self-evaluators of their own territory, the dance students and their teacher are enabled to present their account of the various experiential case study encounters.

3.3 The dividing line between structuralism and post-structuralism

Although the dividing line, if there is one, between post-structuralism and postmodernism is far from clear (Larrain, 1994), the fluid and temporal ontology (Glossary) that post-structuralism suggests allows for these early research conducts to influence later ones. As both "postie" terms cover simplistic notions of culture and community, moving from postmodernism to post-structuralism is to further avail the study of a methodological range that includes significant, non-generalisable aspects of an individual's construct of the culture of dance experience. A paradigmatic tension has been drawn between structuralist and post structuralist discourses for the development of a durable research framework.

Both structuralism and post-structuralism entail a critique of the human subject as well as a critique of meaning (Sarup, 1988). Structuralism emerged from the study of linguistics. Barthes (1982) described this as the linguistics of discourse. Easthope (1991) concurs that "the text of structuralism is intransitive, whereas that of post-structuralism is transitive" (pp.32-33). Sarup (1988) stresses that "while structuralism sees the truth as being *behind* or *within* a text, post-structuralism stresses interaction of reader and text as productivity" (p.3).

According to Lefkowitz, (1989) “structuralism and semiotics recognise that communities that share a textual history reach a consensus about meaning because they share conventions of expression” (p.61). A structuralist emphasis on the constructedness of human meaning represents a major advance for the study to use the New Zealand arts curriculum dance strand as a pivotal text. Eagleton (1996) denies meaning as “a private experience but as the product of certain shared systems of signification” (p.107).

In direct contrast to structuralism's claims of culturally independent meaning post-structuralists typically view culture as “integral to meaning” (Barthes, 1997, p.142). A propensity to search for differences of meaning also allows me to place the meaning the authors placed into the dance strand, which may have been perceived through their own set of personal constructs, to become secondary to the empathetic (Glossary) meaning that each dance reader (the teacher, student or researcher) perceives.

In order to activate a research study which devolves new ways to read the New Zealand arts curriculum dance strand through a somatic lens, a post-structuralist paradigm provides, paradoxically, a coherent structure. The idea for splitting thematic elements and expectations is contained by the post-structuralist method of discourse analysis. To invent dialogues to negotiate theories that have been embedded in the methodology, the philosophies of Derrida (deconstruction), Kristeva (semiotics), and Foucault (“I”-self) have been taken into consideration though not expanded.

For each of these philosophers, the idea of a literary text as having a single meaning or purpose is rejected. For example, Derrida (2002) encouraged secondary viewings of written texts to re-decipher the content and dislodge it from previously determined or predictable outcomes. Even though the historical and authoritative positioning of the initial stakeholders of dance strand document must be regarded, by considering a different and extant stream of experience, thought and opinion from them, it has become evident that this study is not so much an evaluation of why dance was introduced at school but an undertaking about how the community currently regards dance.

Another of Derrida's (2002) contribution's, deconstruction, was "to see that language could be read where effective value is first determined by the context of the social gesture one adopts and by the obligation it signs rather than by the strictly discursive content exhibited there" (p.78). To make an inventory of all contexts of the dance curriculum language and all possible positions of those who use it is somewhat meaningless. In a post-structuralist context, the dance strand document dominates as an artifact; its power resonating therefore only through the living interpreting body of each dancer subject.

In an a priori definition of post-structuralism, the split between the transcribed achievement outcomes of the dance curriculum, which can only be lodged as the relevant and integrated experience of each student, shows that "transformations wrought in various disciplines are measured by their scope as well as the limits of these transformations" (Harari, 1979, p.42). Beyond this study children will remain unlike each other and their experiences generated by doing dance will never find a match even in the most familiar categorisations of learning styles.

Deconstruction, as a continuous process, avoids standardised or measured types of results either about the student population or the teacher's educational expectation. Using this method in the data collection phases, prevalent constraints about the potential for dance as a learning tool remain at the forefront of this study. In a paradigm where every text is about construal explanation, the text which is the human body moving, studied and written upon, is made more available at each and every danced encounter.

What appears to be a fixed and unchanging individual thing or substance is, for Leibniz, the product of the intersection of a moment in an essential law with iteration: hence identity is reliant upon difference - the act of the iteration - while the differential act of iteration lies at the origin of the identical and the permanent (1976, Bailey Gill, 2000, p.50).

If the individual is composed of a hybrid of positions, experiences beliefs and knowledge claims, as each 'performer' of the dance strand relates any parts of the text to their own personal concept of self, the language of dance achievement and expectation is already moved. In the search for a relevant methodology, the endeavour to shift the outcomes of

dance practical knowledge from implicit educational boundaries still relies to an extent on my knowledge about the procedures of dance in education.

Immediate and experienced descriptions typical of the ways students and their teacher respond in each instance of the data collection phases reveal the thrust of what may have determined shifts, advances and retrenchments of dance as a topic in the school system. At the same time I am able to interpret accumulated and multi-faceted considerations about teacher motivation and students' capabilities which may have pervaded the learning experience of dance in their school in the first place.

3.4 Interdisciplinarity

Post-structuralism fits well with the interdisciplinary (Glossary) thought that has been introduced in the theoretical framework. Positioning postmodern interdisciplinary practices as one of the discourses penetrates perspectives for a sort of mimesis to emerge. To review congruencies in form and expressivity, a fundamental change to the approach is required to counter the constraints of disciplinary parameters. The object of interdisciplinary engagement is to seek the unknown in the familiar.

The effect of interdisciplinary application to this study is to provoke revelation about alternative languages and strategies for the practice of dance at school (Leggett, 2006). Adopting these strategies paves the way for an integrative approach for inhabiting actions and procedures. In previous interdisciplinary projects I have employed alternative readings of communication and narratives to produce a new resource or as a way of arriving at the unknown. Kristeva (1998) describes this as an "interpretive grid where the effort to articulate meaning and process reveals less anticipated results" (Coles & Defert, 1998, p.4).

Affecting a sense of presence through accumulative theoretical shifts allows me to extract and distill an eclectically derived methodology and one which paves the way for a ground base of validation strategies, critical to any research project. For this study each

individual embodied experience remains the landscape of the data; focusing, interactive and interpretive.

For those involved in acts of creative learning, the capacity to respond sensitively may not be fully captured through researching any one instance or topic. A multi-axial view for interpreting how dance is being used at school and synchronously detecting inherently perceptual methods of learning narrows a tendency for (re)-objectification (Grant & Giddings, 2002). An interdisciplinary approach even at this stage promotes progress in future for a new dance practice schema at school.

PART B: METHOD - CONDUCTING THE STUDY

3.5 A qualitative approach to the method

The decision to situate issues of a qualitative methodology at the beginning of the methods section rather than in the broader discussion about paradigms comes from a desire to insert an holistic perspective at each stage of the research, as well as make a brief stand about the validity of qualitative study. This desire is encapsulated in Guba and Lincoln's (1994) depiction of conventional and historical emphases on quantitative research as having long been routed by alternative studies for the multi-textual and discontinuous experience of humans occupying their world. In this somatic case study, the hierarchical precept of a quantitative approach would miss the moment by moment subjective experience of the students and their teacher in the classroom.

Further to this, I have taken into account the way Guba and Lincoln (1989) relegate methodology to the selection of a preferred strategy, not to be confused with the methods, which they describe as the useful tools and techniques for data collection and analysis of the findings. These authors state that what is referred to as the "constructive paradigm is sometimes called the qualitative paradigm, as though it were defined entirely by a preference for qualitative methods" (Guba & Lincoln, 1989, p.18).

Although it has been difficult to maintain a clear theoretical stance when inferring other ways of using the dance curriculum document, a qualitative approach to the method

reveals where embedded learning, both in the study and in the search for what is being studied, is best achieved through contextual practice.

At times a feminist approach to qualitative methods and the ethical consideration of care provide me with terminology that supports this kind of purposeful motivation.

Feminist fieldwork is predicated upon the active involvement of the researcher in the production of knowledge through direct participation in and experience of the social realities she is seeking to understand. (Reinhert, 1992, p.46)

In effect, I have located a mixed methodology, embedded in a unique system of values to generate appropriate and relevant data. As mentioned in the literature review, adequate evidence of educational efficacies from inspirational teaching practice models is difficult to pin down and that elusive answer remains to be found about whether it is always going to be a personal aspiration to continue the spill of my experiential practice of somatics into already overloaded school curricula. It was very much in a perceptual detection of somatic methods already being employed in the teaching and learning of dance that underpins the following data collection phases as experiential occasions and keeps this research study qualitative.

Decisions, which relied on the clarification of a number of different personal perspectives, situate the qualitative approach closer to the design of the data collection and analysis. It was important to think about ways to schedule the data collection phases to report increased, current understandings and interpretations of students and their teacher with regard to somatics in schools.

Contexts of the classroom situations, destabilised by researcher presence, became analysable in the next passage of journal writing after each data collection event. The aim of documenting on site and in the somatic journal as soon as the data collection phase had finished was not so much to analyse the object but simply to gather as many facts of it as possible (Tellis, 1997). Reflections, which may have been misconstrued as answers, during the research period, are preamble for eventual comprehension.

3.6 An exploratory case study method

To research an existing situation using a qualitative approach and one which is participative by nature, I selected an exploratory case study method. Relevant features of this holistic research method are detailed by Merriam (1998). He describes the case study as:

An empirical enquiry that: investigates a contemporary phenomenon within its real life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence to evaluate are used” (Merriam, 1998, p.23).

I have used this method to establish underlying emphases children and their teacher placed on the somatic experience in the education environment in relation to what they already knew and the experience of the data collection phases.

In order to satisfy tenets of this kind of qualitative method, describing, understanding, and explaining, this case study has become a strategy replete with somatic understanding, focused on process rather than outcomes. In a recent conference paper, somatics professor Jill Green problematised the distinctions between (dance) science and dance approaches via somatic methods. She described the ongoing problem emerging from a need to rationalise objective truth.

Where the dance sciences seek objective truth, somatics may not seek truth as measurable facts, but find meaning in how one constructs the body itself from a subjective viewpoint (Green, 2004, p.46).

In this case, although dance is being taught in New Zealand intermediate schools and various efficacies of dance learning is being reported about in education ministry reports, somatics, which are a specific aspect of dance study, may not be available in mainstream schools and thus remains invisible both in its access, reporting and potentials. Conditions which have been previously examined for expected outcomes and impacts have been used to amalgamate findings as a pre-existing state (Burns, 1997). This study’s methods, fit with a fluid post-structuralist deconstructive positioning and maintained by exploratory multi-applications have been developed as an iterative case study method for researching alternative outcomes to learning dance.

To negotiate a more pragmatic approach to this reflective enquiry, an action research method initially seemed the best course for obtaining the kind of reflexivity that would generate real results for the future. Action research is seen as a developmental approach and one that implies that the researcher will take an action that enables groups to collaboratively formulate solutions to problems (Cardno, 2003).

What is important to note is that the development of dance in the mainstream education setting was produced by people who are not those who teach it and, so far, those who learn from it. Further to this the dance curriculum is executed by teachers of various dance backgrounds and the adoption of it in schools still relies on the assiduous interest of parents on school boards and principals. The issue of gate keeping has been expanded in chapter five. Although the practical knowledge generated by the findings of an action research study may be of interest to principals, school boards, teachers and even possibly the authors of the dance strand, such a method could only present a report of these stakeholders, albeit reflexively.

3.7 Research design: rigour and adequacy

Case studies can be seen to satisfy the three tenets of a qualitative method: describing, understanding, and explaining (Tellis, 1997). Yin (2003) states that the rigour with which a case has been constructed propounds generalisability as much as results drawn from the set of methodological qualities. He identified three types of case studies, of which exploratory is one, and detailed procedures to satisfy rigour for this type of study to be legitimate as a stand-alone piece of research. The goal for using a case study method for this study was to document the research objectives as completely as possible, beyond emic topics and descriptions recognisable in earlier dance studies in the educational setting (Renner, 2006; Holland & O'Connor; 2004; Ministry of Education, 2003; Hong, 2002; Siedentop & Fortin, 1995).

The following section discusses some of the other design rigour and adequacy issues that qualitative research methods produce. This discussion has been situated prior to the

methods section to clarify a methodology which clearly designates an emphasis on the relationship between the three sets of respondent voices. I have incorporated Miles and Huberman's (1994) qualitative headings for evaluative criteria to “record deliberations about confirmability, consistency, credibility, application and transferability” (p.278). These issues have not been discussed in this particular order.

This study was conducted at an intermediate school over four consecutive days in August, 2007. Being able to collect data over several days from a limited number of subjects (teacher and students), provided sufficient opportunity to examine characteristics of a group already familiar with the dance curriculum. This was an opportunity to regard the learning in situ and in detail. Targeting the preliminary studies as discrete occasions allowed me to separate data out and reflect on how to reveal specific indicators of learning somatics in a variety of ways and settings.

By describing each data collection phase as reflexive and contextualised by the range of embedded theories expanded in the methodology, the study became more coherent and transferable across to the analysis settings (Huberman & Miles, 2002). Transferability considerations about using a single case study have been addressed in a repeated reference that this study is a preliminary investigation, which substantiates dance research studies like it. Feasibility in this case has relied on finding out whether this case study is repeatable, with refinements, elsewhere; a consistency that could be applied both in schools that integrate dance practices readily and those less likely to.

At the same time, this project sought the internal validity or credibility of qualitative research by keeping detailed field notes in the somatic journal and meticulous records of the transcripts, both of which reflected actual activities during the research process. This was further achieved by weaving an explicit subjective and theoretical stance, which had firstly been posited as inevitable bias, but when applied consistently across the study, compounded the data as a record of the subjective experience of each respondent.

To respond to other issues of trustworthiness, a different feature of triangulation was set into the study. One of my aims, which was described in chapter one, was to develop a dialogic process. This was firstly to enable me to engage in a narrative research style, but also became a way to organise the data collection phases (Table 3.1). The first research question: to what extent does a New Zealand intermediate school that employs the Arts Curriculum dance strand teach somatics as part of the practice, became implicit as context for the second which is: What are the implications of students and their teacher's responses to the effect of somatic exercises, particularly in relation to general postural wellbeing at school?

I was able, by finding out about the children's prior knowledge of experiential anatomy and postural awareness through a preliminary questionnaire, as well as observing them dancing in the classroom, to set up an appropriate somatic session from which to witness observations and responses of both the children and their teacher. The teacher's interview provided details about what the children regularly do in their familiar setting, the ways they responded to the somatic activities, but was also set to reveal her expectations about somatics potential in relation to her teaching experience.

As the study was taken over a short period of time, omissions of process and change indicators which may have had an impact on the results otherwise are rectified by including three respondent sets of perspectives. Feagin et al. (1991) endorses a researcher's consideration of more than the singular voices and perspectives of the researched, but also the interactions between them.

By analogy, triangulation techniques in the social sciences attempt to map out, or explain more fully, the richness and complexity of human behaviour by studying more than one standpoint (Cohen, Manion & Morrison, 2007, p.141)

The following paragraphs explore each "respondent voice" in more depth. The thrust of garnering information from these three perspectives was to develop a relative neutrality and coherency between the different experiences that were occurring in the same context and environment. Corroborative features of our three separate contributions confirmed my idea about the imbricating feature of this singular research experience. This section is

then followed by notes about the setting and general notes about the school participants, profiles and numbers.

3.7.1 The students' voice: prioritising students' participation

Three of the data collection phases focused on what the students had to say about somatics potentials and how they thought postural awareness activities might be placed at school. Prioritising ways for student opinions and attitudes to be at the centre of the discourse became precept for a research engagement with children that parallels important ethical factors considered at more depth later in this chapter.

In a longitudinal study of children's health and development, Silva and Stanton (1996) recorded the importance of endeavouring to include all aspects relating to a child's life in order to find out the propensity for successful adulthood. In this same article, there is suggestion that school data such as grades or physical records may be of value whenever researching children at school. In this exploratory case study, it was more critical to hear the students' voice separated out from their academic achievement records. In order to engage with the students' intellect, imagination and emergent individual potential, the data collection phases needed to be uncompromised by previously determined notions about their intelligence or capacity for application.

Instead, I saw the students' willingness to physically participate as a more important factor. Overt communication exchanges, in normal dance and classroom settings, designated a special significance towards the students participating in this study, as knowledge agents. Elkonin's application of Vygotsky's adolescent pedagogy (Bodrova & Leong, 2005), where meaningful engagement becomes available through voluntary attention, was contextualised as a resource for this study. According to Holland and O'Connor (2004), students already think that dance has a much wider application than just dancing. These points promulgate an approach where as well as being subjects under study; students are made contributors of an unfolding experience; one that closely resembled the way somatics also weaves into different contexts.

3.7.2 The arts teacher's voice: prioritising her experience of the educational setting and her students

The research design is grounded by a proposition whereby all participants integrate dance movement learning with a deeper understanding of ongoing physical health and wellbeing. Therefore, it was important to know where the teacher placed dance in relation to her students' wellbeing in the learning site, and also what kind of support they perceived had been prioritised by school programmers as well as from the Ministry of Education.

The teacher profiled for this study had to be someone who already taught dance at school, had some previous experience of dancing themselves and ideally had a commitment to dance as a learning method. Levels of motivation and immediacy, discussed in the literature review, were made notable by the teacher that the principal selected by her administrative cooperation in the set up of the questionnaire, somatic exercises and focus group selection.

The teacher selected was well supported by the principal and board already, but by specifically designating her participant voice in relation to her experience and current expectations of dance in the curriculum, another critical path was made available for data collection and subsequent analysis. Her students were familiar with the dance curriculum language as well as practised at dance. A dance session already timetabled into the school's calendar became an excellent opportunity to observe her teacherly responses and at the same time the shared responses of several other teaching staff. These combined responses signalled the culture of dance practices, developed and received in this learning environment.

The various classroom events had required administrative cooperation from the teacher but also became sites for our ongoing and intrinsically active dialogue. The interview with her provided a much deeper opportunity to find out what she thought about somatics being included in the dance curriculum and occasioned a merge of her currency and experience while finding out meaningful ways to expand the potential for somatics use in

other learning areas. Her voice was compounded by her personal cross-checking of the interview transcript to correct factual errors.

3.7.3 My voice: journalling as a research tool

...a portion of the case study should be given over to considerations of conscious reflexivity. That is, some portion of the methodological treatment ought to comprise reflections on the investigators own personal experience of the fieldwork. (Punch (1985) cited in Huberman & Miles, 2002, p.207).

In the earliest stage of developing the data collection phases and in preparation for building an etic perspective (Sanger, 1993), I embarked on study that led through elements of ethnographic methodology. The idea of installing subjective and reflective field notes, as recognisable influence on the research process is not uncommon in ethnographic studies, but more commonly situates the researcher as emic (Peshkin, 2001). Making a distinction between emic and etic approaches has been crucial, “in that it allows for methods which embody profound epistemological ramifications” (Morand, 1996, p.2). Although it was not my intention to use ethnography as a methodological framework, appropriating this perspective gave me a range for recording some universal aspects about dance from a personal, dancer standpoint.

Concepts of subjectivity and objectivity were developed in the literature review. Maitland’s (1995) definition of “lived-experience” included an important consideration about these concepts as a “continuum to be traversed, or, relationship to be negotiated between subject and object” (p.229). In this case, journalling situates me as another participant in the study. In action, the journal highlights the various experiences of researching and determined them as imprints or, my witnessing abilities of the students’ and teacher’s encounters of somatics.

I bought the journal from a local bookstore. It had a number of headings which fit with the imagery and metaphorical requirements of a somatically driven document. These headings provided me with triggers for thinking alternatively about the data collection occasions. I selected which page to write on randomly so the notes have shuffled into their own order of importance and therefore relevance. The following quote, which was

already written into the journal I used in the study, and is a part of a text for an academic course about creative writing, helps describe the continuing difficulty I have with capturing somatic imaginative process in an academic form.

Our task is to say a holy yes to the real things of our life as they exist... we must become writers who accept things as they are, come to love the details and step forward with a YES... so there can be no more noes in the world, noes that ... stop these details from continuing (Goldberg (1986) cited in Ward Harrison, 2005, p.23)

Several pictorial examples have been included as figures in chapter four. Transferring self-perception and reflection, captured in the journal, into relevant findings of the study has also been supported by educational theorist, Schon (1983). He states that narrative has a broader significance than education and that even that experts in any field tend to embody their knowledge in the form of narrative. I argue that to become knowledgeable in a domain is to become familiar with its narratives, and to construct your own relevant ones.

In the broader context of somatic practice, journalling is a familiar way of negotiating the subjective experience of any awareness encounter and a way of mediating expected analytical outcomes. Divergent thinking (Glossary) was a way of scrutinising the variety of experience. In the development of a penetrative framework to interpret the data, the journal became not only a record of these instants, insights and responses to the voices of the students and teachers but was able to be more thoroughly explored as part of the discussion.

A disconnection, which occurs through journalling, propagated the idea that as we were all responding to situational features differently, the researcher journal was a rich source of data. It facilitated a balance of appropriate expectations for investigating a dance practice familiar to me but in a less familiar setting. It was an important way of acknowledging my distance from the mainstream educational precinct and teaching that goes on there.

A critical question about whether I was relying on my teaching practice and expertise and which has become part of the fabric of this study exposed these points as reason for continuing negotiation between placing the journal as a self-reflective summary or as raw data to be interpreted in its own right. As the intent of this particular study was to provide an imperative fulcrum between two perspectives; *emic*: what those who use the curriculum see of it while they do it, and *etic*, what I see as a dance practitioner and my somatic responses, I have distributed excerpts from the journal across these the findings in chapter four and the discussion in chapter five.

3.8 Setting

This study was conducted in Wellington in August, 2007. Although I live and work in Auckland, I had difficulty in gaining access to a mainstream intermediate school. I felt this was because of a professional life that profiles me as a performer or more recently, lecturer in tertiary academic environments, as opposed to a dance educationalist proper. As this was one of the aspects that I considered and made contentious in my theoretical framework, I had also approached a lecturer at the Wellington College of Education, who had attended a workshop I taught there. She was excited about the proposal and gave me contacts for a number of different schools. They were all schools that employed the dance curriculum on a day-to-day basis. The first school I rang was immediately welcoming, and that is where I conducted my research.

As with the other schools on her list, this school already has a strong commitment to the arts. In preparation for my visits, I looked up their website. The following facts have been accessed from there but in the interests of confidentiality have not been referenced. The students at this school are given multiple opportunities to participate in activities in various art forms and to exhibit and present their work both inside and outside the school. The school is co-ed, well resourced with regard to space with separated classrooms, a library, a hall, an art room, a small music room and a technology room in addition to the offices. This meant that I could be accommodated as planned in suitably sized spaces for the different data collection phases.

Regarding the diversity of students, the website explained that the school differed from other state primary schools as it draws many of its students from outside the immediate area. The reasons for this are varied, but include proximity to the inner city and provision of a large after school care programme, the multicultural nature of the school, a Maori immersion class, staff experience and expertise with special needs children, as well a variety of extra and co-curricular activities.

This school is unusual in that as a full primary school the students enter at the beginning of primary age and exit at the end of Year 8. This factor combined with a reasonable small role limit of two hundred and forty children was important to note in the event of setting a longitudinal study there.

On receipt of proposal and ethical approval, I sent the parent and teacher consent forms and thirty questionnaires to the principal. He gave the consent forms to the head of the arts programme who distributed them to her class group to take home to be signed. As well as this role, she is also a form class teacher and from now on will be referred to as the arts teacher. At the end of that week she distributed the questionnaires to her students who completed them in class. If they wanted to be in the focus group, they could also complete the detachable consent form, which was printed at the bottom of the first page of the questionnaire.

I arrived at the school two weeks later and conducted one data collection event each day over four days. When I first arrived at the school, after being met and greeted by the principal, I was introduced to the head of the arts programme/teacher and taken to watch a Stage Challenge rehearsal. The students were being rehearsed by three teachers, all obviously familiar and expert at teaching in the dance vernacular. It is unusual for Years 7 and 8 students to compete at Stage Challenge in New Zealand. Because of an initial success, they had been invited to repeat their performance as part of a different theatre show.

The rehearsal for the next show was held in the school hall. It was interesting to be in a space other than the normal classroom for this first observation. It was useful in that the students were already familiar with having people watch them there. The students had not practised the dance recently and several dancers had forgotten some aspects of the dance. For the most part by the second run through they had regained familiarity with the steps, movements, actions, connections with each other and the meaning of the theme they were portraying.

The theme for their Stage Challenge presentation was issues that surfaced about the so-called Anti Smacking Bill. Many of these students had already completed the questionnaire (Appendix D) and were to participate in the somatic session.

It had been challenging to negotiate a forty-five minute period for a practical somatic session with enough students attending. Although the school was used to guests, both for research purposes and for extra-curricula activities, it was difficult to find a suitable length of time in the school day for me to access as many students as possible. Once I had made it clear that postural awareness applications do not necessarily include high exertion practices, and are just as suited to less active children and those of varied focus levels, I was able to conduct the session with a diverse group of students, over a generous period of time and in their familiar classroom.

The somatic session, videotaped by one of the boys, was held in their classroom and the focus group session was held in a small art or reading room. The teacher interview was held in that same room. After each data collection phase, I went by myself to a nearby café and wrote for fifteen to twenty minutes in my journal. At the end of the last data collection phases, I went back briefly into their form classroom and thanked the students for their thoughtful contributions to my study.

3.9 School participants: general profiles and numbers

I had randomly calculated an average of twenty-six to twenty-eight students in a normal, mixed Years 7 and 8 class and prepared and posted thirty questionnaires on that account.

The thirty intermediate school children, who finally took part, were selected by the arts teacher prior to my arrival. They were her form class group, aged between 10 and twelve years, of either genders, several ethnicities and there were no physical limitations prescribed by the study. As mentioned in chapter one, demographics were set to encompass a range of gender, dance and academic abilities and cultural differences. Although the study would have benefited from opinions and experiences of non-dance students, the selected school had all their children 'participating' in the dance curriculum, even those who had expressed resistance to participation from the beginning.

I attended two informal meetings with the arts teacher in the staffroom. I have noted earlier that she was an equally participant in this study. We spoke about a number of students who had difficulties in participating in dance activities. She observed these students during the somatic sessions and mentioned some of them again in the teacher interview. I have drawn on Bandura's (1999) notes about adaptive functioning, where people behave uniformly or variably depending heavily upon a functional equivalence of the environment, explained notable shifts in their behaviours towards the somatics session and focus group opportunity.

In this participant observer role I was interested to note the immediate friendliness and acceptance levels of the children to someone who was otherwise a stranger in their midst. The arts teacher explained that the school had regular guests and visitors. At the same time it was important to hear that the teacher was aware of likely differences in response that the children might have to anything danced. In keeping with the qualitative case study approach, I had made myself another participant in the study through my journalling process and through having taught the somatic session.

Of the 30 questionnaires sent, 16 were completed (Appendix D) and when I arrived and collected them; five respondents had requested parent consent (Appendix B) to be in the focus group. Several more students (all boys) wanted to join the focus group after the somatic session. They were sent home with the focus group consent form (Appendix D) and all of them returned with the completed form the following day.

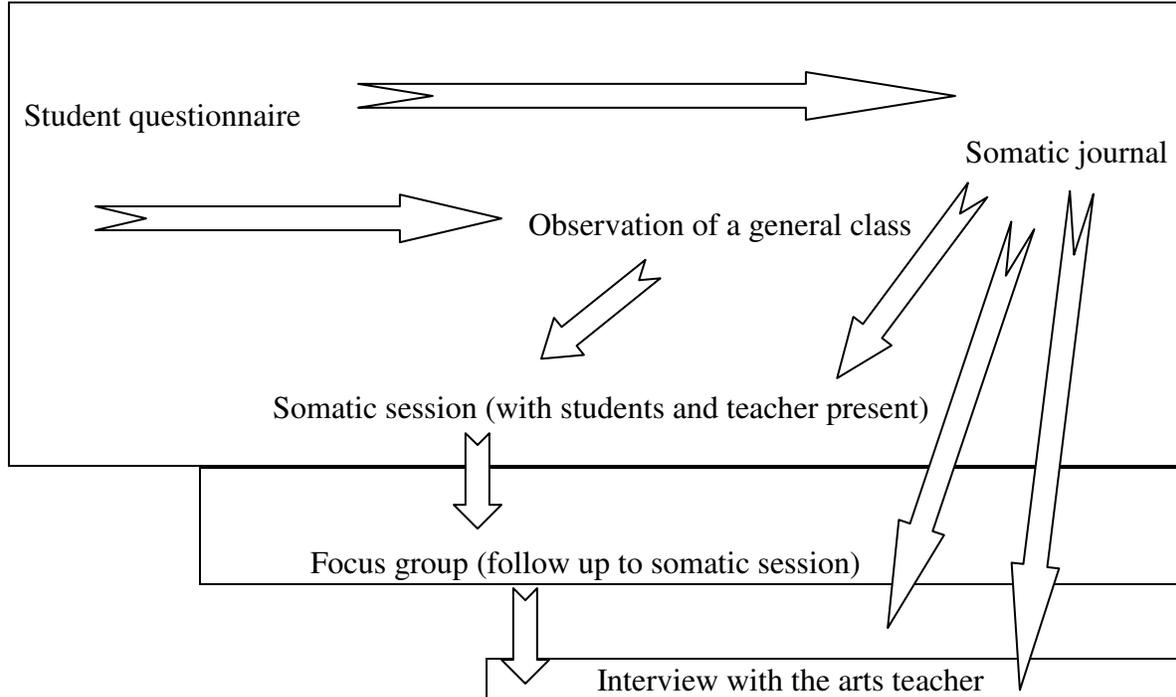
The arts teacher suggested who to choose from this enlarged group, selecting a range of focus levels and a slightly greater proportion of boys to equalize the gender base. As I was particularly keen to keep the numbers of the focus group manageable in relation to the amount of time we had, I agreed to this selection. She sent them to the arts/reading room to meet me there. There were seven participants in the focus group. Two of the boys seemed more interested in helping with the technology than participating.

While I was at the school, I had noted a high level of interest in the Stage Challenge project and dance generally. Although there were other teachers at the school who also taught dance at a deeply integrated level (as with the arts teacher), again, in the interests of my limited time there and because the students who had so far responded to the data collection phases were from her form class, I interviewed just the arts teacher. She was selected by the principal as the person to whom I would send the questionnaires and consent forms prior to my arrival.

3.10 Data collection phases: summary of methods

An issue, raised in any case study, is whether the combination of data collection phases generates sufficient data to answer the questions or whether the emphasis on data is “in relation to the researcher’s confidence and expertise in gathering it” (Burns, 1997, p.380). A rule of thumb applied to the data collection phases was to take sufficient time on preparation and completion of each one to reflect back on the research questions and the overall purpose of the study before moving on to the next phase.

A complete schedule of data collection phases is included in the Appendices section. Table 3.1 below shows the flow-through of the sequence of data collections, and the following paragraphs describe the rationale for their selection in relation to the timing and order of the case study. This section then continues with a more in-depth view of the setting and participants.

Table 3.1: Data collection phases: summary of methods

3.10.1 Student questionnaire

This questionnaire data collection phase was used as a preliminary approach to measure prevalent characteristics about attitudes and motivations of a group of students who had some previous exposure to dance whether at school or outside of it. The second purpose of the questionnaire was to find out what they already knew about somatic practices in relation to their individual postural wellbeing.

To avoid respondent alienation and fatigue, the questionnaire was short and designed to be answered in fifteen minutes. At this age and level, I thought the respondents would be capable of providing some answers in their own words. To enhance question and level clarity, I had piloted the questionnaire in Auckland by giving it to a friend's children who were in the same age range. As a result, more accessible language, illustrations and categories were installed prior to sending it for approval and then distribution. The questionnaire contained a mixture of both closed and open-ended questions so that I could discount proportionally different general expectations about questionnaires.

Predetermined answers about demographics and anatomical information were set as an open question feature.

Emphasis in the introduction to the questionnaire that it was not a test and it was fine for the student to 'not know' or 'not understand the question' meant that respondents could answer from a more personal viewpoint but avoid answering sensitive questions about personal postural wellbeing. While answers to questions about their current postural issues could have provided an extremely useful set of responses, in each case omission became collectible as less anticipated answers and equally important data for analysis.

3.10.2 Somatic journal

The somatic journal commenced after the questionnaire and before the observation in class. The journal was to be used like other field notes to summarise or detail accounts of events and display them to elicit memories after the time there. As well as this, the journal served a different purpose. Self-perception and reflection were mediated by timing the journaling between each data collection phases. This was set in place to reveal a connecting role when representing and interpreting the data. Other notes about the journal have more been recorded specifically in the above section about the respondent voices.

3.10.3 Observation of a general class

There were several reasons for spending some time observing the students in their familiar classroom setting. The primary reason was that it gave students and teachers a sense of my presence at the school; to get used to an outsider in their midst. Teachers and students were able to question me. However, I have treated this occasion as a data collection phase as it physically ceased my role as a complete observer and produced data about how integrated the dance practice is at this school. As well as this, it provided me with an opportunity to observe students' common postural behaviours and the dynamic interaction between teachers and students during dance practice, which informed some of the necessary adjustments to my approach.

3.10.4 Somatic session (with students and teacher present)

But I want that visceral experience. Dance I find is just so... it helps you to... it expresses everything! The body is multi-lingual. (Stuart, 2001, p. 66)

Fraleigh (2004) argues that somatic movement exercises contain repetitive processes which allow the participant to collect different (kinaesthetic) perspectives of learning by using familiar postural conditions. In response to factors and conditions of ability levels which had been discussed in the literature review, the somatics practical data collection phase was developed as non-intensive in terms of high exertion or physically demanding activity (Appendix G). All activities were designed to suit children of all physical capabilities and fitness.

I presented anatomical charts and imagery as integral to the learning and paced the somatic session to incrementally affect activities, which all specifically located the participant students' physical body as the centre of our investigation. Further to this, by presenting an exercise adapted easily from the dance based activity I had already observed, followed by a very simple journalling exercise and palpation exercise, the students received sufficient experience from which to build somatic responses.

This session was videoed, but I also encouraged the students to record their somatic experience throughout the session in a small ready made journal. Although I was aware this video could have been collected for transcription, it served a different use. In the focus group it was replayed to trigger the students' responses. The video and simple single words and even sketches prompted discussion for the focus group session. I felt that having listened to these responses; I would also have had to further record my personal shifts in emphases. These kinds of memories about the somatic exercises would in this way be diluted and compromised.

Somatic activities usually incorporate a time for integration, but the time limits of this study meant that journalled responses were useful as a resource for the students when remembering integrative outcomes. These journals were not meant to be seen by the researcher but the teacher thought I should view them as they occasioned in her some

deep, unexpected responses. Initially they were just to be useful as prompts for the students in the focus group to integrate feelings and memories from which to draw accurate and representative insights of the somatic experience. The arts teacher watched the somatic session. Her presence there meant that material which was noted in my journal was triangulated or at least clarified in ongoing discussions and during the teacher interview.

3.10.5 Focus group (follow up to the somatic session)

The subsequent forty-five minute focus group session was designed so that I could observe the after effects of introducing postural awareness exercises into a normal school setting. The small representative sample of seven students who were all present at the somatic session attended the focus group. I had planned a session (Appendix H) where they could articulate their individual impressions about postural awareness as well as break into smaller groups to discuss what they thought about during the somatic session.

The focus group represented a micro-culture of a school community already embracing dance as an educational tool. The question of dance culture sitting easily in a mainstream educational setting was alleviated, because the focus group already consisted of students extending their experiential parameters. In this way data, albeit discontinuous, provided a rich source for the data collection. Responses from these students were thus promoted as reliable, common impressions.

3.10.6 Interview with the arts teacher

I drafted a standardised interview protocol, in which specific questions were to be asked and recorded. An outline of the kinds of questions that were to be asked, and in what order, have been listed in Appendix I. The questions were worded to allow for reflection and clarification about the teacher's beliefs and position in relation to somatics and the dance curriculum. Observations during the Stage Challenge rehearsal of various teachers who were also engaged in student day-to-day interactions were of great value when making the final preparations for the interview with the teacher. A more detailed

discussion of the methods aspects of the interview with the dance teacher has been assigned to chapter four to contextualise the findings.

3.11 Data analysis

The aim of the data analysis was to address the overarching research questions about students' responses to postural awareness exercises and the attitudes and beliefs they and their teacher held toward the inclusion of somatics in some of their daily school time activities. Immediate descriptions of what school students knew about their own posture and anatomy had to be collated prior to collecting data about how they responded to somatics in a familiar environment.

The questionnaire provided empirical data to commence the development of some basic themes or categories from which to build appropriate levels of language and activity for the rest of the data collection phases. Effort has been made not to reduce these figures otherwise to simple quantities but to look at the way they bulked to produce alternative shades of meaning about some of the central themes which had formed the initial research question.

Propositional (Glossary) content, which has been embedded in the initial phases of defining the problem, anchors the study and to this end the analysis of these data collection phases focuses on a process of representation and interpretation rather than an outcome of simple reduction. As with the methodology, prioritising one-off descriptors of this intensive study is regarded as important in that they preserve the initial questions and objectives as an unfolding skew. The research questions themselves have undergone shifts in emphasis so that the analysis reflects a review of the situation from as many different lenses as possible. Sarantakos (1998) describes this sort of analysis as being based on an open and flexible approach.

The data collection phases were to be analysed in the same sequence as they had been conducted. In keeping with this flexible and sequential approach, each method became a kind of filter, expected to move the descriptions from raw data to meaning in a deeply

logical way. Data combined and read this way was also set to unfold less expected evidence and other than from a 'tertiary dance teacher' point of view. Because a transparency of somatic intention and conduct throughout the research investigation relied on a dialectic process, what then became available were interacting and conflicting ideas. In the next chapter, the findings are presented as a product of this analysis.

3.12 Ethical considerations

Introduction

As with any other educational institution, Unitec offers clear ethical principles that govern student research activities. Guidelines and protocols have been designed to create proper behaviours and responsibility for the researcher, from the commencement of the thesis to completion. Copies of information sheets and consent forms had been viewed by my supervisor to ensure they met accepted criteria and were formally accepted by the Unitec Research Ethics Committee (UREC).

Because I was intending to set my study in an environment with children, I felt an obligation towards considering some deeper ethical considerations. Before completing the ethics proposal application, I aimed to devolve a consistently sensitive approach to take into the school. To this end, I completed an Auckland University summer school course in Ethics (Phil102) at the beginning of 2007. As a result, some concepts of the feminist ethics of care have been incorporated into my approach to the study.

3.12.1 Informed and voluntary consent

A letter to the principal (Appendix A) was sent in advance with consent forms (Appendices B & C) for the students to take home to their parents to get signed approval. As a first communication it functioned as a way of resolving an issue that directly related to setting the study in a school. The consent form contained my introduction, an overview of the project, information about the reasons for the research study, request for permission for their child's participation and also assurance that if they or their child wished to discontinue participation in the study they were able to withdraw at any stage.

Further to this, I added a date for final withdrawal of their contribution to the data and a commitment to making the thesis available on completion and marking.

3.12.2 Gatekeepers and a respect for rights and confidentiality

In any research study there are conflicting attitudes about levels to which children can, and will, discern and control occasions such as this study has introduced. Children's own interests, experience and knowledge have often been excluded in adult vested protections (Hood et al., 1996). In the United Nations Convention on the Rights of the Child, (UNTS, 1990) the fourth core principle is about respect for the views of the child. The other three principles are non-discrimination, devotion to the best interests of the child and the right to life, survival and development.

Every right spelled out in this Convention adheres to principles of human dignity and the harmonious development of every child. It was not just the principal and the school board who gate keep research studies such as this, but parents who (rightly) control research access to children's opportunity to express themselves and their views. I hoped that by giving parents prior opportunity before my arrival to discuss the study in the home environment with their children, in signing the consent form, they also invested in their children levels of freedom to explore and experience the data collection phases in their own ways.

Parents or primary caregivers of each of the students having been identified as gatekeepers, needed to be made fully aware of the extent of the study. Specific gatekeeper issues which relate to this study have been described as possible limitations in more depth in the final chapter of this thesis. In relation to ethical considerations, children were informed about the research and parents given the right to withdraw their child from the process at any stage. Parents or primary caregiver were permitted to be present at the somatics session.

At the end of the questionnaire, the first data collection phase, the children were thanked for their participation and assured that their information and responses would be treated

with respect (Appendix D). This questionnaire also contained a cut-off slip for their consent to be involved in the somatics and focus group sessions. Anonymous self-selection for the focus group gave the students a personal opportunity to not participate any further.

3.12.3 Minimisation of harm

There were other special considerations throughout this research process. On her website, dance therapist Halprin (2006) queries the language platform of any enquiry as needing extensive consideration when placing humans in the vulnerable position of expressing from and about themselves. The participant children were to be engaged in new physical experiences which may or may not evoke emotion. In the somatic session, the students were being asked to view their bodies from an individual perspective.

In recognition of a long-term strategy for dance studies like this to lead the way towards postural awareness to become part of normal school practice, close attention was paid to finding out what constituted both real and desirable experiences. Emotional safety issues were addressed by reiterating a somatic principle that entrusts the individual with the interpretation of their experience. A simple debrief at the end of each data collection phase with the arts teacher and her students, a common practice in awareness training, presented an appropriate occasion for the students to feedback their feelings and thoughts. Any sensitivity and empathetic management of children dealing with external or internal situations was to be referred via their teacher to the school counsellor if deemed necessary or on request.

3.12.4 Cultural and social sensitivity

I recognised that cultural emphases would not be easily addressed in the short time period of the study and particular care was paid to include existent educational practices and values in the design of the participatory data collection phases. UREC cautions, where ethnic groups could conceivably be involved as participants in research that thought needs to be given to the appropriate cultural support people who could advise on design of the research methods.

I found it useful to have a collegial Maori adviser to check assumptions, protocols and expectations before embarking on my study, which might draw out less perceived aspects of bicultural difference. In the commitment to embrace Maori values in the context of the research an important aspect of emotional safety and growth has been considered. Referencing Hauora, Maori philosophy of health and wellbeing, provided an important concept and context when presenting integrated physical, emotional, social and spiritual dimensions of healthy bodies.

An issue, which impacted on other cultural groups and, of special relevance in this case study, was raised about children who have less movement freedom than their cultural counterparts. As mentioned previously, somatic imagery and activities do not require excessive movement but do require some freedom for imagination and thinking to proliferate through physical actions. Sensitivity and prior communication with the dance teacher was required to check whether children know that the activities could take them down onto the floor and through a variety of movements.

This study did not otherwise seek to differentiate culture, gender or ability. As I continue to teach somatic practices across a wide range of groups including physically disabled and mentally impaired people, the somatic activities were set to see how the individual met the understanding of their own body moving (Bandura, 1999). As mentioned in the literature review, there were no performance outcomes.

3.12.5 Limits of deception

Throughout the study particular effort was made to be overt about the research, and to develop a rapport with the group (Anderson & Arsenault, 1998). My ability to generate sufficient data in relation to my confidence and expertise in gathering it was an issue raised when scheduling the data collection phases. As with the previous application of ethical considerations, the rule of thumb in all of the data collection phases was to take sufficient time on commencement and completion of the data collection phase to reiterate

the purpose of the research to the respondents and the particular reason for that phase. Hence the somatic journal.

3.12.6 Respect for intellectual and cultural property ownership

Intellectual and cultural property was safeguarded by observing UREC storage guidelines. All data, questionnaires, consent forms, confidentiality statements and video documentation have been kept in a secured file in the supervisor's office and are to be retained for five years before physical destruction as per the guidelines. Only the supervisor and I have had access to the files.

Intellectual and property ownership was otherwise considered in a pre-designed link between the somatic session and the focus group. A somatic journal was designed to be used as a prompt for the focus group. The students recorded their observations and impressions about how they were in receipt of this experience in their individual journal. Critical to the ownership of their experience was the ownership of this journal. However, the results of this journal differed significantly from the expected outcome and this has been reported in the teacher interview findings in chapter four.

3.12.7 Avoidance of conflict of interest

In the initial letter to the principal, I declared my position as student researcher, my intentions for the research and the hoped for outcomes of the study. There were no sponsorship or agency issues in this case and no perceived conflicts of interest.

3.13 Summary

Research design adequacy has been elaborated previously in this chapter, leaving a point for reflection about the difficulty of knowing whether the study has successfully been aligned with ethical considerations at every step. Details of ethical considerations have been woven through all aspects of the study. They fit into three categories: issues about consent and subsequent participation in the study, a careful application of considerations as to how children are to be treated in relation to the research potentials and thirdly, an

ongoing recognition of the developing role of researcher through the process and power of retrospection in the writing process.

In order to bridge the gaps between researcher expertise at Masters Level and the requirements of a deeply ethical project, focus has been maintained in my somatic journal, in discussion with peers and through regular contact with the supervisor. These dialogues pre-empted the direction of the analysis of the data collected and created an extended partnership with the unfolding research process. That is, these considerations have not only informed the methodology trajectories but also the eventual conclusions and recommendations that have yet to be discerned.

CHAPTER FOUR: DATA AND FINDINGS

4. Introduction to the data analysis process

This exploratory study is designed to explore a more theoretical base (LeCompte & Preissle, 1993) rather than clarify a population sample. An inductive approach has been used to establish links between the research objectives and underlying results derived from the data collection experiences. A linear, flexible approach to the findings maintains my commitment to viewing the study's issues as being complex and multifaceted. An inherently somatic process of representation and interpretation accommodates reflective variables about emphases, timing and sufficiency of attention.

In the first place, a direct interpretation of events forms a descriptive account of the study's ongoing narrative (Eisner & Peshkin, 1990). Making use of a descriptive analysis of the data formed a systematic approach to fine-tuning the four foci of the theoretical framework. Rather than using them as a priori categories, by repeated readings, student and teacher impressions converged, compounded and clarified as meaningful responses to become rich descriptions of somatic practices at school. That is, what had been immediate qualitative data, simply reflecting what was most frequently reported; on subsequent readings revealed a theoretical proposition. This proposition has been expanded in chapter five to be incorporated into the design in readiness for further research. Contexts to which the study may be transferable are outlined, and modifications and applications of the analysis techniques have been considered.

Each data collection phase has been sorted, one after the other, in the same sequence as they were collected. Our three respondent voices, the students', teacher's and mine, have been installed across the findings. That is, when appropriate, direct quotes from students, the arts teacher, or a journal excerpt are incorporated to serve as reflective counterpoint or continuing analysis. As well as emphasising triangulation as a method to reduce discrepancies between the initial problem and the data (Cohen, Manion & Morrison, 2007), I found that in positioning the three sets of participants in this way they are affirmed as simultaneous and unequivocal.

I had initially expected to produce vignettes about the children in the focus group. Unlike the questionnaire or the somatic session, the focus group data revealed less about the general aspects of the students reporting their experiences. What stood out instead were individual dynamic and observable integration processes, which had occurred, and which I was not able to define in the simpler articulated memories of the actual student. On a more recent reflection, I decided to give the data a different feel by renaming the students with a word describing a natural form. These names were generated by personal reverie of a cave under the stars; a somatic stimulus which evoked a reminder of each child's characteristics and contributions without violating their anonymity. The names, which are employed throughout the data analyses, are: Arc, Stars, Vault, Rock pool, Cloud, Rain, and Fissure.

4.1 Analysis of the methods in sequence

4.1.1 Questionnaire

The questionnaire served two purposes: it introduced me, and also my version of the subject of somatics, to the students and the teacher at the selected school. When I arrived, the teacher anecdotally reported that several of the students felt the questionnaire had been too hard. She also noted that she had handed it to them to complete at the end of a school week. She thought that, had they received it at the beginning of the week, they would have found it less difficult. Sixteen out of thirty questionnaires were completed. Initial information has been briefly summarised in Table 4.1.

Although this information about response difficulty may be useful to note for development in the next case study, the questionnaire, in the meantime, provided some empirical data for me to use. I had not known what the students knew about somatics and condensing the raw data from the questionnaires gave me some information. Recognising how much basic anatomical and somatic exercise terminology was already in use at the school, allowed me to build an appropriate somatic session for the third data collection phase as well as establishing concrete links to the key educational categories for this study: how dance links with learning, postural awareness as part of the school day and postural awareness practices and processes generally.

Table 4.1: Questionnaire results

16 x Questionnaires completed – “No response” not recorded unless stated

Researcher comments

Practical experience of dance – encompasses dance experiences at school and outside of school						
Everyday 2	Sometimes 7	Occasionally 6	Never 1			
Summary: Students at this school are for the most part experiencing dance sometimes and occasionally						
Different kinds of dance experienced						
Ballet 0	Hip hop 3	Jazz 1	Cultural 1	Other 2	Anything 2	“Anything” was a category added by the respondents.
Summary: Out of a group of 16 respondents, 7 are taking some form of structured dance. The 2 who have responded doing “anything” are possibly referring to social or a non specific form of dance						
Reasons to do dance						
Enjoyable / fun/ happiness / cool 10	Good exercise/ get fit / to “get out” energy 9	Have to 3	Don’t do it 2			The respondents offered these terms which I have made categories.
Summary: Most of these respondents do dance because it is either fun or for exercise/ fitness reasons						
Links with other subjects						
Stage challenge/ Anti-smacking Bill 7	Sports 1	Inner feelings 1	None 1			The respondents again offered these terms which I have made categories.
Summary: The respondents have made clear links with other subjects through their very recent experience of preparing for Stage Challenge						
General knowledge of anatomy/ kinesiology						
<25% 2	<50% 5	<75% 2	<100% 6			Totaled scores of general knowledge section and made into a percentage.
Summary: The respondents have a slightly greater than average awareness of a general knowledge of anatomy						
Awareness of posture as a general term						
None 4	A little 5	More 2	A lot 3			
Summary: 75% of respondents have little or no awareness of posture as a general term						
Awareness of own posture						
None 4	A little 8	More 4	A lot 0			
Summary: Over half of the respondents have little or no awareness of posture as a general term						
Times of the day when respondents notice postural discomfort						
Before school 5	Before lunch 4	During lunch 4	After lunch 6	After school 5		The respondents were given a more detailed range but the figures surfaced like this
Summary: The respondents show awareness of postural discomfort throughout the day						
What the respondents do about postural issues						
Nothing 6	Something 7	No response 3				“No response” is included here as this related to awareness of own body
Summary: Just above half of the respondents deal with their postural discomfort						
Does dance relate to posture?						
Yes 6	No 0	Don’t know 5				The “don’t knows” are not the same respondents as the “yeses”.
Summary: Most respondents agree that dance does relate to posture although an almost equal number don’t know						
Does dance relate to their future?						
Yes 5	No 4	Don’t know 2				
Summary: More than half of the respondents think that dance relates to their future						

I see the table above as a purview of postural awareness in a class where dance was already part of the weekly programme. Significantly, students who dance at school have some knowledge about anatomy (10) but three quarters of the respondents knew little about their own posture (12). All but two of the respondents reported the experience of feeling physically discomfited at some or several times of the day.

The respondents had not yet experienced the somatic session but six thought that posture did have something to do with dance. Five more said they didn't know. All respondents recorded that dance had something to do with posture. At the same time, six of them reported that they did nothing about physical discomfort. Seven more responded that they would *get up and move around* or *stretch* with only one respondent recording the involvement of any other person (*Mum!*) for assistance in resolving the discomfort. This in itself points the way towards realising that these children are resilient in dealing with postural issues as part of their everyday life.

As mentioned in the introduction to this section, it was not my intention to otherwise compress the figures or reduce them as quantitative data about a small cohort, or to create a profile for a sample population of children dancing at school. The data, so far analysed, simply supported an emergent theory that students at school may already be capable of postural awareness without having a clear language to describe it or tools to employ it.

The questionnaire responses were generally easy to interpret and in spite of some children not answering all the questions, the students' attempts to answer provided a different source of rich data. For example, in the question about describing posture, only one student inserted a dance specific descriptive word, which was *graceful*. Other terms the children used when asked about what they thought posture meant were *a stick*, *arms straight*, *chest out*, *head up*, *manners and politeness*, *no slouching*, *sore bones*, and *stand tall*.

The information produced from the questionnaire helped not only to predict the extent, depth and shape of categories for the other, possibly more intensive, data collection

phases but more meaningfully elicited the range and interest variables about individual postural awareness in the group. As a result of the questionnaire responses and observations of the group in the classroom and dance rehearsing, I recorded in my journal a presupposition about ways they were negotiating somatics through ease and familiarity in their learning environment.

What I thought the students had already said (in the questionnaires) was in relation to their relationships with; the teacher, their classroom peers, their histories, communication, cultural, knowledges and beliefs, their identity, energy and boredom, school and education and their body and movement

This reflection added to my question about children not having the tools to link dance knowledge with ordinary postural applications in that their dance knowledge remains discrete from other subjects and reliant on prevailing group dynamics and trends.

4.1.2 Observation of a general class

I noted in the preparation for the observation in the classroom schedule (Appendix E) that I had planned for this data collection phase to occur between the somatic session and the focus group, but also that there was to be a reasonable amount of flexibility about when it could be placed. There was a particular purpose for this data collection phase. According to Shrum, Duque and Brown (2005) deflection refers to “the process through which methodological tools aid in constructing boundaries for the investigator/subject interaction” (p.12). These authors define the deflection of interaction as “entrance into a new phase that creates a different kind of relationship between researcher and informant” (Shrum et al., 2005, p.13).

In the structure of the whole research event it was important that I was seen mingling with and witnessing the students at work. Therefore, as soon as I arrived at the school, the principal’s suggestion to watch a rehearsal of the Stage Challenge dance provided me with a most appropriate data collection occasion. In his introduction the principal reiterated that the arts teacher also expected the Stage Challenge rehearsal to be a useful occasion for my study. She first brought me to her form classroom and after a brief introduction with the students, we trouped together to the hall for me to observe a pre-set

rehearsal and a number of practice runs. As mentioned in the settings section of chapter three, they had not rehearsed this dance since the previous performance, which was some weeks earlier.

This sequence of introductory events gave me opportunities to mingle with and also observe the students in both a non-dance and dance setting. The students overall did not seem nervous about having me there, but several students produced a number of noticeable “show off” type behaviours, for example being put off their concentration by watching me then doing a more energetic and unlinked step, which inevitably put them out of sequence with others in the dance, or, hiding behind someone prior to an entrance, which also was off-putting for themselves and others in their group.

That is the best dance I have ever done!

The student I have quoted above was a lead character in the dance but came on stage later in the piece. She did not make this statement to me directly but blurted it out at the end of the second run of the dance. There were observable differences in enjoyment throughout their rehearsal session, which became noticeable as links between focus and memory. That is, the student who was enjoying the dance was also concentrating on the task of remembering it.

Normally in a dance teacher role, I would watch the individuals for dance expertise and performance levels. For this occasion, I was aware that I was observing the students dancing from different criteria formed by the study’s questions. Dance expertise and performance levels became counterpoint to the ensuing data. By making this initial distinction in observational emphasis, I was able to link, later in the analysis, in the student journal, and again in the focus group, the way one of the students (Arc) made accumulative connections between what she was finding out, in relation to the Stage Challenge learning, body knowledge, but also about how she was absorbing this new material. Her descriptions illustrate the complex relationship between active performance participation and learning efficacy. These (Arc’s) quotes are listed in the focus group account.

In planning the somatic session data collection phase, I had previously hoped to be able to observe both dance participant and non-participant students. The school expected that all students would take part in the dance activities but some students were able to *not* dance and still participate by involving themselves in the required technical aspects of lighting or stage handing. A second subtle observational example occurred when one of the students came over to me during the rehearsal, and took the time to explain his role as the stage hand and technician. I recorded in my journal his explanation:

I just want to do the lighting and technology. I like watching them dancing.

He seemed to have also absorbed the dance learning. This same (male) student insisted on helping me with my technology needs in the somatic session, thereby continuing to avoid dancing (moving) but by the end of the somatic session, I noticed that he was able to do the anatomical, palpation activity, with the same levels of understanding as the other students. That is, the somatic terminology and principles did not have to be re-explained. Through his own deep observation and interest levels he was able to explore and absorb the lesson. For him, somatic learning was available through a different medium. As with the others, he participated in a capable and active way through the discussion during the focus group session.

Keeping the perspectives about these two students' ways of consciously and unconsciously connecting to their learning in mind, a social phenomenon of dancing in a group made responsive behaviours even more obvious. The two brief travelling times between the classroom and the hall provided me with opportunities to watch students cooperating and responding to non-dance commands.

I noted in the journal that the students were focused at the beginning of the rehearsal, differently to their travelling between the classroom and school hall. In the dance setting, responsivity and behaviours both noticeably adapted to rehearsal needs of focus, group spacing and timing. However, in the somatic journal, which I had recorded as always

shortly after the data collection phase, I noted that this dance rehearsal focus was more self-imposed.

Focus, side of stage, individually, less so than with the whole group.

I felt that the students were responsive to their instructions but also to their freedom - to participate - to feel.

On the return to the classroom, I observed a different occurrence, which I also recorded in the somatic journal:

I thought the children's energy changed when we got back in the classroom. On the way there I could sense disarray (as a group)... usual distractions. Straggling, taking along a pencil, splitting up... and groupings. On the way back, easy march back and most (except one) settled back into silent reading (wow!) The one who didn't settle – he had to go outside and take a breath of air and remind himself that when he came back he would be sensible. He did – and did!

The arts teacher regarded his distraction as a regular occurrence. I spoke to him in the somatic session about the positive benefit of conscious breathing and he reported that it linked up with how he was feeling at the time.

4.1.3 Somatic journal

As mentioned in chapter three, journaling is a familiar way of negotiating somatic experiences. Throughout the first data analysis, I have used journaling to continue to do that, and at the same time, as a tool to mediate less expected analytical outcomes of the study. In the development of a penetrative framework to interpret the data, the journal has therefore become not only a record of shared instances and responses but available to be viewed freshly again and again as a record of our standpoints. By going away from the data collection event to write, meaningful textual passages and figures from the journal could be interpreted equally purposefully for the analysis, and then for the discussion about journaling as a reflective practice tool.

Instead of writing journal notes in order of page number or timing sequence of the data collection phases, I randomly responded to headings established by the author, Ward Harrison (2005). In these ways the journal notes are not so much an account of the

progression of the study's findings but avail the discussion of a more detailed account of the impact of a somatic encounter at school. The following excerpts and pictorial data from the journal have been interpreted to illustrate an interchange of responses, significant as a sequence of unfolding contextualised behaviours of the children and their teacher's experience of somatics.

During reflection about the usefulness of keeping a journal, I recorded an observation, which stemmed from Laurel Richardson's (2000) descriptor of factors she considers when reviewing personal narrative papers. This factor supports an intrinsically reflective and adjunctive use of a journal in the exploratory case study method.

...Expresses a reality? Does the text embody a fleshed out sense of the lived experience? (Richardson, 2000, pp.15-16).

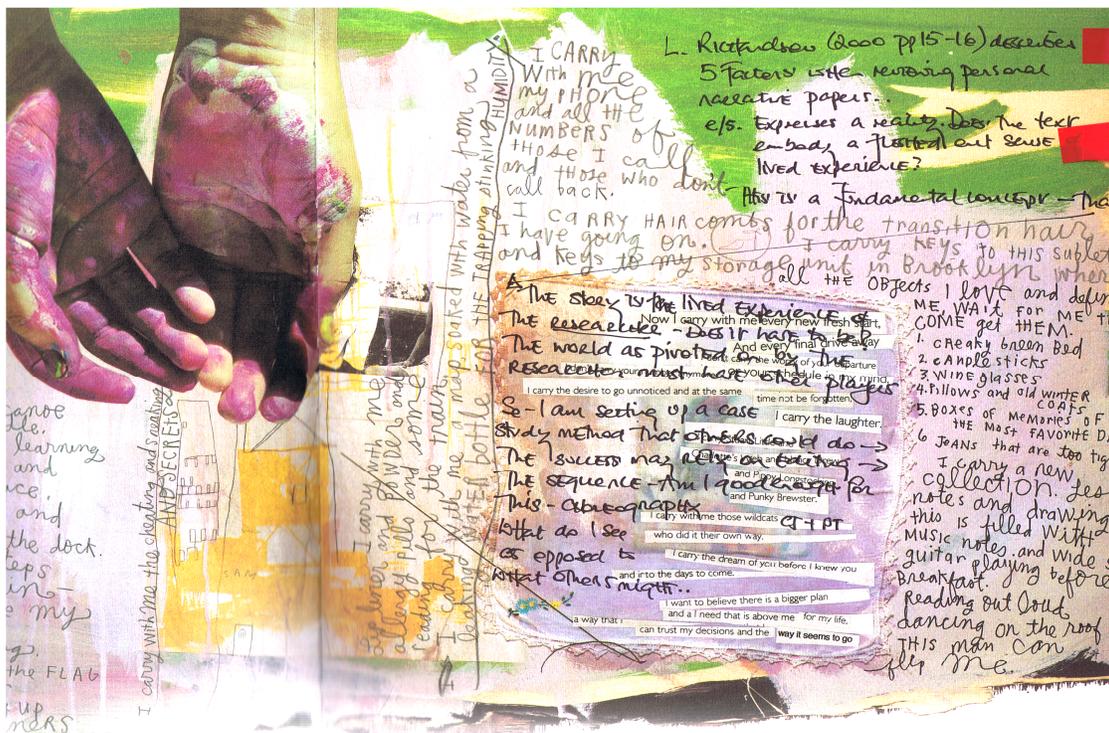


Figure 4.1 Somatic journal

This figure depicts a way I still combine how I 'do' dance. In re-viewing this illustration, I felt like a performer in the wings, taking a deep breath. By drawing on personal tools for responsiveness in relation to being the stranger in the group, different aspects of self-

perception played a critical role in the evolving observations about interactivities with the students and arts teacher. Below is a list of the points that stemmed from these reflexive considerations about the somatic effects on the research experience:

Social relationships among participants and points of view...

Verbal presentations of events, activities and relationships (teacher, students)

The authority of dance at school..., influence by change

If a child holds so much dance in their body memory (learnt movement through a possibly fragmented process), what else is stored there as movement and what can be evoked and what can evoke it?

The latter quote revealed that revelations and thoughts were linking the methodology to embodiment as an ensuing research practice, thereby keeping the study actively in tune with somatic principles of experiential awareness. Figure 4.2 illustrates an example of the way the reflective notes took a *micro view of why the analysis veered in a certain particular direction*.

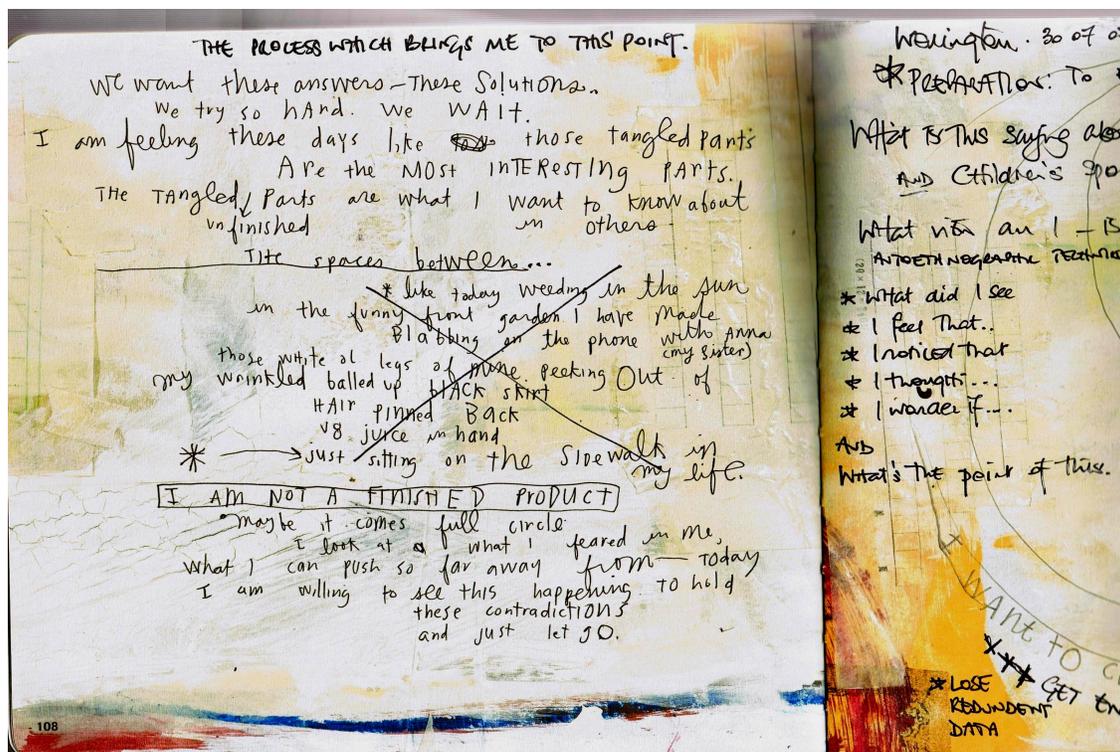


Figure 4.2 Somatic journal

I had been enabled to gain insights, knowing that we were all reacting, performing even, consciously and unconsciously to an outsider's form. These insights were produced in the journal as introspective statements and a question:

I enter the setting (classroom) and remain physically detached from activities and interactions

I engage in some of their regular activities and periodically withdraw... I re enter but eventually I leave

When would my audience want me to show them?

To establish anomalies in the details of each somatic encounter, I also journalled my responses to some of the instinctual preparations I had initially made for each session, as well as interdependent and relational aspects of each day's communication with the arts teacher. In the journal I headed this page with the title, *a presupposition of familiarity*. In the following two figures (Figures 3 and 4), notes about the way the teacher and I had subconsciously formed an empathetic relationship have been made apparent. This ensured that the students' somatic experience fit with the daily tasks.

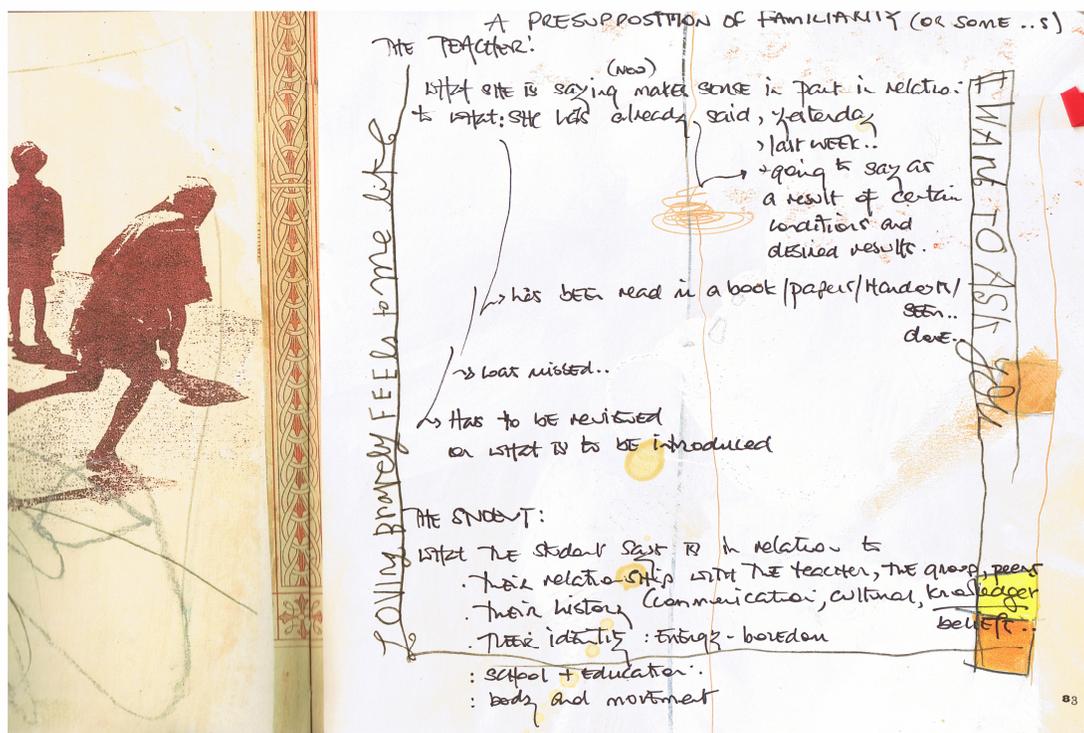


Figure 4.3 Somatic journal

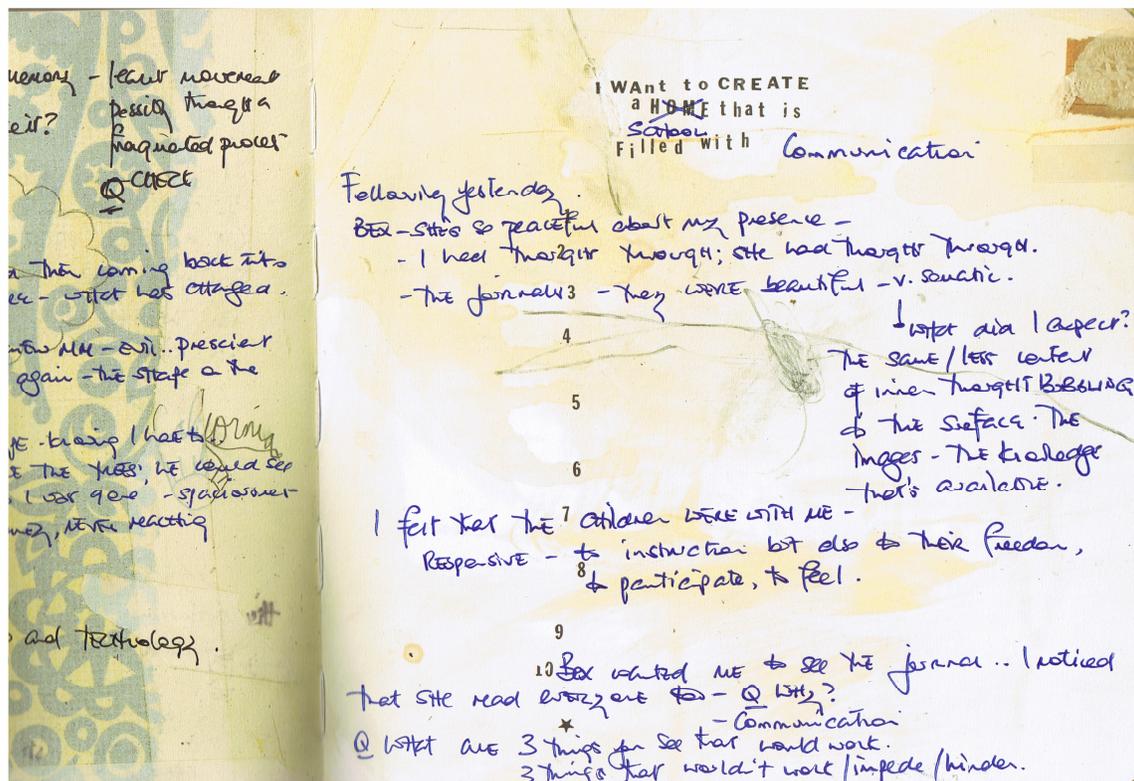


Figure 4.4 Somatic journal

In ongoing rereading of the journal, the question about whether I could research and teach also surfaced. What became immediately obvious from this journal analysis process is that a study which involves active participation does rely to some extent on teaching skills and expertise. Although I was overtly relying on specific teaching (and in this case co-teaching) skills in the somatic domain, by making field notes in the journal about what I was witnessing and responding to in the data collection phases was making relevant the interface between arts teacher and the students.

Figure 4.5 below, illustrates the progression of these thoughts in relation to the complexity of my professional career, which indeed encompasses both these roles. Figure 4.5 demonstrates important consideration about the deeper subjective purpose of this study, and the ways I have benefited as an educator and somatic practitioner from the vicarious experience of researching.

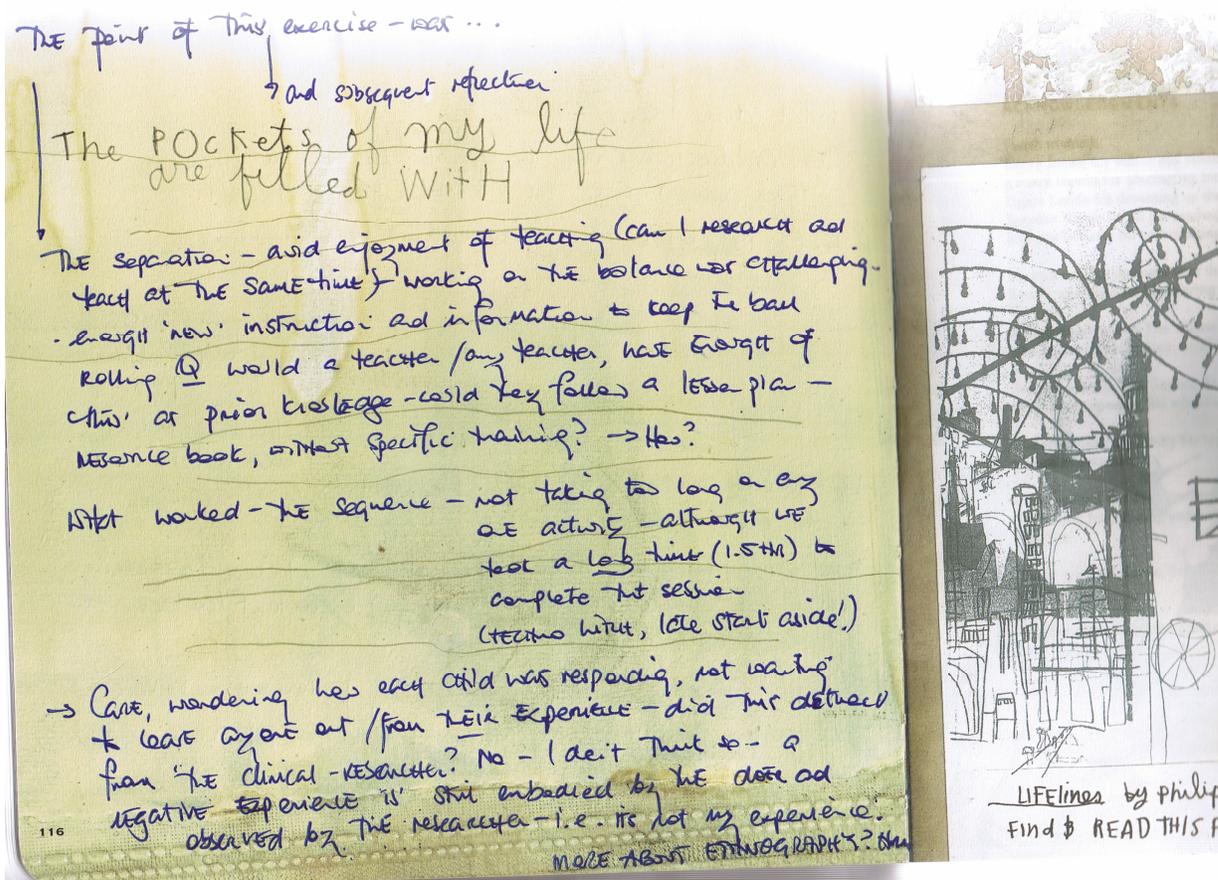


Figure 4.5 Somatic journal

The issue of transferability remains tethered in the journal.

What do I see – as opposed to what others might...?

Can the study be done again, by someone else?

...(is the journal a) guide for future researchers who wish to replicate this study?

In summary, although, important aspects of reliability surfaced when each of the three respondent voices was recorded as individualised experiences of the same situation, the journal remains as a foundational data collection tool to witness and interpret somatic practices. It was in the maintenance of my professional dance experience, my tacit knowledge about dance as educative and particular interest in somatic practices that exposed a different point of view about dance functioning in the school setting.

4.1.4 Somatic session

By the time I arrived at this data collection phase, I accepted that this was an intensive study. Not basing the methods on any earlier model or theory made parts of the analysis unexpectedly laborious and uncertain. Instead of continuing to simplify observations, I decided to account for this data collection phase as an holistic overview. As a result, emerging observations remain as important as detailing the responses of any member in the study's group. The question about whether somatic practices were more recognisable at this school, because the dance curriculum was so well integrated, remains as comparison for previous expectations about movement learning applications.

After reading the responses to the questionnaires and the observation in the classroom data collection phases, my careful somatic session plan needed some minor adjustments in relation to flow of the session and length of time for each activity. The students were comfortable with me, they were clearly familiar with, or interested in, dance at a deep level and communication with the arts teacher was already lively. Reviewing the plan of the somatic session was fun as I was able to simultaneously decrease presupposed issues about their dance confidence and interest.

The sequence of somatic activities was therefore not so much to place emphasis on the introduction of a skills practice for the students or present alternative points of view about physical wellbeing, but to instigate essential opportunities to observe their responses to an holistic concept of somatics. I argue that if somatics was to be included in dance sessions at school in the critical years of physical and behavioural development, was suspended in my increasing interest that somatic values of accessing memory and expressivity skills were already in place at school but not being given weight as a valuable learning efficacy tool.

Although the video data is a record, its purpose was only for the students to be able to remember what they had been doing and possibly trigger memories about how they felt during the somatic session. Therefore the video material has not been transcribed. Incipient discussions that included how the students thought of human movement in

relation to their own physical wellbeing were recorded not as a transcript or in the video but as impressions and reflective thought. The students received a short personal journal to write down or draw their responses as we progressed through the session. Appendix G is an outline of possible activities which were to be included in the session, and this section (4.1.4) includes the findings and analysis of what happened as it was recorded in the journal.

There are no specific technical dance demands on students doing somatics (Thorburn, 1998). Once we handed out their journals for use as a personal record, both the students and the teacher (by her observation) maintained a fluid interaction with the somatics tasks throughout the session. I had not intended to read the students' journals, but the arts teacher did overnight and wanted me to see them. We asked permission of the students and I made the following note in my journal as a result.

The journals – they were beautiful, very somatic, what did I expect, the same less thought bubbling to the surface. The images, the knowledge that's available. (The arts teacher)... wanted me to see the journal – I noticed that she had read every one too – why?

The arts teacher reported that following the completion of the study, the students asked to take their journals home. The ease with which the students expressed themselves in the journal was notable, as much as the decrease of the movement inhibition factors I had noted in the Stage Challenge rehearsal. Students' levels of focus had been observed and then reiterated in the interview with the analysis of the arts teacher interview. I recorded in my journal that the students' focus was increased and very much like the dancerly focus noted in the previous observation of a general class section.

They stayed with me through the sequences – linked the exercises and got quicker at understanding the content context.

Another example of focus with ease, which I recorded as pictorial data (Figure 4.6), became apparent when I moved the students away from their desks and encouraged them to sit or lie with eyes closed on the floor in front of the whiteboard area.

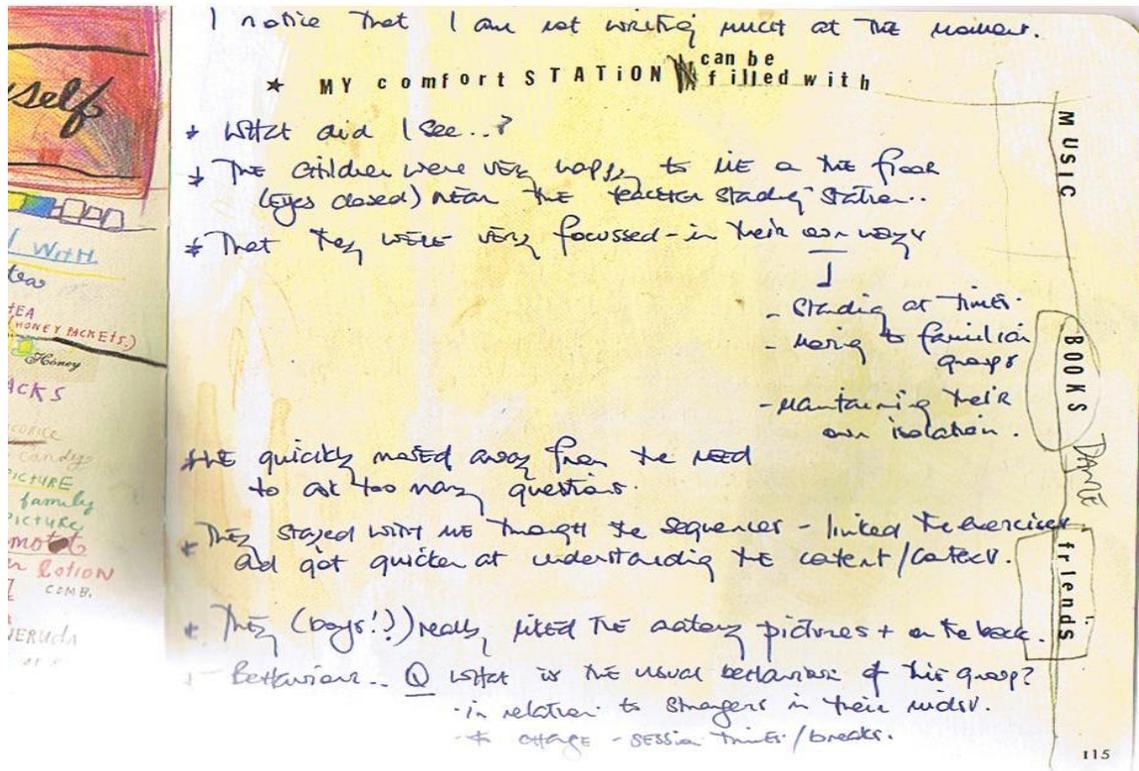


Figure 4.6 Somatic journal

It surprised me how quickly the students became at ease with lying on their classroom floor. The instructions included autonomy in keeping their eyes open if they felt uncomfortable about having them shut.

I checked with the arts teacher before embarking on the next activity which included looking at anatomical charts displayed on the surface of the student's back, followed by a palpation exercise. I recorded an interesting shift in response:

The boys really liked the anatomy pictures - and on the back...

This is one of the first journal entries where I noticed how much interest the boys specifically held. Dance is traditionally seen as a girlish occupation (Buck, 2003 cited in Holland & O'Connor, 2004). To a teacher of contemporary dance in a predominantly female environment, it was revealing to see students of both genders maintain a high level of focus and responsivity to this exercise, as well as function easily at this age as a

mixed group. What was equally interesting to note was that the children as a group were comfortable with touching each other to locate bony prominences.

In this data collection phase, a common and awkward aspect of physical learning became apparent. Two students stood out as being on the edge of the group. One student was a recent, visiting student who knew very little English language. She received a personal journal and stayed close to the group for the first three activities, but was distracted and given a different drawing task by the arts teacher. She had been observing the whole session. The other was a boy who hated dance (he was very clear about that in his personal journal!). He hovered at the edge of the group and joined in the palpation exercise.

In these ways, the two students who chose not to be included in this session were able to maintain their presence in the group by watching, choosing to participate when they felt like it and contributing to the discussion. Levels of interest in relation to learning are not outside the ambit of this study but I realised that I had no real measures in place to record them or determine reasons why these instances occurred.

4.1.5 Focus group

Keeping the first two questions of the study in mind and with regard to setting further studies in place, the small amount of focus group data seemed, at first, of little value. As well as being allocated limited time to explore a topic in depth through discussion, with a group of this age, I still relied on the ease with which they would share the reflections on their experiences.

Following the somatics session there was an increase in enthusiasm about attending the focus group. Several more children wanted to participate in the ensuing data collection phase and some of them went home that evening to get parental consent. If they had not received parental consent I had the agreement of the arts teacher to exclude them from the focus group. The group who presented themselves the next day was somewhat precocious in their initial behaviour. I was already more nervous about this smaller group

as I was aware of an immediately different intensity in the session and volatility about what we were trying to achieve.

As mentioned in the methods' outlines, I had no intention of video recording this session as I felt that emphasis on technology was already detracting from unadulterated student responses. The following findings have been preserved by my note-taking at the time, which has been transcribed, as well as subsequent reflection in the journal. Note-taking seemed a less obtrusive method for observing interesting characteristics of the group, but because of this the data was also initially hard to report as it was also reliant on memory of interactions and less definable relationships between the students.

Although this session provided a focused environment by being in a smaller room, with a less numerous group who by now had previous experience of the topic, as I was not aiming to generalise findings, responses had to be kept simple and directed. Attention to how the students felt, re-presented a critical feature which contextualises the study's pretext stance about communicability of experience.

To this end I called on specific skills of facilitation, to give students equal voice for their previous and current experiences. These skills included making sure that each student was given the opportunity to speak if they wanted to, time to mull their selection of words and repeating back what I heard them say for confirmation. Although I was aware that I needed to make room for those less inclined to verbal interaction in any educational environment, in these ways I regulated the session to prioritise the voicing of their thoughts and opinions.

I have already observed that these students had a high level of attention and were very capable at staying on task. We watched the video twice. An initial shyness about viewing themselves on the monitor settled on the second viewing. The students were less attentive about re-watching the video. Instead we encompassed the second viewing of the video with concurrent discussion around the second question. Key insights about whether students thought that somatics was being included in their dance programme and whether

they could relate it to their individual approaches to physicality were also drawn out through reviewing their personal journals. I also wanted this to be a site specific (Glossary) occasion.

For the students to be enabled as observers and somatic practitioners, it was useful to be in a space which was other than their usual classroom and one which was set up for small group encounters. I set two questions, which I had drafted before commencing the session that day, one at the beginning and one in the middle of the session, to see if I could locate effective mechanisms for responses about the deepening of the students' experience. I had them respond in turn to the first question and then respond again to it after small group discussion.

The second question was treated the same way. The two questions were firstly to find out, through individual and shared responses, what some of the thoughts were that the students had during the somatics session and secondly, what were new thoughts they had about somatics on the focus group day. In the following excerpts, direct quotes have been taken from the students as individuals and then from the spokesperson of one of the smaller groups. As mentioned at the beginning of this chapter, the children were allocated names, which evoked certain characteristics about them but did not reveal their names.

Q1. What are some of the things you thought about from the somatics session?

Vault: Learnt three new moves for Stage Challenge.

Stars: I wanted to jump up and down.

Rock pool: Made me think about things I never thought about before... It's like the muscles have a mind of their own.

Cloud: The other memory (body memory).

Rain: Just thinking about things that I didn't think about before.

Fissure: I could tell how my muscles and bones worked.

Rain's group #1: Nobody can stop people moving around or not paying attention. The people were having subconscious thoughts about – they didn't really know they would move that way.

Rain's group #2: I don't normally focus on what exactly is happening – normally when I watch a video. Normally when you are watching a video on someone you don't normally think about their posture and stuff.

Interestingly, this focus group strategy revealed a deeper understanding of the students' unfolding and separate somatic processes. That is, the students maintained a particularised rather than collective focus about what they were experiencing. Traditionally, learning is reliant on more or most of a group achieving understanding (Ramsden, 2003). In this case the students were confident of their individual responses and ideas.

By the end of the focus group session, a second somatic learning process became apparent. An example of this individuated, articulated process is set into the students' responses below. Arc's and Stars' responses, which occurred at different stages of the session, form a sequence that demonstrates a distinctive transfer of somatic learning. What unfolded in this part of the data sequence was the way two of the students responses had achieved a normal aesthetic and kinaesthetic experience of somatics in any setting.

Somatic process example 1: Arc and Stars responses occurred at different stages in the session.

Arc #1: Interpreting stuff we had already learnt at school, not the moves, but how not to get nervous (breathe, action and imagery.)

Arc #2: How not every single body could be the same and how people's muscles are different and how many reactions are different in different people. You might touch a muscle and it would react differently.

Arc #3: Lines of force are like a line through the body, and when I got them (lying) down - start to show.

Arc #4: You can see how nervous people are with their posture. Freaked out with their partners as they started to get into the activity, talking and minds wandering

off. All of a sudden people changed – muscles. Layers about the - sticky layers from not moving...

Arc #5: Realise how people move – they actually move quite differently – when something happens.

Somatic process example 2:

Stars #1: Moves - I wanted to jump up and down. Pictures. Different things – like other things.

Stars #2: Skin and blood, muscles and bones. I hadn't thought about having them.

Stars #3: I like that I have thought about things that I've subconsciously thought about before.

Overcoming the hurdles of reporting this phase has placed the findings at a different level of significance. Though outside the ambit of this study, I recorded in my somatic journal reflection for that session that, listening to the students' voices, was one of the most satisfying threads in a project about the potential development for dance to be part of community building,

4.1.6 Interview with the arts teacher

Any teacher who stands outside and looking into her classroom notices a huge amount of things that they would never normally see... it was very worthwhile for me. (Arts teacher, 2007)

As with the previous data analyses, I have incorporated direct quotes, this time from the transcript of the arts teacher's responses. Because of her interest and presence in the data collection phases, I have spent some time in selecting the vantage point from which to analyse the interview of the arts teacher. Eisner and Peshkin (1990) place a high priority on direct interpretation of events in education enquiry, but the whole procedure for analysing this case has been not so much directional as implicating and detailing.

What unfolds from preceding findings is then positioned against the forefront of subsequent analysis. Simple categories which have been emerging are held back from becoming a summative depiction of somatics as a dance practice at school. As far as

possible, I have kept the findings in the form of an educational narrative (Connelly & Clandinin, 1990).

The interview, held on the day following the somatic session, provides composite data for the study's matrix of dance education potentials and priorities, somatics as a dance practice (for any body) and increased postural awareness as a learning capabilities tool. In seeking a deeper understanding about the study's peculiarities and exceptions, interviewing the teacher became the occasion that encapsulated the study's essence. The value I placed on teaching and learning theories, embedded in the literature framework, about motivated and immediate teachers was captured and shared in her direct interest, articulate responses and presence. Through the data collection sequence of events, the arts teacher had become not only a participant of the study but part of the methodology.

The questions, which informed the interview protocol, were designed to reiterate the central questions of the enquiry and induce critical perspectives the arts teacher had about somatics as a holistic wellbeing capabilities tool. The research questions are:

- To what extent does a New Zealand intermediate school that employs the Arts curriculum dance strand teach somatics as part of the practice?
- What are the implications of students and their teacher's responses to the effect of somatic exercises, particularly in relation to general postural wellbeing at school?

This semi-structured forty-five minute interview became an exchange, a lively discussion about the arts teacher's responses to somatics happening in her classroom. Follow-up communications were made with her over the next few days. As well as inducing a shared feeling for this particular artistic practice, the interview surfaced her thoughts about underlying features, hierarchies and resistance in relation to the potential for somatics in the school setting (Smith, 1999). Close reading of the transcript material and, as with all phases, my ongoing reflection through the somatic journal, divulged insights lodged in our dialogue. Albeit the school and the profile of the teacher had been carefully selected for this study, her thorough, open attitude and thoughtful reflexivity about my study made this a comprehensive data collection phase in situ.

For the interview, the arts teacher chose the setting. Because the school was her base, I relied on her to choose an appropriate space for us to use. As with the other sessions she had taken some time to prepare and reflect on what she was to say. I confirmed her consent for the interview, described the protocol we would follow and reiterated that she could read the interview notes before they were set into the report. I have since sent her the interview transcript and she has confirmed it is an accurate record.

The arts teacher's responses initially revealed her expectations about somatics potential in relation to her teaching experience. Buck's (2005) study found that teachers' lack of confidence in their students predated their students' natural capacities to negotiate their own benefits. Many of these responses were predated by words which evidence her surprise that the children were responsive to the deeper concepts and practices of the somatic session.

Like (Rain). He is an absolutely amazing student. But I wouldn't have picked him to shine in that lesson. And he did.

I was really impressed with the way that some of them worked together.

... I was really unsure about how it (the students touching each other's back and shoulders in the palpation activity), I obviously don't know them as well as I think I do, and that shocked me.

The boys were just doing it, and they were the people I thought would do it... yeah. Then when we watched they were really amazing.

Her responses quantify an emphasis on students' grasping new discipline content, which was explored in the educational theory literature about independent learners, and exposed the transformative potential that has been placed on the intent and context of the New Zealand arts curriculum dance strand (Shapiro, 1999; O'Connor & Dunmill, 2005).

Several of the interview questions were worded to allow for reflection and clarification about the teacher's beliefs and position in relation to the dance curriculum.

Because I felt that it gave the children a real sense of body awareness, which is in the dance curriculum and I haven't touched on much.

I do think that there are (connections between the dance curriculum and postural awareness), but I don't think teachers are teaching it very well.

... I mean I've only seen your one session so I see it as a getting to know your body and yourself and our body awareness and that definitely has a link with dance; it's a strong connection. Yeah!

Equally importantly, the somatic session became a co-constructed teaching session. Throughout the data collection phases, I had noticed the arts teacher's engagement with my process, the careful watching of her students and the way she absorbed enough of the somatic content to be able to effectively participate during the session. At times, without interrupting the flow of the somatic activities she directed students to alternative tasks, as if she knew they would have difficulty in an extended period of focus.

I also felt that in this way the study met the ethical consideration of care, which I had hoped for. In the somatic journal, reflection about inherent qualities of teacher practice replaced previous assumptions that the teacher and I were playing different roles. She described a number of different aspects which confirmed this as a key aspect of the findings.

I wasn't sure if it was my place to step in and say, give my spiel about, you know "actually really put yourself in that position, and sketch and draw out those inner feelings, doesn't matter what you write, it's not wrong" and I would have actually really given it to them and how it is to be.

*And I know those students and I know like, those students like ** wouldn't; would've when you said, doesn't matter if you don't write anything... or they'd take that, but I think it is really important to hear from those students.*

I think we are probably quite similar in the fact that we are both quite peaceful people and they didn't feel like it was very... but they actually felt comfortable enough to be who they are, which was nice to see.

In these ways, this teacher evidenced both the motivational and immediate attributes, which were described in the theoretical framework. Buck (2005) suggests that, 'when meanings of dance emerge in the classroom rather than by being imposed or directed by

external expectations and assumptions, many (of the) imposed barriers to teaching dance fall away' (p.64). Teachers from schools who have adopted the dance strand will now have had two or three years of teaching from it. They, like the arts teacher, may already hold views about applications for other learning areas. In response to questions about what she noticed happening during the somatic session she commented on what she felt was valuable from the context of activities she might use. The following quotes evidence the way she was making the somatic material available to her own teaching skill set.

... but I don't think people are teaching it very well probably on reflection from seeing how you would be able to teach it to how/what I'd do.

I felt that sort of session could have gone on all day like that, because they hadn't had enough even by the end.

I think what was good about it was there were differences within the session, there were different tasks to focus on, which was really good.

But I thought if I was teaching it, I could have really pushed for some really deep thinking in those journals. I thought that I could... being a teacher, I could have probably, knowing those students, I could have got a lot out of them.

The teacher's interview provided details about ways the children respond to learning dance and anatomy in their familiar setting,

They get to know themselves in a different way and explore their own bodies, and when they work in groups it's a different kind of group work that's (seen) in the classroom... because it's so physical.

It's any anatomy and it's never personalised and they probably; we probably don't think about giving them the experience of really feeling it for yourself and actually stand in your own body and feeling your own body.

In every class you'll get a range of students who will express in different ways.

Further questions revealed that she knew less about somatics.

Mmmh... I don't often do that but I should do it more often. I used to do it when I first started teaching but you forget about things. I used to do it before every arts session I taught, just like a visualisations activity and they really responded to it but because you know, you do all these PD (professional development) things, and you forget about things,

Right, definitely all new. And when I had read their learning reflections from that day, they were all; it was a very new experience for them. They hadn't even heard the word somatics before.

In the following quotes, the teacher attempted to make connections between familiar movement outcomes and somatics.

I wish that I'd known more about it...I don't feel like, when I saw how the kids responded to you talking about themselves and their own body and really taking the time just to "feel" and get to know. I don't do that.

I don't think they have the knowledge or they haven't been taught about knowing their own body well enough to be able to do that (deal with postural discomfort).

So it would be great to have that (somatics) taught as a skill that students can draw upon when they are... using their bodies - to express themselves in different ways and just knowing themselves better.

4.2 Summary

The analysis process addressed both observational and perceptual aspects of this exploratory case study. By using a narrative criterion as part of the analysis process, I was able to find out more about the overlapping nature of the research issues. Overall the findings from the six methods combined to reveal two important directions. They are:

1. Development of relevant themes and categories in the case study for future research. This case study has collected enough data to establish that a motivated teacher makes connections to new material via their teaching skills set, that intermediate school students have a number of ways of managing their body and environment and that functional somatics skills like conscious breathing, applied focus through movement and journalling are familiar tools at school without a specific language or achievement outcomes that support their acquisition. Although outside the ambit of this study, these findings also suggest that gender based issues in accessing dance proficiencies are different when learning somatic movement and awareness skills.

2. Extraction of the methodology. The study's reflective/somatic process surfaces a rationale to look at expanded theoretical applications of dance knowledge. By not making the three theoretical framework foci (somatics, arts education and educational theory), categories in the analysis, explicit statements and spontaneous responses to somatics at school, not bound by my initial thinking, have instead become important as schema for a theoretical shift when investigating knowledge available from the practice of dance research.

CHAPTER FIVE: RESULTS AND DISCUSSION

5. Introduction

The aim of this chapter is to present an in depth discussion of the principal research findings, specifically those which locate relationships between the current literature and the data. Positive aspects of the students, teacher and journal responses from a single school which already does dance are included where appropriate. These are subject positions for discussion, and developed to clarify relevant themes and categories for future case study research. The themes and sub-themes for the discussion are:

- Somatic pedagogy in a constructivist framework
- Mediation of children's learning and behaviour
- Students learning by watching
- Resilience: children dealing with their environments
- Demographics behind the term student: gender and group based activity success
- Balance and impact of teacher skills and knowledge

This study examines whether emergent movement education methods have been made available for New Zealand intermediate school students. The definition of movement in this case incorporates individual perspectives and perceptions drawn from the students' physical relationships with the familiar and their environments. My study sought to locate some of these constructs as possible connectors between a child's expected danced learning outcomes and arts educational potentials. The constructs in question have emerged from the literature discussion in chapter two and the perspectives of the three respondent groups: student, teacher and me as researcher.

It is not my intention to review where and whether the substantive possibility of dance knowledge may have otherwise been diverted by an accustomed emphasis on the performing outcomes of dance. What drives this study forward is LaPointe-Crump's (1990) argument for "positioning dance beyond the performance enterprise to make

possible an excursion into the totality of human expression; the logical and the intuitive” (p.52).

Keeping in mind that the eventual goal is to set in place a number of data collection phases that could be replicated in future studies, this chapter explores the effectiveness of employing a case study method with a small sample of intermediate school students and their teacher in a mainstream school. By finding out from their responses to somatics, when they already use dance in regular curriculum activities, a range of relevant themes have emerged. This chapter’s following sections detail responses and implications by using the three ‘voices’ as well as the three sets of literature established in chapters two and three as ways of selecting thematic headings. In order to reach these headings, I have taken the various sets of data from the collection phases and set them against each other for readings and interpretations. Set alongside my journal notes, discrete emphases have emerged. I made them the thematic headings.

At the end of this chapter I re-engage with a deeper critical reflection of the expanded methodology used in this enquiry. The need to be aware of the effect the researcher has on the research (Phillips & Burbules, 2000) have surfaced in several of the theories touched on briefly in chapter three. Aspects of researcher bias, particularly from the standing and perspective that I have as a long-term dance practitioner, thereby remain integrated with the results and discussion. In light of my dance and somatic experience range, this awareness has been addressed as a subjugated discourse about teachers’ desire to teach dance at school and children’s possible exclusion from an important wellbeing practice.

5.1 Somatic pedagogy in a constructivist framework

The research questions had been developed to explore to what extent a school, which employs the New Zealand Arts Curriculum dance strand, teach somatics as part of the practice. If the New Zealand curriculum goal is for the sum of students’ learning activities to be coherent learning pathways, a broader expectation of dance - albeit providing performance fun and creative choreography - provides conditions for more

recent expansive applications of dance, one of which is the postural wellbeing benefits of somatic practice. The following discussion is formulated on the premise that the dance strand document does not seek to identify or define different dance, cultural and performance styles in what Bresler (2007) describes as “disembodied curricula”, but rather re-establishes the significance of the way the arts teacher used dance as a theme to explore the students’ world.

Qualities and the implications of students and their teacher’s responses to the effect of somatic exercises, particularly in relation to general postural wellbeing at school, emerged from both the rehearsal and the somatic session data collection phases. Data from these two phases provided me with a number of important categories for observing how the school managed individual learning differences in a danced setting. In my somatic journal, I noted:

What I thought the students had already said (in the questionnaires) was in relation to their relationships with; the teacher, their classroom peers, their histories, communication, cultural, knowledges and beliefs, their identity, energy and boredom, school and education and their body and movement.

The Ministry of Education Arts Strategy (2003, p.5) states a specified intention for dance, as with the other arts disciplines, to “offer students unique opportunities for imaginative and innovative thought and action, for emotional growth ...with such opportunities being integral... to young people achieving their learning potentials to be able to participate fully in their communities and society as a whole”. However this study demonstrates that there are unresolved questions about real connections between arts literacy potentials and essential learning skills (Ministry of Education, 2002).

I searched in the literature and the data for broader political, social and educational implications of setting dance in the combined arts curriculum. The literature about educational theory introduced more meaningful perspectives for exploring the potential for holistic learning.

The sequence of somatic activities was therefore not so much to place emphasis on the introduction of a skills practice for the students, or present alternative points of view about physical wellbeing, but to instigate essential opportunities to observe their responses to an holistic concept of movement education. From the beginning of the data collection phases, through to the end, I observed ways the arts teacher played out a number of strategies which meant that children, with differing levels of engagement, had other tasks to complete. In the interview transcript she described one of the student's attention variables this way:

He has very poor attention, but he's very creative and he needs a lot of positive reinforcement. He's got not much self confidence which is a real shame because he is so talented.

In order to contextualise this observation, I have drawn on a broader theoretical underpinning, which places the positioning and role of arts education at the forefront of my study. Meta theoretical paradigms such as post positivism, have precipitated change in the social sciences in the last half century, broadened the spectrum of social inquiry and influenced shifts toward individualised learning.

In this way post positivist claims, that human knowledge is conjectural, self-realisable and transitional (Creswell, 2003), support the central ambivalence of the study's findings. The discussion at this point, therefore, focuses on interrelationships between trends in learning and educational theory. The inclusion of subjectivity from a transactional, epistemological perspective and, as a key concept in the transformation of knowledge, is viewed as critical to this part of the discourse.

Dewey's early model of education, which described curriculum constraints as being more problematic than pedagogy, when providing a flexible base for individuals to develop relevant links to their potential, resonates with both trajectories of my study's findings (Madeja & Kelly, 1970). In the latter section of the chapter, this same knowledge construct is employed in developing arguments about individualism-in-researcher style. Grosser and Lombard (2008) state that, "the occurrence of changes in the relationship

between an individual and the surrounding environment as crucial for the development of cognitive abilities are neglected” (Abstract).

Schools that provide dance might or might not implicitly provide conditions and skills for students to adapt their posture and movement ranges to other environmental features. Taken together, these statements suggest that applying somatic learning to general learning may not be easily embraced by constructivist learning theory but rather more traditionally in the practices of learning by doing.

Educational theories of experiential and independent learning, which were employed in the literature review to develop a profile for the kind of ways students might adapt to new learning methods, counter non-dance creative pedagogies. To this end, the following discussion narrows the theoretical lens to seek ways of situating somatics in the arts educational paradigm.

Dance metaphor, imagery and awareness skills were primarily used to mediate communication and expressivity in the data collection phases. In the interview transcript the arts teacher said that the somatic activities had been significant; *because I felt that it gave the children a real sense of body awareness, which is in the dance curriculum and I haven't touched on much.* She acknowledged they were made less available for constructivist acts of learning:

I find it sometimes its quite hard to stimulate that sharing of ideas in a classroom if we are talking about something in social studies or..., that's why integrating curriculum into dance as part of learning and art as part of everything makes so much sense.

Chappell (2007) proposes an educational acceptance of the unique forms of knowing which are inherent in artistic practices like dance.

In the literature review I briefly explored Gardner's notion of multiple literacies in the context of dance writings and research (Ashley, 2003; Hong, 2006). The following quote

from the somatic journal depicts a shift in my approach to how effective somatics could be in supporting learning which occurs through movement.

If a child holds so much dance in their body memory (learnt movement through a possibly fragmented process), what else is stored there as movement and what can be evoked and what can evoke it?

Later in the somatic journal, I reported a comment by one of the students who made a personal realisation about how people move differently if ‘something’ changes. With reference to one of the main tenets of post positivism, where the knower and known cannot be separated, the students from this class evidenced deeply individualised, reflective thinking skills. A different student observed: *I like that I have thought about things that I’ve subconsciously thought about before.*

Experiential learning theory supports reflective practice and the synthesis of carefully chosen experiences (Adkins & Simmons, 2003). Early notions of experiential education were defined by a series of core practices including: school work characterised by active learning; clear connections between the classroom work and surrounding communities, as well as the world beyond the community. These are important statements in the developing framework of a discussion about a topic which similarly supports the way children are making sense of learning in the twenty first century (Boyer, 2002).

According to Walton (1999), students benefit in far-reaching ways from integrating learning with the articulation of their experience. As well as deepening the knowledge of the subject they are being taught, they collate a language which allows them to think for themselves, to codify their own way of comprehending knowledge, and even link this new knowledge to previous information and/ or transfer skills from some other learning into the dance learning situation. Hipkins (2004) argues that actually, knowledge tends to be treated as a pre-determined product to be given by someone else. She argues that students need chances to be performative, that is, to do things which genuinely create new knowledge for them.

What tertiary students learn as integrated dance practice is different to what intermediate school students learn as dance. In relation to my direct experience of teaching somatics as integrated technical practice at tertiary level, the most relevant points to consider are: students' familiarity with somatic practices either for postural wellbeing or as a self-reflection tool, and an expectation that dance education progresses learning conditions for students. However, dance is still being taught as an adjunct to learning, or, in this school and at best, a way of expressing current social issues.

In the questionnaire, seven of the sixteen students made connections about a current parliament bill with their dance project. In the transcript of the interview, the arts teacher also made reference to educational connections in the interview:

... so ...we decided to make dance our theme last term. So everything we did was dance, so our whole enquiry was based around dance, so we started off by thinking about words around dancing and then we looked at a topic and we all debated this topic and sort of had a look at where we stood on a continuum in relation to the Smacking Bill and then we teased out the ideas, rang people, went on the internet and did research, so the dance was – it had a lot of depth to it.

The study's questions were formed in order to explore somatics studies beyond the professional dance community. If all recipients of dance knowledge are less affected by messages that are visible and more by those that are socially oriented, an important element of this enquiry is deciding whether school is the best place to introduce a practice which is at once personal and experiential. An important factor to consider, in this or in future studies, is whether learning somatics at schools facilitates students to develop confidence and responsibility for more than their ongoing postural wellbeing.

The occurrence of changes in the relationship between an individual and the surrounding environment as a crucial aspect in the development of cognitive abilities has been considered in section 2 of the discussion about students' mediation of behaviour and skills. In the meantime, broader ramifications of researching a discipline like somatics in mainstream education have been summarised in the following ways.

The various Ministry of Education reports, TKI exemplars and dance teaching notes (2006–2008, 2004, 2003, 2002, 2001, 2000 and 1993), which were reviewed throughout this study, confirm that education through dance may become more fundamental to the education of all students by accessing social interactivity skills and confidence in self expression (Ministry of Education, 2001). In response to a question about dance integration potential, the arts teacher responded:

Dance? 'I just love everything creative about it and the expression that children come up with. I first started teaching.. erm.. Junior students and only one person in my class spoke English. I got a decile one school and it was a way of us all communicating without the language. And... I mean lots of the day was really, really tough for these refugee kids, who have come into my class, but the moment we all went to the hall, and started dancing, the smiles and the communication were there, because it was just like a universal language. So from that I just sort of kept going.

This situation, where the teacher has successfully integrated dance concepts and principles, draws attention to deficiencies in accessing the expansive pedagogical outcomes of learning dance and about dance in the regular classroom setting (Chappell, 2007; Holland & O'Connor, 2004; Bolwell, 1998).

Recent research, which intersects with dance in education priorities, proposes new educational evaluations of aesthetic knowledge where it is to be made more accessible and adaptable (Renner, 2006; Stromsted, 2006; Bannon & Sanderson, 2000; Hong, 2000; Walton, 1999). However, as long as an individual's reception and reflection of their own body moving is not manifested in dance achievement outcomes, the possibilities of integrating a student's bodily awareness operating in other learning situations or contexts also remain limited. Chappell's (2007) doctoral thesis signals an important shift towards a focus and direction of somatic pedagogies in the mainstream educational setting.

Several authors were introduced in the literature review as they had developed perspectives about the relationship between art practices and increasing students' knowledge potentials through dance (Desjardins, 2008; Hong, 2006; Eddy, 2000; Ross, 2000; Bolwell, 1998; Fortin & Siedentop 1995). A synthesis of their arguments, which

would situate somatics as part of the New Zealand arts curriculum dance strand, supports somatics as a possible link between dance education and other arts education potentials. Read this way the data and literature reveal where pedagogical values of somatic practices mediate crucial cognitive tools through the expansion of children's capacities for resourcefulness, resilience and imagination (Berk & Winsler, 1995).

Evidence from my study follows questions about factors which support or prevent the implementation of somatics either as a dance practice or in the essential learning skills framework. The fixity of expectation about children's capacity for innovation coupled with the lack of confidence school teachers have in teaching any form of dance are two relevant factors which have been identified (Buck, 2005). Otherwise the literature identifies dance knowing as residing in somatic embodiment practices (Green, 2007; Bresler, 2004; Stinson, 1995).

Without the learning that occurs as a result of specified movement interactions in a range of other learning settings, children remain unable to move from behavioural to instrumental action (Adkins & Simmons, 2002). Through this next observation, the arts teacher confirmed the ways she thought the New Zealand Arts Curriculum dance strand contains a ready and appropriate language for postural wellbeing

...I mean I've only seen your one session, so I see it as a getting to know your body and yourself and our body awareness and that definitely has a link with dance; it's a strong connection. Yeah!

Several times in the interview transcript, the arts teacher recognised postural wellbeing:

When I saw how the kids responded to your talking about themselves and their own body and really taking the time just to "feel" and get to know. And, And if they feel really comfortable and motivated... they'll be rolling around on the floor and just touching any body and every body and just sort of very open and really connected with their bodies and other peoples' bodies in the group.

She was less aware of somatics as the title for a specific topic:

Right, definitely all new... and when I had read their learning reflections from that day, they were all - it was a very new experience for them. They hadn't even heard the word somatics before.

New approaches to learning dance and about dance in education may have been forestalled by uncharted differences between the traditional model of learning dance and the holistic model, which includes somatics.

The arts teacher observations, which were transcribed, have become a two part reminder of the way the study has placed an emphasis on teacher practice and knowledge. This topic has been elaborated in the discussion in section 5.2. In the notes about the focus group, which were recorded in the somatic journal, an example of an individuated, articulated process demonstrates the distinctive potential of somatics in any setting. That is, in the brief learning cycle of the data collection phases, the student recognised something new; she could also apply this new *thing* to her own contexts and also think about doing things differently with the new information and skill.

The following excerpts from the somatic session and then in the focus group record this progression:

Interpreting stuff we had already learnt at school, not the moves, but how not to get nervous (breathe, action and imagery).

How not every single body could be the same and how people's muscles are different and how many reactions are different in different people. You might touch a muscle and it would react differently.

You can see how nervous people are with their posture. Freaked out with their partners as they started to get into the activity, talking and minds wandering off. All of a sudden people changed – muscles. Layers about the - sticky layers from not moving...

(I) realise how people move – they actually move quite differently – when something happens

In the students' quick integration of the somatic experience, it was clear that Bamford's (2006) questions about the reasons for teaching arts education and the benefits of teaching creative subjects, which were introduced in the literature review, had been

answered. Building skills to participate, and become confident about feeling their bodies in unfamiliar situations were positive aspects of the two data collection occasions.

Combined, the explanations of Bandura (1999) and Hipkins (2004) about requisite opportunities for performance and adaptation in the classroom setting supported somatics as meeting the needs of the imaginative child. This was evidenced by the students' articulate responses to a new topic, as well as with the connections their teacher made in her interview responses. In the somatic journal I noted that, *I felt that the students were responsive to their instructions but also to their freedom, to participate, to feel.*

While exposing students to a newer dance practice, in their school setting and curriculum, their willingness to participate became the catalyst for resurfacing their innate physical knowledges. At this point, Hanna's (1983) definition of somatic studies, where "an individual investigates their body in relation to internal anatomical scaffolding and externalised spatial perception" (p.1), clearly demarcates the study's conscious emphasis on the multiple absorption levels of the students.

Several of the other children also responded positively to somatics with comments such as, *"Just thinking about things that I didn't think about before"*, *"It's like the muscles have a mind of their own, and, I could tell how my muscles and bones worked.* These responses, which I rerecorded in the somatic journal, form a critical part of the layering of the results, which have been inserted in section 5.1.

Combined, the literature and the data exposed a shifting paradigm, where traditional learning methods for dance and teaching approaches inclusive of holistic learning have yet to be clarified. Literature that reviewed a progression from Dewey's debate about Cartesian duality in a discussion of binary endeavours of mind and body requiring unique experiences and connections (Connell, 1995) has been made less relevant.

Details of the field of dance education overlapping literature about educational theory have exposed an educational nexus. In order to build and amplify dance skills potentials,

new activities to spiral gracefully out of old, lessons learned from past experiences to be incorporated, imagination and creativity are to be encouraged in the completion of learning activities (Starnes, Paris, & Stevens, 1999). Kesten's (1987) definition of independent learning is integrally designed to support the fostering of students. He states that, "learning in which the learner, in conjunction with relevant others, can make the decisions necessary to meet the learner's own learning needs" (p.3).

My notes and conversations from Godard's and Fortin's workshops and personal communication, with their approaches to the immersive role of subjectivity in learning in mind, present the necessary conditions for students to make sense of their own way of doing things. The following section develops from previous statements about critical pedagogy where learning is valued as a personal and empowering activity and explores the implications of students and their teacher's responses to the effect of somatic exercises, particularly in relation to general postural wellbeing at school.

5.2 Mediation of children's learning and behaviour

The next part of this discussion focuses on examples where dance is used as a language to support the integration of experience in the education environment, where health and wellbeing as an integrated feature of children's learning and perhaps more importantly where ecology of memory, awareness, experience, identity and individuality is considered.

Questions of good or safe posture and its relationship to education remain largely unexplored and produce a critical situation which continues to defy a necessary connection about knowing. In my experience of somatics I have been able to develop metaphor as a way to think differently and expand my perspectives. In just such a way I have searched for symmetrical arguments between the two research goals: employing a case study method to explore dance as an educational medium for learning about postural wellbeing and developing a methodology that fits with embodied dance theory. The discussion has moved across these positions simultaneously.

As a result I propose a triad of three methods: dance product learning, learning through dance processes and a critical and as yet undeveloped practice of dance learning through embodiment for school students' to fully access unique potentials to be found in dance learning.

The data collected through the questionnaire, somatics session and focus group accumulated as important indicators of intermediate students' dance knowledge. Activated responses and abilities relative to the students accessing "unique potentials to be found in dance learning" and, the links which make it personal, are lost in the *chaos* of artistic education practice. Questions continue to be raised about the kinds of connections a subject like dance has with the learning competencies of a broader educational framework (Burton et al., 2002), This question remains unanswered as long as primary skills outcomes are to be confined to the narrower definitions of performance and/ or to educate potential theatre audiences.

Somatic studies provide learning conditions for students to make sense of their own way of doing things and values learning as a personal empowering activity. In the interview, the arts teacher reflected on this. She said,

Well, when I watched your lesson I wish that I'd known more about it... I don't feel like, when I saw how the kids responded to you talking about themselves and their own body, and really taking the time just to feel and get to know.

In the first data collection phases, what had been important to witness as different ways students accommodated a new topic, has emerged as categories for children's and their teacher's responses from three different positions. As categories they are subheadings: learning by watching; resilience: children dealing with their environments and gender and group based activity success.

5.2.1 Students learning by watching

In the somatic journal, I noted that one of the students, who had been engaged in the rehearsal process as a technician, thereby watching rehearsals rather than doing, was as able as the other students to participate in the practical data collection phase, with high

levels of understanding. I noted in the somatic journal that, *he seemed to have also absorbed the dance learning*. The study availed itself of independent learning theory, which was introduced as a notional explanation focusing on the creation of the opportunities and experiences necessary for students to become capable, self-reliant, self-motivated and life-long learners (Kesten, 1987). Beyond the acquisition of skills levels, students in their learning site make some sense of whatever they are learning and also apply this knowledge to their broader learning inventory. In curious and correlative contrast, Fraleigh and Hanstein (1999) argue that, “the simultaneous engagement of body, mind and sensibility, aligning feeling and cognition has to do with discovering being *human, individual and interested*” (p.190).

5.2.2 Resilience: children dealing with their environments

Previous examples of student comments and the following comment from the arts teacher exposes comprehension as a pathway to meta ways of their individual knowing:

They get to know themselves in a different way and explore their own bodies, and when they work in groups it's a different kind of group work that's (seen) in the classroom... because it's so physical.

The potential impact kinaesthetic and experiential learning like this may have on the various learning styles of children in the earlier years of their general education is yet to be discerned as a model. I have contextualised these two aspects for my study to engage a range of perspectives that were new for the main stakeholders at school, the students and their teacher. In the meantime, the essential principles guiding somatics that have underpinned this study expose this experiential and physical practice as a way of enabling students to learn.

The results of the questionnaire showed that three quarters of the respondent children had little information about their own posture and, significantly, they reported that they did *nothing* about managing personal discomfort throughout the day.

Nobody can stop people moving around or not paying attention. The people were having subconscious thoughts about – they didn't really know they would move that way, and, I don't normally focus on what exactly is happening – normally

when I watch a video. Normally when you are watching a video on someone you don't normally think about their posture and stuff.

Student statements like these preclude conditions where as long as information about how the human body works is taught independently of the sensing, feeling, doing aspects of the body moving, the coordinates for an individual dealing physically, emotionally and mentally with their world continues at best as generalised information (Stapp, 2001).

In the data collection phases, which specifically involved the children moving and exploring somatics, it was evident that this age group has a number of ways of managing their body and environment. A number of the students said they did very little about discomfort over the day. In the questionnaire, several responded that they either, *get up and move around* or *stretch*. As each physical body deals with internal body and external environments, increased self awareness make obvious physical restrictions in familiar shapes and aligned positions obvious.

Postural awareness practice is applicable to other school sites, like the playground, the library, and during computer usage. Physical difficulties with unfamiliar movements become diffused, stress on the body's structural loading is countered and the build up of dysfunctional postural habits is reduced.

The reflective journal that the children completed in the somatic session was, according to the arts teacher, an important part of the success of the session:

I think what was good about it was there were differences within the session, there were different tasks to focus on, which was really good. At one stage we were looking at pictures and then we were doing something when where we were closing our eyes and then we were doing something with a partner and then we were doing something silently by ourselves or just journaling and then we were talking to a peer. That... I feel that sort of session could have gone on all day like that because they hadn't had enough even by the end, they could have gone out and had some fresh air and come back and still been happy to... because it was interesting but the... varying tasks.. I mean if it was all the same thing, watch the video, journal, watch the video, journal, watch the video, journal.

This response, as well as the students' pictorial and articulated efforts in their journals, points the way for a development of regular journaling activities and study lists so that children could know what to do when their bodies have to sit still (or be upright on chairs or carry heavy school bags) for long periods of time. I had reflected on the journals also:

The journals – they were beautiful, very somatic, what did I expect, the same less thought bubbling to the surface. The images, the knowledge that's available. (The arts teacher)... wanted me to see the journal – I noticed that she had read every one too -why?

Through imaginative drawn and written responses the students had quickly absorbed this simple technique for self-managing behavioural and focus drifts. By taking time out in a constructive refocusing task, and combined with conscious breathing to ameliorate the occasion, the children had learnt, through somatic journaling, to safely reveal where they felt stressed and how their bodies were responding.

An important feature of the study was to expose various ways somatic practices physically enable students. As somatic educator, Schneider (2001) suggests, ongoing motor control, balance and coordination are simply a maturation of primary movements of rolling, crawling, reaching and leaping. Stiff, stooping or floppy postural habits are redressed not only by imagery, but also breath awareness and attention during regular, simple and repetitive exercises, including those taken into the classroom.

On the way back from the dance rehearsal at the hall, I recorded in my journal that only one of the children was unfocussed. While the other children were exhibiting a calm and orderly procession, his behaviour was erratic and drawing attention to himself. The teacher led him away from the group and asked him to go back outside, breathe and return when he had clarified what he was to do in the classroom. I observed later in the somatic journal my impressions about the situation.

I thought the children's energy changed when we got back in the classroom. On the way there I could sense disarray (as a group)... usual distractions. Straggling, taking along a pencil, splitting up... and groupings. On the way back, easy march back and most (except one) settled back into silent reading (wow!) The one who

didn't settle – he had to go outside and take a breath of air and remind himself that when he came back he would be sensible. He did – and did!

Observations about the way a child needs reminders to breathe point the discussion towards children's resilience and adaptability, and the ways in which children may be engaged in their environment somatically, but not enabled to make links to these alternative strategies themselves. These reflections, which support my idea that children (and their teacher) are already engaged in somatic practices, but not aware of the same, had also surfaced in the questionnaire.

Functional somatics skills such as: conscious breathing, applied focus through movement and journaling are familiar tools at school without there being an obvious skills base to support their acquisition. The arts teacher said:

I don't think they deal with it to be honest... er... I don't think they are aware of their own body enough to actually sit there and say, oh, this is part of my body, (which) is not feeling quite right and then being able to go the next step further and say well what am I going to do about it.

It is at this point the passion for situating dance as more than just performance peaked. Although it is evident that children in this school are not aware of somatics as a topic - that is, it is not part of their dance learning - they get it anyway. A notion that somatics as something which children naturally *do* to orient themselves in familiar environments, rather than as a distinctive separate skills based practice promotes children behaviours as tools they are using to focus and negotiate their body's moving in the school environment (postural wellbeing). This observation also revealed an implication, which I previously had not thought about: this is about the need for children to learn about their anatomy from a personalised viewpoint.

If this study were developed from a phenomenologist pedagogical standpoint, the finding that somatics is what children “do” would be made more significant. These initial findings pave the way towards a more consciously phenomenological enquiry, as well as contribute to theory on student centred pedagogy in dance education.

Having the students actively do an anatomy activity allowed them to display embodiment practice impacts. I have already noted how much the boys enjoyed showing muscle charts on their backs and there were several other observations, which I recorded in the somatic journal after the focus group session, about the connection they made between the anatomical names and the shapes of their own bodies. Active participation with one's own body's awareness in relation to the environment promotes a different sort of awareness to body image and shape. Further to this, active bodily association with what feels good and what feels bad, and as a complex integration of experiential and physical structural elements, can become part of daily life.

Individualising anatomy provides ways for children to apply body knowledge to some of the regular *stressful* occasions throughout the school day. In my study, the students maintained a particularised rather than collective focus about what they were experiencing. Traditionally, learning is reliant on more or most of a group achieving understanding (Ramsden, 2003). In this case the students were confident of their individual responses and ideas. As regards somatic imaging: children learn the whereabouts of their body, locations for discomfort, that these areas are muscles and joints, and as simple as the laying on of a parent's caring hand, the child can also hold or visualise the sore place as part of a healthy composite body, the site of its experience.

In summary, these specific examples of somatic principles in action, somatics-based and somatics-led learning at intermediate level lead to a specific regard for the enhanced and expansive learning outcomes both within the dance curriculum and beyond it. The consequences of this approach to cognitive development places a strong emphasis on individual and personal negotiation of experience. Furthermore, the occurrence of changes in the relationship between an individual and the surrounding environment as crucial for the development of cognitive abilities is proposed, with reference to Grosser and Lombard (2008) in contrast to the traditional, individualistic approach to teaching and learning dance.

5.2.3 Demographics behind the term *student*: Gender and group based activity success

A statement about demographics in the methodology section was set to define the broad parameters of the students being profiled in the study. This section moves the discussion behind the term *student* to explore some of the significant findings which add value and depth to the research questions. The term ‘student’ is by nature a generic term that includes a variety of profiles. What is significant about the present results, is that by revealing the student in this study as non explicit in gender, ability and from several cultures, a number of important points are revealed. Whilst acknowledging there are some links which could be made between culture and dance, this section places emphasis on one particular group, made visible by other dance statistics.

In the literature review, Buck (2003, cited in the Holland & O’Connor report, 2004) defined dance as predominantly a “girlish” occupation. Latest figures in a research study of 29,000 adults, conducted in the United Kingdom (Chan et al., 2008), show that “gender has a consistent impact on the likelihood of engaging with dance: women are significantly more likely than men to have attended all types of dance events and participated in all dance activities: (p.4). Berger’s (2003) thesis, entitled, “*Dance and masculinity: Shifting social constructions of gender*” explores the “subculture of masculinity in participating in dance forms such as ballet and thereby “escaping the dominant socialisation process” (abstract).

Perhaps more importantly for this discussion were the arts teacher’s comments about how, although the girls, who may be more familiar with dance practices outside of school, were less confident in the somatic session:

When they go away in groups, work together and then come back to share, their dances are so much more than what the girls have, I don’t know if its because I’m teaching 11 and 12 year olds and the girls are a bit more, erhm... not so confident about sharing or getting things right at this age or doing it in front of the boys or...yeah... but boys they are really amazing.

In an earlier part of the interview the teacher had commented about how the school encouraged children to query new ideas. Employing Freire's (1970) concept of popular education, these children seemed enabled to critically assess at a deep level content, contexts and relationships, which are usually taken for granted in a somatic session.

In the findings I noted several times how the teacher affirmed the boys' participation and focus in the somatic activities and follow up discussion in the focus group. In the previous section, discussion about how much boys particularly enjoyed the anatomy session has already been noted. It occurred to me that why it is of interest to boys is that they are able to make active links between knowledge and themselves, which helps maintain their focus. A comment in the transcript of the interview by the teacher compounded this observation. She said that:

The boys were just doing it, and they were the people I thought would do it... yeah. Then when we watched they were really amazing. Building skills to participate and become confident about feeling their bodies in unusual situations were positive aspects of the two occasions.

And in a question about the boys working together to get dance ideas, the arts teacher responded, *They do, they get very...yep...stimulated really easily, motivated very easily...yeah*

Crowther, Martin and Shaw's (1999) statement about how critical and transformative learning is more likely to focus on group and collaborative learning, supports a discussion about aspects of student focus in a number of ways. In section 3, the teacher comments on the way the students stayed attentive to the somatic session because of the variety in the activities. I also noted in my somatic journal, how the children,...*stayed with me through the sequences - linked the exercises and got quicker at understanding the content and context.* The following points synthesise Crowther, Martin and Shaw's (1999) statement in relation to literature which explored dance as a collaborative art form in chapter two (Stevens & McKechnie, 2005; Blumenthal et al., 2003).

Stevens and McKechnie's (2005) definition of dance movement as "deliberately and systematically cultivated for its own sake" (p.243) combined with Blumenthal, Inouye, and Mitchell's (2003) description about the experimental processing which occurs in dance learning, fits with the arts teachers observation in the interview transcript when she commented about how the boys worked together:

They stand out, like from the group, when you go away and sort of brainstorm together and do lots of dance sort of warm-ups and things. Then they go off into groups and start creating dances. When the boys come back they're just miles beyond what the girls have come up with.

In this way it was evident that the boys engaged in a creative and collaborative way to resolve unfamiliar content, which is a familiar feature of somatic learning. As a purposeful, subject centre and enriched learning practice, these results show somatics at school as a holistic dance method which imbues dynamic physical and spatial awareness with a sense of wellbeing, embodied intelligence and sense of community.

Taken together these points serve as a critical reminder that by continuing to treat learning dance at school as an activity which makes students self-conscious, the procedural and declarative knowledge, which Stevens and McKechnie (2005) associate with dance learning and "not characteristic of other movement-based procedural tasks" (p.243), may continue to reduce dance in education potentials in the schools learning environment.

5.3 Balance and impact of teacher skills and knowledge

Some researchers have argued that the real work of school is the production of 'persons' (Packer & Goicoechea, 2000). This statement, cited in a paper written by New Zealand Council for Educational chief researcher, Rosemary Hipkins, (2004) helps mediate a tension between my expectations of dance in the Arts Curriculum framework and a desire for a more general access to a dance practice which is about embodiment. In the first place it is challenging to be seen to be critiquing the dance strand document through a dance lens, rather than the one which has guided dance educationalists. That is, the knowledge of those who wrote the curriculum is not necessarily the same as the

knowledge required for the teaching of it but, by initially de-centering teachers as the primary voice of danced outcomes less predictable notions have emerged from the dance realm for somatics to become an identifiable part of teachers' resources. These are important notions when it comes to proposing the expansion of somatics into a greater forum other than for learning about dance performance.

There are several possible explanations about why the results keep turning towards the dance curriculum in order to answer the two research questions. As already mentioned in the early part of this chapter, the arts teacher confirmed that she thought the dance strand contains terms and objectives which fit with somatic language, concepts and practices, but that students might not be able to access this body of knowledge: *I don't think they have the knowledge or they haven't been taught about knowing their own body well enough to be able to do that (deal with postural discomfort)*. In the interview transcript she further stated that:

I wish that I'd known more about it... I don't feel like, when I saw how the kids responded to you talking about themselves and their own body and really taking the time just to "feel" and get to know. I don't do that.

And,

So it would be great to have that (somatics) taught as a skill that students can draw upon when they are... using their bodies - to express themselves in different ways and just knowing themselves better.

Keeping in mind the previous discussion in section 5.2, which drew attention to children's capacity for developing strategies to mediate their environments, I have brought the same attention to bear on teacher skill sets when managing teaching.

Shulman (1993) describes teaching practice as substantive intellectual work which requires selecting, organising and transforming one's field so that it can be engaged and understood at a deep level by students. What I have derived from the findings in chapter four is, I would argue, supported by educational theory about teacher motivation and immediacy literature, and discussed as deeply implicated themes. The arts teacher's responses quantify an emphasis on a school teacher grasping unfamiliar discipline

content, and exposed the transformative potential which has been placed on the intent and context of the New Zealand arts curriculum dance strand (O'Connor & Dunmill, 2005; Shapiro, 1999).

Even in recent research about teaching practice is constructivist, driven by programme assessment and qualification requisites or ideal models of teaching and learning (Cohen, Manion & Morrison, 2007). Whereas I had initially thought that somatics would fit with a dance teacher's brief for teaching dance at school, the data suggests that the processes and practices were recognisable as conceptual tools which could be taught by any teacher alongside dance learning. The significance of this was realising how deeply implicated the dance strand is in this study with ongoing questions about how it is being interpreted and taught embedded but unexplored.

I developed the two research questions sequentially; by resolving the first, the second question expands to reveal a more elusive question about whether it is personal experience and perspectives in dance, which has to motivate dance teachers in mainstream school settings. What was produced in the search for a theoretical educational framework was a fit with a teaching practice that already contains individual, historical and related dance experiences. The following discussion centres on the depth of knowledge of a discipline a teacher needs to teach it well. The arts teacher confirmed that she struggled with dance as a subject and generalised her observation about teaching it in the interview transcript: *...but I don't think people are teaching it very well probably on reflection from seeing how you would be able to teach it to how/ what I'd do.*

Her reliance on teacherly skills to mediate the subject provides the context for the following part of this discussion. Buck's doctoral thesis explores teacher motivations in the following way. In a more recent conference paper, which was introduced in the theoretical framework, he states that, "teacher's lived meaning of dance proved to be powerful filters for their understanding of dance in the classroom and served to both motivate and deter the inclusion of dance in the classroom" (2005, p.18).

The study's two questions hold a central theme in line with my thesis about opportunities for teachers to use the arts to shift from traditional transmission models of teaching environs and routines. Adequate evidence of the educational efficacies of inspirational teaching practice models is less available. In any dissection of educational reform, how students understand what it is and why they are learning is closely aligned to what makes teachers want to teach those same subjects. When otherwise reduced, to skills and information transference, points about experiential practice and learners taking hold of their learning reassemble notions about a sustainable dance in education teaching practice.

In spite of New Zealand schools' educators knowing the Ministry of Education intentions, many are still resisting the deployment of the arts curriculum dance strand because of its apparently specialty teaching focus. Dance as a discursive, creative, physical, personal experience, and perhaps in contrast to dance in the physical education curriculum as social practice, has yet to be defined. Significantly, the questionnaires diverted me from the actual somatic topic pathway and directed me back to information about how many students actually participate in dance practices in or away from school (all but one) and the way in which they recognise dance in school as having links with other subjects (ten out of sixteen).

Interestingly, although the arts teacher recounted that she had some previous dance training: *I was a dancer when I was young, doing ballet type dance, rhythmic gymnastics and things like that but I have no professional dance training*, she recognised the somatic practices of imagery and visualisation as separate, albeit familiar from alternative arts knowledge: *I went to Design School when I left school and majored in photography*. In response to an interview question about how she recognised the imagery activity, she said:

Mmmh... I don't often do that but I should do it more often. I used to do it when I first started teaching but you forget about things. I used to do it before every arts session I taught, just like a visualisations activity and they really responded to it.

As part of her reflection about the somatic session data collection phase, the arts teacher reported how she had remembered some of the activities (for example, the visualisation). She continued by saying how she also realised that, *they (the activity examples) often come back though, don't they?* Her reflections point to the way a subject can be taught by one who is interested in it, albeit less experienced in the specific processes and techniques.

This case study has collected enough data to suggest that a motivated teacher makes connections to new material via their teaching skills set. Predominant literature about teacher practice which identifies vocational or motivational factors as determining good practice, provide this study with a perspective about the probability of an educational, experiential practice such as somatics to be taught outside professional dance training institutions. A consequential explanation is that teaching dance may reside in, not only applications for understanding each student's body from the articulated physical experience but also from the teacher's own experiential, emotional and perceptual standpoints. A question about whether somatics can be taught by one who is interested in dance but inexperienced in somatic processes and techniques is raised, as few of the dance teachers in schools are graduates of tertiary dance training programmes where somatics has primarily been developed.

This final list of points, reassembles notions about teaching practice and motivation, and presents a distinctive method that can be called on. Dovetailing behaviourist and cognitive ideals paves the way for an expansion of educational parameters. The constructivist stance maintains that learning is a process of constructing meaning; it is how people make sense of their experience (Merriam & Caffarella, 1999). Two separate arguments follow: decisions to include arts integrated into education without the provision of teaching skills to match are contested (Fortin & Siedentop, 1995; Ministry of Education, 2003; Hall et al., 2007), and secondly; the challenges faced by teachers in motivating students, providing co-constructive learning environments; supporting learning, extending their own knowledge.

Points about experiential practice and learners taking hold of their learning reassemble notions about a supporting teaching practice. In any dissection of educational reform, how students understand what it is and why they are learning is closely aligned to what makes teachers want to teach those same certain subjects. Barnes (1999) suggested that when a school achieves a successful confluence of learning skills with experiential awareness and with each child, the school no longer perpetuates society, but becomes an essential force in the reconstruction of it.

5.4 Summary

In summary, this chapter's discussion reveals that dance in the school curriculum is broadly contextualised for inclusion of dance as an art in education subject by a global trend for sustained and progressive change, and how it is more typically experienced by this group of students in the latter years of primary school and before secondary education, as a way of knowing through participation

The study has also revealed the value the arts teacher placed, not just on the critical role of a teacher's own experience and knowledge, but on the intricate engagement process of teaching. As revealed in the analysis, the students value learning: this interests them and engages them bodily, socially and personally. Dance practice therefore exposes a potential crossover with somatics, particularly where outcomes value the education of the individual. In a final point the discussion also reveals that the somatic practice, though not exclusive, also produces a distinctive method for exploring teaching and learning theories.

In these ways, the research questions, which placed value on the students and their teacher's articulation of the research experience, have become ears for the voices of a rich and representative narrative of the exchanges between dance knowledge available at school and the learning acquisition potentials as experienced by both groups.

CHAPTER SIX - CONCLUSIONS AND IMPLICATIONS

6. Introduction

As a critical pedagogue, however, I find myself caught in a particular bind. On the one hand, critical pedagogists (whether female, male, white, or nonwhite) have continually advocated language as a defining critical momentum, despite critical pedagogy's obscure terminologies. The argument for this side of the coin remains that any new movement must search for its defining language within its own struggle for a new paradigm (Kanpol, 1999, pp.137-138).

Chapter six is the final chapter of the thesis and offers some concluding thoughts about the two dilemmas that have been discussed throughout the study. The first dilemma, which has been noted in the previous chapter as ambivalence, reviews the extent of somatics in dance in education; here I argue that the history of dance in the education curriculum is a major dynamic implicated in the access of a new dance practice.

The second dilemma is instigating an approach which maintains the previous position but advances a new dance practice across the borders of arts in education priorities. In a summary of arguments, I will demonstrate that the thesis has moved in structure from ideas to practice based applications, which necessitates the return to a deep integration of arts education theory with somatic practice.

This study is significant in the way that dance in education has been viewed through a somatic lens. What emerged in the final points of the discussion in chapter five reveals that somatic practice, though not exclusively produces a distinctive method for exploring teaching and learning theories. In the following paragraphs I will endeavour to conclude the thesis through integration of these three components as well as reflect on the limitations of this particular study and opportunities for further research.

6.1 Review of the study

According to Yin (1994) a case study investigates a “contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident” (p.13). By consistently reflecting that this study was qualitative, and

to some extent reliant on the interpretation of the dance curriculum and how it is currently being taught, I have been able to examine what each participant in the study said and did transitorily.

These impressions have formed a distinctive and productive perspective about the two research questions. The students' initial responses in the open ended questions in the questionnaire lodged a clear indicator of a New Zealand intermediate school's current knowledge of somatic, embodiment practices. Their immediate answers provided me with a perplexing reality about the lack of same and forestall a qualitative depth implanted in the second question about the implications of postural wellbeing on learning.

Derrida's (2002) example of encouraging secondary viewings of written texts, particularly to dislodge them from previously determined or predictable outcomes, promoted the formulation of a case study method that would actively seek to view dance at school differently.

Yin (1994) also notes that a case study benefits from the prior development of a theoretical framework which guides data collection and analysis. To this end, following a personal and theoretical rationale for a conceptual framework, introduced in chapter one, an explanation about deconstruction as a tool was imported into the methodology in chapter three. Literature in chapter two has been drawn upon to support an extensive theoretical framework.

Webb (1996) argues that, "theory matters because without it education is just hit and miss; we risk misunderstanding not only the nature of our pedagogy but the epistemic foundation of our discipline (p.23). Taking this statement into account, I realised that what I had embedded in the rationale for undertaking this study were some of the somatic principles and practices I use daily. These in turn became a model for collecting data as well as for interpretation. In Table 4.1, for example, I was able to take the students answers: *the respondents offered these terms, which I have made categories.*

Employing field notes in this way is not an unusual process in an exploratory case study method, and in my somatic journal I was able to also evaluate the responses in an alternative and more reflective way. In this way the somatic journal became a reconstruction of the research process.

6.2 Somatic and creative practices integrated as methodology

Since the commencement of this study, literature about dance somatic pedagogy and the way it has moved beyond dance training institutions has diversified. In a recent text, *International Handbook of Research in Arts Education*, dance researcher Green (2007) categorises new approaches to learning dance and about dance and in this way promotes several new directions for somatic research. Several of these categories are significant to this discussion. They are; somatic dance research, critical pedagogy research in dance and somatics as a particular investigative theory.

Phenomenological explanations of Merleau Ponty and Sheets-Johnstone, briefly accounted for in the literature review have been relegated to future studies. Where attention on the most recent somatic research studies has previously been focused on dancer's training methods, critical discourse might better situate the efficacy and potential for concepts of primacy to be included, and if awareness practices are to be learnt at a much earlier age (Green, 2007).

The aim of this study has been two fold. Initially set as an investigation to find out more about the implementation potential of a new dance practice called somatics at a mainstream school and whether students and their teachers were already familiar with it, the design of the methodology has informed a parallel exploration. This second exploratory pathway was substantiated by a research design that could be repeated either in the same school as a longitudinal study or in other schools less likely to have integrated the dance curriculum achievement outcomes with other learning domains.

An inherently somatic process of representation and interpretation accommodated reflective variables of emphases, timing and sufficiency of attention. In the somatic

journal I posed myself ways of responding to the data collection phases: *social relationships among participants, points of view...*, *...verbal presentations of events, activities and relationships (teacher, students*" and lastly, *the authority of dance at school...*, *influence by change?*

In making these responses leaders for witnessing the students responding to the somatic activities I was able to move the data from a direct interpretation of events to an account of the study's ongoing narrative (Eisner & Peshkin, 1990). I would argue that a theoretical proposition emerges from this position: where a personal standpoint and the research study converged, readings of the data produce an imbricated approach and as a result broader contexts to which studies like this are transferable.

The interview with the arts teacher was a stimulating and provocative session, I noted in the somatic journal how she thought that we had certain similarities in our teaching:

I think we are probably quite similar in the fact that we are both quite peaceful people and they didn't feel like it was very... but they actually felt comfortable enough to be who they are, which was nice to see.

It has been important to remind myself throughout the data collection phases that my approach in this situation is as a researcher rather than as a classroom teacher. Keeping this in mind, implications of students and their teacher's responses to the effect of my presence at their school support what I had described in the findings as an intrinsically reflective and adjunctive use of a journal in the exploratory case study method (Richardson, 2000). In Figure 4.2 of the somatic journal, I noted how we were all performing:

I enter the setting (classroom) and remain physically detached from activities and interactions and I engage in some of their regular activities and periodically withdraw... I re enter but eventually I leave followed by when would my audience want me to show them.

When I dance, in preparation I intentionally absorb the audience's expectation and deliver my performance from this as a catalysing effect. In the same way I have intuitively responded to my place in this research situation.

The aims of the study were not ambitious and few resolutions are set in place; nor does it necessarily provide discrete answers. Other than that as a case study, interestingly complex issues, which are prevalent in the teaching of dance subjects at school, have been made observable. Post modern dance emerges as much as any other art form, from a period during which eclecticism and the proliferation of methods becomes operative paradigms for singular authorities (Desmond, 1993).

A bricolage of knowledges and disciplinary profusions sets dance as a significant arts learning medium. This notwithstanding, the theoretical framework brought to my thesis observations and perceptions about dance as intransient and therefore perhaps less available.

The findings of the study, albeit limited by access to students and their teacher at a single late-primary/intermediate school, propagate an idea that the relationship between performance arts processes and practices and the current educational objectives of New Zealand's educational curriculum framework require integration. Using this statement as a way forward in the conclusion of my study, I can commence with a suggestion that by initially releasing dance at school from familiar achievement emphases of fun, creativity and performance and re-negotiating dance learning in ways that access more personal, postural and movement vocabularies, a notion is advanced about a more meaningful link with individual wellbeing.

Even though the terms creativity, fun and performance (Ministry of Education, 2006-2008) might mediate children's motivation for a new topic, dance at school may after all not be promoted by them. Keeping this in mind, questions develop about why it is so difficult to effect changes in the art education curriculum that access day-to-day subject learning priorities in mainstream schools. Intersections and interdependent reliance on other subjects' outcomes may redefine those terms as imagination, interest and self-actualisation.

6.3 Dance and somatics as miscible in a mainstream school setting

The mind-body connection, which has been established far beyond Descartes's dualism concept, implies recognition of these terms as components of a healthy composite body. Performance practices, which are designed to enable dancers to become better tuned with their body, not just mechanically, but also expressively, may be made available in the same school opportunities to perform that students are now being given. Although the New Zealand Arts Curriculum dance strand document (2000) is a pivotal text for the study, the discussion exposes it as a flexible non-genred dance base, which might incorporate a new non-performative dance topic such as somatics.

The New Zealand Arts Curriculum dance strand provides language and terminology which mediates health and dance outcomes. However, the dance strand, as with many other policy documents, may be seen as both enabling and a constraint. A position amongst dance educationalists to emphasise participatory pedagogical discourses based on the early British Modern Dance in Education models may have, in turn, largely discounted the embodied knowledge base of dance performing practice (Chappell, 2007). What is important to note is that by avoiding a critique of the espoused theories that finally set New Zealand as the first country in the world to introduce dance as mandatory in the mainstream schools curriculum a consequential perspective exposed the gap between dance practice and dance in education theory.

In summary, the confidence that might have been generated for use when seeking to create educational innovation and reform, defers to arguments that highlight the need for individualism in any learning environment. By combining somatics with educational theory, the viability of including postural awareness practices at school is increased. In the process, the key theme of this work has been identified.

To give children strategies for focusing and calming beyond ordinary class conduct restraints a new approach to dance practice in mainstreams school curricular is considered. Postural awareness activities that alleviate physical and mental strain patterns, provide internal learning environments so that students can deeply engage with

subject content and integrate with learning requisites. By maintaining somatics as a discrete discipline from dance performance occasions, new ways of approaching current issues of school induced postural strains and obesity may be developed as holistic wellbeing practices.

Students' responses to the somatic session and their articulated impressions validate a rationale for principles about the consideration for placing humans in the vulnerable position of expressing from and about themselves. Although the study is limited by its singular attention on one cohort's previous dance experience, I suggest somatic outcomes as an opportunity for developing a refined perceptual capabilities tool for children.

The arts teacher in this study was already aware of somatic type pedagogical practices: journalling (self-reflection), visualisation and breath awareness, but not enabled by the curriculum to connect these as the skills building elements of these practices other than for ameliorative teaching methods. If dance is to be expanded across other knowledges in a mainstream setting, similar research studies, need to be flexible and provocative.

As much as qualitative research inevitably evolves as continuous and substantive methods, a study like this locates somatic learning as an embodiment opportunity where all participants are considered. What follows from this statement is the need to formulate a proposal to find ways in which to enrich the pedagogies of dance with somatic practices: more particularly, taking into consideration that teachers from middle year schools have previous understandings about wellbeing practices from other learning areas.

Researchers have long been interested in understanding factors affecting student achievement (Chen, 2008). To contribute new insights to the domain of learning and teaching with the practical purpose of making dance more accessible through self, difference, individuality and community emphases (Kanpol, 1999), this study has sought to link knowledge about somatics and/or or transfer skills from some other learning into the dance learning situation.

The case study found that students require considerations about their wellbeing to be integrated with implicit knowledges, but also that in the reflection of their learning, stored memories are available as part of a continuous process. According to Freire and Freire (1997) “(i)t is necessary that we should always be expecting that new knowledge will arise, transcending another, that is being new would become old” (p.32).

6.4 Limitations and connections to future studies

Because of the size of this study, the issues and consequences of teaching somatics via the dance strand achievement objectives have not been fully explored or realised. Clear imagery and different sense responses remain at the forefront of future studies about children’s capacities for the greater absorption of learning. The notion of multiple literacies, albeit briefly explored in the literature and discussion, makes sense if it produces perceptual levels that can be applied anywhere. In reflecting on my effort to engage this study with the New Zealand dance curriculum strand, a critical discussion commences about the value holism has been given in the educational environment.

In a commitment to embrace Maori values in the context of research conducted in New Zealand Aotearoa an important aspect of integrated learning has already been considered in chapters two and three. Referencing Hauora, the Maori philosophy of health, has provided a broad language platform when presenting combined physical, emotional, social and spiritual dimensions as part of the healthy body. Cultural emphases are not easily addressed in the short period of the study although particular care has been paid to include existent cultural educational practices and values.

Although Hauora had been introduced in the last section of the literature review, as an educational concept which supports holistic learning, not enough evidence was located to determine whether it has been widely implemented. This study did not gain access to specific bicultural strengths of Hauora, but acknowledges this may be a useful platform for further collaboration and exploration.

Details of ethical considerations have been woven through all aspects of the study. Gillespie (1996) argues that although the profusion of ideas about body-as-technology provides an excellent environment for an individual's exercises in self invention and creativity, profusion by its nature promotes acceleration as well as proliferation. My experience of somatic practices in this school incorporated as aspects of timing or integration through sustained change are similarly, inevitably and safely incorporated.

Although safety issues have already been set in place in the developmental phases of the New Zealand Arts Curriculum dance strand and are imposed through the usual School Safety Regulations, there are other special considerations throughout this research process. Participant children may engage in new physical experiences (albeit low impact) which evoke emotion. Issues, in relation to previous emotional experiences may have resulted in unconsciously held postural holding patterns. Somatics practices, as a non exertive physical experience, entrusts the individual with the depth and interpretation of their experience.

Halprin (1995) supports somatics as intrinsically safe by saying that the individuals' response to more natural movement impulses within a certain set of systematic movement situations, gives them opportunities to develop a fuller range of original, safe movement. However, this preliminary study, which is to investigate postural awareness already at school, involves paying close attention to finding out what constitutes both real and desirable (research) experiences. To this end, the focus group became a debrief session in which students fed back their feelings and thoughts.

Further to this, the complex issue of gatekeepers was explored briefly in the ethical consideration and in the discussion. School communities are partly defined by the role that parents play and their responses to their children learning dance at school is acknowledged though not explored beyond the consent form. As the parents/carers are initially asked for their consent, they will have the opportunity to discuss with any child issues about their participation. What was revealed in the findings has also revealed a persuasive argument about maintaining an exterior educational position from which to

see and conduct research. A future study involving parent/carer/family participation might generate further valuable data.

Although the literature lays bare the complexities of dance in the education environment, it also provides a basis for a long term strategy where somatic practices could feature as part of any daily physical wellbeing regimes in mainstream schools as part of community building. The findings of this study are summed up in a quote by Kathleen Durham:

The emotional life of any community is clearly legible in its art forms and because the dance seeks continuously to capture moments of life in a fusion of time, space and motion, the dance is at a given moment the most accurate chronicle of culture pattern. The constant interplay of the conscious and unconscious finds a perfect instrument in the physical form, the human body which embraces all at once. Alone or in concert man dances his various selves and his emotions and his dance becomes a communication as clear as though it were written or spoken in a universal language” (Clark & Johnson, 2005, p.519).

The study’s reflective/ somatic process promoted a rationale to look at expanded theoretical applications of dance knowledge. As well as developing a methodology to study somatics in the mainstream education setting, by incorporating dance ontology into the theoretical framework, the rationale for a subjective and reflexive stance has been made available.

Regular reflection, on similarities between the creative act of learning dances and writing this thesis, enabled a decision to situate journaling as meaningful text into the first data analysis phase as well as provide reflective notes for the discussion in chapter five. Intuitive aspects of the study, recorded throughout the journal retrieved less obvious aggregates of previous exposures and applications of dance, both in the educational setting I intend to research, and in my current academic environment.

In the literature review I had separated teachers teaching dance at school from teachers of dance. I thought that somatics would need dance teachers to teach it, but the study exposes a somatic prevalence in the teachers’ toolkit. As a conceptual tool it could be taught by anyone, alongside dance learning if the curriculum was to be interpreted from a

contemporary dance approach, or otherwise through a broader arts educational lens. This perspective was driven by my experience in tertiary institutions, where graduates of dance are excluded from dance teaching in schools without a requisite year at Teacher's College.

Since the commencement of this study, several New Zealand Colleges of Education have been incorporated into the university setting and I speculate whether this will affect the current situation. If graduate dancers were to teach dance in school, postural wellbeing practice may be more likely to emerge as part of an integrated curriculum?

6.5 Developing a long term project - further research directions

Situated in the desire to achieve a legitimate piece of academic research is an innate feeling that this project is about exchange. That is, the explicit dance knowledge which has previously been confined to tertiary dance training may be made useful in other settings. One of the values of this study, therefore, lies in its potential repeatability. The case study once tested could be refined and repeated as a longitudinal study and/ or conducted in a variety of locations as effective interventions by including schools that do not regularly employ the New Zealand arts curriculum dance strand. This case study method is repeatable and could in the long-term become a useful intervention to introduce and support somatics as part of the dance achievement outcomes.

Setting out to participate in change is exciting. Future studies may be seen as intervention strategies, developed to enhance the postural wellbeing of children at school; both simple and effective as a best practice proposition for teachers drawing on arts subjects as meaningful learning areas. In order to develop a long term project, a somatically driven realisation has been employed from which to build an enduring research framework. In taking on a subject where time and timing are implicit factors, I have had to draw on ways in which I have choreographed and learnt dance movement, knowing that it is only with time and practice that I will be able to actualise this project long-term.

Whilst maintaining important considerations about academic validity and transferability, the potency of self-reflection has been maintained in all parts of the research process. The eclectic theorems embedded in this initial study are given space on the first occasion to espouse embodied experience as fundamental to children learning dance as well as an ongoing part of my research design. Emerging similarities between dance practice, knowledge and research practice have provoked a deepening understanding about the probability of learning dance, which is not performed, but instead determines self-awareness, as a normal part of the human occupation of thinking. In this way, dance practice exposes a potential crossover with somatics, where outcomes value the education of the individual.

External observations about the impact of the most recent practice applications of dance in a mainstream school setting are timely. Issues of long-term postural health and wellbeing in relation to growing statistics of childhood obesity, postural strain from school children carrying heavy bags and increased use of computers may be addressed through a more detailed and active understanding of how their bodies sense and feel when moving. This resource may in turn become a general resource for managing and reducing injury.

If this case study reveals that dance at school may or may not incorporate somatic practices for the wellbeing of children, the provision for further study is made surer. In summary, this thesis provided me with an opportunity to capture moments of somatics at a New Zealand intermediate school by piloting a single exploratory case study.

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LIST OF APPENDICES

Appendix A: Cover letter

Appendix B: Parent consent form

Appendix C: Teacher consent form

Appendix D: Questionnaire

Appendix E: Samples of somatic journal headings

Appendix F: Samples of sketches

Appendix G: Samples of activities for somatic session

Appendix H: Focus group guidelines

Appendix I: Teacher interview protocol & questions