HEALTH PROMOTION IN ONE NEW ZEALAND PRIMARY SCHOOL: A CASE STUDY

BY

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ABSTRACT

This research investigated the way in which one low decile New Zealand primary school in the greater Wellington region practised health promotion, as defined by the World Health Organisation when specifying a health-promoting School. The focus was to discern how one purposefully selected school with many potential social, economic and cultural risk factors undertook the challenge of improving student health. The lens used was that of an experienced community nurse / nurse educator who had previous school nursing experience.

Objectives were: to explore the concept of the ‘health-promoting school’ in a specific New Zealand context; to develop and use appropriate research methods to assess a single low decile school in relation to World Health Organization health-promoting school components and checkpoints; to work with the school community to identify health issues; and, to record external and internal changes that could impact on school health over a finite time period.

Case study, guided by Hartrick, Lindsey and Hills Health Promotion Nursing framework was selected as the most appropriate method to collect both quantitative and qualitative evidence with the aim of providing a clear understanding of the particular case. Previous research validated an intrinsic case study approach for an inquiry that involved both the process of learning about a specific case and the product of that learning. Triangulated evidence from multiple sources accumulated from multiple data collection methods was used to answer the checkpoints of components within the health-promoting school framework developed by the Western Pacific Region of the World Health Organization in 1996.

Results confirmed that the school was working appropriately within the scope of their educational practice to provide a health-promoting school environment for the school community. Gaps and issues identified included an element of talking past each other between the cultures of the education organisation and the nominated health service provider respectively that contributed to a lack of appropriate and accessible health service delivery for the school population. Teaching staff considered that they had insufficient access to health knowledge, and input from health service staff did not meet health education requirements for the school. Staff preference for increased school nurse involvement was not realised. The consequence was that two outside agencies (KiwiCan and Life Education Trust) delivered the bulk of the Health and Physical Education curriculum which resulted in a degree of fragmentation of health education for students.

The issues that were identified demonstrated that health services in the area were not satisfactorily meeting the needs of the community and were not addressing the health inequities for the predominantly Pacific Island and Maori students and of their families that formed the school community.

The conclusion reached was that a full-service school approach should be considered by the school and the local District Health Board as one way to overcome the current lack of access to health services for the school community.
Assertions included the potential integration of locally available services by a school-based nurse coordinator supported by health professionals (Nurse Practitioner and Pacific Island Community Health Worker) and social workers. The vision included professionals working within their professional scopes of practice as part of a Primary Health Organisation with the aim of appropriately addressing the health inequities experienced by the school population.
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A journey of discovery is always a process of growth, through learning and change. This particular journey has been made possible by all those who supported, encouraged, resourced, affirmed, shared their time, energy and expertise with, directed, listened to, and trusted me.

I have told this story in acknowledgment, respect and with utmost regard for:

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1 INTRODUCTION

1.1 Introducing the study

This thesis is a story and a journey of discovery. As with all travel one starts with an interest in where to go, sometimes a knowing of why, and always with a sense of apprehension / excitement. Some journeys are so tightly planned that the travel allows for no deviation from the fixed itinerary – and probably keeps the traveller so safe that there is little scope for new experience or new knowledge gain. Other journeys are planned so that the safety factor is in the trust that the travel plans are sound enough to allow investigation of the new and unknown. These journeys are then exciting, responsive, stimulating and interactive. These are the journeys we want to share with others when we return so they can catch a glimpse of what we experienced. This journey was in the later category. It took me to new realms that I am impelled to share.

My interest in health, and more specifically child health primarily stems from my work as a nurse working in community roles, and more recently from my involvement in nursing education. My occupational settings have included community antenatal and preschool (Play Centre\(^1\)) education, urban Accident and Emergency, and suburban Practice, Plunket\(^2\)

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\(^1\) The Play Centre movement, founded in 1941 is a preschool education organization where parents remain fully responsible for the education of their children through active participation that can include progressive training to become a preschool educator (Somerset 1970).

\(^2\) The Royal New Zealand Plunket Society was founded in 1907 with the aim of reducing the mortality and morbidity rates of young New Zealand children. The present day organization has national contracts with the Ministry of Health to provide well-child services for children from birth to five years of age. Plunket nurses are registered nurses who complete a one-year specialty nursing Diploma programme in their first year of employment.
and Public Health nursing roles. For the last decade I have been involved in undergraduate, post registration and postgraduate nursing education.

During my transition from institutional to community work my nursing practice changed from caring for people experiencing emergency accident or illness events to one of promoting health and wellness with the aim of preventing emergencies and illnesses occurring. I now have a strong commitment to the role of the nurse in community practice that is primarily focussed on the maintenance and enhancement of wellness for all populations. This research has given me the opportunity to explore the literature and undertake research relevant to the enhancement of wellness and nursing practice possibilities for children and their families at this moment in time in Aotearoa /New Zealand

At the beginning of this journey I believed that due to the increase in public access to a variety of indiscriminate information and an increased availability of a diverse range of health and illness care options, there was an urgent need for more health education for New Zealanders. Health education with a focus on current and future New Zealanders being able to make informed choices about potential lifestyle risks and take more control of their own health. I considered that this required timely education and that the optimum opportunity for such education/information sharing was at the primary school life stage. My ideas were influenced by my experiences and literature that supported that it is at this age children are more inclined

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3 Post registration nursing education can be entry to specialty nursing programmes at graduate (NZQA level seven) level or postgraduate (NZQA level eight) level. Advanced nursing programmes and Masters degree study is also post graduate education (Nursing Council Of New Zealand 2001b, N.Z.Q.A. 2002).

4 In New Zealand primary schooling commences at five years (legally a child must be enrolled at six years) of age and may continue until year five (10 years of age), or seven (12 years of age) depending on the school. Children attend intermediate school for years six and seven if the primary school does not provide this option. Secondary schooling commences at year eight.
to accept different ways of doing things and to be highly influential in introducing their families to health messages (Bradley 1997). I had a growing concern that primary school children were not being exposed to appropriate and timely delivery of health information and health experiences that could assist them in their future healthy life choices. Another concern was the increasing inaccessibility of nursing services for primary school aged children in New Zealand. Frequent reflection, discussion and resurfacing of these issues drove my desire to undertake this research journey.

As this work progressed I became more aware of these issues at global, national, regional and local levels. I became more involved in national nursing policy discussions and actions through my multiple involvements in nursing organisations in New Zealand. I was privileged to be able to share ideas with nurses in the field and national nurse leaders. I was amazed at the synchronicity of situation – an invitation to join a group or committee that provided important information, a new government policy that gave thought to a potential solution, a chance conversation with a nursing student, an exemplar shared by a practitioner. Every new situation and interaction provided me with fuel and stimulated reflection and clarity of direction.

By the end of the journey I realised that my knowing was of a different dimension and that I had formerly held a view of the place of health education that was still influenced by the medical model. I could acknowledge that I had not fully understood the complexity of imparting health knowledge to children in other than an optimum time to indoctrinate them, which would not necessarily assist them to make healthy life choices. I had gained a deeper understanding of how life skills that can lead to choice are gained through social contexts that have the philosophical aim of
student empowerment. I came to realise that this was what was meant by health promotion in the health and nursing context and that the framework proposed by Hartrick, Lindsey and Hills (1994) was strongly aligned to my own philosophical intent of nursing practice.

The journey I undertook to reach that understanding is set out in this thesis for you, the reader, to share. My intention has been to present it in congruence with my professional philosophy. I invite you to follow my path and take from it what you want, and use it how you wish.

1.2 Moving the case

This journey had no clear starting point, but I know it was many years before the idea of post registration academic study came into my worldview and became a possibility. The journey towards this project has been long and has been influenced by my life experiences, nursing practice and educational opportunities. I have been enrolled in university study since 1980. I commenced an undergraduate Bachelor of Arts degree (BA) at the same time as my youngest child started preschool education. The degree was completed part time, over 13 years, whilst I worked progressively longer hours as my children became more independent. I still remember the sense of accomplishment as I reflected on the fact that I had finally completed what initially had seemed such a hurdle. With a little persuasion from mentors and friends I enrolled in a Master of Education (M Ed) degree, this major chosen mainly because the class times suited my working hours and family commitments, but also out of a desire for increased knowledge of the discipline of education. I was, by then, working as a nurse educator. I
thrived on postgraduate study because of the increased freedom it presented in the choice to focus on issues of personal and professional interest to me.

I remember that at that stage I was ready to explore some of the questions from my own nursing and education practice. I went on to complete a thesis on the empowerment of nursing students (Pearson 1996) and it was during this journey that I realised that research had become a passion for me. I often reflected that as a nurse I had gained skills in interviewing, which had enhanced my ability to communicate and gather information from individuals. I also considered the organisation, time management and determination I had gained from experiences in my personal and professional life had equipped me well for research. During previous research journeys (Pearson, Joyce, Khull, MacDonald, Southwick & Wilkes 1996, Pearson 1996) I had developed the habit, albeit irregularly, of keeping a personal journal of ideas thoughts, insights and quotations that had meaning for me. I was reminded of a recurring question, that I had previously written about in my journal, by a relatively new graduate nurse who was working as a public health nurse in schools, when she said to me in passing:

The teachers still think we are only interested in Nits and I would really like to be in the school teaching about health (pers comm, public health nurse #1).

This comment prompted me to remember the frustration I had felt as a public health nurse and the idea of exploring the issue of the roles and possibilities of practice for nurses in New Zealand schools was rekindled.
In spite of the shift from illness focused hospital based nursing training to tertiary education based wellness focused nursing education, the majority of graduate nurses in New Zealand are still initially employed in secondary and tertiary health care institutions. This situation was identified in the W.H.O. document on community health nursing (W.H.O. 1974) as being an issue that needed to be urgently addressed on the grounds that the percentage of the total population of any country that was receiving tertiary level care at any given time was minor compared to the need for health focussed professional nursing care for the bulk of the population in the community.

Currently employers of community nurses in New Zealand, where nursing practice is usually focused on maintenance of wellness and first contact (primary) care continue to consider that working in a tertiary institution is a required rite of passage and essential before nurses are employed into community nursing positions. This practice can have the effect of subjecting a graduate whose education has been nursing focused client care to the medically dominated hierarchal culture that still exists in New Zealand hospitals and has traditionally not served either patients nor nurses very well. The result is that many community nurses are expected by nurses, doctors and clients (including teachers) to have an illness and problem focus to their practice. Many nurses, including myself have been enculturated in this manner. I have come to realise with greater clarity that when nurses have their consciousness raised through an education experience that is truly health promotive in philosophy and practice they deliberately work towards a health focused nursing practice framework.
1.3 Seconding the case

As I have stated the driving forces for this research that resurfaced as ‘unfinished business’ from my days in public health nursing practice were the issues of lack of health education for school students and the reduction of school nursing services. I had not been able to gain an understanding of what was really going on, or why, during my public health nursing practice experience, and I still felt compelled to gain that knowledge. My journal of 14 February 1997 documented a mind map with the central theme ‘the school nurse: essential to child health?’ This query was driven by a lack of knowledge about what was the contemporary role of the public health nurse, what had shaped the role, and what were the future possibilities for these nurses. Behind this need to know was my concern that public health nurses seemed to have little involvement in health education in primary schools and children did not seem to be learning enough about health to enable them to care for themselves in the future. As mentioned, I have previously explored the concept of empowerment, which to me, in the health sense, involves people knowing enough about themselves to know how to engage in health promoting lifestyles and how to utilize health professionals to assist them to maintain their own health.

As a nurse who had practised in the community in what I considered was a health promoting manner I had an ongoing concern about the increasing medicalization and illness focus of health care (Kickbush 1996a). I perceived that a common mindset of many people was that they did not need to concern themselves with what they could do to stay healthy
because they were being encouraged to go to the doctor and get a prescription as a cure when an illness event occurred.

I was concerned by anecdotal evidence that the health syllabus taught in New Zealand schools, (Department of Education 1985), did not appear to have met the objectives of enabling healthy self care, and that the new curriculum for Health and Physical Education (Ministry of Education 1997a), would not be delivered in a manner that was any more supportive of these aims. The syllabus and subsequent curriculum for health (Ministry of Education 1997a), that was gazetted in 2001, included the requirement that teachers develop programmes based on a learner needs assessment, that would enable students to make informed decisions concerning their total well-being/hauora\textsuperscript{5}, both now and in the future.

My school nursing experience had been that while teachers were aware of the health needs of their students their role was to ensure that through the use of learner education needs assessments students could benefit from the education they offered. Teachers did not appear however to receive the education in their preparation for practice that could provide a health focussed learner needs assessment. Nor did they have the in-depth evidence based health knowledge to ensure the total present and future health decisions for student in their class could be explored. The realisation of what was expected of teachers and the potential effect on the future health of this age group supported my growing interest in the topic. Relatively few primary schools in New Zealand have a dedicated school

\textsuperscript{5}Hauora, translated from Maori means health or well-being (Tauroa 1990).
nurse, so there was no clear model of nursing practice or nursing standards to measure, or, be influenced by, in the proposed project.

My decision to concentrate on primary school health education and the nursing role in primary schools was based on my knowledge of the developmental and educational literature and my belief that this was the optimum age to impart an understanding of health. By the time I had completed a further literature review and uncovered further intriguing information I had become fully engaged and committed to researching developments in the health education arena in New Zealand primary schools.

1.4 Propositioning the study

The process of exploration of the topic included the development of two draft proposals before a realistic, viable and congruent proposal was finalised. Draft proposal # 1, entitled Health Teaching and the Role of the School Nurse in New Zealand Primary Schools clearly focused on the role of the public health nurse and the issue of health education in schools. It set out to define the scope of the project by asking the following questions:

1. What role do nurses have in NZ schools at present?
2. How do nurses perceive their potential role?
3. What do teachers perceive as the nurse’s actual and potential role?
4. How, what, when, and by whom is the current health curriculum taught?
5. What educational knowledge and professional development are teachers given for teaching the health curriculum?
6. What educational preparation are nurses given to teach health subjects?
7. What is the potential role for the school nurse in the new Health and Physical Education curriculum?
Methods of data collection were to be mixed and I recall a definite desire to gain some quantitative data as I considered that this would be more readily accepted as valid by the school, education and health managers, and the Ministries of Education and Health. I also considered that this methodological approach would suitably challenge my learning. My awareness of the limitations of this reductionist approach, however, guided me to include qualitative data collection methods in an attempt to add a deeper and more inductive dimension to knowledge and therefore understanding. Three stages of data collection were documented in this proposition.

The first stage included administration of a one-page questionnaire requesting basic information about the school, nursing involvement, and elicited interest in participation in further research. The questionnaire was to be sent to the 222 primary and intermediate schools in the Wellington region, identified from the Ministry of Education school database. A letter was also to be sent to public health nurses in the same geographical area requesting involvement in the second stage of the project. Data from the questionnaire were to be analysed and a contact database of schools willing to be involved in stage two developed.

Stage two was to involve holding focus group meetings with school health coordinators and nurses, with the intent of gaining answers to the initial research questions. This information was to be utilized to develop a comprehensive questionnaire, which was to be sent out to schools willing to participate in the project. I also intended to review all relevant literature and
visit the USA, UK and Australia to gain a greater understanding of the role of the school nurse in other countries.

As can be seen from this plan my concept of the above project was that it should have a large sample to ensure validity and reliability and that it should be a large-scale study. Initially I had not addressed the logistical difficulties, which became evident during further reflection, discussions with my supervisors, and other interested persons. One major consideration was the fact that I was to undertake this study while working in demanding, full time employment. I consider however, that the main problem with the concept was that my focus was too broad but lacking in sufficient depth. I also realised that utilisation of this methodology was likely to lead me to answer my own questions in a biased manner before I had asked them of others.

I believe that all research has an element of bias, as personal interest essentially drives the process of inquiry. Acknowledgment and exploration of bias is essential to the research process, and it is the task of the researcher to eliminate bias as much as possible, through awareness, rigour and the design of the project. I had a major concern that my initial plan may have elicited defensive responses from both teachers and nurses because the positioning of the inquiry could have had an outcome of making others feel wrong or wronged.

The second draft proposal therefore took a step backward as I reexamined my personal and professional philosophy, considered issues of integrity and how I could hold true to both through the design of the study. The new project title was The Teaching of Health in New Zealand Primary
Schools: the actual and potential role of the school nurse. This appeared on the surface to essentially be the same as the original draft proposal, and, in fact the research questions had barely changed from the first version, but my focus had shifted. The major change in my focus was the methodological consideration, which had shifted to involve a comparative case study approach with three participant schools. One rural, two suburban (one high decile⁶, one low decile). I intended to collect similar in-depth qualitative data from each case to provide triangulation, then make comparisons between the schools. I considered that this approach would ensure a greater degree of generalisation and acceptance of findings. I intended to retain the comparative focus on nursing roles in the three developed countries previously mentioned, through an in-depth review of international literature.

This proposal seemed more manageable and congruent with my qualitative philosophies and allowed for comparisons of similarity and dissonance between schools in different contexts. However, during further discussions with my supervisors, issues of size, purpose, focus and workload resurfaced. I had, during the development of these draft proposals been reading relevant literature when I came across the World Health Organization (W.H.O.) health-promoting schools literature (W. H. O. 1994, 1995a, 1995b, 1995c, 1996). One particular Australian article by Booth and Samdal (1997) stated that there was an urgent need for the development of tools that could be used to monitor and evaluate health-

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⁶ A decile ranking based on the socio-economic status of the community served is assigned to all New Zealand schools. One (1) is the lowest and 10 the highest ranking.
promoting schools - a challenge I couldn’t ignore. I felt I had at last found the right itinerary for this odyssey. I had discovered a more holistic framework or map that was currently being considered for use in New Zealand schools and was therefore relevant and of future use. This holistic health promotive framework comprised health education, including the curriculum delivery and content, the provision of health services, school health policy, the social and physical environment and the school’s relationship with their community. I decided that I would work with one school as a single case to be studied in-depth. I planned to utilise a range of data collection methods with a focus on coming to an understanding of the issues through gaining knowledge of health promotion in that one school.

I realised, in retrospect that my process of working through the focus and method of inquiry was all part of an essential consideration of methodological process. How this project could address my initial questions in a manner ethically and methodologically congruent with the setting and participants as well as being philosophically congruent with my nursing and education practice was both the requirement and challenge. My reading then led me to the health promotion nursing literature including the work of Hartrick et al (1994) Hartrick (2000, 2002) and Lindsey and Hartrick (1996). The framework these authors proposed for family assessment was based in health promotion and included an emphasis on caring nursing ontology. Their framework included listening (to the family), participatory dialogue, recognising patterns and envisaging action for positive change (Hartrick, et al. 1994) which became my guide for this expedition. By utilising case study method within this philosophical framework a safe plan of travel evolved.
Stake (1978, 1994, 1995) considered that a case study approach to inquiry involves both the process of learning about the case and the product of that learning, and that an intrinsic case study is undertaken when one requires a better understanding of a particular case. As my ideas and learning proceeded I relinquished my notions of a large project and realised that the answers I needed lay in an in-depth uncovering of what was going on in one primary school. I also understood that my personal philosophy of health promotion guided me to work ‘with’ people as participants and not ‘on’ them as subjects of research. Therefore participatory research that focussed on an outcome that could be utilized by the school for their own purpose as well as meeting university academic study requirements was required.

Labonte (1989) considered that health professionals should relate to, and abide by, a philosophy of health promotion when working with clients. Hartrick et al. (1994) described that in child and family nursing this meant the nurse needed to move from an epistemological emphasis of nurse as holder of expert knowledge, to an ontological emphasis of the manner or way of being of the nurse. Hartrick et al. (1994) further described that this ontological position involved the nurse becoming personally engaged with the client group to facilitate the promotion of health by possessing a human caring presence, appreciating multiple realities, respecting diversity, and valuing each person in context. I consider that it is this ontological position that is required of health promotive case study research, with the school community as the client, or case to work with as inquiry participant.

The Objectives of the Project were at that stage finally defined as:
1. To explore the concept of the ‘health-promoting school’ in a specific New Zealand context;

2. To develop and use appropriate research methods to assess a single low decile school in relation to World Health Organization health-promoting school components and checkpoints;

3. To work with the school community to identify health issues;

4. To record external and internal changes that could impact on school health over a finite time period.

The aim of the research was defined as: An investigation of the way in which one low decile New Zealand primary school in the greater Wellington region practised health. Health in this context defined by the World Health Organisation when defining the Health-Promoting School as:

A holistic model of health which includes the inter-relationships between, physical, mental, social and environmental aspects of health (W.H.O. 1995a:3)

The focus was to learn how one school with many potential social, economic and cultural risk factors acted to improve the health of their students. The purposefully selected (Patton 1990) school was to be researched as a case study (Stake 1994, 1995, Yin 1994, Zucker 2001) and examined using both quantitative and qualitative methods of data collection from as wide a range of sources as necessary to meet the objectives of the project.

To fully understand and articulate the aims and objectives of the proposal required an extensive review of relevant literature, which was guided by my need to understand the historical and current issues of health promotion in the New Zealand context. As I explored the more recent
literature and New Zealand health policy I was driven by the need to understand the total contextual and developmental origins of the notion of health promotion. This was essential to my broad understanding and provided the setting for the case in context as much as the geographical and research explorations of the case.

This literature review will be presented in the following chapter (Chapter 2), and will include a discussion of the current context of community nursing in New Zealand. Following this scene setting the research methods and the rationale for evidence collection methods will be presented in Chapter three, the case context will be outlined in Chapter four followed by the presentation of evidence in Chapter five. Discussion of assertions will then be addressed in Chapter six and the research conclusions presented in the final Chapter (7). Appendices precede the References, both of which have been bound in a separate document to the body of the thesis for ease of use by the reader.
2. LITERATURE REVIEW

The focus of this project is directed towards the health of a school population. Therefore an exploration of the body of knowledge that has shaped, defined, and driven health and the health of people in specific settings is the starting point for contextual understanding of how schools in New Zealand have become part of a global school health initiative, Health-Promoting School’s. In this chapter I will document the literature-referenced pathway that I undertook to gain a background understanding of the topic.

The concept of the Health-Promoting School originated from the World Health Organization. I shall initially present an overview of the relevant historical developments, philosophies and activities of this organisation, and introduce the concept of Primary Health Care. This chapter will use New Zealand health policy direction as an example of World Health Organization influence and the issues that arise in nations during implementation of global policies. Health Promotion will then be discussed against global health developments and World Health Organization conferences. At the conclusion of this chapter, the settings approach to health promotion will introduce the Health-Promoting School initiative which will be explained and explored in the New Zealand context. Determinants of Health will be addressed prior to a final and brief discussion of the concept of Health.

This discussion will be brief as I am mindful that a full exploration of the concept of health is worthy of a complete thesis.
It is acknowledged that neither the conceptual notion of *Health* as an entity, nor any of the other concepts named above can be viewed in isolation. Each has developed in context, over time and in association with the others. The arbitrary separation of each concept and the order of presentation is an attempt to provide a logical, yet informative discussion of relevant literature, with the aim of providing a background understanding to this thesis.

Abbreviations will be avoided as I consider that they can detract from an easy flow for the reader and tend to devalue the worth of a full title or concept. Footnotes will be utilized throughout to define terms that could detract from the main line of discussion but are considered to answer potential questions as they may arise for the reader. Capitals and Italics will be used when defined concepts or titles are used in the body of the text.


In 1945 a United Nations conference was held to consider the setting up of an international health organization and bring together the growing number of regional health organizations that were not mandated to act in a global capacity (W. H. O. 1998a).

At the conference the statement that:

> the health of all peoples was considered to be fundamental to the attainment of peace and security in the World (W. H. O. 1998a :9).

was made against a post war background that included rejection of the extreme nationalism of war time, support for the possibility of a more
humane world future, and the desire to avoid further world wars. The aspiration of international co-operation in such areas as education, science, food and agriculture, finance, and health was also an influence, and furthermore it was considered that the wartime discoveries of penicillin and dichlorodiphenyl-trichloroethane (DDT) had significantly altered the possibility for prevention and control of communicable disease (W. H. O. 1998b).

Following the conference, 22 meetings were held by a Technical Preparation Committee, which proposed the name World Health Organization and wrote draft resolutions for presentation at the first global health conference. This *International Health Conference* (later known as *The World Health Conference*), which lasted four and a half weeks, was held in New York in 1946 and was attended by 51 member states of the United Nations. One of the major principles defined by conference delegates at this event was that the World Health Organization would be empowered to act as the directing and coordinating authority on international health work. Problems requiring the assistance of the World Health Organization would be identified and aid requested by the government concerned and not by the World Health Organization\(^8\) (W. H. O. 1998b).

The constitution of the organization, which was accepted at The First World Health Assembly on April 7 1948, stated that membership of the organization would be open to all states without restriction. Six regional

\(^8\) This policy was part of the support for nations to define their own health needs not to have them defined by other/s.
offices of the new organization, each with their own governing body, were established later in 1948 to integrate the pre-existing regional organizations and to provide links between the World Health Organization and national governments. Activities of the new organization continued to reflect the directions (Epidemiology, Technical study, and Technical field advice) of the pre World Health Organization, League of Nations funded health organizations. The philosophy, policy, and activities of this new organization reflected the spirit and intent of collaboration, and the post war desire to share power, support peace and encourage global collaboration for health (W. H. O. 1998b).

In the preamble of the World Health Organization constitution is the statement:

Health is a state of complete physical, mental and social well-being and not merely the absence of disease (W. H. O. 1948).

Article one of the constitution states that:

The objective of the World Health Organization shall be attainment by all peoples of the highest possible level of health (W. H. O. 1948).

Activities of the new organization included the provision of planned projects that were relevant to requests for assistance and focused on assisting people to become self sufficient by the conclusion of that project. Technical and scientific meetings were held and results utilized to direct projects, policies and programmes and to coordinate and suggest research and health personnel training. The international publications programme supported the organizational activities, research programme and policy functions of the (W. H. O. 1998a). The philosophy and practice of the World
Health Organization was aimed at supporting experts to work with those in need to encourage self-development and sustainable self-sufficiency (W. H. O. 1998b). Global and regional requests for research, knowledge and assistance drove organizational activities in the early years, especially in the Western Pacific Region\(^9\), where post war reconstruction including reducing the effects of famine, rebuilding health service facilities, providing clean water and the control of communicable diseases, were urgent priorities (W. H. O. 1998b).

While global communicable disease eradication still directed the majority of global activity in the 1970’s, human rights, status and gender impacts on health assumed a larger focus in the world health arena as the effects of social and economic deprivation on health and well-being became more apparent. An increasing political and economic focus directed World Health Organization activities towards health policy development, with the concept of health development as distinct from the provision of medical care becoming more clearly identifiable as a fundamental World Health Organization principle. An illustration of this was the statement:

> That governments have responsibility for the health of their people, and at the same time people should have the right as well as duty, individually and collectively, to participate in the development of their own health. (W. H. O. 1998a:16).

During this same period equitable health resource distribution and an

\(^9\) Western Pacific Countries in 2000 included, Australia, Cambodia, China, Cook Islands, Fiji, Hong Kong, Japan, Kiribati, Lao P.D.R., Malaysia, the Federated States of Micronesia, Mongolia, Nauru, New Zealand, Papua New Guinea, the Philippines, the Republic of Korea, Samoa, Singapore, Tonga, Tuvalu and Viet Nam. (W. H. O. 2000)
increasing emphasis on illness prevention led to a critical analysis of the biomedical focus of health service provision. Health Services, especially in developed countries, were considered to maintain pre World Health Organization philosophies of deciding for, or having power over the patient or client, rather than the position, defined as power with, that occurs when the helper shares knowledge and works with the person in need (Hunter, Bailey & Taylor 1993).

The 1970’s period also saw the development of World Health Organization policies aimed at support for socially relevant research and critical analysis of health technology. This focus subsequently led to support for health technology that was scientifically sound, adaptable to local needs, acceptable to the community, maintained by local people and affordable to the specific country (W. H. O. 1998a).

In 1974 Lalonde, the Canadian Minister of Health defined the term Health Promotion, (which according to Terris (1996) was first used in 1945 by Sigerist in a discussion on the four major tasks of medicine), in a report entitled A New Perspective on the Health of Canadians (Lalonde 1996). The document has been credited with being a response to the increasingly narrow approach to health of the biomedical model (Bunton & MacDonald 1992). Lalonde (1996) presented a perspective of health that acknowledged a broad range of factors including human biology, lifestyle, the organization of health care, and the social and physical environments in which people lived.

What has come to be considered the most important milestone for the World Health Organization was the landmark international conference.
held at Alma-Ata in 1978, which was attended by 134 delegations. (Wass 1994). The outcome of this conference was The Declaration of Alma-Ata (W. H. O. 1978), which included the goal of achieving an acceptable level of health for the people of the world by 2000, and provided a plan for Primary Health Care. The concept of Primary Health Care, as a new approach to health care, included concepts of equitable distribution of health resources, citizen participation, health promotion and illness prevention, political action, co-operation between countries, reduction of spending on armaments for war, and ultimately world peace (W. H. O. 1978).

In effect, The Declaration of Alma-Ata (W. H. O. 1978) was a strengthened statement of the original World Health Organization philosophical intent of support for a peaceful, collaborative and power-sharing approach to health. The Primary Health Care approach outlined in The Declaration of Alma-Ata was not seen to be a new idea as such, as many initiatives in the Western Pacific such as the barefoot doctors of China, and the women’s committees in Samoa, already had the involvement of communities in the local provision of health care. The Primary Health Care initiative was recognition of the growing realisation that the traditional health services such as the examples cited might have something to offer that the biomedical approach could not (W. H. O. 1998b).

The philosophy and intent of Primary Health Care, was more that just the provision of a more traditional or community focused mode of health service delivery. Primary Health Care was intended to be an overarching ideology for the total holistic health needs of each nation - an organizing
framework, a level of care, and a set of activities. As *The Declaration of Alma-Ata* (W. H. O. 1978) stated in the sixth clause:

Primary Health Care is essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination (W. H. O. 1978).

This full intent of the concept of Primary Health Care was considered to have the greatest possibility of making a revolutionary impact on global health (Wass 1994). However, what followed in the 1980’s and 1990’s, was a slow adoption of comprehensive Primary Health Care in developed countries, caused by a lack of understanding of the complexities of the concept, a continuing belief that Primary Health Care was more relevant to developing countries, and resistance from those who profited from the health care systems already in place (Wass 1994, W. H. O. 1998b). Established health care systems historically have had a powerful vested interest from health professionals, wealthy industrial organizations, and governments who may be threatened psychologically and/or financially by sharing power. These potential threats have led to wider support from those with power and resources for a selective, rather than comprehensive, approach to Primary Health Care (Wass 1994).

The selective or reductionist (Baum & Sanders 1995) approach to Primary Health Care concentrates on providing medical interventions aimed at improving the health status of most individuals at the lowest cost (Wass 1994). This selective form of Primary Health Care uses the words of holistic
primary health care, but concentrates on the delivery or level of care and not participatory action or citizen self-determination. Selective approaches are focused on greater access to health care services for a greater number of people, but with power and control of the system still in the same hands so the status quo is maintained (Wass 1994).

A comprehensive Primary Health Care approach emphasises community-controlled social change that impacts on health in the fullest sense rather than only in the access to health, or more usually, illness care, informed by the biomedical model. In the comprehensive Primary Health Care model health professionals may play a part in working with communities in the movement towards health, but they do not have the control (Wass 1994). It is this comprehensive strategy that is most likely to be sustainable long term. However it is more difficult at a national organizing framework level as it requires policy change in the full range of government departments that impact on health. Housing, education, employment, social welfare, and health policy changes are required, as well as appropriate policy development to ensure the rationale and long term focus of intended policy change is understood. Education and understanding can be enhanced by consultation and community involvement, which is considered essential at every level of the policy development process. Blank (1994) described six stages of policy development, and considered that health policies are most likely to fail if objectives are not clearly defined, and all options are not fully analysed prior to final decision making. *Initiation, Estimation* and *Selection* are all required prior to *Implementation* and
Evaluation of policy, and termination should also be part of the policy cycle (Blank 1994). Blank warned that:

Policy objectives falling outside the prevailing values of society will generally lead to failed policy unless considerable effort is made to show why such action is essential to protect even more basic values (Blank 1994: 9).

Wass considered that as well as citizens of a country being involved, Intersectoral\(^\text{10}\) understanding and co-operation of all power holders is the key to this process (Wass 1994).

Since the 1970’s, as more countries have taken on a democratic form of government, human rights, equity and social justice have become embodied in the government policies in many countries (W. H. O. 1998a). Philosophically it would seem more likely that a democratically elected government would support changes that included increased citizen involvement and power sharing. But increased democracy has not necessarily translated into the adoption of comprehensive, primary health care approaches. Disparity between less developed and well-developed countries has led to uneven progress in health status and health care service provision. Health sector financing has become an increasingly major issue as escalation of medical costs for treatment of illness has threatened the sustainability of cost effective selective primary health care interventions (W. H. O. 1998b). Blank (1994) identified that part of the

\(^{10}\) Inter-sectoral Policy is defined as: Health orientated policy affecting sectors outside health services but usually evolved in collaboration with the health sector (Nutbeam 1986:352).
process of policy development should include a technical assessment of the benefits and costs of any proposed policy but:

The unrealistic dependence of the public on technological solutions to health problems, and the search for quick cures at the expense of prevention and health promotion, explain the reluctance of governments to deny funding for even unproven medical innovations (Blank 1994: 11&12).

I consider that the political systems of developed countries such as New Zealand do not readily allow for such a radical change as was expected from the comprehensive Primary Health Care strategy declared at Alma-Ata in 1976. If we move from the World Health Organization history and examine the New Zealand health policy changes from the early 1880’s to the present time the difficulties encountered in altering policy direction towards Primary Health Care goals can be comprehended. Whilst primary health care action may be taking place at some community levels in the form of autonomous self care and community group programmes (another selective approach to Primary Health Care), policy and consequent power shifts, to redirect the resources, and maintain these initiatives have been more problematic in the New Zealand context.
2.2 New Zealand Health Policy and Primary Health Care

In New Zealand, parliamentary elections are held every three years. This relatively short period in office has the effect of constraining the planning and progress any political party, or the group of parties who hold power is/are likely to effect in the minimum available timeframe. To consult effectively for changes, with which the voting population may either agree, not agree, or not understand (Wass 1994), can take longer than the two years available prior to pre-election ‘population pleasing’ policy statements that tend to be part of an election campaign. From time to time multi-party agreements such as superannuation policy have been deliberated in New Zealand, without great success (Watkins 2001).

Health care is an area that like superannuation potentially affects every member of the population and can provide the media with emotive fuel when people cannot access the most highly advanced and often most costly cures for disease and illness events. This publicity can deleteriously affect the popularity of the government (Blank 1994). As a developed country the population of New Zealand has come to expect a supply and demand situation for personal health care that has historically been provided by the state. This expectation has become unrealistic and unaffordable as New Zealand, like most western nations, attempts to cope with an aging population, rapid change and increasingly costly advances in medical technology (Blank 1994).

New Zealand has had a publicly funded health care system since the first Labour government in the 1930’s proposed a system that would provide
access to care on a need, rather an affordability basis (Bowie & Shirley 1994). The concept was challenged by the Medical Association of the time, which resulted in a compromise being reached that:

…ensured that a publicly provided secondary health\textsuperscript{11} care system would be free to the patient although a small private fee-for-service hospital sector remained. Much primary care\textsuperscript{12} was also free, but general practitioners were entitled to charge a small entrance fee (Bowie & Shirley 1994 :298).

The effect of managing health and illness through welfare state provision can have the effect of undermining personal responsibility (Boston 1999). What occurred in New Zealand was a medicalization of health (Bunkle 1994, Kickbush 1996a, MacDonald 1998), which involved the redefinition of normal life processes, such as pregnancy, into abnormal or disease events. Repeatedly going to the doctor for all health and illness care can also reduce the confidence of the individual to know what is best for them (Kickbush 1996a). It also lessens the chance of taking responsibility for knowledge of their own body and health needs thus contributing to the expanded expectations and demands for medical intervention and the power position of the doctor as holder of all health knowledge (Blank 1994).

\textsuperscript{11} Health services are classified according to their primary, secondary and tertiary preventative impacts. Primary care promotes optimal health and provides protection against specific diseases. Secondary care involves early diagnosis and treatment, including emergency care, after disease or illness events have occurred. Tertiary care includes restoration, rehabilitation and care of the dying after chronic manifestations of disease have developed (Logan & Dawkins 1986 :84).

\textsuperscript{12} Primary health care is defined as: a person’s first contact in any given episode of illness with the health care system that leads to a decision of what must be done to resolve his problem (Logan & Dawkins 1986 :12). It is a part but not the whole of World Health Organization concept of Primary Health Care.
Successive New Zealand governments have tried to restrict the ever increasing amount spent on ‘health’ to fit within the amount available from taxes by implementing health policy changes. Blank (1994) considered that the questions that drive the direction of any health policy are:

- Whether all citizens have a positive right to health care and, if so, what should this entail?
- To what extent does freedom from ill health require societal provision of health care resources to all citizens?
- What limits can justifiably be set on these entitlements to health care?

(Blank 1994: 5)

The answers to these questions are often philosophically based and therefore may vary from political party to political party. In New Zealand the last two elections have resulted in coalition governments which further reduced the chance of agreement to these questions, and therefore agreement to the health policy direction of any government. To compound the problem of increasing demand for illness care still further, improvements in health from the reduction in illness related behaviour could have a negative effect not only on government popularity, but also on government income. For example, a reduction in cigarette smoking, aimed at the reduction of secondary and tertiary treatment for smoking related diseases, can have the short term effect of reducing income from excise tax, and therefore potentially reducing the amount that may be spent on health services short-term. As Parish (1995) propounded the ‘pay off’ in terms of reduced demand for illness care is perceived as long term, certainly longer than the lifetime of the government of the day. Therefore the status quo is maintained despite the fact that the evidence indicates that an emphasis on health promoting activity is cost effective (Parish 1995).
Cost benefit analysis associated with a change to a national strategy of *Primary Health Care* could be likened to dietary change in the individual in pursuit of long-term avoidance of heart disease. The increased costs may be more obvious at the outset and include changes in cooking methods, shopping and food selection. Even when fully aware of the potential benefits the individual may still decide it is not worth the effort or cost to change (Baum & Sanders 1995). For governments (I suggest) change with a long-term benefit focus has not been worth the risk to short term, election focused popularity and power.

The manner in which health policy is decided by any government at a given point in time is influenced by multiple factors that include the:

- social values and structures, political institutions and traditions, the legal system, and characteristics of the health care community. Health policy is also shaped by the composition of the population and by demographic trends. Variation in health care policy from one county to the next, then, can be explained only by understanding each country’s unique combination of these variables and unique experience of the inert action between them (Blank 1994: 25).

Bowie and Shirley (1994) considered that the main economic health issues New Zealand faces stem from compromises made in the 1930’s. Issues which include, fragmentation and lack of coherence between health care services, little emphasis on population-based preventative care, lack of accountability and incentive to use resources efficiently, and the open-ended commitment to funding of health care by central government (Bowie & Shirley 1994).
New Zealand citizens have been subjected to successive health reforms since the third Labour government of 1975 gained office. This government proposed the formation of the Health Funding Authority (HFA) that was to be responsible for policy, priorities, and strategic planning for health, with the aim of improving accountability and efficient use of resources. The proposal, however, was considered as too radical for both the government and the public, and has since been blamed as contributing to the National party winning the next election (Bowie & Shirley 1994).

From this time, until the most recent health policy changes in 2000/2001 the main aim of health policy appears to have been driven by the need to reduce spending to a level that the country can afford (Bowie & Shirley 1994, Blank 1994). Towards this end the National government elected in 1979 established a population-based funding formula for health, which was ostensibly to lead to a fairer distribution of health service funding through the Hospital Boards, and from 1983 introduced incremental, voluntary transition from Hospital Boards to Area Health Boards (AHB’s). These proposed changes may well have been influenced by the World Health Organization concepts of Primary Health Care, as they allowed for decentralisation of government funding, with Area Health Boards to be responsible for co-ordination of public health and provision of health services (Bowie & Shirley 1994). Voluntary transition to Area Health Boards did not eventuate, and by the time the fourth Labour government was elected in 1984, total health expenditure as a percentage of Gross Domestic Product (GDP) had increased from:

5.1% in 1970 to 6.5 % in 1984 (Bowie & Shirley 1994: 300).
This increase however was due to higher private, rather than public spending in the form of private health insurance, charitable donations to organisations and personal health expenses (Bowie & Shirley 1994).

Access to primary health care, in the sense of first contact with a health care service, became more difficult as fees paid by the patient increased, and as a result inequities of access to the health care system became more obvious, especially amongst low socioeconomic groups, including Maori\textsuperscript{13} and Pacific peoples\textsuperscript{14} (Bowie & Shirley 1994). In 1985 the standing Committee on Maori Health recommended that the Treaty of Waitangi\textsuperscript{15} be regarded as the foundation for good health and that all legislation relating to health in New Zealand should include recognition of the Treaty (Durie 1994). The aim of this recommendation was an attempt to address growing health inequities for Maori.

In 1987 the Labour government set up a taskforce, headed by business leaders, the report from which criticised rivalry between professional and sectional groups, lack of accountability and the lack of management skills of hospital managers, and lack of competition between providers of services. The main thrust of recommendations in this report was to introduce an element of competition into the health system by re-establishing hospital services along modified competitive market lines

\textsuperscript{13} Maori are the indigenous people of New Zealand

\textsuperscript{14} Pacific peoples are the population of Pacific Island ethnic origin (for example, Tongan, Niuean, Fijian, Samoan, Cool Island Maori Tokelauan and Tuvaluan) incorporating people of the Pacific ethnic origin born in New Zealand as well as overseas (King 2000).

\textsuperscript{15} The Treaty of Waitangi (Te Tiriti o Waitangi), signed in 1840 was the founding document of New Zealand and established the relationship between the Crown and Maori, as Tangata Whenua (people of the land). The Treaty included the principles of Partnership, Protection and Participation (Durie 1998).
through a purchaser/provider split. Many of the proposals in the report, which were very unpopular with health professionals and Labour party supporters, were analysed by economists as shifting costs to patients rather than achieving real productivity gains, and they were not implemented by the government (Bowie & Shirley 1994). An example of cost shifting to patients was that in the maternity service area early discharge of mother and baby was encouraged which effectively saved the hospital money but became a cost to the family and, if available, community health services.

In 1988 The New Zealand Board of Health Committee on Health Promotion published a document entitled *Promoting Health in New Zealand* with the aim of stimulating discussion and action on strategies that would best promote the health of New Zealanders (New Zealand Board of Health 1988). This document, based on *The Ottawa Charter for Health Promotion* (W. H. O. 1986- see Appendix 2.1 for the full text) included an introduction that acknowledged the importance of Whanau:

as the functional unit within which individuals help themselves and others towards a healthy lifestyle (New Zealand Board of Health 1988:4).

The document also recognised Te Tiriti o Waitangi and urged that all government and non-government agencies recognise Te Tiriti in policy and practice. The introduction of the document stated that:

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16 **Whanau**, translated from Maori means family (Tauroa 1990). The term can also include relationships that have blood links to a common ancestor and/or groups with common bonds and goals (Ministry of Health 1997).
In accord with the World Health Organization *Health for All* strategy and *Ottawa Charter* the committee places in the forefront of its considered priorities a number of prerequisites for a community’s health:

That all government and community action should give priority to achieving the following basic conditions for health:

- to safeguard peace and eliminate the fear of war
- to ensure the same right to health for all people by the provision of equal possibilities to develop and maintain health and by the reduction of social inequities
- to satisfy people’s basic needs for sufficient food, clean drinking water, suitable housing conditions, fundamental education and a useful occupation with an adequate income (New Zealand Board of Health 1988 :7).

Suggested areas for government action that supported health promotion included housing, employment and removing of sexism, ageism and institutional racism. Structural and institutional changes were proposed to facilitate thorough review of the health implications of policy, with a suggested five-percent of total allocation to be spent by Health Boards on health promotion. The need for research and development, strengthening and re-orientation of existing organisations towards health promotion was also outlined in the document (New Zealand Board of Health 1988). Health promotion focuses included, managing stress effectively, encouraging self esteem, fostering physical activity, promoting sound nutrition and reducing drug use (New Zealand Board of Health 1988). In 1989, the *New Zealand Health Goals and Targets*, *New Zealand Health Charter*, and *A Contract for Area Health Boards* (Clark 1989) were published by the Minister of Health (Ashton 1999).

The *New Zealand Health Goals and Targets* (Clark 1989) affirmed a commitment to the 1981 World Health Organization Global Strategy of *Health for All by the year 2000*, by the government, as signatory. The
document stated that the cost of not improving the health of New Zealanders was too great and had been hampered by an absence of clear goals and targets. The document also re-stated the World Health Organization definition of health and acknowledged it was unrealistic to consider that complete health for all could ever be attained. It was considered that health status could be improved if:

Life expectancy is increased and avoidable mortality is reduced; morbidity is reduced and the average number of years that people live free from major disease is increased; health promoting behaviour is increased and health damaging reduced. (Clark 1989: 2)

The overall strategy included: introducing The New Zealand Health Charter (Clark 1989); creating Area Health Boards; introducing annual contracts that included regular monitoring; reviewing and re-defining the role and structure of the Department of Health; and, the development of a hospital accreditation system. The objective of The New Zealand Health Charter was:

To maintain a nationwide publicly funded health system with the overall goal of protecting and improving the health of all New Zealanders. Essential care will be universally accessible, in a manner that is acceptable to both individuals and the community, taking into account the cost the community and country can afford (Clark 1989:1).

The principles of The New Zealand Health Charter included respect for individual dignity, equity of access, community involvement, disease prevention and health promotion, and effective resource use (Clark 1989). Area Health Boards were to be given the broad responsibility for ensuring that public health expectations within their regions were assessed and met.
through public, private and voluntary organisations being contracted to work collaboratively and focus on reducing behavioural and environment health risks. Area Health Boards were to be accountable to the Ministry of Health and were to negotiate annual contracts, to meet performance orientated goals and targets (Clark 1989). Equity issues were to be addressed by an increase of the General Medical Service (GMS) benefit paid to general medical practitioners (G.P's) in exchange for capping the fee to patients. The aim being improved access to care through improved affordability to the patient. A practice nurse subsidy was also paid to general medical practitioners to subsidise and so increase employment of nurses to assist in the achievement of the identified health goals and targets (Bowie & Shirley 1994).

In 1990, however, the Labour party lost the election and the National government was re-elected and instituted more radical reforms of the health and welfare systems, influenced by the 'New Right' philosophy which promulgated a user pays, profit philosophy of health and health care (Price 1993). These changes included targeting health subsidies for primary care, increases to prescription charges, part-charges for hospital visits and hospital care and reduction of health subsidies, including the General Medical Service benefit (Bowie & Shirley 1994). The changes also included replacing Area Health Boards with Regional Health Authorities (RHA's) and reframing public health services (hospital and outpatient) into semi-commercial Crown Health Enterprises (CHE's). This effectively separated funding, purchasing and provision of health care (Boston 1999), and drove
the move to contracts for services that have become descriptive, narrowly focused and mainly for disease focused care as time has progressed.

Welfare payments to the unemployed were also reduced post the 1990 election to provide ‘incentive’ for people to gain employment (Price 1993). Underpinning this action was the ideology that the sole reason for unemployment lay with the unemployed individual and had nothing to do with the social systems, employment possibilities, or the economy of the nation (Price 1993, Wass 1994). Discussion about the introduction of a compulsory private health insurance scheme at this time gained very little public support and was abandoned (Boston 1999), even though, by 1990, 51% of the population had some form of medical insurance (Consumer 2001a).

I would suggest that the relatively high uptake of medical insurance by 1990 was driven by the fear of limited access to care as the health care system clearly was increasingly unable to cope with cost and demand. As insurance premiums increased, especially for the over 60’s together with the realisation that New Zealand was not following the USA model and that urgent care was still obtainable, medical insurance holders have gradually decreased. By 2001 the number of New Zealanders with health insurance was reported as 35% (Consumer 2001a).

The main objectives of the health reforms during the early 1990’s were stated to be encouragement of efficiency and improved access to an effective and affordable health care system (Ashton 1999). The Regional Health Authorities were to be responsible for monitoring the health requirements of their populations and for purchasing services accordingly.
This work included negotiating contracts with the public and private providers, including Crown Health Enterprises (for public hospital and outpatients services), private hospitals, general medical practitioners and voluntary organizations (Ashton 1999) for the provision of comprehensive primary, secondary and tertiary care. A Public Health Commission was established to purchase public health (population based) services and to ensure a national focus on health protection, disease prevention and health promotion was maintained (Ashton 1999).

Even before the new structures were fully established many changes were made to the original proposals including the abolition of the Public Health Commission two years after its formation. Reasons given for this change were overlapping responsibility and accountability with the Ministry of Health. However it was also suggested that the Commission had a tendency to provide the government with advice contrary to the philosophy of the government and interests of the powerful alcohol and tobacco industries (Beaglehole & Bonita 1997).

In 1994 the Public Health Commission had provided the Ministry of Health with a revised set of objectives that were adopted by the Ministry. The goals included:

- To promote a social and physical environment which improves and protects the public health;
- To improve Maori health status so that in future Maori will have the same opportunity to enjoy at least the same level of health as non-Maori;
- To improve and protect the health of children;
- To improve and protect the health of young people;
- To improve and protect the health of adults; and,
To improve and protect the health of older people (Ministry of Health 1997:16).

In 1997 (Ministry of Health), it was reported that overall only 35% of the targets included in the stated goals were likely to be achieved. Forty-two percent were unlikely to be achieved and there was no data for 24% of the targets. Only 25% of the targets for children were likely to be achieved and 63% were unlikely to be achieved. The reasons given for non-achievement of these targets were that some targets were influenced by factors outside the health sector, such as poor housing, smoking, alcohol consumption and road accidents and that some of the targets may have been inappropriate (Ashton 1999). This report demonstrated the distinction between objective measurable illness focused objectives that could be easily quantified and objectives that were wellness focused and included all the determinants of health. Subsequent to this report health objectives published by the government became more aligned to quantifiable treatment and prevention of illness or selective Primary Health Care orientated objectives rather than the more comprehensive qualitative focus supported by the Public Health Commission. The Director-General’s annual reports on progress on Health Outcome targets legislated by the Health and Disability Services Amendment Act 1995 became reports that documented trends in progress toward overall achievement with objectives assessed as tracking towards health, static, tracking away from health or trend not yet assessable (Ministry of Health 1997). Many comments in the 1997 report indicated problems of measurement due to changes in collection of statistical evidence, research in progress and other logistical reporting difficulties.
The main election issue in 1996 was health, with concern about and objections to, the profit driven model for health care which had resulted in reduction of local services, including closure of small hospitals, lengthened waiting lists for surgery and poorer access to health care (Ashton 1999). After the National led, coalition government was formed in 1996 health policy changes included: centralised funding for services through the Health Funding Authority; replacement of Crown Health Enterprises with not for profit regional hospitals and community services; provision of free general practitioner visits and pharmaceuticals for children under six years; and, removal of part-charges for hospital care. An increased emphasis on Maori Health, Child Health and Mental Health Services, all of which were demonstrated as not meeting health targets, was also indicated (Ashton 1999).

Benefits of the 1990’s health reforms have been propounded as having more clearly defined guidelines on requirements and associated costs of health care and more appropriate health targets. The main criticisms of the reforms were that the focus on cost encouraged conflicts of understanding by citizens and health professionals that led to adversarial competition. This competition has worked against the philosophical intent of most health professionals and precluded possibilities for intersectorial collaboration and patient centred health care approaches (Ashton 1999). From a health promotion stance the changes did not contribute positively to the health of New Zealanders, for the reasons stated above, and also because health orientated care is difficult to quantify and easy to ignore.
when cost containment based on measurable, short term illness focused care is always more pressing (Boston 1999).

In December 2000 the Labour-led, coalition government elected in 1999 released *The New Zealand Health Strategy* (King 2000) as the platform for the government’s action on health. In the strategy seven fundamental principles were identified, which were:

- acknowledging the special relationship between Maori and the Crown under the Treaty of Waitangi
- good health and wellbeing for all New Zealanders throughout their lives
- an improvement in health status of those currently disadvantaged
- collaborative health promotion and disease and injury prevention by all sectors
- timely and equitable access for all New Zealanders to a comprehensive range of health and disability services, regardless of ability to pay
- a high-performing system in which people have confidence
- active involvement of consumers and communities at all levels (King 2000:vii).

The document stated that all these principles were to be reflected across the health sector. Out of 10 goals and 61 objectives there were 13 *Population Health* objectives. Two of the five service delivery areas to be contracted on the short to medium term were *Public Health* and *Primary Health Care* (King 2000). The strategy included the development of District Health Boards (DHB’s) responsible for provision of care across primary, secondary and tertiary care areas for the total population. Contractual

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17 *Population Health* is defined as: the health of groups, families and communities. Populations may be defined by locality, biological criteria such as age or gender, social criteria such as socioeconomic status, or cultural criteria such as whanau (King 2000).

18 *Public Health* is defined as: the science and art of promoting health, preventing disease and prolonging life through organised efforts of society (King 2000).
funding agreements for the provision of services were to be negotiated following a needs assessment\(^{19}\) of the relevant population. Contractual agreements were to include clear measurable performance indicators that could allow for the progress on objectives to be measured and compared over time (King 2000).

In February 2001, 23 years post Alma-Ata, The Primary Health Care Strategy (King 2001a) was released as part of The New Zealand Health Strategy (King 2000). The Primary Health Care Strategy stated that:

Over five to ten years a new vision will be achieved:
People will be part of local primary care services that improve their health, keep them well, are easy to get to and co-ordinate their ongoing care. Primary health care services will focus on better health for a population, and actively work to reduce health inequalities between different groups.
The New Zealand Public Health and Disability Act 2000 gives District Health Boards overall responsibility for assessing the health and disability needs of communities in their regions, and managing resources and service delivery to best meet those needs (King 2001a: vii & viii).

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\(^{19}\) A needs assessment or needs analysis is a means of identifying the health needs of a community or other population group and is a first critical step in shaping the design of interventions (Clendon 1999a).
2.3 Primary Health Care Nursing In New Zealand

The role of nursing in New Zealand primary health care was initially explored by Shaw (1986), who as Director of the Division of Nursing in New Zealand attended a workshop in the Philippines in 1985, the focus of which was *Mobilising Nursing Leadership for Primary Health Care*. In her summary Shaw wrote:

…the nurse is a provider of health care, a catalyst in community health development, a collaborator with others, an educator, a collector of information, a planner and manager, and an agent of change. The nurse helps the community to become aware of its own health potential (Shaw 1986:25)

More recently, with the renewed Primary Health care focus in the country the role of nurses in the New Zealand Primary Health Care workforce has been explored in a discussion paper written as a report for the National Health Committee by Carryer, Dignam, Horsburgh, Hughes and Martin (1999). In the document increased nurse involvement in primary health care was considered to be an effective way to reduce inequalities in health and improve population health in a manner which was cost effective to the country. Nursing was discussed as being philosophically aligned to primary health care rather than the illness focused medical model of care currently being offered and nurses were considered to be well positioned to work in more effective ways to utilise their abilities and to improve health and wellness of individuals, families and communities (Carryer et al. 1999).

Since the most recent Primary Health Care focused documents were released in 2000 the Government has supported many positive initiatives
that are aimed to provide a more equitable health care system. Two of these that are most relevant to this discussion have been the formation of a Ministry of Health led expert committee on Primary Health Care Nursing and the Ministry of Health directives for District Health Boards to develop Primary Health Organisations in their regional communities.

The expert committee on Primary Health Care Nursing met during 2001 and developed a framework to overcome the issues that were considered to impede the development of a responsive nursing service that could fully utilise the knowledge and competence of registered community nurses. The main issues that were identified were, service and funding issues, governance and leadership issues and problems related to access to education and a lack of payment related career pathways.

The issue for service delivery involved current nursing scopes of practice which do not necessarily meet community health needs and do not reflect the education and ability of baccalaureate educated nurses. Current funding models also contribute to this problem. For example practice nurses employed by general practitioners who gain a government subsidy to employ nurses. This practice leaves nurses accountable to and controlled by the medical profession. Many general practitioners are not aware of the possibility of, and may feel threatened by, newer nursing scopes of practice and nurses continue to have their employment and scope of practice dependant on the financial constraints of their medical managers. Nurses are rarely part of the governance groups in such practices and therefore the status quo is maintained resulting in nurses not being visible in the community health care team.
Other groups of community nurses such as district nurses are employed by in-patient service managers who have an illness focus and world view of patient care that is inappropriate to primary health care. This can result in nurses being funded and managed by nurse leaders who do not have community needs as their primary goal. Fragmentation caused by the recent years of competition for service contracts between agencies has also placed nurses in the situation of being reluctant to communicate, share information or support each other across employment groups.

Each of the employment groups for community nurses currently has had a different form of orientation to their role depending on their employer. Many nurses are only provided with in-house on the job training with minimal if any mentoring from a nurse leader who will often have their own case load and be located in a different geographical area to the new staff member. Post registration education has not been readily accessible due to cost, difficulties in release of staff and the paucity of programmes relevant to the Primary Health Care nursing sector. Because of the difficulties encountered by community nurses to accessing higher education there is a related paucity of research or evaluation of the nursing services provided or evidence base to nursing care.

With the aim of providing a vision and direction that could overcome these issues the expert committee on Primary Health Care Nursing developed a *Primary Health Care Leadership and Education model* and strongly supported alterations to current methods of payment for practice nurses. The following explanation of the model (Appendix 2.2) should be read while viewing the model, which is a visual attempt to describe the
relationships between leadership, scope of practice, education and clinical career pathways for the Primary Health Care nurse.

The model attempts to present Primary Health Care nurses in their current contexts with a representative list of some of the current Primary Health Care nursing groups named (in no significant order), in the centre of the model.

**NB** These are the current designations of primary health care nurses who maybe employers or employees. Titles, roles employment, and scopes of practice will change in the future as population and personal health merge and Primary Health Organisations (PHO) develop.

- Above the list of Primary Health Care nurses is the envisaged leadership group, composed of representative/s from each of the Primary Health Care nursing groups. These leaders are to work strategically with the Director of Nursing (DON), for Primary Health Care who will be part of the District Health Board executive team.

**NB** The DON may have a sole Primary Health Care nursing focus or, dependant on the size and context of the area may also be responsible for leadership for the secondary and tertiary nursing workforce. Ideally the roles should be separate to allow a focus on one or the other.

- Primary Health Care Organisations are yet to be configured and are therefore represented in the top left of the model with indications of their relationship to the District Health Board and employing organisations (represented by broken arrows). Current District Health Board contracting arrangements are indicated by a solid arrow from District Health Board.

- The arrows point to the left column, from the centre section indicates that Primary Health Care nursing scopes of practice, conditions of employment, reporting and accountability lines will depend on the needs of enrolled populations as manifest in contractual obligations and form that the Primary Health Organisation takes.
At the lower aspect of the model is the progressive educational pathway for Primary Health Care nurses.

- Entry will be through an approved New Graduate programme, which will be provided for new graduates and will focus on consolidation of new graduate competencies and orientation to practice. In some contexts the programme may incorporate a specialty to practice focus during as part of the programme.

- Flexibility of the New Graduate programme will ensure the needs of the graduate and specific context and scope of practice are met. Eg. A new graduate in a rural setting may require practical experience in Accident & Emergency and medical in-patient or outpatient settings to ensure the knowledge and skills essential to the context are developed.

- Primary Health Care nurses will be supported by clinical experience and education in Specialty, Advanced and, where relevant Nurse Practitioner programmes specific to their context.

- Arrows leading from the educational pathway back to the central section of the model represent the increase in responsibility, linked to education and remuneration as the nurse moves higher in the clinical career pathway (Draft report The Expert Primary Health Care Nurses Committee Dec 2001).

The Expert Primary Health Care Nurses Committee also discussed pilot projects for nurses working in the proposed Primary Health Organisations (PHO's). Primary Health Organisations are to be the new structures, funded by the District Health Boards to provide Primary Health Care in the community. Individuals will enrol with a service provider who is expected to provide the full range of health services required by any individual enrolled with them. The guidelines for Primary Health Organisations (Appendix 2.3) were released in February 2002 and at this point in time specific funding has yet to be announced. It has however been mooted that a targeted amount of funding will be made available to set up Primary Health Organisations, which are positioned to meet the guidelines
and will support collaboration between current agencies rather than competition. Support for recently established Maori and Pacific people’s initiatives and agencies that involve community members in governance will also be encouraged by the Primary Health Organisational strategy. Currently District Health Boards are deliberating and service providers are positioning themselves to meet the guidelines and form Primary Health Organisations in their communities.

These initiatives appear to be very positive and to have more potential to be more aligned with positive health promoting provision of health care. However I have a concern that many of those involved in formulating policy and providing care demonstrate a lack of understanding of Primary Health Care (Wass 1994). The profit and power motives of those involved in health service (Blank 1994), and the political philosophies that drive health policy change (Boston 1999) are continuing to be played out in the new Primary Health Care initiatives. The New Zealand Health Care Strategy and the newly formed 21 District Health Boards are already under threat from opposition political parties who, when they gained power in 1987 dismantled similarly elected Regional Health Boards that gave a voice to community (Bowie & Shirley 1994). The risk is that if the main opposition party gains power in the 2002 election they may similarly dismantle the newly formed District Health Boards. The medical profession is also strongly lobbying the Minister of Health and District Health Boards to ensure that any changes to service provision do not alter their power base or earning potential.
Based on the past, I consider that if the opposition gets into power in the 2002 election they may once more disband the Primary Health Care focused system in favour of a more centrally controlled, economically competitive health care system. The complexity of the issues, described in this New Zealand example serve to highlight the difficulties that result when political parties do not work together on long term health strategies the country can afford. The resulting lack of understanding of what has happened and why, causes confusion and subsequent feelings of loss of power for the public and health professionals who feel they have no say in what subsequently evolves. The perception, as personal health costs increase and access to trusted services are restricted, then becomes one of helplessness as money is seen to contribute to structural changes rather to the provision of equitable health care. This example also serves to highlight some of the reasons why global adoption of the World Health Organization, Primary Health Care initiative in developed countries has been so slow.

In the next subsection the literature related to the World Health Organization and the development of the concept of Health Promotion is explored.
2.4. The World Health Organization and Health Promotion

In 1986 the World Health Organization published *The Ottawa Charter for Health Promotion* (W.H.O. 1986) which has become a widely disseminated and referenced document. The Charter was produced following the first International Conference on Health Promotion, held at Ottawa, Canada. The conference was held against the background of slow implementation of the *Primary Health Care* strategy (W. H. O. 1978) and of increasingly complex patterns and disparities in the health of peoples within and between nations. At that time health issues taking account of socio-economic influences were increasingly noticeable as research addressing quality of life as well as quantitative measurements of mortality (death) and morbidity (illness) were published (Pool 1994). In developed nations, as communicable diseases were becoming less prevalent through improvements in hygiene, immunisation regimes and drug treatment strategies, people were living longer and illnesses associated with longevity and lifestyle were becoming more obvious. In less developed countries, improving hygiene and access to adequate food and clean water were still the highest priority for achievement of health gains. The disparities that occurred within and between nations were described by Omran’s *epidemiological transition* theory, in 1971 (Pool 1994, Trlin 1994, Beaglehole & Bonita 1997, W. H. O. 1998b). Omran’s theory, which is relevant because it has been utilised to assist with understanding and explaining the complexity of differing population patterns with respect to health and
As documented notions such as the theory of epidemiological transition led to the causes of ill health (health determinants) becoming more widely understood it was recognised that health education in isolation from other measures had not resulted in the expected health gains (W. H. O. 1998b). Lifestyle related ill health and the need to re-assess the concepts of preventative medicine and health education became the driving forces for the support of Health Promotion as an entity (Parish 1995).

Health Promotion was defined as:

The process of enabling people to increase control over, and to improve their health. To reach a state of complete physical, mental, and social well-being, an individual or group must be able to identify and realize aspirations, to satisfy needs, and to change or cope with the environment. Health is, therefore, seen as a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capabilities; Therefore, health promotion is not just the responsibility of the health sector, but goes beyond healthy lifestyles to well-being (W. H. O. 1986:iii).

The Ottawa Charter for Health Promotion (W.H.O. 1986) released following the Ottawa conference, set out the action required to achieve Health for All by the year 2000 (Wass 1994, Baum & Sanders 1995), based on the ideology of prevention of illness and promotion of health appropriate to the specific setting. The charter stated that:

Health promotion supports personal and social development through providing information, education for health and enhancing life skills. By so doing, it increases the options available to people to exercise more
control over their own health and over their environments, and to make choices conducive to health (W. H. O. 1986).

The Charter also documented the five foundation areas of action considered essential to a refocus from illness care towards the promotion of health. These areas for action were:

- **Build a healthy public policy**
- **Strengthen community action**
- **Develop personal skills**
- **Create supportive environments**
- **Reorient health services** (W. H. O. 1986).

If these areas of action are interpreted in the fullest sense they reframe the *Primary Health Care* objectives of *The Alma-Ata Declaration* (W. H. O. 1978).

If **Build a healthy public policy**, includes political actions and interventions such as legislation, economic policy, taxation and organizational change.

If **Strengthen community action**, includes a focus on communities planning, making decisions and setting priorities.

If **Develop personal skills**, includes supporting personal and social development through appropriate education and knowledge gain.

If **Create supportive environments**, includes protection of environments and natural resources.

If **Reorient health services** includes changes in the organization of health care. (Fosse & Roeiseland 1999, Wass 1994, Baum & Sanders 1995).
The Ottawa Charter for Health Promotion (W. H. O. 1986) has been widely utilized as a basis for action and incorporated into international and in New Zealand national, public health documents. Health Promotion as the basis for action has been defined as:

..the process of enabling individuals and communities to increase control over the determinants of health and thereby improve their health (Nutbeam, 1986 :344).

The expansion of this definition, which formed part of a Glossary of Health Promotion, initially commissioned by the European Region of the World Health Organization in 1986 (Nutbeam 1986), and reviewed in 1998 (Nutbeam 1998), stated that within the concept of health promotion there was a need for a comprehensive social and political process that works towards change in social, environmental and economic conditions that impact on health, as well as strengthening the skills and abilities of individuals (Nutbeam 1998). Nutbeam's original definition of Health Promotion stated that:

Health promotion works with people not on them; it starts and ends with the local community; it is directed to the underlying as well as immediate causes of health; it balances concern with the individual and the environment; it emphasises the positive dimensions of health; and it concerns and should involve all sectors of society and the environment (Nutbeam 1986:345).

The bulk of discussion, critique and descriptions of the concept of Health Promotion have been presented in literature from the United Kingdom during the 1990’s, when ethical, feminist, nursing, psychological, sociological, and academic world-views were presented (Thorogood 1992,
Many authors have considered that there were two main philosophies or approaches to contemporary *Health Promotion*, which were referred to as the individual, free market, libertarian or lifestyle emphasis, and the system, structural or collective emphasis (Yeo 1993, Thorogood 1992). These two emphases were described as a continuum by Davison and Davey-Smith (1995) and Daykin and Naidoo (1995) with the individual emphasis at one end and the collective emphasis at the other. Discussion of the continuum focused on the need to place the person/s being worked with at some point along the continuum in order to focus the aim and target of any intervention that had the intent to improve, maintain or enhance health.

The individual or lifestyle emphasis determined that individual behaviours were the causes of health or disease, so considered that targets should include interventions such as health education, self-help and social marketing aimed at assisting the individual to modify their own behaviour towards health through a healthy lifestyle. A position determined by Morgan and Marsh (1998) as situated within a Western ideology that highly values the individual and personal responsibility for individual success and failure.

The systems or collective approach focused on social, economic, political, institutional, cultural, legislative, industrial and physical environments in which the behaviour takes place, with the aim of changing
the systems that impinge upon or affects the health of communities, and individuals as part of the community\textsuperscript{20} (Yeo 1993, Thorogood 1992).

However, the individual behavioural approach which was the original target of health education, as previously noted, had not made the expected difference to health outcomes. It was criticised as being too easy to use from a power position when the expert expected the individual to alter behaviour after being given health-supporting information. The sociological and feminist critiques of *Health Promotion* (Davey, Gray & Seale 1995, Davison & Davey-Smith 1995, Kelly & Charlton 1995, Nettleton & Bunton 1995, Parish 1995, Yen 1995, Daykin & Naidoo 1995) considered that the individual approach did not allow for the lack of choice or the reality for persons from minority or relatively powerless positions in society, including women, ethnic and cultural groups and unemployed persons, and therefore could not realistically bring about lifestyle change. Psychologists Tones (1991), Bennett and Hodgson (1992) and MacDonald (1998) elucidated that individual behavioural change is complex, takes time, is influenced by age, gender, and situational context. For example as Weare (1992) stated when describing adolescents:

\begin{quote}
\ldots\text{many adolescents are motivated by short-term hedonism, have little concern for their futures, cannot see any point to living beyond 30 and find the idea of risk very seductive (Weare, 1992: 78).}
\end{quote}

\textsuperscript{20} *Community* in current New Zealand health documents is defined as: a collective of people identified by their common values and mutual concern for the development and wellbeing of their group or geographical area (King 2000).
Critiques of *Health Promotion* from an ethical stance (Yeo 1993, MacDonald 1998) debated the issues of moral responsibility in the context of individual (freedom valuing) versus social (freedom devaluing) positions. The risk of victim blaming if the individual alone was made responsible for all their health behaviour and therefore health or illness outcomes was identified by all authors (Tones 1991, Bennett & Hodgson 1992, Davey, et al. 1995, Davison & Davey-Smith 1995, Daykin & Naidoo 1995, Kelly & Charlton 1995, Nettleton & Bunton 1995, Parish 1995, Yen 1995, MacDonald 1998).

Downie, et al. (1996) discussed *Health Promotion* from a values perspective, as they considered that codes of ethics regulate professional practice but health promoting activities were essentially concerned with values and value-judgement (Downie, et al. 1996). Milio (1996), in a fiscal analysis of *Health Promotion* commented that support for the individual emphasis towards lifestyle change is less costly in terms of programmes and therefore economically and politically a cheaper option in the short-term.

The sociological and feminist writers asserted that those in political power are also more likely to be those in positions of privilege who have the education and resources to choose healthy options and therefore find it easier to engage in victim blaming because their own world view does not incorporate the reality of others with less power, fewer resources and therefore restricted choices (Davison & Davey-Smith 1995, Daykin & Naidoo 1995).
Yeo (1993) and Tones (1997) did not support the continuum view of individual versus collective as being a useful approach to Health Promotion. Yeo considered that:

If freedom and health or the individual and community are sometimes in conflict, they are not always so. Indeed, for the most part they are not only compatible but also complementary and mutually reinforcing values. (Yeo 1993: 230).

Yeo (1993) also considered that one of the main tasks of Health Promotion was to build and strengthen the community. Tones (1997) considered that the aim and intent of Health Promotion was empowerment and viewed health education as part of, not separate to the concept. Tones (1997) further discussed that this did not mean the type of education for health that focused on delivery of content, or filling the person with facts and knowledge (Friere 1972). Rather education that focused on empowerment through critical consciousness raising and life-skills teaching strategies was required (Tones 1991). The underlying philosophy was that the critically conscious person was more able to become involved in making choices if they had knowledge about the social system impacts on their lifestyle and health, no matter what their sociological context.

Tones (1991) considered that the two barriers to individual freedom of choice were, environmental factors that healthy public policy should address, and the psychological barriers. He considered that these psychological barriers included low self esteem and a lack of self efficacy\(^{21}\).

\(^{21}\) **Self efficacy** is the belief the person has concerning their ability or lack of ability to achieve a goal (Bandura 1986).
Yeo (1993) challenged health educators to promote freedom and responsibility without creating blame.

I contend that health-focused empowerment of the individual citizen requires that health professionals and anyone engaged in health education are themselves empowered in the first instance. The United Kingdom project 2000 initiative (Dines & Cribb 1993) referred to the need for nursing education to address the empowerment of nurses by educating them away from the traditional hospital training environment. Dines and Cribb (1993) discussed that a tertiary education setting would support nursing education by encouraging critical thought, exploratory teaching methods, problem solving and the development of thinking skills. What was proposed was the use of the adult or andralogical education methods defined by Bandura (1986) and Friere (1972) to ensure the nurse was educated in a manner that could then empower the individual he/she was working with. This has been the aim of the New Zealand experience (Southwick 1994). In New Zealand nursing education began the move from hospital training schools to tertiary educational institutions in 1973, with all programmes having moved by 1985. All pre registration Diploma of Nursing programmes had been converted to undergraduate Degree programmes by 1995.

Nurses and many other health professionals have traditionally entered helping professions with the mindset of caring for the weak and infirm. This tradition has been reinforced, by work that has mainly involved women, and the religious origins of the profession (Catalano 1996). These origins have supported a caring that situates the carer as a rescuer and the person being helped as a victim (Bolstad & Hamblett 1997). This manner of
interacting has been identified as what has happened when individual, behavioural, health education approaches to health gains, which are totally contrary to the aims of Health Promotion, have been used by health professionals (Labonte 1989). Karpman (1973) originally described the rescuer/victim roles in a triangular model or drama triangle. In this drama triangle there were two people, one with more power (eg health professional with expert knowledge) than the other, and three roles, rescuer, victim and persecutor (Karpman 1973).

- **Rescuer**, when the expert helps the victim, on their own perceptual consideration that the patient/client is in need of help. The rescuer discounts the ability of the victim to help themselves, and by doing so colludes with the victim to support feelings of helplessness and lack of knowledge.

- The **victim**, does not need to take responsibility for the advice, action or outcome and their feelings of not being able to care for themselves are reinforced by the actions of the rescuer.

The third role is the **persecutor** role, which can be played by either the rescuer and/or the victim. The rescuer usually demonstrates persecution behaviour by blaming the victim for not taking the advice given by them and then critically judging the victim as not worthy of future help. The victim may also demonstrate persecutor behaviour by blaming the rescuer for telling them what to do, and if nothing changes, for having been given the wrong advice or treatment (Choy 1990).

A victim blaming situation can occur when an individual is held totally responsible for all the determinants of their health and when the health
professional holds onto power and does not work with the patient/client on
goals identified by the person in need (Tones 1997). Choy (1990) expanded
on this drama triangle and described a *winners triangle*. In the *winners
triangle* there are also two people and three roles and the people interact in
a manner that is of benefit to both as they have the skills for what Choy
(1990) termed ‘game free relating’. These roles were described as:

- **Carer**, when a person helps another in a non-conditional manner,
  that does not come from their own need but from a genuine care
  for the other. The carer knows how to put boundaries on how
  much they help and utilises skills of listening and self-awareness
  to maintain this role.
- **Assertive**, when a person is able to get their own needs met and
  is prepared to fight for what they believe in a non-vengeful
  manner. The assertive person uses assertion skills to maintain
  this role and aims to fight to change things not fight to punish.
- **Vulnerable**, when a person recognises that they have a problem
  and uses problem solving strategies that may involve seeking
  help from another person. The vulnerable person uses problem
  solving and self-awareness skills when in this role (Choy 1990).

The importance of self awareness, personal motive and development
of the skills required to maintain interaction in the *winners triangle* model,
are considered as essential for all helping professions and are further
described in the context of *hearing someone else fully* by Bolstad and
Hamblett (1997). This positive attitude, as the basis for helping has also
been referred to as the *Gestalt shift* that Dines and Cribb (1993) regarded
as essential for health professionals wanting to engage in health promoting activities that address the perspective of the client and ensure victim blaming does not occur (Weare 1992).

I concur with Dines and Cribb (1993) that the exploration of personal beliefs, values, and professional roles are essential components of the education experience for health professionals if health professionals are not to engage in *impowerment*\(^{22}\), rather than *empowerment* (MacDonald 1998). Tones (1997) and Thorogood (1992) considered that values clarification is at the basis of all health promoting education. Traditional training methods for health professionals and health education methods that address content alone contravene this aim (Dines and Cribb 1993). In a study conducted in a New Zealand school of nursing in 1993 (Pearson, et al. 1996) the development of autonomy among first year nursing students was explored against the notion of reflection and the development of reflective practice (Schon 1987). The tutorial team determined conditions that could prevent students from becoming autonomous learners included the actions of tutorial staff when they engaged in unhealthy rescuing and subsequent persecution of students who did not perform. Tutorial staff acknowledged that these behaviours had come from their initial training and the type of nursing practice that encouraged the health professional to maintain the expert role. The practical outcome of the study was to strengthen support and strategies such as peer supervision which enable staff to reflect upon and discuss their practice with the aim of fulfilling student centred learning.

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\(^{22}\) *Impowerment* refers to power conferred on the patient/client by someone in authority. *Empowerment* refers to the cultivation of a person’s self-esteem so they can assume power without reference to a higher authority (MacDonald 1998).
objectives. The educational programme was also realigned to ensure a gradual movement from being directed by tutorial staff to autonomy for the student, based on the research findings (Pearson, et al.1996) and the work of Heron (1992).

I consider that these are some of the important philosophical issues that require understanding, and which differentiate the education embodied in the concept of Health Promotion, moving away from the training type of education that has been utilised in many health education and health professional programmes until recent times.

The Ottawa Charter for Health Promotion (W. H. O. 1986) also focused on what has become known as the settings approach (W. H. O. 1998b) to health promotion including direction as to where and when learning about health should occur, and claimed that Health Promotion is about:

   Enabling people to learn throughout life, to prepare themselves for all of its stages and to cope with chronic illness and injuries is essential. This has to be facilitated in school, home, work and community settings. [W. H. O. 1986].

The settings approach to health promotion has been introduced in many World Health Organization regions, as the most appropriate manner to address the diverse realities of communities and therefore nations. Wenzel (1997) considered that the World Health Organization definition of setting was not introduced as a fundamental or strategic characteristic of health promotion but rather as a label to direct health professional educational activity to improve the health status of selected population groups. Wenzel (1997) conceptualised:
…health-related behaviour as one outcome of the interplay between individuals, their social reference groups and their specific living and working conditions (Wenzel 1997:5)

and considered the socio-ecological model proposed by Bronfenbrenner (1979) to be the most appropriate model to describe the complex contexts of human development (Wenzel 1997).

In 1994 the W.H.O. released the document entitled *New Horizons for Health* (W. H. O. 1998b). As a Western Pacific Regional World Health Organization initiative, this framework document was disseminated with the aim of encouraging the development of sustainable improvements in the environments in which people lived. In their sociological critique of *Health Promotion* Nettleton and Brunton (1995) considered that contemporary concern for a healthy environment was central to health promotion because human impact on nature would be of utmost importance to health in the future. Also discussed was the failure of structural or system approaches to address the consequences of industrial capitalism, social inequities, poverty, and pollution (Nettleton & Bunton 1995). They stated:

Health Promotion activity is, for the most part, directed at promoting the health of populations. However, at the same time, such activities serve to contribute to the creation of individual identities. Both populations and individuals are envisaged in terms of differential risk factors. Indeed the reduction of risk, in many respects, could be said to be the very stuff of health promotion. Such risk reduction requires that adequate attention be paid to the environmental context in which people live out their lives (Nettleton & Bunton 1995: 50).

The *New Horizons for Health* report (W. H. O. 1998b) organized future activities of the Western Pacific Region of the World Health
Organization around three themes: Preparation for Life, Protection of Life, and Quality of Life in later years. The common focus for each theme was on people having the potential to make long term differences to their own health. The aim of the report was to strengthen the people-centred human development approach to health while continuing to move away from disease centred approaches to health (W. H. O. 1998b).

As well as incorporating current health issues, such as increasing longevity and the consequent need for management of chronic conditions and illnesses associated with aging, the document reiterated the World Health Organization constitution preamble (W. H. O. 1948) and stated that it was the responsibility of both local and national governments to provide supportive environments that encouraged the individual to make healthy choices (W. H. O. 1998b). Support for maintaining wellness by health information sharing throughout life and the focus on quality of life into older age was considered paramount if health care was to be affordable for any nation. The Western Pacific Regional Office, prepared a ‘minimum set’ of 63 indicators to enable countries to measure their progress towards the New Horizons for Health goals, and provide measurable, comparative data that could be easily analysed at a national and regional level (W. H. O. 1998b). New Zealand has incorporated many of these measures into the objectives to be met through health service delivery contracts. However the health focused objectives have been found more difficult to measure than the more objective illness focused measurements that can use mortality and morbidity statistics to prove or disprove progress towards desired outcomes.
The Yanuca Declaration on Health in the Pacific in the 21st Century (W. H. O. 1998b) was the document published following a Prime Minister’s meeting convened by the Western Pacific Regional Office of the World Health Organization, in 1995. The rationale for this meeting was the need for a response to the changing social and economic conditions of Pacific countries and the effects on quality of life and health status. The three priority areas identified were: health resource development; health promotion and health protection; and, supply of pharmaceutical and essential drugs (W. H. O. 1998b). The vision was for Healthy Islands in the Pacific, which were described as places where children are nurtured in body and mind, environments invited learning and leisure, where people worked and aged with dignity, and where ecological balance was a source of pride. Countries were called upon to act in order to enhance the quality of life and adopt a relevant, health settings approach from a local perspective. For example with a focus on healthy islands, health-promoting schools, or healthy market places (W.H.O.1998b).

Four World Health Organization Health-Promoting conferences have now been held since the first Ottawa conference of 1986.

The second Health Promotion conference in Adelaide, Australia in 1988 resulted in the publication of the Adelaide Recommendations on Healthy Public Policy which called for political commitment to health by all sectors (W. H. O. 2000).

The third Health Promotion conference, held in Sundsvall, Sweden in 1991 resulted in the Sundsvall Statement on Supportive Environments for Health which stressed the importance of sustainable development and
urged social action at the community level, with people as the driving force of development (W. H. O. 2000).

The fourth *Health Promotion* conference was held in Jakarta in 1997. The resulting *Jakarta Declaration on Health Promotion into the 21st Century* (W. H. O. 1997a), was published in July 1997 following the conference entitled *New Players for a New Era*. The Jakarta Conference was the first to be held in a developing country, and the first to be held in the Western Pacific Region. The conference provided:

an opportunity to reflect on what has been learned about effective health promotion, to re-examine determinants of health, and to identify the directions and strategies which are required to address the challenges of promoting health in the 21st century (W. H. O. 1997a:1).

The *Jakarta Declaration on Health Promotion into the 21st Century* Charter acknowledged that prerequisites for health were peace, shelter, education, social security, social relations, food, income, empowerment of women, a stable ecosystem, sustainable resource use, social justice, respect for human rights and equity. At this conference poverty was named as the greatest threat to world health (W. H. O. 2000).

The fifth, *Health Promotion: Bridging the Equity Gap* conference held in Mexico, in 2000 identified that action was needed to strengthen the evidence base of health promotion, increase investment and infrastructures to support health promotion, promote social responsibility, and increase community capacity and the empowerment of individuals and communities (W. H. O. 2000).

In recognition of the key role of education in enhancing the health status of an entire population, the Western Pacific Region identified schools
as priority settings within the Healthy Cities and Healthy Island initiatives, for regional health promotion (W. H. O. 1998b). Regional guidelines were developed for *Health-Promoting Schools*, which elaborated on the principles of *Health Promotion* within the concepts of *preparation for life* originally outlined in *New Horizons in Health* (W. H. O. 1998b).

*The Health-Promoting School* guidelines suggest concrete actions for developing healthy lifestyles and healthy physical and social structures in the school setting (W. H. O. 1998b). In 1998 there were 27 countries in the Western Pacific Region that had taken steps to introduce *Health-Promoting Schools* (W. H. O. 1998b).

In the following section the *Health-Promoting School* strategy will be described and discussed utilising the World Health Organization documents and relevant related literature.
2.5 The Health-Promoting School

‘Health is inextricably linked to educational achievements, quality of life, and economic productivity. By acquiring health-related knowledge, values, skills, and practices, children can be empowered to pursue a healthy life and to work as agents of change for the health of their communities’. Quote by Dr Hiroshi Nakajima, Director-General, World Health Organization cited in (W.H.O 1997b:1).


In 1950, the first World Health Organization expert committee on school health services was convened. In 1995, another World Health Organization expert committee, The World Health Organization Expert Committee on Comprehensive School Health Education and Promotion met. This committee considered promoting health through school health programmes:

...to be the most cost-effective way to improve students’ health and as a result their educational performance (W.H.O. 1997b:13). The acknowledgment of the cost effectiveness of school health promotion is widely supported along with the growing acknowledgment that...
school based interventions cannot solve health and social problems in isolation from other forms of public health action (International Union for Health Promotion and Education 2000).

The World Health Organization Health-Promoting Schools initiative has gained momentum in the Western Pacific region since December 1994 when the first of a series of workshops was held in Sydney, Australia. Following this initial meeting, a further three workshops have been held with representation from Western Pacific region nations, including New Zealand. Reports from these workshops articulated the developing ideas and proposals for action agreed to by participants at each of the workshops during the term of the project, 1994 to 1996.

Proposals for action arising from the first workshop included, a focus on understanding the needs of students, effective teaching for health, creating a healthy school community and supportive school environment, reorientating school health services, involving families and communities, initiating health supporting public policy and international support for network development (W. H. O. 1994).

The second workshop held in Singapore in January 1995 proposed that co-ordination of agencies was needed to address health in schools. The key tasks for action to further health-promoting schools in the region were identified as: achieving full recognition of the importance of the health of children; developing a trained workforce and skills and resources for effective advocacy; understanding the health needs of students; setting criteria; and, measuring progress and establishing networks (W. H. O. 1995a).
The third workshop in the series was held in Fiji in October 1995. Following the workshop held in Singapore in January 1995, draft guidelines for Health-Promoting Schools had been developed and circulated and these were reviewed at the October 1995 meeting. Principles and concepts of Health-Promoting Schools developed by Booth (in W. H. O. 1995b) were attached to the workshop report and resource priorities including the development of data on health behaviours of school children were set as an urgent research priority to ensure that baseline data could measure the effectiveness of subsequent health promoting initiatives in schools (W. H. O. 1995b).

The fourth workshop, held in Shanghai, China in December 1995 reviewed the New Horizons in Health (W. H. O. 1998b) document and its focus on preparation for life against the Health-Promoting School draft strategy. Other objectives for this workshop included identification of priorities for the following three years and finalising the Health-Promoting School guideline document (W. H. O. 1995a). The report from the December 1995 workshop also documented the importance of researching health-promoting school initiatives to ensure that the complexities of the health-promoting school concept and the components and expected outcomes could be documented and progress tracked. It was also suggested that:

key research institutes should be encouraged to undertake studies into the health behaviour of school aged children using World Health Organization standardized instruments as a basis (W. H. O. 1995a:29).
The final publication in the Western Pacific health-promoting school workshop series was the Development of health-promoting schools – A framework for action, which stated that a health-promoting school:

Is a place where all members of the school community work together to provide students with integrated and positive experiences and structures which promote and protect their health. This includes both the formal and informal curricula in health, the creation of a safe and healthy school environment, the provision of appropriate health services and the involvement of the family and wider community in efforts to promote health (W. H. O. 1996:2.)

The health-promoting school guidelines included components and checkpoints for health-promoting schools, as well as a model charter for schools intending to make a commitment to become a health-promoting school. A model award system, on which schools could be rated in order to gain a bronze, silver or gold Health-Promoting School award dependant on their activities in the previous year, was also included in the document. The intent was for schools to utilize these models as a starting place from which their community (students, staff, parents, and other community members involved with the school) could develop a relevant charter owned by the specific school.

This stance has since been supported by the World Health Organization expert committee on comprehensive school education which considered successful health-promoting schools to be a reflection of an organized, coherent approach to a wide range of health issues implemented through comprehensive and holistic strategies. The committee considered that strategies need to be visioned and planned by all those involved in order to meet local conditions (W.H.O. 1997b).
The major elements of the *Development of health-promoting schools—A framework for action* (W. H. O. 1996) reflected the five main action areas outlined in *The Ottawa Charter for Health Promotion* (W. H. O. 1986) with slight variations in the wording to reframe the original actions as statement headings, with actions identified within the specific statement components. *Building Public Policy Action* (W. H. O. 1986) was redefined as the *School Health Policies* (W. H. O. 1996) component of the framework; *Create Supporting Environments* (W. H. O. 1986) was redefined as two separate components, the *Physical Environment of the School* and the *School’s Social Environment* (W. H. O. 1996); *Strengthen Community Action* (W. H. O. 1986) was renamed as the *Community* (W. H. O. 1996) component; *Develop Personal Skills* (W. H. O. 1986) was redefined as the *Personal Health* (W. H. O. 1996) component and the *Reorient Health Services* (W. H. O. 1986) was renamed the *Health Services* (W. H. O. 1996) component.

Throughout the world, schools have been considered as settings where health can be enhanced and specific health issues addressed (International Union for Health Promotion and Education 2000). An analysis of 25 reports related to school based health promotion, published in the USA between 1989 and 1991 concluded that:

> Education and health are interrelated and that children who suffer from violence, hunger, substance abuse, too-early pregnancy, depression, or hopelessness are not healthy children. Unhealthy children are children with impaired learning. Education can contribute substantially to improving health. Conversely, a child’s health status constitutes a major determinant of educational achievement. To improve academic achievement, schools and other institutions must devote more attention to health concerns. Globally health-promoting school initiatives have identified key features that
were considered relevant to their specific national setting (Lavin, Shapiro & Weill 1992:12 & 13).

For example in Scotland the Scottish Health Group focused on the allocation of time spent on the teaching of the health curriculum, the impact of the hidden curriculum in shaping health, and the provision of health and caring services, whereas the Welsh health-promoting school group centred initiatives around the provision of health education teaching, implementation of health related policies and the involvement of outside agencies in planning and delivery of health education teaching (Colquhoun et al. 1997).

The focus in the Western Pacific has been more closely aligned to The Ottawa Charter for Health Promotion and the holistic framework it suggested to support Health Promotion (W. H. O. 1986). In the following sections each of the components of the Development of health-promoting schools – A framework for action (W. H. O. 1996), will be introduced, defined and discussed with reference to the New Zealand primary school context and relevant supporting literature. The guidelines, including components and checkpoints can be found in Appendix 2.4.
School Health Policies

The Development of health-promoting schools – A framework for action (W. H. O. 1996) stated that:

School health policies are the clearly defined and broadly promulgated directions which influence the school's actions and resource allocation in areas which promote health (W. H. O. 1996:5).

To fulfil the requirements of the National Education and Administration Guidelines (Ministry of Education 1993) New Zealand schools are required to have a number of policies related to their operation that reflect current New Zealand legislation\(^\text{23}\). Policies are expected to be developed in consultation with the school community (Board of Trustees, parents, staff and students), to direct the day to day running of the school and ensure the safety of the student’s staff and visitors to the school. The Revised National Education Guidelines (Ministry of Education 1993) referred to the requirement that schools are to:

provide a safe physical and emotional environment for students. (Ministry of Education 1993:10)

Crump (1999) asserted that change in (or new) policy is intended to result in new ways of doing things with the aim of improved practices or more efficient use of resources. In schools, policy change should be aimed at improving educational outcomes for the majority of students, with the

focus on reduction of inequity for students who have been traditionally disadvantaged (Crump 1999).

Booth and Samdal (1997) considered that assessment of written policies would not be a difficult task and self reporting could be an appropriate way of evaluating school health policy. To evaluate the policy in practice however may not be as easy (Booth & Samdal 1997). The New Zealand Education Review Office, during regular, usually three-yearly, audits of all New Zealand schools reviews all required school policies. This audit process includes completion, (by the school community), of a self-review document (E.R.O. 2001), prior to an Education Review Office two or three day, site visit to the school. The school community is then sent an accountability review report following the visit. The report includes commendations, recommendations and accountabilities, which the school Board of Trustees must address within the timeframe given by Education Review Office (E.R.O. 2001).

The Development of health-promoting schools –A framework for action (W. H. O. 1996) stated that the health policy components that need to be clearly identified in a school were

P1\(^{24}\) The school has a policy on healthy food.
P2 The school is totally smoke-free and prohibits alcohol and illicit psychoactive substances in all activities.
P3 The school upholds equity principles by ensuring that girls and boys have equitable access to school resources.

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\(^{24}\) All the components in the W.H.O. document are numbered beginning with the initials relating to that section ie P for policy, PE for physical environment, SE for social environment, C for community, PS for Personal health skills and HS for health services.
The school has formal procedures in place relating to the distribution of medication.
The school has a policy and programme on first aid.
Where appropriate the school has a policy on the control of helminth and other parasites.
Where appropriate the school has a policy on sun protection.
The school has a policy on health screening.
The school has a policy on closure in the event of emergencies or other circumstances which would endanger student’s health.
The school has a safety plan for implementation in the event of natural or other disasters.
Where relevant the school has a policy on the control of HIV/AIDS including its safe management (W. H. O. 1996: 5-7).

Health policies can make a difference if they are connected to national and local priorities and if they are developed in consultation with parents, students, school and community (Rowling & Burr 1997). Rowling and Burr (1997) considered that policy that directs how a school deals with welfare and discipline has a great influence on creating a supportive school environment. Policy that supports students to manage their own behaviour through positive reinforcement and a reward system is more likely to support a healthy learning environment rather than policy that focuses on punishment and discipline which encourages teacher controlled behaviour and fear of authority (Rowling & Burr 1997). Meta-analysis of research on health-promoting schools has demonstrated that implementation of health related activities, guided by policy that is focused on areas such as sun, safety, nutrition, physical activity, sexuality and drugs can make a difference to health outcomes for school students (St Leger 1999a).

Policies are relevant to all the six health-promoting school areas, as they are utilised to ensure the school meets health-promoting outcomes.
The Environment

The Development of health-promoting schools – A framework for action (W. H. O. 1996) separated the environmental section into two distinct areas, physical and social. Most literature treats the environment as a whole but acknowledges the two components. The World Health Organization expert committee on comprehensive school health education considered that a health environment included physical, psychosocial and community participation which either supported or obstructed student and parental involvement (W.H.O. 1997b).

The Physical Environment of the School

The Development of health-promoting schools – A framework for action (W. H. O. 1996) stated that:

The physical environment refers to the buildings, grounds, equipment for both indoor and outdoor activities and the areas surrounding the school. The term also refers to basic amenities such as sanitation and the availability of water (W. H. O. 1996:8).

Components were:

PE.1: The school provides a safe environment for the school community
PE2 Adequate sanitation and water is available
PE3 The school upholds practices which support a sustainable environment
PE4 Students are encouraged to take care of the school facilities
PE5 The school endeavours to enrich learning by ensuring the physical conditions are the best they can be (W. H. O. 1996:8 & 9)

As previously identified in New Zealand, national legislation guides the provision of a safe environment for children, staff and visitors in school
settings. Schools are expected to comply with standards for playground design and maintain the grounds and equipment with the aim of preventing accidental injury. Policies guiding the use of equipment with the aim of injury prevention are also required. However it is acknowledged that there is always an element of risk between the provision of equipment and an environment that encourages physical, mental and social, age appropriate developmental experience and the prevention of unnecessary risks, that may cause harm to a school aged child.

As a health promoting professional I support this approach. However the concern with safety that has been supported by the Occupational Health and Safety legislation in New Zealand can cause the costs of compliance to become too expensive and the activity to cease. New Zealand schools are currently facing this issue with swimming pool water testing requirements in schools being aligned with public pool requirements. This increases costs of labour and equipment to a level that many schools can no longer afford. This could have the effect of school age children not being taught to swim with potentially more serious consequences than an over supply of bacteria in a school swimming pool.

The indoor areas of schools must also be safe and prevent danger from known hazards such as pollution, noise, overcrowding, poor ventilation, unsafe furniture, excessive cold or heat, poor lighting, or exposure to hazardous chemicals. An adequate number of clean toilets and associated hand washing facilities to reduce the transmission of infections, and safe drinking water, must be provided. If the heating or water supply cannot be maintained or an environmental hazard occurs the Education Act, 1989
vests the Board of Trustees with the duty to close the school (Ministry of Education 1993).

When responding to the Education Review Office self-review, a school must report on fencing of swimming pools, smoke free environment obligations and workplace health and safety for employees, which include keeping a register of all accidents. Preparation of a civil defence plan, evacuation procedures and training of staff to provide first aid also form part of the audit reporting process (E.R.O. 2001).

In 1999 the Education Review Office failed 337 (52%) of the 642 state and integrated schools reviewed in that year with respects to one or more safety requirements. The related media report stated that:

These ranged from failure to provide safe playground equipment and secure pool gates or fences to the failure to manage student behaviour effectively, to control bullying or to eliminate abuse of students by teachers or other students (The Education Weekly 2000:1).

It was reported that the main factor influencing this outcome was that Boards of Trustees had failed to understand their legal responsibilities of ensuring that school’s physical environment was safe. Education Review Office findings included that in 119 (19%) schools there had been a failure to develop appropriate policy or guidelines on managing and reporting suspected child abuse and in 103 (16%) schools Boards of Trustees had failed to identify and eliminate hazards or potential hazards in the school grounds, classrooms, laboratories or workshops (The Education Weekly 2000).

I consider that school policies are essential in terms of stating the aims and intent of the running of a school. They must however be written
and regularly reviewed by all those that will use and be affected by the policies. Policies need to be written from a shared intent that has a philosophical basis if they are to be put into practice in the manner intended. One of the risks of the Education Review Office method of checking that the schools have policies that are required is that the school can uplift a policy from another school\textsuperscript{25} and therefore meet the Education Review Office requirements, but the action around the policy will of course not be understood or actioned by that school.

\textsuperscript{25} An example told to me was of a school receiving a faxed copy of a policy and handing it to the Education Review Office review team during the compliance visit. I do not know if this met the requirements of Education Review Office or not.
The School’s Social Environment

The Development of health-promoting schools –A framework for action (W. H. O. 1996) stated that:

The school’s social environment is a combination of the quality of the relationships among staff, among students, and between staff and students. It is often strongly influenced by the relationship between the parents and the school, which in turn is set in the context of the wider community. It is also influenced by senior staff from within the school and by health and education personnel who visit the school, all of whom provide role models for students and staff by the attitudes and values they display in their social behaviour (W. H. O. 1996:10).

Components were:

SE1 The school ethos is supportive of the mental health and social needs of students and staff
SE2 The school creates an environment of care, trust and friendliness which encourages students attendance and involvement
SE3 The school provides appropriate support and assistance to students who are at a particular disadvantage relative to their colleagues
SE4 The school provides a fully inclusive environment in which all students are valued and differences are respected
SE5 The school is attentive to the education needs of parents and how these can influence the well-being of students (W. H. O. 1996:10&11)

MacDonald (1997) contended that the concept of the health-promoting school was developed as an attempt to strengthen the relationship between the health curriculum and wider school ethos. The need for this being based on:
The belief that information and knowledge and skills gained in the classroom can be reinforced and supported or undermined and contradicted by what might happen outside the classroom in the rest of the school. (MacDonald, 1997:77)

Booth and Samdal (1997) discussed that the term school ethos is frequently used to describe the whole school environment but in the health-promoting school meaning considered it is used to reflect the quality of the social interactions of the school community. The Development of health-promoting schools – A framework for action (W. H. O. 1996) stated that the quality of relationships are the important factor of the social relationships in a school, which implies that the spirit and attitudes that underpin the relationships need to be perceived as positive for all concerned.

Nilsson and Lindstrom (1998) discussed that the term school ethos was first defined by Rutter, Maughan, Mortimore and Ouston (1979) in their discussion of secondary school based research in inner London. Swedish authors, Nilsson and Lindstrom completed a salutogenic26 interpretation of school processes that Rutter et al. had found contributed to a positive school ethos and student success and concluded that:

Among the processes in a school which contribute to positive outcome are the teachers emphasis on education, the expectations of good results, the teachers role model of positive examples, the coherence among the school personnel and the maintenance of the physical environment (Nilsson and Lindstrom 1998:8).

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26 The Salutogenic model aims at exploring the origin of health rather than explaining the causes of disease. For example an exploration of why most children do not have accidents at school would be the focus rather than examining the causes of the accidents that occur.
The willingness of teachers to see students about problems at any time was also important and was said to demonstrate that staff appreciated students’ needs. General expectations set by the school including collegial support and joint planning meant that principles and guidelines were clearly recognisable by all school staff. Staff who demonstrated good timekeeping, positive interactions and behaviour were positive role models for students (Nilsson and Lindstrom 1998). Rowling and Burr (1997) stated that educationally supportive environments also have mechanisms to prevent discrimination, harassment and intimidation and have staff trained to cope with a crisis.

I consider that a social environment conducive to quality learning must be founded on the philosophical beliefs in education that the school community share. It is these beliefs and values that should then be written into policy that guides the way the school works to deliver education for their community. The attributes described as positive in the literature support that policy and delivery of education that respects the contribution of every member of the school is the most efficacious for good learning and health.

Hurrelmann et al (1995) in their comprehensive discussion of health-promoting schools in Germany discussed that goals shared by all participants are an important component of the social criteria of a healthy organization. Furthermore they considered shared goals in a school should include broad concerns of relevant educational issues that help develop the school profile, or identity. They considered shared goals were important to a student’s sense of belonging because when there is consistency, transparency and a degree of belonging students:
will experience a greater sense of controllability which is an important predictor for well-being (Hurrelmann, et al. 1995:128)

A strong connection has also been found between indicators for health damaging behaviours and school alienation. Children who do not like school, who report their achievement as being below average, and who do not tend to continue on to higher education tend to demonstrate higher levels of harmful health behaviours (Nutbeam, Smith, Moore & Bauman 1993).

The support for teachers who deliver programmes based on the values of the school, the community and nation in which they are situated is a crucial and often neglected part of the health-promoting school initiative (Hurrelmann et al. 1995). Hurrelmann et al. (1995) considered that increased levels of aggression and violence among students require a higher level of educational competence and personal dedication among teachers at a time when many teachers are suffering from psychological and physical symptoms as a result of job stress. The Expert Committee on School Health Education and Promotion (W. H. O. 1997b) determined that teachers have an immense impact on young people’s health if they are valued, provided with relevant ongoing professional development and supported by a staff health promotion programmes. As Hurrelmann et al (1995) stated, any successful attempt at promoting health within the school system will have to target teachers as well as students. However teacher support is not overtly addressed as a component of the Development of health-promoting schools – A framework for action (W. H. O. 1996).
One of the most obvious examples of destructive interpersonal relationships in schools is bullying. Rigby (1996) asserted that bullying as an intolerable social evil has taken place in schools for generations, with teasing, harassing and bullying occurring as a form of amusement, horror, or indifference to parents, teachers and other children. Rigby, (1996) who has conducted extensive research on bullying in Australia, has classified forms of bullying and defined bullying as:

Repeated oppression, psychological or physical, of a less powerful person by a more powerful person or group of persons. (Rigby 1996: 15)

The effects of bullying include the reduction of victim self esteem, increased social isolation, slowed school progress caused by anxiety and subsequent loss of concentration and increased absenteeism. The student who is continuously bullied and is unable or unwilling to retaliate may feel frustrated and angry and may take out these feelings on a less powerful victim. General health can also be affected, and the incidences of social isolation, the inability to form satisfactory adult relationships and increased risk of suicide have been linked to bullying (Rigby 1996).

I consider that bullying can be related to the victim blaming described in the Karpman drama triangle (Karpman 1973). However in the case of bullying there is not usually any attempt by the bully to rescue the victim. What does occur more often is that the victim retaliates however they can, by either bullying the bully verbally or physically or bullying someone else who is weaker than themselves. One of the ways to assist those that are victimised is to teach life skills (Tones 1991), the skills that are described in
the *winners triangle* (Choy 1990) as awareness of self, assertion, communication and appropriate help seeking that can empower the person being bullied. By learning to employ proactive behaviours bullied students can increase their resilience and reduce the extent to which they are victimized (Rigby 1996). These proactive behaviours include knowing: how to recognize unreasonable requests; how to make assertive non-acquiescing responses; how to resist manipulation; how to ask for help and how to leave hostile environments – all behaviours that can be taught in school and supported by the *school ethos* (Rigby 1996).

As discussed, mechanisms to ensure the school ethos reduces the likelihood of bullying include polices and processes for reporting bullying. In the New Zealand Education Review Office self review questionnaire, schools must report whether corporal punishment is used, that there is a policy for handling child abuse, and that policy and procedures are in place to prevent sexual harassment, deal with any sexual harassment complaints and provide counselling for students making complaints (E.R.O. 2001).

This section and the discussion of the *school ethos* and the social environment that can support students to enjoy school, to be safe and to feel part of the school community are clearly linked to the discussion on the need for school policies that have been developed with the involvement of all those that will be affected by them. Students and teachers need to be involved in formulating policy that involves a zero tolerance of bullying and models positive social interactions. If students are taught positive behaviours towards peers and are educated in conflict resolution skills which are role modelled by staff healthy ways of interacting that reduce bullying and support a social environment conducive to health and learning will be possible.
Community Relationships

In the *Development of health-promoting schools – A framework for action* (W. H. O. 1996), Community Relationships were defined as:

Connections between school and the student’s families plus the connection between school and key local groups who support and promote health. By definition a health promoting school is one where parents are closely consulted about and involved in the school’s health promotion activities (W. H. O. 1996:11).

Components included:

C1 Family and community involvement in the life of the school is fostered
C2 the school is pro-active in linking with its local (W. H. O. 1996:11)

All components of the health-promoting school strategy include the need for appropriate communication, involvement and support of parents and community members. Education policy in New Zealand supports consultation and the collaborative management of schools. Boards of Trustees are nominated members of the school community who undertake training in the role and are charged under the Education Act with a number of duties, including consultation with teaching staff and parents (Ministry of Education 1993).

The home-school-parent interface is considered to be an integral part of the health-promoting school framework, and is considered essential to the strategy of promoting child health (Booth & Samdal 1997), especially in low socioeconomic communities (Passarelli 1994). Simeonsson and Gray (1994) considered that the family is the most important influence on a child’s
health care and is a frequently under-emphasised but major factor in accomplishing illness prevention objectives.

The New Zealand Child Health Strategy (Ministry of Health 1998), stated that factors that can mitigate against negative socioeconomic influences on children include:

- Bonding and social factors such as strong relationships with family members, teachers or other significant people who demonstrate positive attitudes and behaviours;
- Healthy beliefs and standards, such as having a set of clearly established rules and developmentally appropriate expectations which help make connections between behaviours and consequences;
- Environmental factors including positive home-school relations and quality schools; and
- A child’s individual characteristics such as cognitive skills, strong coping skills, high self esteem and temperament appear to mitigate the risk or be protective (Ministry of Health, 1998:15).

Literature that has described, explained and evaluated school community partnerships suggests that they are labour intensive and involve considerable time, if they are to ensure the development of shared understandings (St Leger 1999b).

The consultation report for the Health Education in Primary and Secondary Schools: Syllabus Revision (Department of Education 1982) emphasised the role of parents and communities as consultants for health because:

School education is most likely to be effective in a school when:
Close links are encouraged with health agencies in the community, and programmes are seen as an integral part of health promotion in a wider context (Department of Education 1982 24).
In New Zealand, the health curriculum is the only learning area for which
schools are legally required to consult the community (Consumer 2000).

Instructions include:

The Consultation should involve the school principal, Board of Trustees,
and parents and guardians of current students and those likely to be
enrolled in the next two years. The principal must ‘attempt to’ get a ‘broad
agreement’ on the health education needs of students, goals for health
education and the ‘desirable treatment’ of the health syllabus at the school
(Consumer 2000:17).

The process includes the requirement for the principal to give the Board of
Trustees a written description of the proposed programme following
consultation. The board can only veto ‘any particular element of sex
education’ with which they disagree. Approval of the programme by the
Board of Trustees is effective for a period of two years, when the process
must be repeated. In 1996 the Education Review Office reported that only
52% of schools had completed the full consultation process outlined above,
26% of schools had undertaken a limited consultation and 22% of schools
had not consulted the community at all (E.R.O.1996).

An issue related to the school ethos and parental involvement in their
children’s education that is not widely discussed in the literature, is the
assumption that all parents will feel comfortable enough in the school
environment to participate on an equal level with teachers. Morton (1994)
considered that the involvement of parents in schools has never been
straight forward, as parents are not a homogeneous group and therefore
there will always be variations in the expectations that parents have of
schools and schools have of parents (Morton 1994). In the findings of a
study conducted with first year nursing students, impacts on current learning
included negative school experiences involving psychological, physical and racial abuse by teachers. Study participants considered these experiences contributed to educational failure (Pearson et al. 1996). The same nursing student participants required support and coaching prior to placements in primary schools, which formed a component of their nursing education.

I consider that parents who have not enjoyed a positive school experience themselves could be less likely to engage in the school community unless the school staff ensured the environment was supportive of them and of their needs. Lavin et al. (1992) considered that school failure, under-achievement and related social and health problems can cause serious repercussions for children and their families, their communities and ultimately the economic and social systems of the nation (Lavin, et al. 1992). Morton (1994) considered that professionals should take notice of what parents say, and involve them to a greater degree than only the traditional role of teachers helper. He contended that the onus is on the school to initiate the partnership and indicate the desire to work with parents - a situation that may challenge the educational professional as expert (Morton, 1994b). Morton asserted that:

Teachers who stop short of partnership generally do so either because they feel threatened as professionals and find themselves in danger of losing the control element of their position, or because they cannot manage the diverse interest levels of parents (Morton 1994:4).

The role of parents and interested community members has become part of the expectation of school governance in New Zealand schools. The role of the health professional in this partnership and their role in health education and provision of health services within the school setting will be discussed in the following sections in this chapter entitled Personal Health Skills and Health Services.
Personal Health Skills

The Development of health-promoting schools – A framework for action (W. H. O. 1996), stated that:

Personal Health Skills refers to the formal and informal curriculum whereby students and others gain age-appropriate knowledge, attitudes and understanding and skills in health which will enable them to become more autonomous and responsible in individual and community health matters (World Health Organisation, 1996:12).

Components included:

PS1 The curriculum approaches health issues in a coherent and holistic way
PS2 The curriculum is designed to improve students’ theoretical understanding of health issues and how to apply this in practice
PS3 Teachers are adequately prepared for their role as key participants in health-promoting schools
PS4 Other key stakeholders have the opportunity to gain skills relevant to health-promoting schools (W. H. O. 1996:12 & 13)

The World Health Organization Expert Committee on Comprehensive School Health Education (W. H. O. 1997b) considered that health education should aim to influence the students’ understanding, attitudes and behaviour by health being a separate curriculum subject that is also integrated into all other appropriate subjects. The recommended approach was for comprehensive school health education which focused on health not disease, to utilize all opportunities for health teaching. This teaching needs to be congruent with the school environment and foster interaction between the school, the community, parents and local health services. The committee acknowledged that effectiveness is mitigated by the amount of
classroom time devoted to the health curriculum, administrative support, and preparation and motivation of teachers to deliver the curriculum (W.H.O. 1997b). Bradley, also discussed the logic of considering schools as sites for the delivery of holistic health promotion programmes in the USA because:

Most school-age youth are healthy and have not developed behaviour patterns that negatively influence their own health and the health of others. (Bradley 1997:3).

Strehlow (1987) considered that health education was important for primary school aged children because at this age/stage children are curious about how their bodies work, the way foods and other substances are absorbed, and they are receptive to ideas about hygiene and health, and accident prevention. Pender (1987), when discussing health-promotive nursing practice stated:

Health-promoting behaviors are acquired more readily in childhood when routines are less stabilized. In addition, habits or behaviors developed in childhood and adolescence are more likely to persist as an integral part of lifestyle than changes made in health behaviours later in the adult years (Pender, 1996:82)

Health knowledge and skills teaching in New Zealand schools is guided by a national curriculum and has a health education philosophy and focus. The International Union for Health Promotion and Education (2000) acknowledged that the core business of a school is to build the educational skills and knowledge base to equip young people to live their lives in a changing world and provide a competency base for meaningful employment. They also considered that the capacity of each student to learn effectively is
influenced significantly by his or her health status (International Union for Health Promotion and Education 2000).

Research has determined that health and education are closely linked, and that young people with reduced vision or impaired hearing have a higher incidence of learning difficulties and that tiredness and/or malnourishment lead to poorer concentration skills. Similarly children with poorer resistance to infection or inadequate management of chronic health conditions have significantly higher school absences (National Health and Medical Research Council 1996).

Since the focus on a settings approach to health promotion has prevailed, schools have been identified as the ideal site for health education. Research results support the view that effective health promotion programmes can improve children’s health and subsequent education (W. H. O. 1997b, St Leger 1999b). Education for health is therefore regarded as an important focus to ensure children are able to gain the greatest benefit from their educational experience. To this end regular research is conducted in New Zealand to ascertain the level of knowledge, understanding, skills and attitudes to curriculum subjects, including health and physical education.

The New Zealand Ministry of Education funds the National Education Monitoring Project (NEMP) to routinely research and report on the curriculum achievements of representative samples of New Zealand school students. The aim is to provide a picture rather than a performance judgement on student achievement in relation to curriculum goals (Crooks & Flockton 1998). Each year, one or more curriculum areas are the focus of
research which targets a sample (approx 3000) of students in year four (ages 8-9 years), and year eight (ages 12-13 years), and measures knowledge, skills and attitudes in that essential curriculum learning area (Crooks & Flockton 1998, Consumer 2000). The aim of the research and subsequent report is to enable policy makers, curriculum planners and educators to debate and review educational practices and resources. Research results for the Health and Physical Education curriculum were last reported in 1998. Key findings were that 59% of year four, and 25% of year eight students were very positive about studying health in school, but that compared with 12 other school curriculum areas health was the least popular subject. Physical Education (PE) however, was the most popular of the curriculum areas for year eight students and second most popular for year four students. School size, school type, community size and geographical zone did not seem to be important factors in predicting achievement in Health and Physical Education, or in attitudes towards them. Boys performed better than girls on most Physical Education tasks that involved throwing, catching or dribbling balls. Girls in both age groups performed better on ladder activities, balance, skipping and poi tasks, and in the older age group, on 20% of health tasks. Non-Maori students outperformed Maori on about 25% of health tasks but Maori outperformed non-Maori on a similar proportion of Physical Education tasks. Students attending low socio-economic status (SES) schools scored lower that other students on about 40% of the health tasks at both levels, but higher on 15% of the Physical Education tasks at year four (Crooks & Flockton 1998). Assessment was made in a variety of specific topic areas including personal
health and physical development, relationships with other people, movement skills, healthy communities and the environment. In a *Forum Comment sheet* (Crooks & Flockton 1999), which reported briefly on key findings of the research, suggestions that were made as to how learning could be improved included:

- Helping students to understand the meaning, scope, and value of health education and the interrelationships of social, emotional, spiritual, physical and intellectual dimensions of total well-being;
- Linking the learning of knowledge to practical applications, experiences and decision making;
- Providing frequent opportunities for students to develop critical thinking skills;
- Finding ways to utilise students strongly positive attitudes towards physical education to benefit learning in other areas of the curriculum;
- Identifying and addressing barriers to learning arising from expectations and learning programmes that favour one gender over the other (Crooks and Flockton 1999:3).

The Johnson Report (Johnson 1977), which preceded the 1985 to 2000 *Health Education in Primary and Secondary Schools* (Department of Education 1985) New Zealand School Health Syllabus, emphasised that health education should enhance the students’ self image and encourage parent participation. That Syllabus had nine clearly defined strands and five bands of age appropriate objectives for each different topic. The overall aim of the health syllabus was:

To enable students to understand the basic requirements of good health, to develop a sense of responsibility for their own health, and to take constructive action for personal health, for the health needs of others and for health issues in the community (Department of Education 1985:4)

The syllabus topics were:
Many of these topics overlapped or were integrated into other curriculum subject areas. For example, *Building Self-Esteem* and *Eating for Health* topics were documented as having shared content, skills and attitudes with Language, Science, Social Sciences, Physical Education and Home Economics curriculum areas (Department of Education 1985). The 1985 Health Syllabus, which was 10 years in the consultancy and development phase, was utilized in New Zealand schools until the end of 2000. External specialists were often responsible for teaching components of the syllabus, for example a *Keeping Safe* programme was taught by specialist police officers, and a *Feeling special keeping safe* programme was delivered by Family Planning Association (FPA) educators (Family Planning Association 1999). It is now considered undesirable and contrary to an integrated health promotion programme approach to incorporate a series of topic-based programmes into the school curriculum (Downie et al. 1996).

which built on a concept created by the New Zealand School Trustees Association, encouraged a comprehensive and holistic approach to school health, aimed at complementing the existing (1985) Health Syllabus in schools (Public Health Commission & Ministry of Health 1995). The development of the national curriculum statement on Health and Physical Education preceded the conclusion of the 1994 to 1996, World Health Organization Western Pacific health-promoting school workshops and the final guidelines that this group produced in 1996. This caused a nomenclature confusion in New Zealand for a number of years. The basis of the Healthy Schools – Kura Waiora was, as was common to the health-promoting school guidelines (W.H.O. 1996), the Ottawa Charter for Health Promotion (W. H. O. 1986). The five areas identified for action to improve public health in the school setting in 1995 were documented as:

- Building on policies to promote the health and wellbeing of students and staff;
- Creating school environments that promote the health and wellbeing of students and staff;
- Strengthening local community involvement;
- Developing personal skills to promote the health and wellbeing of students and staff;
- Co-ordinating school health activities aimed at promoting the health and wellbeing of students and staff (Ministry of Health and Public Health Commission 1995:5).

The document also discussed that in light of the fact that attitudes and values are mostly learned through direct informal experience of the total environment, rather than through direct formal instruction schools needed to consider how they teach, reinforce or contradict what is learned in the classroom (Public Health Commission and Ministry of Health 1995).
Since 1997 the New Zealand Ministry of Health, guided by the Western Pacific World Health Organization guidelines (1996), has supported a number of Health-Promoting School pilot programmes, mainly delivered by Public Health Nurses (Grant 1997) but until 2000 had retained the Healthy Schools – Kura Waiora nomenclature for the promotion of health in New Zealand schools at the national level. (pers comm Ministry of Education 1998).

From 1998, in line with the national educational frameworks developed by the New Zealand Qualification Authority, resources have been put into the new curriculum for Health and Physical Education developed by the Ministry of Education to replace the 1985 Health Syllabus. The first draft of the curriculum for Health and Physical Education was released for consultation on February 8 1998, with submissions on the draft received by July 1998. The final document was to be released by mid 1999 and plans for implementation of the new curriculum were to include professional development and support material production during 1999 and 2000. Full implementation of the curriculum was planned for, and commenced in the 2001 school year (Ministry of Education 1997b). The title of the document Health and Physical Education in the New Zealand Curriculum, included the aims for students to:

A. develop the knowledge, understanding, skills and attitudes needed to maintain and enhance personal health and physical development;
B. develop motor skills through movement, acquire knowledge and understandings about movement, and develop positive attitudes towards physical activity;
C. develop understandings, skills and attitudes that enhance interactions and relationships with other people;
D. participate in creating healthy communities and environments by taking responsible and critical action. (Ministry of Education 1997:7)

The curriculum is underpinned by four concepts. *Well-being* (Hauora), which includes *Taha Wairua* (Spiritual Health), *Taha Tinana* (Physical Health), *Taha Hinengaro* (Mental Health) and *Taha Whanau*²⁷ (family health), *Health Promotion*, the *Socio-ecological Perspective*, and the *importance of attitudes and values that promote hauora* (health) (Ministry of Education 1997). The seven key learning areas are listed as:

- Mental health
- Sexuality Education
- Food and Nutrition
- Body care and physical safety
- Physical activity
- Sport studies
- Outdoor education

(Ministry of Education 1997;35).

These learning areas were designed to reflect and address current health and physical education needs of New Zealand students (Ministry of Education 1997). (See Appendix 2.5 for the structural framework of the curriculum).

My analysis of the curriculum reference list of the *Health and Physical Education in the New Zealand Curriculum* (Ministry of Education 1997) would support that there appears to be a heavy weighting towards physical education and nutrition rather than a focus on general health. In the draft curriculum document, *body care* and *physical safety* were omitted as topic

²⁷ These terms will be further explored in the final section of this chapter entitled *towards a definition of health.*
areas. This oversight was remedied during the consultation phase of document development. The health sector was not formally involved in the development process of the curriculum and most input came from home economics and physical education teachers (pers comm Ministry of Education analyst 1997). This situation was not surprising given the removal of the health sector (public health nurses) from a formal role in school health education during the consultation phase of the 1985 Health Syllabus. During that consultation a report was written (Department of Education 1982) that contained the following statement:

Organisations such as the Red Cross, the Order of St John, and the Health Department, have already had experience in helping schools develop classroom programmes in health education. These organisations agree that if this involvement were to become more general, their resources and personnel would be over-extended. Instead, a role in in-service training was seen as more appropriate for these and other outside agencies. (Department of Education 1982:10)

The Health and Physical Education in the New Zealand Curriculum also contributes to the development of essential skills described in the New Zealand Curriculum Framework as: physical skills; self management and competitive skills; communication skills; problem solving skills; social and co-operative skills; information skills, numeracy skills, and work and study skills (Ministry of Education 1997b). The achievement objectives for these skills are expressed in the eight progressive levels of the New Zealand Qualifications Authority framework (N.Z.Q.A. 2002). The curriculum requires teachers to develop programmes based on a learner needs assessment, enabling students to make informed decisions concerning their total wellbeing/hauora, both now and for the future (Ministry of Education 1997).
The National Medical and Health Research Council of Australia (1996), in a report on the available evidence concerning effective practice for promoting health in the school setting, acknowledged that changes in the education sector have led to increased responsibility for schools concurrent with a reduction in health support services. They stated that:

Health is up against strong competition for curriculum time, teacher attention and resources. This places a premium on supporting health promotion through the mainstream organisational structures of the school (eg. the school welfare system) rather than relying exclusively on special purpose initiatives, which are often first to go when resources are scarce (National Health and Medical Research Council 1996:3).

Anecdotal evidence suggests that this situation is also the case in the New Zealand context. The Australian report suggested one solution could be improved collaboration between the health and education sectors. The council also suggested the development of monitoring progress and evaluating health outcomes as necessary if health gains were to be supported in a school setting (National Health and Medical Research Council 1996).

Traditionally health education in schools was concerned with hygiene and aimed at minimisation of infection, which was driven by the health sector, with minimal integration between the health and education personnel. An ill health, problem based focus was taken during the time when the biomedical epidemiological sciences were strengthening. The objectives of health education were to get a message to a captive audience with interventions aimed at building health by improving the health behaviours of the student population (St Leger 1999b). As patterns of ill-
health changed (see section 2.5 on Determinants of Health) and health issues have become understood in all their complexity, the scope and breadth of school health education has altered (Downie et al. 1996).

It is pertinent at this stage to distinguish and expand upon the concept of Health Education within the context of Health Promotion and the Health-Promoting School.

Health Education

In the 1986 version of the Health Promotion Glossary, Nutbeam defined Health Education as:

A term used to represent consciously constructed opportunities for learning which are designed to facilitate changes in behaviour towards a predetermined goal. In this context health education has been closely allied to disease prevention as a means to changing behaviours which have been identified as risk factors for particular diseases. It is essentially an educational activity involving some form of communication designed to improve knowledge, and develop understanding and skills, which are conducive to health. (Nutbeam 1986:345)

In the updated Health Promotion Glossary (Nutbeam 1998) the definition was altered to incorporate a broader and less specific view. The definition became:

Health Education comprises consciously constructed opportunities for learning involving some form of communication designed to improve health literacy, including improving knowledge, and developing life skills which are conducive to individual and community health (Nutbeam 1998:4)

The theoretical shifts that have underpinned the changes in these definitions will now be explored to provide an explanation of the shifts in the philosophy and practice of health education over time.

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Health Education and Health Promotion have been shaped by educational theory, and philosophers of education maintain the main goal of education is to enable people to be autonomous, free, able to think and be in control of their lives (Weare 1992). Colquhoun et al. (1997) considered that the basis of good teaching is an inquiry approach which leads students through the process and involves four critical dimensions – knowledge, skills, values and action. The aim is that analysis of information helps students gain new understanding, develops skills of research, critical thinking, social interaction and communication.

Teachers should encourage children to not only answer questions but to question answers (Colquhoun, et al. 1997:163).

This view of education is supported by the New Zealand school curriculum framework (Ministry of Education 1997a). Health education ideology links back to the discussion in section 2.3 on the individual versus the collective approach to Health Promotion. The autonomous goal of education is aligned to the notion of individualism inherent in tradition Health Education, that was supportive of strategies and outcomes that did not conflict or override individual freedom. This notion implied that education and persuasion towards healthy behaviour was acceptable but that coercion was not (Naidoo 1986). Individualism supported the health educator to provide persuasive arguments and relevant information but left responsibility for change to the individual who theoretically had the freedom to accept or reject information as long as the information was understood (Naidoo 1986, Colquhoun et al. 1997, Tones 1997).
In that approach the educator maintained *power over* the individual as the information given to the student was with the aim of trying to change behaviour towards the educators view or value of what is a *more healthy* approach to living (Labonte 1994). The goal of individually focused health education was that understanding had occurred. However, it was more common to measure that changed behaviour. Behavioural change within the traditional *Health Education* philosophy has been found to be dependent on many factors including an individual’s knowledge, attitudes and beliefs. We now understand that information alone does not change behaviour and complex theories and models have been developed that describe multiple stages of behavioural change (Donatelle, Davis & Hoover 1991). The use of coercion through what could has been called propaganda (Naidoo 1986, Downie et al.1996), tends to attempt to change attitudes beliefs and behaviours by any means including manipulation of emotions, which in effect denies the individual freedom of choice (Naidoo 1986).

Criticism of individually focused *Health Education* is that it denies health is a social construct and assumes freedom of choice actually exists. It is therefore not effective in its own terms of reference (Naidoo 1986, Colquhoun et al. 1997). Many authors label the individual approach of Health *Education* as the *traditional*, medical model, disease orientated, approach, that has a negative focus aimed at prevention of illness and an emphasis on physical aspects of ill health as opposed to the salutogenic positive focus on maintenance of health. The individual approach to health education is considered to neglect the social and political determinants of

Following criticism of the individual approach to health education and recognition that knowledge gain alone did not lead to attitude change and subsequent healthier behaviour, a risk factor or transitional approach to health education has been identified by Downie et al. (1996). This approach has been described as including propaganda and manipulative, coercive emotive, tactics such as shock and horror to scare people into behavioural change through utilisation of graphic posters and television images for mass media campaigns. Downie et al. (1996) have also described a modern approach to education for health aimed at both prevention of illness and the promotion of health. The theoretical construct of this approach includes an holistic view of the person situated within his or her socio-ecological context and includes educational processes that facilitate people to clarify values in relation to themselves, health, and health influencing behaviour. This approach is commonly referred to as life skills training, which Weare (1992) considered was a misnomer. Weare (1992) defined training as encouraging people to acquire a set of preset beliefs, habits and values, whereas education is the ability to think rationally, logically and critically and make decisions without coercion. I concur with this analysis and will therefore use the term acquisition or education.

The aim of life skill acquisition is to enable people to make their own informed decisions about their health. Interaction between the educator and the learner in life skills education involves development of the skills of assertion and communication, based on intact self-esteem (Downie et al.
Health promotive strategies acknowledge the need for the educator to have respect, cultural awareness and work from the perspective and position of the other’s world-view (Tones 1997). These methods support power sharing as described in the winners triangle (Choy 1990) and are considered essential elements of health promotive education that empowers the other (Tones 1997). Collective dimensions of this modern approach to education for health are recognised and individual constraints to freedom of choice acknowledged. Socio-political factors that impact on health are targeted to ensure the environment is made more supportive to health. The focus of the modern approach is based on a socio-ecological framework and positive health or a salutogenic philosophy (Katz & Peberdy 1997).

This salutogenic focus aims to direct efforts towards identifying factors that enable individuals and communities to attain and maintain good health in spite of the hazards associated with modern life (Downie et al. 1996), rather than a focus on illness prevention. The belief is that education for health can only be successful if it is embedded in a structural context that acknowledges the dependency of health on environmental conditions (Hurrelmann et al. 1995).

Other discussions of Health Education have elucidated similar definitions of the traditional approach to health education but have embedded the traditional and transitional approaches (discussed above) within the traditional approach. A second approach presented in a synthesis of models presented by Colquhoun et al. (1997) is the self empowerment approach, which seeks to improve health by developing peoples
understanding and control of health within their environmental circumstances and is, I consider, similar to what has been described as the modern approach to education for health. This model attributed to Tones (1997) accounts for inequalities in health status between local groups as a product of different processes of socialisation and aims to address the low self-esteem assumed to be associated with poverty through life-skills acquisition (Colquhoun et al. 1997). Tones (1997) considered that the main goal of education for health should be empowerment because:

The empowerment strategy helps to resolve an important dilemma in health promotion: the need, on one hand, to prevent disease and safeguard the public health while, on the other hand, respecting individual freedom of choice – including the freedom to adopt an ‘unhealthy’ lifestyle (Tones 1997:33).

The third approach in the synthesis of models (Colquhoun et al. 1997) is the radical, critical or collective action approach which aims to produce socio-structural change conductive to health, and change patterns of disadvantage correlated to poor health.

I contend this approach could also be considered a part of the modern approach defined by Downie et al (1996) but goes a step further because it includes a greater expectation of community involvement and action. The primary goal of the radical approach is the achievement of social change through collective action, which is considered more likely if individuals have critical consciousness raised through education (Friere 1972, 1994, Friere & Shor 1987, Tones 1992). Tones (1992) considered that traditional, self-empowerment and radical collective approaches to
health education are not mutually exclusive or antagonistic, as parts of each or all will be occurring at the same time.

Draper, cited in Downie et al (1996) defined three levels or a *tripartite typology* of the breadth and information relevant to health education. Type 1 involves health education about the body and how to look after it, which is considered as being the most common type of health education and as essential knowledge for each new generation. Type 2, involves provision of information about access to appropriate health services. Type 3 includes knowledge about national, regional and local policies, structures and processes in the wider environment that are detrimental to the promotion of health (Downie et al. 1996, Colquhoun et al. 1997).

Weare (1992) contended that most modern educational theory minimises the importance of acquiring facts and emphasises the learning of process, and that effective education does not tackle topics in isolation, but adopts a co-ordinated approach where different learning experiences are organized to complement one another. Weare (1992) considered that the aim should be to start from *where people are at* developmentally, emotionally, and socially as it constitutes a more person centred educational philosophy and focus. This relates back to the importance of the health professional *working with* the person/people and trusting that they know what they need.

The three types of health education previously described are all considered relevant to education for health as they are information fields essential to enabling behaviour and health promotion (Colquhoun al. 1997, Wass 1994). I consider that the Draper typology (Downie et al. 1996) can
be linked to the approaches and philosophies of Health Education but I would concur with Downie et al (1996) in concluding that these theories of Health Education have pre-empted practice in society. Health promotion and health-promoting schools are philosophically and theoretically supportive of the more modern approach to education for health, and critical consciousness is expected to occur by level seven and eight in the NZQA framework (N.Z.Q.A. 2002). Therefore I consider that in a primary school curriculum where levels one to three/four are covered, critical thinking may not be an appropriate goal.

However, whatever theoretical model of health education we consider is being utilized in schools and in the wider society, acknowledgment must always be made of the values that are assumed, stated as objectives, or learned as unintended outcomes of what is often called the hidden curriculum. Views as to what kind of attitudes, self image, lifestyle and skills should be taught will always be informed by the personal belief systems of the educator. As Tones (1992) contends, use of different models of health education are indicative of professional, philosophical and political understandings by educators of what health should be about. Change in personal health related behaviours from health damaging to health promoting is still the main target of intervention strategies used in most approaches to health promoting education (Williams, Weston, McWhirter et al. 1996).

The World Health Organization expert committee on comprehensive school health education and promotion determined the aim of a school health programme must be that both teachers and children are enabled to
care for their own health. The committee considered the three components of school health that required coordination were the health environment, health services, and health education (W. H. O. 1997b). Health promotion focused research in schools has found that programmes that have a focus on:

- Cognitive and social outcomes;
- Behaviour change – not necessarily health, usually education;
- Holistic programme delivery and content;
- Linkages with the health sector;
- Relevance to student’s social and cognitive development;
- Reasonable teaching time for the topic;
- Adequate resources; and,
- Include sufficient professional development for teachers,

are likely to have successful outcomes in improved education achievement and health (St Leger 1999b). St Leger (1999a) considered that content knowledge and practical skills were important. However research findings from the New Zealand National Education Monitoring group indicated that most year eight students could demonstrate the learned theory of a healthy food pyramid (65% all items correct, 21 % partly correct), but could not translate it as well into the real life situation of planning a lunch\(^2\) (Crooks & Flockton 1998). Teaching children how plan a menu, shop on a budget, read food labels, and prepare and cook food would be more valuable if the

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\(^2\) Year 8 students were better able to choose a menu for a high energy day (31% good balance and reasons, 40% good balance without reasons) than for a more sedentary day (17% good balance and reasons, 31% good balance without reasons). Use of the health food pyramid did not improve the results (Crooks & Flockton 1998:22).
aim of the educational experience is to improve diet and nutritional outcomes (St Leger 1999a).

Issue based, interactive learning approaches that are contextualised to the community and include engaging resources and are given enough teaching time have been found to be important to health learning outcomes in schools. A minimum of at 25 minutes of teaching time per week, and preferably 40 to 50 minutes per week, were found to make a significant difference to health education learning outcomes (National Health and Medical Research Council 1996). In a report on Sexual and Reproductive health teaching the Education Review Office suggested that not enough time in the teaching year was assigned by many schools, to cover the information deemed necessary for young New Zealand citizens to prepare themselves for future life stages (E.R.O 1996).

**Nursing and Health Education**

As stated previously, the role of the school is to develop effective programmes, and teachers are responsible for delivery of the programme (Ministry of Education 1997). Involvement in school health education varies from country to country and within countries. In many countries public health or school nurses have been involved in school health education programmes. MacLean, when writing about the role of the New Zealand school nurse stated that although health education teaching should form part of the nurse’s health education role the teaching function of nurses had been largely underdeveloped (MacLean 1983).
Bradley (1997) discussed that nurses can take advantage of many teachable moments at school, as they have the opportunity to capitalise on moments when students take an interest, or have a need to know about their health or health choices. It must be acknowledged that it has often been difficult for health professionals to work with schools in health promotion activities in the past because the core business of schools does not explicitly include health issues (Williams et al. 1996).

The development of this nursing role has not been supported by policy (Department of Education 1982), funding (pers comm Public Health Manager 1999) or teachers (Anon 1996) and subsequent public health nurse practice in New Zealand, except in some circumstances where the nurse is accepted and has credibility in a school (Robertson-Green 1993). Many teachers view nurse involvement in classroom teaching as a professional issue, and consider that there is a place for educational input from nurses in one-off sessions, in initially supporting knowledge development of teachers, and in the role of educating parents (Anon 1996).

During the New Zealand health syllabus era 1985 to 2000 many school topic areas of the health programme were taught as separate components by outside agencies. An example previously given, was the Keeping Safe element of the syllabus, taught by police officers. The Life Education Trust, founded in Australia, has also played an active role in school education in New Zealand during the last 10 years (pers comm Life Education Trust Manager 2000). This organization is active throughout New Zealand and provides school children with formal teaching sessions, taught by a registered teacher, in a specialised mobile classroom brought to the
school site. The programmes aim to meet the needs of the school and cover the topic areas in the school syllabus/curriculum. The Life Education Trust proactively offers education services to the school for a minimal fee per child, and expounds that health is a specialist subject which should be taught by specialist teachers, because classroom teachers do not always have the appropriate in-depth knowledge (pers comm Life Education Trust Manager 2000).

This view could be supported by research findings outlined below, which have explored health teaching in schools. In a German study 73% of a representative sample of citizens considered health education in schools to be insufficient, with the lowest rating from those who had school-aged children. A followup survey of teachers found that a large number of teachers considered that they were inadequately prepared and insufficiently trained for the task of health teaching (Hurrelmann et al. 1995). In the USA a number of complex barriers to meeting health prevention objectives were identified, of which lack of teacher training was found to be the most significant factor. A minimal level of knowledge for teachers was defined as, knowledge about personal health sufficient to model healthy behaviour, as well as to teach the generally accepted curriculum content areas (Simeonsson & Gray 1994).

In an Australian study aimed at discovering teachers understanding of school health and priorities needed to expand school health activities, findings included that there was no evidence that teachers perceived local community members and agencies as partners in planning, implementing and reviewing school health programmes. Physical activity, food and
nutrition, and safety dominated focus group discussions during the research, and teachers stated that there was little opportunity for in-service education and that they needed more knowledge and skills to work successfully in school health. The study found that teachers placed a great reliance on external health related organizations, which they considered were not integrated into the school programme (St Leger 1998).

Another study conducted in NSW, Australia with 350 infant and primary school teacher respondents demonstrated that teachers had a fundamental lack of understanding concerning child health issues and the health-promoting school strategy (Thyer 1996). A large majority of teachers (99.6%) believed their role included promoting children’s health through advocacy for children and many recorded a strong preference for parents to take the leading role in this area. They also acknowledged however, that many children did not get this knowledge at home and that children generally paid more attention to teachers than to their parents. When asked to identify issues about which they were lacking information, respondents identified children’s learning, speech and, behavioural difficulties, fitness, and counselling skills. Teachers also requested a response book containing information about child health agency contacts so they could refer children to the appropriate services (Thyer 1996).

In an unpublished New Zealand study conducted in Auckland by Coles et al., cited in Clendon (1999b) teachers identified their health promotion and health education needs as, abuse awareness and education, biculturalism as it applies to Te Tiriti o Waitangi, and vision and hearing impairment education. Many respondents expressed feelings of exhaustion
and were overwhelmed by their responsibility for the children in their care and 91.6% stated that they would prefer the school nurse to play a greater role in school health promotion. Approximately 80% of respondents wanted nurses to collaborate with them in the classroom setting, and only 13.9% believed a nurse was available when required, 40.9% believed a nurse was sometimes available, and 5.7% considered that a nurse was never available (Thyer 1996).

In 1999 the Education Review Office made the statements that:

Bullying, classroom violence, ineffective intervention programmes and inadequate training for teachers to handle difficult situations were among the concerns identified by the office over the last decade. Many schools were also struggling with issues such as cultural safety and racial harassment (The Education Weekly 2000:1)

The discussion on the components of Personal Health Skills has included past and current health-promoting school education practice. The concept of Health Education has been explored as it applies to health-promoting schools. Issues about the teaching of health education have also been raised which would appear to be complex and common. I would assert that given the evidence it may be timely to review current health education (as part of health promotion) practice in New Zealand schools. Clearly many nurses consider they have much to offer and many teachers express a lack of knowledge and expertise to teach some of the content material. The goal would be a partnership between these two professions to ensure integration of experts in the community who can relate to, and support the value and belief systems of the school and ensure appropriate knowledge and understanding is gained by all students. These issues also relate to the next section, which will address health services in New Zealand primary schools.
Health Services

The Development of health-promoting schools – A framework for action (W. H. O. 1996) stated that those involved in this field of activity are:

Local and regional health services which have a responsibility for child and adolescent health care and education, through the provision of direct services to students and in partnership with schools (W.H.O. 1996:14).

The components were:

HS1 Basic health services which address local and national needs are available to students and staff
HS2 Local health services contribute to the school’s health programme
HS3 Health services contribute to teacher training (W.H.O. 1996:14)

The World Health Organization Expert committee on School Health Education and Promotion considered that health services reflect how health care is organised and provided in a particular society. Separate management of services were viewed as having the potential to cause lack of integration and lack of comprehensive screening, treatment and referral services (W.H.O. 1997b). The Australian National Health and Medical Research Council also considered that in ideal circumstances health services would be school-based, providing comprehensive health, welfare, and local government services (National Health and Medical Research Council 1996).

In most New Zealand primary schools health services for students are provided in the school setting by the visiting public health nurse. The nurse is supported by a vision-hearing technician (VTH) and the visiting
A home and school visitor providing a link between the medical officer, school and home over matters concerning the health and welfare of children (Burgess 1983:219).

‘Her’ role included collecting health information from inquiry cards sent to new entrants and inviting parents to the medical examination of their children, testing eyesight and arranging treatment as needed. Attention was
given to defective hearing, physical deformities, excessive or unsuitable clothing, malnutrition, skin disease, pediculosis and lack of cleanliness, giving advice – in particular about care of teeth and general cleanliness were noted in an article published by The New Zealand Nursing Journal in 1927 (Burgess 1983). During epidemics such as diphtheria and scarlet fever outbreaks, the nurse would also assist the medical officer in diagnosis and immunisation. Burgess (1983) also noted that the nurse might also assist at the annual health camp, health weeks and industrial shows. In 1930 the roles of the Native Health Nurse and the School Nurse were combined into one role - that of District Nurse, who held responsibility for school health.

Wood (1999) drew the following statement about the purpose of public health nursing from the New Zealand Nursing Journal of 1945 and stated that:

the role was essentially educational. The public health nurse should:

- Help make known the scientific facts about health
- Help create positive attitudes towards the acquisition and maintenance of health
- Encourage and teach the use of health and medical resources
- Contribute towards adjustment of social conditions to the end that the individual and the family will become resourceful in meeting their health needs.

Above all, the public health nurse taught as much by what she [sic] was as by what she said, and by her own attitude, appearance and obvious health (Wood 1999:4&5)

In 1953 District Health Nurses involved with school health in New Zealand combined with Industrial Health Nurses to become Public Health

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29 A public health nursing role that was initially developed in 1909 in response to infectious disease epidemics in Maori populations.
Nurses (Burgess 1983). The role of the Public Health Nurse in schools has traditionally been to promote health related behaviour, attitudes and values and to provide health care for the school community they served. The nurse provided surveillance, screening, immunisation, and follow-up of children with health issues referred to the nurse by the teacher. There was also some involvement in health teaching on a one-to-one basis with children they had contact with (MacLean 1983). Until the early 1990’s new entrants to primary school were physically screened and their health history and any concerns discussed with the accompanying parent or guardian. Hinder discussed New Zealand public health nurses practice preceding this time as a role of:

accompanying families through their health care episodes by assisting
supporting and knowledge sharing (Hinder 1997:23)

Since 1999, as the number of public health nurses has been reduced and parental consent is required before a health professional can examine or treat any child that is not accompanied by the legal guardian (pers comm, public health nurse manager 1999) the role described by Hinder is less possible.

From the early 1990’s public health nurses in New Zealand have worked within the philosophy of The Ottawa Charter for Health Promotion (W. H. O. 1986). Public health nurses in the Wellington region have been geographically located in specific areas and served all schools within that allocated region (pers comm, public health nurse manager 1999). In New Zealand a few (mainly private) schools that educate year one to year 13 students employ a nurse, with a job description specific to the employing
school. Public secondary schools sometimes employ a nurse, although nurse numbers in the Wellington region have dropped over the last ten years. Often the nurse’s employment in a public school has been as part of an allied staff workforce with office duties and management of a ‘sick bay’ or ‘medical room’. The role of the nurse has been limited by the understanding of possible nursing scopes of practice by teachers and managers who tend to have shaped nurses roles to their own health care contacts with nurses. This has had the impact of restricting nursing practice to traditional roles and does not take advantage of aspects of the scopes of practice made possible by current nursing education programmes (pers comm school nurse #1, 2000).

Surveys to obtain the views of a school community concerning the role of the school nurse in the United Kingdom have shown that staff tended to view the nurse in a traditional way, that is, tending to the sick and injured. When describing their roles however, nurses tended to give priority to health surveillance, screening and prevention of illness, together with health promotion. Parents were least aware of the nurse’s role in the school (Farrow 1996).

In a New Zealand based study in one school community, Clendon (1999a) found that participants from a variety of backgrounds (staff, parents, health professionals and others) had some degree of knowledge about the role of the public health nurse, with most recognising the educative role, child protection and home visiting capabilities. Many of the less visible aspects of the nurse’s work, such as advocacy, referral, networking and health promotion however, were not identified. Robertson-Green (1993)
also identified these *invisible* factors of the public health nurse role in another New Zealand study on nurse’s perceptions of their work with children and families. Robertson-Green considered that effective public health nurse practice was difficult to describe because nurses found it:

- difficult to articulate and document the reality and vision of their practice;
- but also, because the contradictions and the way these constrain practice have gone largely unrecognised and certainly unchallenged. (Robertson-Green 1993:108).

This is what Hartrick described as:

The ‘messiness’ of nursing which is characterised by complexity, instability, uncertainty and ambiguity (Hartrick, 2000:28).

Lack of recognition of the unique access arrangement a public health nurse can develop with children and families, and of the importance of routine screening tasks, such as five year old assessments, as a way of becoming known to the school, the student and their family, were identified as concerning for nursing practice in a time of increased fiscal accountability and reporting against illness focused objectives (Robertson-Green 1993). Five year old assessments were discontinued in New Zealand because they were not deemed to be cost effective in terms of the number of problems newly detected versus the cost of nurse time (pers comm public health nurse manager 1999). For nurses however they were an opportunity for one-to-one education for the student and parent/s, a chance to start a relationship with the family, to check dental clinic enrolment, access to medical care, immunisation status and an opportunity to be regular presence in the school and therefore become a reliable and trusted health professional in the school setting.
Different perceptions of the role of the school nurse are compounded by there being no formal association or school nurse focused group for New Zealand school nurses employed outside public health organisations at present \(^{30}\) (pers comm school nurse #1 2000), and therefore no nationally defined scope of practice for school based nurses exists. The public health nurse’s current role is defined by the contractual obligations of the public health service by which they are employed. The nurse’s time is spread over a variety of public health tasks, which are prioritised depending on the health needs of the population served. When there is an infectious disease event that requires follow up, such as occurs for Meningitis, and Tuberculosis, or a national immunisation campaign, priority is given to that event rather than any school based activity (pers comm public health nurse manager 1999).

Nurses may be involved in a teaching programme that is part of the school health curriculum, when invited to do so by teachers. This is more likely when the nurse is a trusted member of the school community and when teachers are aware of the nurse’s ability to deliver health-teaching sessions. Because of the varied and unpredictable nature of the role it can take a public health nurse a long time to gain the acceptability and credibility of the school community. On each occasion there is a newly appointed nurse or an activity that takes the nurse away from being a regular reliable

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\(^{30}\) The Public Health Nurse section of New Zealand Nurses Organisation (NZNO) can only be joined by members of the national organisation and does not focus specifically on school nursing. In the USA school nurses work under standards developed by the American Nurses Association (1983). The National Association of School nurses develops discussion papers and education programmes, publishes a journal and holds annual conferences at which school nurses can gain credentialling through a credit system.
presence in the school, trust in the nurse is diminished (Robertson-Green 1993).

The public health service role in schools includes health surveillance. Vision-hearing technicians screen each student’s hearing and vision at age five, 11 and 14 years and at any other age if requested by teachers, nurses or parents. Students who have impaired hearing on initial screening are referred for treatment if appropriate and re-screened with further referral to appropriate health services as necessary. Most New Zealand Primary schools have a dental clinic in the school grounds and more recently in some areas schools are visited by a mobile dental clinic. The dental therapist and an assistant visit each school once each year for a period of two or three months, depending on the level of need in the specific school. Advice, treatment for prevention of caries, drilling and filling of caries, dental hygiene education and referral to dentists for complex treatment is part of the therapist role (pers com, dental assistant, 1999). The public health service provides a wide range of posters, pamphlets and other educational literature and resources for use in schools and members of the public.

Each child born in New Zealand is provided with a Child Health Development Record Book that gives information about New Zealand health services and health professional roles, preschool education services, application forms for dental health enrollment, immunisation schedules and space to record immunisations. First aid advice, and the facility for parents and health professional to record visits, issues, milestones and graph weight and height of the child until the age of 16 years are also components of this document.
A New Zealand needs analysis undertaken as a postal survey by Cole et al (cited in Clendon 1999b), in 1992, focused on identification of issues in the provision of public health nursing services in schools. Teacher respondents in the study stated that student health problems included prolonged absenteeism, lack of available care for sick children, parents not taking the child to the doctor, poor hygiene and inappropriate clothing, running noses/colds, child abuse, behaviour problems and self esteem issues. Other issues of concern included ear problems, head lice, school sores, asthma, infectious illness/low immunisation rates and the expense of visiting the doctor (Clendon 1999b).

Public health nurses may refer a student to a Health Camp if it is considered to be in the child and family’s best interests. Health Camps in New Zealand are regionally located. The first Health Camp was opened in Wanganui in 1919 to address health problems such as inadequate nutrition often associated with poverty. The philosophical practice in health camps in current times has changed from a rescuing focus to one of utilising a self-empowerment approach (Tones 1992) to address issues that impact on the child’s well being. Children are now taught communication skills, problem-solving strategies and how to cope with teasing, bullying and peer pressure. Staff teach children self care strategies and address health issues, such as asthma. At Health Camps children attend school as part of the experience when:

Children are offered a time of stability and regular school attendance. They can return to their communities with a positive attitude toward themselves, their peers, adults, and to school and learning (Otaki Children's Health Camp 1998:3).
In The Public Health Commission’s advice to the Minister on school health (Public Health Commission 1995) the five, Ottawa Charter linked (see bold text below), action areas for health sector agencies to improve public health in the school setting were identified as:

- Assisting schools and boards of trustees to **establish policies** to promote health and wellbeing of students and staff
- Assisting schools to **create environments** which promote the health wellbeing of students and staff
- Assisting schools to **strengthen community involvement**
- Assisting schools to develop teacher and student **personal skills** by providing information and resources
- **Re-orientating the health services** to achieve greater co-ordination and collaboration of the delivery of services to schools. (Public Health Commission 1995:5)

The initiative suggested that a staged process of action covering:

- talking and listening;
- assessing need and identifying required action;
- formulation of policies which formalise action;
- implementation of action;

occur as the Health and Education sectors worked together towards the goals for school health.

Passarelli (1994), considered that in the USA the establishment of ongoing dialogue and working relationships between community, health and education professionals to bridge the gap between the health care delivery system (nurses) and the education system (teachers) was essential to support the health of school aged children. Clendon (1999a) reported that in the USA there were over 500 school based health clinics usually led by nurses, with approximately 25% located in elementary (primary) schools.
These clinics had a focus and function in collaboration with families and schools rather than on the individual child. In other words they worked within the health-promotion paradigm that utilised the socio-ecological framework and focused on the family as the unit or client rather than the individual (Hartrick et al. 1994). A clinic in Phoenix, Arizona, USA, was provided as an example of collaboration between a community hospital, school district and private paediatrician with the aim of ensuring that children from the five schools in the district had access to appropriate health services. Results of this initiative reduced absenteeism rates and the number of children utilising hospital emergency services as a primary care site (Clendon 1999a).

Collaborative practice has been nominated as part of health promotive focused health service provision. In recent years New Zealand health policy has mitigated against collaborative practice between services concerned with health as the ‘New Right’, competitive ideology was put into practice (Price 1993). Collaborative practice has also been suggested as a possible threat to school nurses who already consider they are invisible (Robertson-Green 1993) and marginalised (McDonald, Langford & Boldero 1997). In research conducted in the United Kingdom, McDonald et al. (1997) found that a change from an illness model to one of health promotion focused practice had prompted a decline in universal\textsuperscript{31} school examination of students and an increase in health interviews, health education, counselling and support. Findings also stated that there was little

\textsuperscript{31} Health service for the whole population. eg Universal five year old screening provides the service for all five year olds throughout New Zealand.
collaboration between school nurses and general practitioners or practice nurses. These findings may well be generalised to the total New Zealand situation for as stated, school nursing roles have changed to become less directly involved with individual children and universal health screening has ceased. In a report on the current situation in New Zealand schools some public health nurses expressed deep concern and frustration. These nurses reported that since the introduction of service contracting in the mid 1990’s their ability to be creatively responsive to the needs of the whole child within a family have been hampered (BRC 1999). New Zealand public health nurse practice has altered since 1997 to fit the focus of the service provision contracts developed by the Health Funding Authority. These contracts do not always reflect the needs of the community to be served, as they are a top down approach rather than being led by consumer need, which Colquhoun et al (1997) considered was essential in a settings approach to health promotion.

In a discussion on health professionals Naidoo and Wills (1990) considered that the manner in which practitioners interpret the health promoting role depends on their professional training (or education), their role in the organization, personal experience, interests and social and political perspective. Katz and Peberdy (1997) suggested that professional training moulds practice in which the values and views of the professional seem more valid, rational and moral than the views of the other person. Nurses as health professionals have gained their perspective on health care service during their training or education. Nurses trained in a hospital setting were therefore more likely to have a medical model approach to
service provision linked to the traditional education approach involving disease prevention, or an assessment, intervention, then cure focus (Labonte 1994).

The behavioural approach to health service provision, with its emphasis on changing lifestyles incorporates promotion of physical well being with the disease prevention approach described above, was considered by Labonte (1994) to be most often practised within state health agency professional practice, by hospital trained nurses. Another approach, that of the socio-environmental approach to health care delivery, is most likely to be practised in a community setting with population groups (Labonte 1994). This approach incorporates sociological and environmental aspects of health, with health considered a positive or salutogenic concept. This approach can incorporate the empowerment and critical collective action approach to service delivery (Katz & Peberdy 1997, Colquhoun et al. 1997, MacDonald 1998, Tones 1997) which I contend is more likely to come from practice that originated from an educational institution based nursing programme.

The later approach is most congruent with the health-promoting school philosophy. Health service professionals who work with schools utilising this approach work with the school as a community to assist the school to identify their health-focused needs (Rowling 1994). The perception of issues must belong to the community (Labonte 1998). Katz and Peberdy (1997) contend that power sharing is the crucial factor in professional health promotion practice, and that acceptance of health promotion values must include ethical principles of beneficence (doing
good), maleficence (doing no harm), respect for autonomy, empowerment of
the group of focus, concern for equity and social justice and respect for
diversity (Katz & Peberdy 1997).

I contend that it can be understood from this exploration that there
are many tensions in the way health care service is now provided in New
Zealand schools. The theoretical positioning of health promotion being led
by the population being served is not supported by the current government
funding model for health promotion in schools. My analysis of what has
happened is that the rhetoric of empowering health promotion practice has
been translated by the funders of services into the reduction or withdrawal of
holistic care of individuals as part of a population. Theoretically withdrawal
of the provision of actual health care services for individuals is correct
practice within a health promotion philosophy. However in practice it has
altered what was responsive health focused nursing practice with the result
that public health nurses are frustrated and so I suspect are school
communities.

In the next section the determinants of health that have informed the
components of the action in the Ottawa Charter for Health Promotion
(W.H.O. 1986) and the health-promoting school framework will be
discussed. The following literature and related discussion provides the
historical context of how knowledge about the causes of illness has changed
over time and how this information can influence how we are able to act to
encourage health for populations.
2.6 Determinants and Measurements of Health

The concept of determinants of health has been adopted to determine, with the aim of understanding and explaining the complex patterns and causes of population health and disease (W. H. O. 1998a, Trlin 1994). Terris (1996) credited William Alison with documenting in the 1820’s some of the first work that identified determinants of health when he identified the close association between poverty and disease, in Scotland. The same links between poverty and disease were also made in Paris in the 1840’s and Germany in 1847, when prosperity, education and liberty, based on democracy was considered the best remedy to the problem (Terris 1996). In 1859 in England Florence Nightingale founded the first school for nurses specifically to supply qualified district nurses to work in defined geographical locations in Liverpool. These nurses not only cared for sick patients but also instructed families in home care and general hygiene (Logan & Dawkins 1986). Nightingale supported the work of ‘health missionaries’ and:

…was convinced that cleanliness in the home could eradicate high infant mortality and morbidity and promoted both nurse-midwifery and home-based health services (Hanson & Boyd 1996:21).

By the 20th century concepts of social hygiene and social medicine were well developed in Europe and Britain where these dual concerns were slowly replaced by an emphasis on specific causes of disease, as the science of disease epidemiology developed.
Epidemiology is the study of what "comes upon" groups of people. More specifically, epidemiology is concerned with the distribution of disease and death, and with their determinants and consequences in population groups. Inasmuch as patterns of health and disease are integral components of population change, epidemiology’s reservoir of knowledge about these patterns and their determinants in population groups serves not only as a basis for prediction of population change but also as a source of hypotheses that can be further tested to correct, refine and build population theory (Omran 1983:509 & 510).

The theory of *Epidemiological Transition* (Omran 1971) is a model that has been used to link shifts in key population health and illness patterns to the social and economic changes that take place over time, as a nation develops industrial market and capitalistic structures (Davis 1994). The theory was developed during the ascendancy of the medical and scientific views of health. This theory has been subsequently criticised because it is not considered to be accurate in predicting causes of population health and care needs which are considered to be more complex, and more context and time dependant than the theory allows (Davis 1994, Trlin 1994). Trlin (1994) stated that in the Epidemiological Transition theory:

> Health and disease (and thereby mortality) are perceived as both dependant and independent variables, responding to and influencing the growth and composition of populations and all aspects of their social organisation (Trlin 1994:145).

The Epidemiological Transition theory was originally developed in 1967 by Omran (Omran 1971), and updated in 1983 (Omran 1983). Five propositions were detailed in the theory with the first named as mortality and population dynamics. The basic hypothesis of the first proposition was that an exponential population increase has only occurred following a decline in
mortality and increase in life expectancy. The second proposition described the progressive shifts in disease patterns that occurred in nations as they developed. This second proposition has been the one most utilized in discussions about stages or ages that occur during transition. Omran (1971) stated that:

During the transition, a longterm shift occurs in mortality and disease patterns whereby pandemics of infection are gradually displaced by degenerative and man-made diseases as the chief form of morbidity and the primary cause of death (Omran 1971: 516)

These shifts in mortality and disease patterns were described as occurring in three separate and successive ages. The *age of pestilence and famine*; the *age of receding pandemics*; and the *age of degenerative and man-made diseases* (Omran 1971,1983), the latter now more commonly named the era of non-communicable diseases (Beaglehole & Bonita 1997). These three ages/stages/era, have been utilised by the World Health Organization to classify countries according to whether they are in an early (age or of pestilence and famine), middle (age of receding pandemics) or late (age of degenerative and man-made diseases) stage of transition (W. H. O. 1998b).

The World Health Organization (1998b) when reporting on the health on the Western Pacific Region, considered that Fiji, Malaysia, the Federated States of Micronesia, Mongolia, the Philippines and rural areas of Vietnam included populations in the middle stage of epidemiological transition, evidenced by problems of maternal mortality and morbidity, and
communicable\textsuperscript{32} diseases. However it was also considered that these countries are also being increasingly affected by traffic accidents, ischaemic heart disease, stroke and cancer, the description of which is described in the age of receding pandemics (W.H.O. 1998b). The Western Pacific Region of the World Health Organization considered that progress through the theoretical ages/stages of epidemiological transition by countries in the region has been achieved by improved economic circumstances and sound public health policies (W. H. O. 1998b). Countries such as Australia, Cook Islands, Hong Kong, Japan, Nauru, New Zealand, the Republic of Korea, Singapore and urban China are all considered to be approaching the later stage of epidemiological transition, or age of degenerative and man-made (lifestyle) diseases.

The third proposition of the Epidemiological Transition theory stated that national development usually favoured young over old and females over males, and regarded the main beneficiaries of development as young children and women of reproductive age who benefited from improved living conditions that reduced the rates of infectious and deficiency diseases (Trlin 1994). The fourth proposition stated that transitions in developed countries had been the result of socio-economic, political and cultural determinants, whereas less developed countries benefited more from new medical and public health initiatives (Trlin 1994).

Omran has been credited by Trlin (1994) with further developing the original theory in 1982, driven by the need for a multi disciplinary approach,

\textsuperscript{32}Diseases that were named \textit{infectious diseases} are now more commonly called \textit{communicable diseases} to allow for the inclusion of the wide variety of transfer methods and types of disease communicated amongst populations.
a need to understanding the causes and consequences of population
dynamics and his awareness of the limitations of the original theory (Trlin
1994). In this review Omran (1983) moved from the position that new
medical interventions could decrease mortality in developing countries to
stating that mortality decline in less developed countries will depend on the
progress made in supplementing imported medical technology with health
care and social development including:

- Reorientation of health programs from hospital-based curative systems
toward community-based total care (both preventative and curative)
systems with emphasis on primary care.
- Improved management and administrative efficiency of health
programs.
- Health education to change patterns of life that are detrimental to
health.
- Improved training and motivation of health and community workers
- Community participation in health and welfare programs
- Environmental control and sanitation
- A political and economic structure responsive to health needs of the
population
- Progress in public services, such as schooling and road construction
- Rise in the standard of living
- Equitable access to good care for the poor and disadvantaged,
especially in rural areas (Omran 1983:315).

A fourth theoretical age which attempted to incorporate further global
changes in the health of populations that have occurred since the 1980’s
has been proposed as an:

…attempt to account for the resurgence of ‘old’ infectious diseases and the
emergence of new infectious diseases in association with non-
communicable diseases (Beaglehole & Bonita 1997:7).
The most significant new infectious disease pandemic in this period has been the Auto Immune Deficiency Syndrome (AIDS). The resurgence of drug resistant Tuberculosis (TB) could also be included in this category. Embodied within the updated theory of Epidemiological Transition (Omran 1983) was the acknowledgment that in most countries different population groups could be experiencing different stages of transition within a country. For example Maori and Pacific people in New Zealand are considered to be at different stages of transition to Pakeha\textsuperscript{33} (Pool 1994). In New Zealand Davis (1994) completed a comprehensive critique of the Epidemiological Transition theory and determined that the original theory and the proposed extension, or fourth age/stage were lacking in human agency. By human agency Davis (1994) meant a lack of acknowledgment of cultural variation, historical uniqueness, social inequities, power and conflict, or:

\[
\ldots \text{the role of meaning in the understanding of social activity and the human determination – and hence indetermination of that activity (Davis 1994:163).}
\]

Davis (1994) considered that it was highly problematic to apply quasi-biological reasoning to what are essentially social processes and further that:

\[
\text{An alternative model of the epidemiological transition requires a reordering of diseases and disorders in such a way that they align more closely with social aetiology rather than disease process (Davis 1994:170).}
\]

I consider that the original theory of epidemiological transition was of its time, and therefore closely aligned to the medical, scientific notion of

\textsuperscript{33} \textbf{Pakeha}: A fair-skinned non-Polynesian immigrant to New Zealand: thence, a usually fair-skinned, non-Polynesian New Zealand born New Zealander (Orsman and Orsman 1994).
health that incorporated disease as the focus or orientation. I further regard that Davis’s critique and ideas are a move towards incorporating the lifestyle / behavioural approach to health. Davis (1994) suggested that the social aspects of people’s lives and their ability to shape their health or lack of illness should be incorporated into the determinants of health. I contend that what has happened over time is that as new knowledge about health and the causes of disease have evolved the determinants of health have become more complex. As this has occurred they have broadened and incorporated the worldviews of more diverse groups of people. A move away from the one, scientific, world-view to incorporate the knowing of all groups within society has occurred (Chick 1992).

Since the 1940’s epidemiologists concerned with public health, have discovered a variety of specific causative factors in the physical environment. These include toxic chemicals and carcinogens, and in the social environment, tobacco and alcohol consumption, fatty diets and lack of exercise, (termed lifestyle factors), which have separately or collectively contributed to disease (Terris 1996). The focus on lifestyle or behavioural factors that have contributed to the cause of disease was made possible after the discovery of sulphur drugs and antibiotics, which could be used to treat infections, thus enabling a change in focus for medical practitioners (MacDonald 1998). Prior to this time medical energies were focused mainly on understanding and treating infectious diseases.

The Lalonde report of 1974 (Lalonde 1996) was the first comprehensive theoretical statement in the public health arena resulting from discoveries in the field of non-infectious disease epidemiology (Terris
1996, MacDonald 1998). The Lalonde report has been credited as being an attempt to move Canadian health expenditure away from the direct expenditure and focus on health care organizations, towards reorientation of health services to prevention of illness, primarily through encouraging lifestyle change (Terris 1996).

Three main approaches to health and health care identified in the literature and already discussed in previous sections of this literature review were the medical approach, the behavioural approach and the socio-environmental approach. The medical approach emphasised the scientific methods of disease prediction, disease control and medical intervention. The behavioural approach in effect is an extension of the medical approach with the addition of social interpretations of the causes of ill health and a focus on individual lifestyle or behavioural change directed towards improving health. The socio-environmental approach is referred to by Nutbeam (1986) as the approach that is most congruent with health promotion as it has an emphasis on maintenance of wellness, and a focus on positive health for populations (Labonte 1994). In the 1986 Health Promotion Glossary, Nutbeam documented that:

Basic resources for health are income, shelter and food. Improvement in health requires a secure foundation in these basics, but also information and lifeskills; a supportive environment, providing opportunities for making healthy choices among goods, services and facilities; and conditions in the economic, social and physical environments (the total environment) which enhance health. This inextricable link between people and their environment constitutes the basis for a socio-ecological concept of health promotion (Nutbeam 1986:334).
MacDonald (1998) has suggested that it is only since medicine applied reductionism\(^{34}\) to illness has progress in the eradication of disease served to separate biomedicine from health and to focus medicine on illness.

In 1998 the National Health Committee report on the social, cultural, and economic determinants of health in New Zealand defined the determinants of health as:

> All factors that influence health, including individual lifestyle factors, social and community influences, living and working conditions, and general socio-economic, cultural and environmental conditions (National Advisory Committee on Health and Disability 1998:102).

The report which focused in on the social cultural and economic determinants of health utilized the socio-ecological (or socio-environmental) model (Appendix 2.6) proposed by Dahlgren and Whitehead (1991) to describe the complexity of the determinants of health and how different factors in society impact on the individual. This socio-environmental view of the health determinants is aligned to the health promotive philosophical view. The model includes the factors initially identified by the Canadian Minister of Health as the determinants of health for each individual which were, *Human Biology*, the *Environment*, the *Health Care System* and *Lifestyle* (Lalonde 1996). Other lifestyle influences and proven effects on health add detail and reality to the model.

Labonte (1998), another Canadian, contended that to gain a total view of health determinants, influences on mortality and morbidity, or the

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\(^{34}\) **Reductionism** is a technique of investigation that has underwritten modern science by focussing on as few variables as possible, ideally two, so that one can be measured (a dependant variable) and the other investigated (independent variable) (MacDonald 1998).
traditional epidemiological measurements of non health, need to be considered along with influences on well-being. Labonte proposed that groupings of influences or health risks\textsuperscript{35} include physiological, behavioural, psychological risk factors, and what he termed as risk conditions which can include global and local environmental hazards, social and economic conditions such as discrimination, poverty and low social status. Labonte (1998) considered that when risk factors increased, mortality and morbidity increased, and when risk factors decreased, wellness increased. He further stated that each risk factor influenced and impacted upon others in a synergistic manner.

Two risk conditions that were not emphasised in the Labonte (1998) determinants of health, that have been identified in New Zealand as affecting rates of morbidity and mortality, and impacting on wellness, are a low level of education, and overcrowded, damp and cold housing (National Advisory Committee on Health and Disability 1998). Hassall (1996), considered that a low level of education can contribute to low social status and is linked to poverty and that poverty restricts access to education and full participation in society, as well as restricting physical needs such as access to housing, food and clothing.

Poverty, previously noted as the first identified health determinant has been implicated in the 1990’s as one of the greatest risk factors for increased morbidity and mortality (Terris 1996, Katz & Peberdy 1997, W. H. O. 1998a, National Advisory Committee on Health and Disability 1998, \textsuperscript{35}In epidemiology ‘at risk’ describes the susceptibility of an individual or group of persons to the occurrence of some predictable event or disorder which may result in loss, difficulty or ill health. Predicability in this case is based on mathematical probability (Nutbeam 1986:7).
Health Research Council 1999). The incidence of what are termed poverty-related diseases, such as tuberculosis, rheumatic fever, meningococcal diseases, asthma, glue ear, iron deficiency anaemia, and infant mortality, have all increased in New Zealand in recent years. There are also claims that stress associated with poverty has been a contributing factor to increased reports of domestic violence, child abuse, children left at home alone, sole parentage, relationship breakdown, youth suicide and child crime (Stephens & Waldegrave 1997).

As part of the New Zealand Poverty Measurement Project 36 Stephens and Waldegrave (1997) developed a poverty measurement, with the aim of providing information on the incidence and severity of poverty in New Zealand. Methodology used for the project included two focus group meetings held to develop two financial estimates. One an estimate of what was considered to be enough money for a household to participate adequately in their community, and the second an estimate of how much money was required for minimum household expenditure (Davidson & Tolich 1999). Findings of the project included that the incidence of poverty in New Zealand is highest for those with children and increased with the number of children in a household. Maori, Pacific and sole parents, especially those with large families, were found to have a high incidence of poverty which was determined to have doubled during the 1984 to 1993 period (Stephens & Waldegrave 1997).

36 The initial stages of this research were carried out in Porirua, the community in which my research project was undertaken.
document defines poverty in two ways; **absolute poverty** is below:

> some absolute standard of minimum requirement for survival and functioning in a community (National Advisory Committee on Health and Disability 1998:102).

**relative poverty** is:

> identification of a gap between what is and what might be, showing that potential exists for improvement. It is measured by comparing individuals or groups and relating them to some norm, defined locally, nationally or internationally (National Advisory Committee on Health and Disability 1998:107).

Measurements of poverty have usually utilized socio-economic scales (SES) that have categorised employment groups into numerical groups or classes, with group one being the highest and group five the lowest. In New Zealand the Elley-Irving scale (Elley & Irving 1972) of male occupations, last updated from the 1981 census, was the most utilized model. In 1996 Davis, Howden-Chapman and McLeod updated this scale using population norms for men and women in the paid workforce. This more complex model allowed for part time work patterns, and during development identified inequalities in pay rates for women and Maori, who earned substantially less than was expected for their education, age and occupations. The updated scale still does not incorporate persons who are not in the paid workforce, including housewives, students, beneficiaries and the retired. This still limits the usefulness of the tool to define all groups with increased risk to health (Davis, et al. 1996).
Crampton, Salmond and Sutton (1997), developed an Index of Derivation, the NZDep91 using ten variables from the 1991 census, that were determined to reflect ‘dimensions of material and social disadvantage’. The variables were income, transport, living space, home ownership, employment, qualifications, and social support. Validation of the index included investigations into technical aspects of the index, exploration of scores in specific areas and correlation with key health variables. The final step in the process of development was correlation with the health outcomes known to be associated with deprivation. These included mortality rates, hospital discharge rates, and ratios of registrations for lung cancer. A scale that provided a deprivation score of one to ten (with one the lowest and ten the highest level of deprivation) was developed for each geographical mesh block\(^{37}\) in New Zealand (Crampton et al. 1997). Since this time the NZDep96 has been developed from the 1996 census data (Health Research Council 1999).

Development of these measurement tools is important because research has demonstrated that unemployment, poverty and housing have a more significant impact on health than the health care system itself (Davis, et al. 1996). Therefore to predict disease patterns and to provide adequate and appropriate planning to support prevention of disease and promotion of health accurate assessment of what is occurring and likely to occur, in which areas of the country is essential. From these data objectives and funding for specific programmes can be decided (Burton, Richards, Briggs and Allan 2000).

\(^{37}\) Mesh blocks are geographical units. Each mesh block contains a median of 90 persons. (Crampton et al. 1997).
The report on *The Social, Cultural and Economic Determinants of health in New Zealand* (National Advisory Committee on Health and Disability 1998) utilized the model (Appendix 2.6) developed by Dahlgren and Whitehead (1991). This report identified the key determinants of health in New Zealand as, income, poverty, employment and occupation, education, housing, culture and ethnicity (National Advisory Committee on Health and Disability 1998). Ethnicity has been identified for Maori as a factor contributing to inequality for health outcomes. Burton et al. (2000), stated that while much of the relatively poor health status of Maori (who made up 15% of the New Zealand population in 2000), had been linked to poorer socio-economic status, factors including higher levels of smoking among Maori women, and under-utilisation of primary, secondary and tertiary health services, have led to a health gap for this population (Burton, et al. 2000). Population based services and facilities (such as water, sewage, transport and recreational facilities), and social cohesion and social support, were also identified as factors relevant to health inequalities in New Zealand (National Advisory Committee on Health and Disability 1998).

Measurements of health status used in the *Social, Cultural and Economic Determinants of health in New Zealand* (National Advisory Committee on Health and Disability 1998) report used national quantitative measures of the major causes of morbidity and mortality, infant mortality rates, birth weight, life expectancy, health status of Maori and Pacific people, and disability statistics.

Childhood focused recommendations from the report included that:
• the Minister of Health require the Health Funding Authority to fund a national programme to increase uptake of childhood immunisation, particularly among Maori, Pacific children, and children from low socio-economic groups.

• the Minister of Health seek further advice on the effectiveness of existing home visiting programmes in New Zealand to ensure they are reaching the groups who would benefit most.

• the Minister of Health work with the Ministers of Maori Development, Education and Social Welfare to identify further inter agency initiatives to improve health and developmental outcomes in children in disadvantaged circumstances (National Advisory Committee on Health and Disability 1998:77).

The 2000, New Zealand Health Funding Authority population health response to improving health and reducing inequalities in health strategy was developed to be used across all sectors of health service planning and delivery, including personal health, public health, mental health and disability support (Burton et al. 2000). The report acknowledged that decisions made in other government agencies (such as housing, education, social welfare, and employment) would also have an impact on the health and independence of New Zealanders (Burton et al. 2000). The strategy utilized a targeted (focused on those at greatest risk) and universal (whole population) approach - for example targeted the 20% of non immunised children while maintaining the strategies that ensure that universal measures maintain the current 80% immunisation rate (Burton et al. 2000). Objectives of the strategy were documented as working to:

• Target critical and achievable areas as a first priority

• Demonstrate proactive and visionary leadership that promotes a broad view of health

38 A population health approach takes into account all determinants of health, seeks to empower and support individuals and groups to take greater control over issues that affect their health (Burton et al. 2000).
Fund effective, accessible and innovative health sector interventions
Promote consideration of the impact on health of social and economic policies
Fund effective, population based services and environmental measures
Promote community development processes
Build and maintain effective partnerships
Build the capacity of Maori community and providers
Build the capacity of Pacific peoples community and providers (Burton et al. 2000:18)

Examination of these objectives suggests to me that they will require a range of quantitative and qualitative tools to measure outcomes, if they are to be utilised. This is often difficult to achieve, and may have been a reason why the health objectives in 1996 were not deemed achievable or able to be met or reported upon (Ashton 1999).

MacDonald (1998) addressed the complex issue of measuring quality of life health outcomes and considered that a compromise is likely in the setting of objectives. Otherwise the danger is that objectives that are easily measured will prevail rather than the most relevant objectives for population health needs. MacDonald (1998) further considered that in the United Kingdom government documentation and objectives for health targets still reflected a medical view of the determinants of health, that considered health as an absence of disease.

It would appear that although there has been a broad and holistic recognition of the determinants of health in New Zealand the objectives stated in the most recent New Zealand policy documents (King 2000, 2001a) aim to reduce disease rather than supporting health per se. I consider that this could have the effect of reducing the scope and focus on holistic health promotion in New Zealand.
It is with this in mind that I present the final section in this chapter. As the focus of this thesis is based on the promotion of health the various interpretations of what the term health has been interpreted to mean require an exploration, albeit brief, compared to the vast literature on the topic. The following section will therefore explore the notion of health upon which the ideas in many of the previously discussed ideas are founded.
2.7 Towards a Definition of Health

It is widely acknowledged that the most commonly documented definition of *health* is that contained in the World Health Organization constitution (W.H.O.1948), which stated that:

Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. (W. H. O. 1948)

This definition reflected the most relevant consensus on health at that time and was an attempt to encompass all the notions of health from many cultures and countries (Kinloch 1985).

Since 1946 the World Health Organization has discussed, and continued to refine and reshape ideas and meanings of the definition of health as knowledge of the causes of illness and determinants of health have been discovered. Many analyses of health have critiqued the 1948 definition because it constitutes a reflection of the medical, illness focused ideology of ‘health’ and as such it is too closely aligned to Eurocentric thinking. It was further considered that this allopathic approach to health is reductionist as it deals with the specifics of disease (symptoms, pathology, aetiology, diagnosis and cure), which have been normalised through the growth of expert doctors and researchers (MacDonald 1998). It was the growth of these medical sciences that also supported the emergence of

39 *Allopathic medicine* is the type of medicine practiced by western medical practitioners. The term can be used interchangeably with regular medicine, orthodox medicine, conservative medicine or scientific medicine and is in contrast to alternative, Eastern, complementary or homeopathic medical practice (Weil 1996).
health work as a formal professional area of expertise (Katz & Peberdy 1997). Patients in this model were conceptualised as largely inactive recipients of expert knowledge and prescribed intervention from a professional (MacDonald 1998). The problem with this approach is that:

the medical model has shaped peoples perceptions of health and illness and has altered their ability to deal with illness (MacDonald 1998:52)

Research into the meaning of health at the personal level has identified the three main conceptualisations as being: health in a vacuum, discussed as the lack or absence of disease; reserve of health, discussed as a quality that includes resistance to illness; and, equilibrium, discussed as an active awareness of the balance of the body (Katz & Peberdy 1997). Terms often used to describe disruptions to health are: illness, which is defined as a subjective state of feeling ill or unwell; sickness, which is defined as reported illness; and, disease, which is defined as specific conditions of ill health or a pathological state (Katz & Peberdy 1997).

Health referred to as a state of well-being, (W.H.O.1948) is further defined by Downie et al. (1996) as a subjective estimation of mood or level of happiness on a given occasion. Labonte (1998) described the various fields of well-being or positive health as including physical, mental and social dimensions that overlap and involve; vital energy; an ability to do things; a meaning and purpose; a feeling of control over life and living conditions; a community connectedness; and, an enjoyment of good social relations.

The notion of health as a positive or salutogenic notion is one that is philosophically aligned with the idea of equilibrium, and proactive
approaches to health which are aimed at maintaining balance and thus well-being. The *health in vacuum* conceptualisation of health is aligned to the illness focused medical view of health, as absence of disease (usually in the physical or mental sense). Positive health is defined by Nutbeam (1986) as:


As this work has progressed I have been struck by the confusion and profusion of terminology used to describe what could more correctly be termed *disruptions to health*, and the treatment of these disruptions. Discussions of health in the literature and also in everyday Western culture euphemistically define illness, sickness and disease, and their care, as *health care*. I consider this is / has been likely to confuse a person or group receiving care and what they may expect of their involvement with a health professional. Another dilemma within the literature has been the silence of the spiritual dimension of health as a component of holistic health. Most discussions and models of health from the western and more specifically European countries have included physical, mental and emotional health as dimensions, but have not addressed the spiritual dimension. It was not until the 1998 revised *Health Promotion Glossary* (Nutbeam 1998) that spiritual health made an appearance in the World Health Organization literature, with the brief statement within the definition of health that:

>Today the spiritual dimension of health is increasingly recognised (Nutbeam 1998:1).
I have found this fascinating given the tradition of European nations to colonise the world, often in the name of spreading spiritual enlightenment, usually in the name of Christian religions. Literature from the colonised world has been more forthcoming. O'Brien (1998), from the USA, stated that:

Spirituality, as a personal concept, is generally understood in terms of an individuals' attitudes and beliefs related to transcendence (God) or to the nonmaterial forces of life and of nature (O'Brien 1998:4).

and

Religious practice or religiosity, however relates to a person's beliefs and behaviours associated with a specific religious tradition or denomination (O'Brien 1998:4).

O'Brien (1998) considered that this was an important distinction to make in holistic nursing practice to ensure that the patients' spiritual needs were not neglected by a nursing focus on religious practice.

In 1986 Nutbeam defined health by restating the World Health Organization definition but then went on to explain that:

Within the context of health promotion health has been considered less as an abstract state and more in terms if the ability to achieve one's potential and to respond positively to the challenges of the environment. In these terms, health is seen as a resource for everyday life, not the object of living; it is a positive concept emphasising social and personal resources as well as physical capacities (Nutbeam 1986:p344).

It is this definition that is related to the health-promoting school philosophy and as such will be taken as the meaning of health in this thesis. However other health related concepts need to be explored and understood to set the context in which this research is situated.
Kinloch (1985) has articulated the misnomer of ‘health’ in illness care in a study of Samoan health practices, in Samoa and New Zealand. The study report addressed the issue of language in the statement:

When Western trained health professionals are ‘talking health’ in the context of cross-cultural communication the talk follows a common line of inquiry. They question me on topics they think are pertinent to their medical practice and to the provision of health care. In the name of talking health they are talking about sickness and its management (Kinloch 1985:7).

Kinloch (1985) and other authors who have discussed Samoan health and health beliefs have identified the significance of the spiritual dimension of health for Pacific people.

Samoan people believe that good health occurs because people live in harmony with the environment, the god(s) and their deceased relatives (Finau 1994:15), cited in Tanuvasu (1998:44)).

Tanuvasu (1998) went on to state that:

Spiritual, mental and physical illness occurs if this harmony is disturbed (Tanuvasu, 1998:44).

Kinloch (1985) also discussed that Samoan people do not talk about health as an absence of sickness, neither do they talk about sickness as a lack of health or well-being. Health is not considered something that can be promoted, and sickness is not considered as something that can be prevented.

Samoan people see sickness as an inevitable, unpredictable and powerful discontinuity in the flow of life, a disruption of the social order (Kinloch 1985:15 &16).

For Samoan people ‘doing sickness’ is seeking to re-establish the spiritual wholeness, not just of the sick person but also of the social group through the process of caring and curing the sick person (Kinloch 1985:16).
These ideas are similar to the Cook Island perspective of health described by Mitaera (Laing & Mitaera 1994) and are also congruent with the equilibrium and awareness of the balance of the body conceptualisation of health described by Katz and Peberdy (1997).

New Zealand Maori models of health developed since the 1980’s also include a strong spiritual component and provide a context within which approaches to health and health care can be more readily understood in contemporary New Zealand (Spicer, Trlin & Walton 1994). The model of Maori health most commonly referred to in the literature, and that utilised within the *New Zealand Health and Physical Curriculum* (Ministry of Education 1997a) is *Te Whare Tapa Wha*, which was first proposed by Durie in 1983. In this model, health is conceptualised as the four walls of a meeting house (te whare tapa), with each wall representing a separate component of health and each component considered as equally necessary to ensure shelter, coherence and to maintain strength and symmetry.

- The components are Taha Wairua, Taha Hinengaro, Taha Tinana and Taha Whanau. Taha Wairua is the spiritual dimension of health, the key aspect of which is the capacity for faith and wider communion. The belief is that the spiritual dimension of health is related to unseen and unspoken energies.
- Taha Hinengaro is the mental dimension of health, the key aspect of which is the capacity to communicate, to think, and to feel. The

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40 Laing previously published under the name Kinloch.
belief of the mental dimension being that that mind and body are inseparable.

- Taha Tinana is the physical dimension of health, the key aspect of which is the capacity for physical growth and development. The belief is that the physical dimension of health is necessary for optimal development.

- Taha Whanau is the extended family dimension of health, the key aspect of which is the capacity to belong, to care, and to share and includes the belief of the extended family dimension of health is that individuals are part of wider social systems (Durie 1998).

Durie (1994) considered that Maori models of health while emphasising the value of traditional Maori health belief systems are complementary to western medical practice.

Philosophies that relate to Maori health also include their relationship to, and recognition of, Te Tiriti o Waitangi (the full text of which can be found in Appendix 2.7). According to Durie (1994) the original motivation for Te Tiriti o Waitangi stemmed in part from health concerns and Te Tiriti o Waitangi was considered a positive intervention to reduce the deleterious health consequences of colonisation and the need for protection against unfair marginalisation of Maori by British settlement. An aim of Te Tiriti o Waitangi was to ensure the well-being of Maori (Durie 1994). The three articles of Te Tiriti o Waitangi relate to governance or sovereignty (Article the First), tino rangatiratanga or a continuation of existing property rights (Article the Second), and citizenship rights or equality and equity between
Maori and other New Zealanders (Article the Third) (Durie 1994, Cram 1999). In reality, the intent of Te Tiriti o Waitangi has not yet been honoured, and the health of Maori has not been protected (Cram 1999). At health hui⁴¹ held in the 1980’s and 1990’s Maori claimed that their health was entitled to protection as a taonga⁴² under Article Two of Te Tiriti o Waitangi. Durie (1994) considered that the third Article was most relevant to Maori health. However, Cram (1999) asserted that the document should be treated as a total agreement, which is greater than the sum of its parts. Cram (1999) also considered that Tino Rangatiratanga, or Maori self-determination, was the most controversial aspect of Te Tiriti o Waitangi.

It was not until 1988 that the Royal Commission on Social Policy recommended that the three principles relevant to both social policy and Te Tiriti o Waitangi should be recognised as Partnership, Participation and Protection (Durie 1994). Recognition of Te Tiriti o Waitangi is now considered essential to the health of Maori and as such it is especially relevant to health promotion. It has been argued that only when Maori land claims are settled in accordance with the intent of te Tiriti o Waitangi, and the language and culture are restored, will empowerment of Maori lead to improved health outcomes for them (Durie 1994).

It is within the context of the literature presented and discussed that the design of this research is situated. Essential to this research is the

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⁴¹ A hui is a meeting on a marae for social, business, or religious purposes: A meeting anywhere of Maori people, with occasional inclusion of non-Maori to discuss Maori matters. (Orsman and Orsman 1994).
⁴² Taonga goods: treasure, in recent use, a treasured artefact, constructor person (Orsman and Orsman 1994).
understanding of the philosophy of health promotion and to underpin that comprehension literature and related discussion that encompassed the activities and growth of the World Health Organization, the New Zealand development of health policy in relation to the World Health Organization, the Health Promoting school development, the determinants of health and the meaning of the concept health has been presented.

The following chapter will present the method of inquiry and explore the rationale for selection of the method and collection of evidence.
3 METHOD OF CHOICE

In this chapter, the case study method which was introduced in chapter one will be rationalized, considerations explained and research protocols outlined.

3.1 Rationale

My initial interest in this research arose from concerns regarding health education and school nursing in New Zealand which I perceived could potentially impede self-knowledge, self care and access to health care by primary school aged children. To gain an understanding of what was currently occurring in the primary school health context I considered that analysis of evidence from the field was required. Following examination of the literature (chapter two) I determined that it was important to use a health promoting philosophical approach (Hartrick et al. 1994) whilst gaining relevant evidence. That is, I considered it was essential to take the position or come from the ontological view of working with people in the context I wished to explore – a primary school. I considered that an exploration from this position with access to the ideas, opinions and points of view of the client, actor or research participant\(^43\) was more congruent with the purpose than to solely gather and interpret evidence from the viewpoint of myself as researcher. This positioning guided me towards critical\(^44\) and

\(^{43}\) **Client** is a term used by community nurses for the person with which they are working, **Actor** is the term Stake (1995) used for a person or persons who participated in case study research.

\(^{44}\) The **Critical** paradigm focuses on the critique of economic structures, and emphasises emancipatory outcomes (Grbich, 1999:7).
Wass (1994), in a discussion of research methodologies relevant to Primary Health Care and Health Promotion, considered that *Action Research*\(^{46}\) (Kemmis 1985, Rowling 1997) and *Feminist*\(^{47}\) (Lather 1992) research methodologies had a lot to offer because they included participants as research partners, aimed to raise critical consciousness, and took care to ensure the findings were able to be utilised by participants. When discussing research participation Reason (1994) also advocated for co-operative participatory action research and action inquiry because of the self-reflexive and liberating possibilities of the approaches.

While Action Research and Feminist methodologies were considered during the design of this project, and have been utilised to inform the design protocols, they were not regarded as entirely appropriate for the reality of the participating school or the *actors* in this case study. The results of this research need to be utilised by the client group (the school) to assist them to facilitate change and improve the current health situation of students. That objective dictated that research protocols addressed issues of rigour and were presented in a manner that could be examined both as a whole as well as in smaller more specific units. Towards this end it was decided to use the health-promoting school framework (W. H. O. 1996) that

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\(^{45}\) The *constructivist* paradigm focuses on individual constructions of social reality (Grbich, 1999:7).

\(^{46}\) *Action Research* attempts to bring about change through an evaluation of a situation. The researcher achieves his or her aims by means of intervention, by working with people to help them change their environment, or by providing sufficient information to enable them to take responsibility for changes in their own life situations (Grbich, 1999:10).

\(^{47}\) *Feminist* methodologies include an emphasis on the location and exploration of power (Grbich, 1999:9).
included focused questions (Appendix 2.4) answers to which could inform and be used by the school.

A danger with this approach however was perceived to be that the project could become or appear to be too aligned with the scientific positivist\textsuperscript{48} paradigm, be viewed as too simplistic, and therefore tend to minimise issues\textsuperscript{49}. The dilemma was to meet the needs of the school (have a report containing valid or trustworthy evidence of what was occurring in context), of the researcher (complete a thesis that was philosophically aligned to my nursing beliefs), and the phenomenon (school health promotion), which required careful planning and methodological reasoning. This included supporting the health promoting practice of enabling ‘the person’ to tell their story (Hartrick 2000). Therefore rather than locate the study in a particular research paradigm that required a complete methodological approach, the case study method was selected.

The aim was that the research design could incorporate both qualitative and quantitative data collection and analysis methods, describe the complexity of the case, identify the main issues (Stake 1995) and address issues of rigour that would enable results to be considered valid (Yin 1994) and trustworthy (Emden & Sandelowski 1998a). It was Stake (1994, 1995) who asserted that case study is not a methodological choice, but rather a choice of object to be studied, when he stated that the

\textsuperscript{48} The positivistic (quantitative) paradigm holds with the mechanistic view that knowledge is concerned with ‘facts’ and the observed world, and that social laws underpin the development of the human species (Grbich, 1999:7)

\textsuperscript{49} Issues were used by Stake (1995) as a conceptual structure in case study research that was evaluative in nature. Stake considered that identification of issues draws attention to problems and concerns.
epistemological question of what can be learned from the case should drive the design of the study.

Case study research has not been well utilized as a method within nursing research and Yin (1994) and Stake (1978, 1994, 1995) who came from opposing philosophical paradigms are still the most referenced authorities on the method according to Zucker (2001).

Yin (1994), who favoured the positivist scientific approach to case study research, asserted that case study is the preferred research method when investigating:

a contemporary phenomenon within its real-life context, especially when the boundary between phenomenon and context are not clearly evident (Yin 1994:13).

Furthermore Yin (1994) considered that the case study’s unique strength was its ability to deal with a variety of evidence. This position was broadly supported by Anderson (1990) and Stake (1994) who contended that both qualitative and quantitative data collection methods could be used in case study research and that the common commitments of these methods were:

To bring expert knowledge to bear upon the phenomena studied, to round up all the relevant data, to examine rival interpretations, and to ponder and probe the degree to which the findings have implication elsewhere (Stake 1994: 245).

Stake (1994, 1995) however strongly supported a qualitative philosophical approach to the method through naturalistic data collection with the aim of giving the reader a description of contexts that could allow a personal understanding of how case participants view their world. Stake
(1994,1995) considered that by presenting multiple realities contextual understanding of the case was possible. This stance was supported by Zucker (2001) who discussed that case study research with an emphasis on the participant perspective can be used as a creative alternative to traditional approaches to descriptive research that could subsequently be used to guide nursing practice. The goal of qualitative case study method is to describe as accurately as possible the most comprehensive description of the case (Zucker 2001). The intent of the method from Yin’s (1994) perspective is the need of the researcher to collect data whilst being as unobtrusive as possible. The aim is to minimalise any changes in the environment or action of participants to reduce what has been termed the Hawthorne effect, caused by the researcher’s presence (Grbich 1999).

Stake (1994, 1995) and Robson (1993) considered that the case study researcher faced strategic choice about what needed to be understood, in what complexity and in what capacity the researcher should become involved with the participants in the process. This position was based on the assumptions that: it is not possible to examine every aspect of a case; there is no single reality; and, the presence of a researcher will make a difference to the research context (Stake 1995). Rather than attempt to quantify the description of a case or attempt to compare cases Stake (1995) supported a focus on selected issues within the case that were identified at the outset, or during the qualitative investigation. It was considered that these issues could lead to a deeper understanding for participants, the researcher and readers of the research (Stake 1995). This issues approach has been utilised within this project.
3.2 Case Considerations

My initial research proposal included two stages. The assessment phase, followed by an action research phase during which the intent was to work on the health issue/s the school wished to address. As the research progressed the decision was made to conclude the project following the assessment phase. Rationale for this change was that to complete a comprehensive assessment that included a high degree of detail and ideas for future action was a more natural conclusion to the project. That this conclusion was philosophically more congruent and practically more useful for both the school and the health services to use as a tool for reflection, discussion and future planning was also taken into account. It was further considered that the philosophical intent of health promotion and action research could be subverted if the school community was manipulated into a time frame for action driven by myself as researcher.

In the initial stages of the project it also became obvious to me that whilst some participants would be able to be fully engaged with the research, the time constraints for the majority of participants precluded an equal participatory partnership role for most members of the school community. Therefore case study method informed by a health promotion nursing practice approach of working with the client (Hartrick et al. 1994) was considered to be the most appropriate and congruent inquiry method. Units of study within the holistic overview of the school could involve different members of the school community in a manner that was respectful of their roles and other commitments, whilst also enabling them to contribute and participate as much as they considered possible. The intent was that during the research process I would become personally engaged with the
school community to facilitate the research process from the health promotive ontological position of possessing a human caring presence, appreciating multiple realities, respecting diversity, and valuing each person in context (Hartrick et al. 1994).

3.3 Researcher positioning

I locate myself as researcher with my personal interest shaped by my historical, social, political and cultural background. Beliefs and values about what I perceived as occurring in New Zealand primary schools in relation to health guided this study. The project is therefore not value free. Lincoln and Guba (1985) in discussing whether being value-free was valuable stated that:

A value is simply that criterion, or touchstone, or perspective that one brings into play, implicitly or explicitly, in making choices or designating preferences (Lincoln and Guba 1985:160).

Emden and Sandelowski (1998b), discussed goodness and criteria in qualitative research and considered that qualitative research was aligned to the post modern\(^{50}\) approach and criterion of uncertainty, where the researcher acknowledges that research outcomes are at best tentative, and further that no set of standards can ensure, with absolute confidence, that research findings are entirely valid.

I acknowledge that as part of the project planning and data collection, analysis, interpretation and composition of this research I have attempted to address validity and reliability, goodness and trustworthiness to

\(^{50}\) The Postmodern or Poststructural approaches share an emphasis on deconstructing representations of social reality (Grbich, 1999:4).
ensure the requirements of both quantitative and qualitative paradigms that have informed this project are met. I consider that whilst research cannot be value-free, when pursuing health promotive research practice a key feature of the process is a trust in the power of the subjective experience (Wass 1994) and the influence of norms, perspectives and assumptions. I have made assumptions and acted in multiple roles in this project, which have been informed by my personal and professional perspectives, experiences, beliefs and values. I have located myself in the case study by using the first person in accordance with this philosophical intent rather than taking the positivist ‘researcher’ stance.

**The Nurse as Researcher role**

Based on my experience one assumption that I make is that a nurse who works with people in the community is familiar with being in the environment of the client and working on the terms the client sets in their environmental context. There is an awareness on the part of the nurse that if sensitivity and appropriateness to the client’s perception of their needs is not maintained the nurse will not have future access. A fine line between meeting the needs of the client and fulfilling professionally guided responsibilities to the client within professional practice is maintained to meet client and nursing objectives. The focus is, however, on the needs perceived by the client within the context of the scope of practice of the nurse.

As a nurse researcher in a New Zealand primary school I worked with my researcher objectives and carried an awareness of the role of a
nurse working in community practice. The client needs were met as part of the process of maintaining professional credibility and access and as part of the reciprocity required of a researcher in the field. The school worked with me and perceived me as a researcher as well as a nurse and to the Principal I was also (as a Head of School of Nursing) a colleague. I maintained awareness of these roles and aimed to respond to requests for assistance made by school members in a generous manner with the knowledge that the product that would be of most use to the school (the research report/thesis) would not be completed for some time. Smaller more tangible ‘rewards’ were considered essential to maintain interest, relationships and access. I have referred to my responses to health related requests by the school as when I have taken on the role of nurse as researcher. Stake (1994, 1995) discussed the case study researcher as ‘playing’ many different roles including teacher, participant, observer, interviewer, reader, storyteller, advocate, counsellor and evaluator. Therefore making choices about the options of how to participate in the field were part of the research protocol development, which was influenced by the need to be flexible in response to the specific research context (Stake 1994, 1995). My participation was shaped by the school that was selected as the case.
**Case Selection**

Different definitions of types of case study method have been described in the literature (Patton, 1990, Yin, 1994, Stake 1994, 1995). The case in this study was chosen *purposefully* (Patton 1990, Stake, 1994, 1995) as one integrated, complex, functioning system. The selected school had a strong commitment to health and I perceived that the ease of access and willingness of the school to participate made it more likely that extensive data and a deep understanding could be gained through an *intrinsic* study of this single school (Stake 1994). Because of the utilization of several units of analysis within the health-promoting school framework (W. H. O. 1996) this case study could also be considered as utilising an *embedded* case study design (Yin 1994). An *Intensity sampling strategy* (Patton 1990) was utilised for the purpose of investigating an information rich case that manifests the phenomena under study, but as a case is not extreme or unusual, compared to other similar types of cases (New Zealand primary schools). The school as a particular unique entity was considered to have information-rich potential because members of the school community demonstrated a high degree of awareness about health, and were passionate about how health status affected students’ learning.

The school that was purposefully selected – Cannons Creek Primary is located in the suburb of eastern Porirua in the Wellington region and is defined by the Education Review Office (E.R.O.2000) as having a socio-economic decile rating of ‘1a’. The ethnicity statistics in 2000 for the 215 students were 63% (135) Pacific Island, 28% (60) Maori, 6% (13)
Pakeha, 3% (7) Asian, with 51% of students female and 49% male (E.R.O., 2000). The school health ethos is encapsulated in the school’s advertising literature by the phrase ‘healthy children learn better’ and the Principal has stated that health is not just a taught subject at the school but that the school ‘does health’, or that health is a way of being at the school. The working title of the project as I prepared to engage with the school became ‘Doing Health’ in a New Zealand primary school: What does this mean?

3.4 Preparation for the study of the case

Preparation for the study was carried out with patience as protocols were established to deal with clarification of the focus, potential issues, aims, objectives, questions, methods, data collection processes, access to the case and the various sources of evidence as well as time dependant practicalities for participants of the research. The research proposal was developed after clarification of the aims, objectives, questions, and focus of the project, which followed an initial literature review. Selection of and approaches to the school, with subsequent informal agreement to participate were completed. Concurrently formal agreement from academic supervisors was also completed during preparation processes. An outline of ethical considerations, processes and timelines were a necessary component of the proposal documentation which accompanied the human ethics declaration submitted to the Victoria University of Wellington Human Ethics Committee for approval.
**Negotiating Access**

Access to the school was negotiated concurrent to the proposal development process. Negotiations included ongoing discussions with the Principal of the selected school during the 12 months taken to develop and refine the proposal. Following ethical approval from Victoria University of Wellington (VUW) (Appendix 3.1) and Whitiria Community Polytechnic (Appendix 3.2) which was a requirement for employees wanting to access research funding, formal meetings with stakeholders were arranged to explain the nature and purpose of the project. Glesne and Peshkin (1992) and Bell (1993) discussed the issues and processes in gaining access for educational research. Support was given to develop what they termed a *cover story* that could be communicated succinctly by the researcher in a manner that could be fully understood by the intended audience and included a researcher biography, together with an outline of the project scope, purpose and intended outcomes. Participant selection, benefits and risks, issues of confidentiality, intended access needs and philosophical intent to work with the participants were also suggested components of such a *cover story*. Bell (1993) stressed the need to consult, use common sense and courtesy, to never make assumptions and to retain an awareness that people are doing the researcher a favour when negotiating and maintaining access to a school. An awareness of these considerations was maintained throughout the research journey.

My *cover story* was initially developed and presented to the Principal of the school who gave tentative support to the project concept prior to formal approval by the Board of Trustees. The Board of Trustees was then presented with an oral and graphic version of the *cover story* (Appendix 3.3)
at a meeting during which access to the school and support for the study was requested. An informed consent form (Appendix 3.4) was subsequently signed by a Board of Trustees representative and the Principal (Appendix 3.5) which included the clause:

We understand that the Board of Trustees will be kept informed of the progress and findings of the research and the school Principal will first approve any publication of any information that identifies the school.

During the data collection phase it became obvious that maintaining the level of anonymity and confidentiality for the school that was initially discussed at the first Board of Trustees meeting was becoming difficult because of increasing community awareness of my engagement with the school. As Davidson and Tolich (1999) stated when discussing a thesis about a school in New Zealand:

New Zealand is such a small place that readers were easily able to identify the school, the Principal and several of the teachers (Davidson and Tolich 1999:79).

Therefore permission was sought from the Board of Trustees to name the school in the report (Appendix 3.6), which was granted (Appendix 3.7).

**Ethical Considerations**

As discussed, the need to take the role of other or consider how the research process may affect the participants was an important ethical component in the planning of this research project. Tolich and Davidson
(1999) considered that the five principles of ethical conduct for social science researchers should include:

- doing no harm;
- voluntary participation;
- informed consent;
- avoiding deceit; and, confidentiality or anonymity.

Other considerations made in the design of this project included the postmodern and feminist ethics of power which included on-going negotiation before and during the project when considerations of what would be achieved, who would benefit, who would make decisions, and how knowledge would be shared were considered (Lather 1992, Grbich 1999). Planning the project in a manner congruent with the intent and purpose of health promotion that addressed all five ethical principles in an open and honest manner was also given attention. As discussed this included negotiating access in a way that was respectful, appreciative of the reality of school business and that acknowledged the diversity and needs of school members. Producing an outcome that would be useful for the school was as stated also part of this consideration. The reflective critique suggested as part of the postmodern and feminist ethical process (Lather 1992, Grbich 1999) was maintained through the use of a personal journal in which my actions and relationships were explored against the philosophical and ethical intent of the project.
Methods of participant recruitment

Following ethical approval and formal approval from the Board of Trustees the project was explained to each individual research participant or group as part of the research protocol, prior to their participation. The information sheet (Appendix 3.8) was presented and discussed, participant questions answered and expressions of interest to participate were formalised by the signing of a consent form. Individuals within the school were approached in person and people external to the school were phoned and interview appointments made at a time and place to suit the participant. In some cases an interview occurred opportunistically as part of the initial contact. Multiple interviews were held with the Principal, which were arranged in person, by phone or via email.

Regard for Ethnicity

As many participants were of different ethnicity to myself care was taken to ensure culturally appropriate actions were taken at all times to maintain the cultural safety of participants. For example, planning included identification of community leaders in the event that advice was required for appropriate research protocols pertaining to Maori and Pacific peoples in the school community. There was awareness of the fact that it was not appropriate for a Pakeha researcher to be involved in investigations into issues involving traditional Maori or Pacific knowledge. Davidson and Tolich (1999) considered that the most important requirement for cross-cultural research in New Zealand was that it should be a negotiated agreement. The fact that access was given by the Board of Trustees on behalf of the school community, on the schools terms, and that each stage of the project
involved negotiation, informed consent and the open agreement of the participants was an attempt to ensure the research met the needs of the community, and enabled co-operation and collaboration. It is hoped that the final report and any subsequent action taken by the school will also enable empowerment for the school community (Tones 1992), an outcome suggested as a focus for cross cultural research in New Zealand (Davidson & Tolich 1999).

3.5 Issues of Rigour

According to the positivist paradigm rigorous case study design addresses issues of construct validity (Yin 1994) achieved by collecting and converging multiple sources of evidence. This is also discussed in qualitative research methods as triangulation, which is the use of various sources of evidence or data that all point in the same direction relative to a given conclusion (Anderson 1990, Grbich, 1999), in a similar manner to determining one’s position by the use of multiple fixed points when sailing (Dixon 1996). The triangulation method in research is taken further than the use originally made of it by surveyors when they used the exact same type of measurement viewed from three different perspectives to gain one accurate position (Grbich, 1999). In research when multiple sources of data are collected to answer one component or research question data triangulation is achieved. The aim of the technique is to reach a more accurate and convincing research conclusion (Patton 1990). Multiple perspectives on the same data set aim to ensure theoretical triangulation,
and multiple methods of data collection aim to ensure *methodological triangulation* (Yin 1994).

Anderson (1990) stated that many critics of case study method argue that another researcher might reach a different conclusion from the data presented. This critique could be levelled at any qualitative research if there is an acceptance that research is not value-free and is constructed by the researcher (Lincoln & Guba 1985). Keeping an audit trail is a technique that can be used during the research process to document the ideas, developments, decisions and directions therefore allowing another to follow the researcher’s pathway and the logic of the conclusions reached. Clear documentation of these processes, protocols, and evidence including how they were gathered, analysed and triangulated is a method used in this project to overcome this potential problem.

Yin (1994) discussed that the way to ensure rigour in case study research was to follow the quantitative *positivist* paradigm of ensuring that the four aspects of validity and reliability, were considered before, during and when reporting the research. These aspects are: *construct validity*, that requires consideration during data collection with the utilisation of multiple sources of evidence, establishing a chain of evidence, and having key participants review the draft case study report during the composition phase; *internal validity* that should occur during data analysis by utilising techniques of pattern matching, explanation building and/or time-series analysis; *external validity* that takes place if multiple cases are utilised as part of the research design; and, *reliability* which should occur during data collection through using protocols and developing a case study data base.
Protocols in this project address construct validity, internal validity and reliability. External validity is not possible as only one case is being studied. Construct validity including multiple methods of data collection and analysis has included both quantitative and qualitative data collection and analysis methods. It is also considered salient to discuss validity and reliability in the interpretive, qualitative research paradigm. As stated the concept of validity through rigour in research is derived from the quantitative, scientific, positivist research paradigm (Emden & Sandelowski 1998a, Davidson & Tolich 1999), whereas use of the term trustworthiness is the more accepted term used to discuss validity in qualitative research (Lincoln & Guba 1985). Emden and Sandelowski (1998a) considered that trustworthiness involved good quality qualitative research that is thorough, informed, well written, balanced, useful and educative. Emden and Sandelowski (1998a) discussed the points made by Lincoln at a workshop they attended, at which Lincoln discussed working with Guba 10 years earlier (Lincoln & Guba 1985), when Lincoln considered that they had not fully appreciated that research quality standards interacted with ethical inquiry standards. Subsequently, authenticity/ethical criteria were developed to take into account the intent of democratic sharing of knowledge between researcher and participant. Lincoln (cited in Emden & Sandelowski 1998a) considered that interpretative research should be judged on ethical standards, and that qualitative research required intellectual and ethical rigour. The ontological positioning of the researcher was considered to be a key element of authenticity/ethics as the assumption was that all texts are located locally and to claim whole truth was
misleading, as community, voice, critical subjectivity and privilege can all influence what is written (Emden & Sandelowski 1998a). This position supports the view that case study researchers pass on to readers some of their personal meanings in the construction of knowledge through socially constructed events and relationships (Stake 1994,1995, Emden & Sandelowski 1998a, Tolich & Davidson 1999). Therefore the reader needs to be able to follow the protocols, through a comprehensive audit trail that enables them to judge the trustworthiness of the research.

The data collection techniques used in this study included use of a variety of data sources, multiple perspectives to interpret a single set of data and multiple methods to study a single issue. Documents, physical artefacts, archival records, unstructured interviews, semi-structured interviews, focus group interviews, observations and a structured survey were all utilized.

Each of the data collection techniques will be discussed in the following sections on sources of evidence.

**Sources of evidence**

Within this *intrinsic* case study units of interest embedded within the whole case were investigated. The health-promoting school framework developed by the World Health Organisation (W.H.O.1996) was used to guide data collection for each unit or component. These components and the checkpoints (Appendix 3.9) embedded within the health-promoting school framework cover the six areas of: school health policies; the physical environment of the school; the school’s social environment; community relationships; personal health skills; and, health services. These six areas
together make up an integrated holistic overview of all components of a health-promoting school (W.H.O. 1996).

Each of the components identified above encompasses specific subcomponents and checkpoints or questions that were used to guide data collection and will be used to present the research evidence in chapter four. An example is that under school health policies there is the sub-component of the school policy on healthy food. The checkpoints for this sub-component are:

- the school has taken action to ensure that healthy food is available to the students;
- the teachers act as role models by eating healthy food in school; and,
- healthy food is available at school social events (W.H.O. 1996).

To answer these checkpoints or questions each of the sub-components has been addressed as fully as possible through the collection of multiple sources of evidence from multiple participants. In the case of the school’s policy on healthy food, documents, archival records, interviews, health behaviour survey responses and observations were collected as evidence. Interviews were held with parents, teachers, the Principal, school staff and students. These multiple sources of evidence and perspectives were then used to respond to the specific sub-component checkpoints/questions, which are reported in chapter 5. A matrix of the convergent sources of evidence for each component has been developed and is presented in Appendix 3.10, as part of the research audit trail.

Project planning involved decision making and participant selection with consideration of concerning who could best provide what evidence, in what form, where and when. Sources of evidence were collected from many
people in the school community, including the Board of Trustees, the Principal, teachers, school staff, students, parents, and community members who had a health focused involvement with the school. Community members also included health professionals and educational personnel outside the school. As part of the process of data gathering logical leads were followed from previously gathered information. For example the Principal responded to open-ended questions by giving information that raised further questions in my mind and led to other sources of information or potential participants.

**Documents**

Yin (1994) stated that documentary information is likely to be relevant to every case study but should not be accepted as a literal recording of events that have taken place, because editing always occurs in documents to some degree. The person making the recording is liable to record observations that are most relevant to their personal view of the event (Yin 1994). Documents can be used to corroborate evidence from other sources and to provide leads for further inquiry. Strengths of documentary evidence are that they can be reviewed repeatedly, are unobtrusive to collect, are exact in details such as names, places and dates of events and can give broad coverage to the topic. Weaknesses include the potential for biased selectivity, reporting bias and the potential lack of access to some or all relevant documentation (Yin 1994).

Documents used in this study are listed in Appendix 3.11 and included school policies, which were accessed and screened for relevance to the topic. Medical room and absence records for the 2000 school year
were collected, collated and statistically analysed. The fortnightly school newsletter was collected during 1999 and 2000 and reviewed for health-related content and information that was then followed up in interviews with staff or relevant persons. Minutes of selected community health meetings held during 1999 and 2000 were collected. National and local newspaper and media clippings were collected during 1999 and 2000. Selected, health related local City Council reports relevant to school health matters were collected during 1999 and 2000. School nurse job descriptions, Health Funding Authority documents, health service clinic information, referral forms, brochures, and Ministry of Health circulars were also obtained.

**Physical artefacts**

The strengths of collecting physical artefacts are that they provide insight into cultural features and technical operations in the contextual environment (Yin 1994). Weaknesses include selectivity and availability.

In this study artefacts were collected opportunistically, usually when observations of some other activity were in progress and something that appeared relevant came to my notice. These artefacts included ‘deferred works’ priorities and suggestions for school improvements written on a staffroom whiteboard, class agreements for accepted behaviour written on a classroom blackboard, wall posters, children’s artwork and playground, classroom, corridor and staffroom decorations. Photographs of the school and school grounds were taken in 1999 and 2001.
**Archival records**

Yin (1994) considered that when archival records are being used the researcher needs to take into account the conditions under which they were collected and their accuracy as like any documentary evidence bias is likely to exist. Yin (1994) also warned that it was wise to be wary and cross check such information, as it is likely to have been produced for a specific purpose and audience.

Archival records used in this study, included Education Review Office reports, health service reports, minutes from community health meetings, newspaper articles, and letters.

**Interviews**

Interviews were the most common method used to collect evidence in this project. Appendix 3.12 lists the interview participants, type of interview/s, recording method/s and date/s of the interview/s. Interviews were one of the most important sources of information in this case study because relevant people could be targeted and information then gained using a variety of interview techniques. The strength of the interview method is considered to be that interviews can obtain the descriptions and interpretations of others, be insightful and provide rich data sources (Anderson 1990, Stake 1994, 1995). Weakness of the method can include bias due to poorly constructed questions, and response bias, when the participant could choose to withhold or emphasise information. Researcher bias can occur when questions are posed in such a manner that the participant is led in a certain direction.
My aim was to reduce researcher bias by constant personal awareness, use of reflection, research protocols and my experience in communication skills. Many of the skills used in interviewing, such as building trust, active listening, asking open-ended questions, interpreting answers, and the ability to be adaptive and flexible, mimic the ontological way of being that Hartrick et al. (1994) discussed as the health promoting professional stance used when working with a client group. I consider these were the generic skills I had developed and strengthened during my community and educational nursing practice and had utilised to effect during previous research experience. As much care as possible was taken during the planning and data collection phase of this project to ensure that the context of the interviews reduced possible technique weaknesses and strengthened the likelihood that participants were encouraged to give responses that were not constrained.

Yin (1994) considered that the three main types of interview used in case study research were open-ended, focused, and survey interviews. Hitchcock and Hughes (1989) defined nine types of interviews that could be of use in social science research, including unstructured (or open-ended) interviews that are a form of recorded conversation during which either the researcher or participant may initiate and expand on the line of interview related to the research topic. A semi-structured (or focused) interview was deemed to occur when a number of open ended questions are asked of the participant by the researcher and followed up with further questions to gather in-depth information and a comprehensive answer to the initial question. A structured (or survey) interview takes place when the
participant is given an opportunity to select one answer to a question from the choice provided by the researcher.

The interview techniques used in this study included unstructured, semi-structured, and structured survey techniques. Interviews were conducted with individual participants and with groups, commonly termed focus groups (Anderson 1990, Katz & Peberdy 1997, Davidson & Tolich 1999). To avoid terminological confusion the relevant interview terms defined by Hitchcock and Hughes (1989) will be used and further described and discussed in the following subsections.

**Unstructured interviews**

Unstructured interviews in case study method are interviews in which participants are often called key respondents or key informants and are asked for both factual information and their opinions. In some cases participant insights can be sought during these interviews, and these can lead to further inquiry leads (Hitchcock & Hughes 1989, Davidson & Tolich 1999). Key informants are considered critical to case study success as they can suggest sources of corroborating evidence and initiate access to other sources of relevant information (Yin 1994).

In this study multiple open-ended interviews were carried out with the Principal, school staff, teachers, Board of Trustees members, health service personnel and with students. These interviews occurred either during formal appointment times or more usually during opportunistic moments during visits to the school. The Principal was the crucial key informant because of his knowledge of the organisation, links to other
people in the school and wider community and access to school information. Unstructured interviews were not audio recorded but comprehensive notes were taken during and/or after the interview.

Semi-structured interviews
Semi-structured interview protocol incorporated the use of a schedule of focused questions adapted from the sub-components of the health-promoting school framework. This schedule was used to ask questions of individuals and groups. Semi-structured interviews were usually flexible which is why they are favoured in educational research (Hitchcock & Hughes 1989) as they gave the opportunity for me to probe and expand on the participant’s initial responses. Semi-structured interviews in this project were usually formal and recorded on audiotape for the purposes of checking my written notes for accuracy, and to reduce the amount of recording bias. A degree of recording bias was apparent to me when, following the first interview, the written notes made during and directly after the interview were compared to the tape recording. It was apparent that I had not made notes on information I had not considered noteworthy during the interview, which on reconsideration was significant evidence. Audiotapes were used only after formal, signed, informed consent was given by the participant/s. The tapes were not transcribed for analytic purposes as the focus was on the responses to specific questions that sought aggregate perceptions or knowledge from multiple participants (Stake 1995) rather than theory generation or any other qualitative analytic method (Glaser & Strauss 1967).
Care and attention was given to planning the environment for each interview to ensure there would be little or no interruption. Interviews were carried out in the participant’s choice of environment, and prior to commencement of the interview the purpose and focus of the interview were re-clarified, and use of the tape recorder and the issues stated on the signed consent form were reiterated. Sources of evidence using this technique included the Principal, teachers, students, Ministry of Education and Ministry of Health personnel, health service managers, nurses, and health education providers.

**Focus group interviews**

*Focus group* interviews can produce considerable and complex information in a short space of time (Davidson & Tolich 1999) and usually involve six to 10 participants who have a common interest in the topic under consideration. The benefit of the focus group interview is that an answer from one person can spark a memory or a more detailed followup response from another participant (Anderson 1990, Katz & Peberdy 1997, Davidson & Tolich 1999). This technique can often raise new ideas as well as allowing the interviewer to probe and clarify answers. Anderson (1990) considered that:

> Focus groups work because they provide a setting in which individuals are comfortable in self-disclosure and, furthermore, where group dynamics create a chain of reaction designed to exhaust the views on the issue or topic (Anderson 1990:242).

Focus groups were used in this study with two teacher groups on one occasion for each group, with one group of students on two occasions,
and with one group of parents on one occasion. One group of teachers of senior classes and one group of teachers of junior classes respectively, were interviewed to answer health-promoting school related questions. The protocol included meeting with both groups of teachers individually to discuss the purpose, focus, recording and utilisation of interview information. Consent forms (Appendix 3.13) and information sheets (Appendix 3.8) were left with the group and a tentative date for the interview made. Once signed consent forms were received the meeting date, time, and place for the interview was confirmed. The interviews took place at a time the teachers normally met, after school, in an empty classroom. Interviews were audiotaped to ensure as much information as possible was captured and to allow me to focus on facilitating the group rather than taking notes during the process. Comprehensive notes were made immediately following each interview.

Two semi-structured focus group interviews were held with a group of six students. Polson (1998) considered that the advantages of using focus group techniques when interviewing children included the environment being less threatening and children being able to provide support for each other. This appeared to hold true for these students with the first interview being held to explore aspects of the student health behaviour survey and to check reliability following data analysis. The second interview focused on specific questions related to the school policies on health. Informed consent was gained from parents of the students prior to the interview. Students who wanted to participate took the consent forms (Appendix 3.14) and an information sheet (Appendix 3.15) home to their parents to be signed and
returned. The first six students who returned signed consent forms were selected to form the focus group. The interview process included children being released from class half an hour prior to the lunch break. This followed negotiation between the Principal and relevant teachers for an appropriate time that would not disadvantage the students’ learning. The interview took place in a quiet meeting room with an oval table around which the students and I sat.

The purpose, focus and utilisation of information, taping and confidentiality of information for the student interview were all discussed, prior to interview commencement. Ground-rules for behaviour during the interview were also discussed with the student group prior to commencement of the interview. Interviews were taped to ensure as much information as possible was captured and to allow me to focus on facilitating the group rather than taking notes during the process. Comprehensive notes and thoughts were also made immediately after the interviews. The students were very keen to participate and share their opinions. The first meeting was disrupted by a school fire drill, which served the purpose of allowing observation of policy in practice and checking student knowledge of the evacuation process. It also demonstrated the need for researcher flexibility and accentuated the lack of control I had over the environment, which is common in case study research (Stake 1994, Yin 1994).

A focus group interview was held with self-selected parents to discuss the results of the student health behaviour survey and inquire about school policies. An information sheet and questions (Appendix 3.16) were prepared and given to participants and consent forms (Appendix 3.13)
discussed as part of the introductory protocol phase of the meeting. The process to set up this interview included discussions with the school staff and Principal as to where, when and what approach to take for the interview. The interview was advertised in the regular fortnightly school newsletter and food was provided. The time set was an hour prior to the regular weekly computer classes associated with the computers in homes project. Initially three parents attended. For one parent the purpose of attending the meeting appeared to be an appreciation of and desire to participate in the forum that was publicised in the newsletter. The newsletter stated that I would present and discuss the student survey results and answer general questions about health issues for their children. For the other two parents that initially attended the meeting their reason for attending appeared to be a need to discuss child health issues and to gain health related information.

Mid-way through the interview three more parents, who were fairly new to the school and the country, and spoke limited English arrived and took part in the interview. They subsequently returned signed consent forms and written answers to some of the questions posed (Appendix 3.16) which an interpreter had helped them complete. At the end of the interview they thanked me for helping them with their English language learning. This focus group interview was not audiotaped, but comprehensive notes were made following the meeting and consent forms were signed by the three initial participants prior to the commencement of the interview.

51 The computers in homes project was commenced by the 2020 Trust in 2000 to provide computers to 25 homes for the purpose of encouraging computer literacy for students and parents. Families were provided with computers, access to the internet and classes for parents, taught by local Polytechnic computer students, were held once each week at the school.
**Structured survey**

Yin (1994) considered that a survey within a case study could be used as a type of structured formal interview that allowed the participant to answer set questions that would be able to be quantitatively analysed.

Davidson and Tolich (1999) stated that survey research:

Takes a snapshot of a group’s attitudes, values or behaviours at one point in time (Davidson & Tolich 1999:126).

The Student Health Behaviour Survey (Appendix 3.17) was developed and utilised as a health behaviour assessment tool in New South Wales, Australia (Bauman, Hogan & McLellan 1996). The aim of that survey was to allow a better understanding of the prevalence and distribution of adolescent health behaviours. The original survey was administered to 3918 students in grades six (mean age 11.88 years), eight (mean age 13.96 years) and 10 (mean age 15.97 years), in a range of randomly selected State and Catholic schools. Permission to adapt and use the survey tool for this research project was given by Adrian Bauman of the National Centre for Health Promotion, University of Sydney. The aim of utilising the survey was to gain information about the health behaviours of senior students at Cannons Creek School in a form that could provide comprehensive knowledge and a possible comparison to the original New South Wales survey results.

The students in the Cannons Creek School survey fell into a lower age range than those in the original Australian study. The youngest cohort in the Australian survey ranged in age from 9.67 to 12.75 years, with a mean age of 11.88 (sd 0.52). The New Zealand sample ranged in age from 7.58
to 12.25 years with a mean age of 9.86 (sd 1.05). Prior to the survey being used the tool was discussed and adapted in consultation with the teachers and Principal at the school. The main alterations were to language to allow for the New Zealand context, and for the age of the student group.

The draft survey was piloted with a group of seven students aged 8.12 to 12.66 years (mean age 10.33 years). Feedback from this group suggested that some words were hard to understand, and that the tool was too long and complex to hold the attention of students that were not comfortable, competent readers (more males than females fell into this category). The survey was reviewed in light of this feedback, wording was altered and some questions removed. The questionnaire was not altered in any substantial manner however, as the school considered that all the information was useful and should remain for comparisons to be made with the original survey.

The survey was administered to four classes of students in the senior school over a period of two days, following approval for the process and personnel to be involved being gained from the Board of Trustees. The principal, teachers and in some cases, teaching assistants and I were in the room when the survey was introduced and given to each class.

Confidentiality was discussed with the students and staff, and most students covered their work with a book as they completed the questionnaire. To follow the school policy and practices on inclusion the survey group included some students with special learning needs and the teaching assistants helped these children to complete the survey. The Principal read out each question to the group, with the aim of overcoming
the varied reading levels of the class, while the researcher and teacher assisted individual students as necessary. Some students read and completed the survey unassisted.

Following completion of the written survey I weighed and measured the height of each student, entered these results on each student’s survey then collected the numbered questionnaires for analysis. Teaching staff did not have access to any of the completed surveys. Following analysis that incorporated the grouping of questions into conceptual variables (Appendix 3.18) a discussion was held with the Principal regarding specific areas of concern, tentative results were presented to the Board of Trustees, then reliability was checked using the focus group interview process with six survey participants. The focus group interview was held seven months after completion of the health behaviour survey.

Observations
Observation as a data gathering technique can take a variety of forms depending on the methodology and purpose of the activity. Different observation methods can demonstrate the differences between the quantitative research approach and qualitative research methodologies. Quantitative research tends to approach observation as a data collection method for the purposes of collecting objective data such as the number of occurrences of a particular action or event in specific circumstances. In this method specific variables can be considered and the evidence used to confirm or disconfirm the research hypothesis through a process of deduction. Recording tools are usually schedules or observation records
that can be analysed statistically. With this approach the researcher takes extreme care not to influence the events during the observation (Anderson 1999, Yin 1994).

Observation methods in qualitative studies are more commonly focused on naturalistic descriptive field notes and the recording of events with the aim of developing comprehensive records of the complex environment and actions within it to help the researcher draw logical conclusions or assertions from the situation. The researcher using this approach negotiates the amount of participation that they will have depending on the purpose of the project (Stake 1994, 1995). Data analysis using naturalistic methods is inductive or constructed and more commonly occurs throughout the research process. Ongoing analysis is used to further define issues and may used to guide interviews and the collection of other written data all of which can contribute to the trustworthiness of the final assertions. The tools for recording can be audio or visual tapes and/or observational field notes. Observation has strengths in that it covers events based in context. *Participant-observation* occurs when the researcher is both participant in, and observer of, an event, which can help to provide insight into interpersonal behaviour and motives (Anderson 1990, Grbich 1999).

In this study, direct observation was carried out in classrooms, the staff room, playground and common areas in the school such as the entrance foyer, library and assembly hall. Opportunistic observation, such as of the school fire drill (which occurred during a student interview) also took place. Participant observations took place mainly during staff and
community meetings. Observation was however ad hoc and selective due to time and access constraints. The protocols followed the qualitative purpose of assisting in focusing issues and directing further questions to gain a fuller context based understanding of the case.

**Confidentiality**

Access to tapes and written data was restricted to the researcher, and confidentiality was discussed prior to data gathering and was included as part of research consent protocol. Survey forms were numbered prior to being given to the students and were not traceable to any student. Confidentiality was discussed with the students and staff prior to the completion of the survey and most students covered their work as they completed questions so their answers could not be viewed by adults or their peers. As stated, the student group that completed the survey included some that had special learning needs. Teaching assistants helped these students to complete the survey, and gave me verbal assurance that information would remain confidential.

As discussed, it was anticipated that issues of confidentiality might arise at the stage of report composition and dissemination of results that might lead to identification of the school. When this issue eventuated clarification and formal permission to name the school was requested and granted. School policies on publicity and media releases were adhered to through verbal agreement with the Principal. A strategy was also discussed for post thesis media releases that may involve joint participation and ownership of the results. Board of Trustees, teacher and parent meetings
were used as vehicle for keeping the stakeholders informed of findings, at key stages during the research process. This feedback loop was an integral part of the study and included a draft document of the evidence being reviewed by the Principal and Deputy Principal (Memo re this draft can be found in Appendix 3.19) to ensure trustworthiness of findings, and a formal opportunity for feedback from these participants. A copy of the thesis will be provided following its completion, to the Board of Trustees, the Principal and participants who selected the ‘I would like access to the completed report’ option on the consent form.

**Analysis of evidence**

Analysis of evidence in this study depended on the paradigm and purpose of the data collection. Quantitative data analysis of the student survey utilized relevant deductive statistical analysis at a fixed point in time – following survey completion. Qualitative data was analysed using inductive methods that progressed with the research process.

Davidson and Tolich (1999) considered that analysis is similar in both quantitative and qualitative research to the extent that both forms of research search for patterns and regularities in the data using steps that include data collection, data reduction, data organisation and data interpretation: They further stated that:

> The last step ‘data interpretation’ reminds us that analysis is about finding patterns in your data which relate back to your original question. It is not about seeking patterns for the sake of it (Davidson & Tolich 1999:143).
In this study quantitative methods were utilized for statistical calculation, with the aim of establishing significance and significant difference (Patton 1990) between student participants who completed the student health behaviour survey. Data from each survey form were entered into the SPSS computer programme. Data coding schedules were used to group subject responses into specific concepts or units that related to the components in the health-promoting school framework (Appendix 3.9). Data analyses were descriptive, comprising frequencies, cross tabulations and factor analyses similar to those used in the New South Wales study (Bauman et al. 1996). All other evidence was analysed using qualitative methods.

Stake (1995) considered that in case study research there is no particular moment when data analysis begins. Analysis and interpretation are about making sense and giving meaning to the evidence collected, by using protocols, art and intuition during data processing. Stake (1995) also asserted that qualitative study capitalises on ordinary ways of making sense by linking the new to the familiar, through considerations of separate parts and how they relate to each other. Two analytic strategies used in case study research discussed by Stake are *categorical aggregation* of instances and *direct interpretation* of the individual instance. Stake (1995) considered that:

> At no point in naturalistic case research are the qualitative and quantitative techniques less alike than during analysis. The qualitative researcher concentrates on the instance, trying to pull it apart and put it back together again more meaningfully – analysis and synthesis in direct interpretation. The quantitative researcher seeks a collection of instances, expecting that, from the aggregate, issue-relevant meanings will emerge. (Stake 1995:75).
The qualitative interpretative approach was utilised to gather and analyse information concerning the quality of people’s experience in the school community and to allow in-depth and detailed information on specific health-promoting school questions and issues to be evaluated. Analysis was continuous and as new information was collected I tried to make sense of it by linking it to evidence already collected, and knowledge I already held from what had previously occurred, my experience and literature I had reviewed. Comprehensive field notes were taken during and after school visits and a personal journal of ideas, impressions, thoughts, insights and reflections were kept. Interviews were written up using notes, tape recordings and memory as soon as possible after the event, and footnotes were inserted into the text as I thought of how and where further evidence or literature was needed to make sense of the evidence to date. Finally qualitative and quantitative evidence was reviewed against each health-promoting school component or each embedded unit, to provide triangulated evidence for each of these specific health-promoting school checkpoints. Following the analysis of the particular units embedded in the case, research literature was used to focus on issues raised and assist with making meaning of the school organisation and issues in relation to health.

**Generalisation**

Lincoln and Guba (1985) stated that:

Generalisations were assertions of *enduring* value that are context-free. Their value lies in their ability to modulate efforts of prediction and control (Lincoln & Guba 1985:110)
Lack of generalization has been raised as an issue for case study research (Anderson 1990, Yin 1994, Stake 1994, 1995). Yin (1994) considered that generalisations to theoretical propositions were possible but not generalization to populations or universes because the goal of case study research was *generalising* and not *particularising* analysis (Yin 1994). Anderson (1990) considered that the extent to which generalisation in case study research is possible is related to the extent to which a case is typical or involves typical phenomena. Generalisation of the findings from any school as a case for study or research is not specifically possible, as each case will be a unique school in a unique context. Consideration of generalisation may however extent to links made by readers of the study to other contexts through recognition of similarities with other schools or aspects of the phenomena in other contexts (Stake 1995). Stake (1995) considered that too much emphasis of the need of research to be generalised detracts from:

the intrinsic study of a valued particular (Stake:1995:238).

This study in the holistic case study sense cannot be generalised to any other New Zealand primary school. However, components of the study may be recognisable and have some relevance to other health-promoting school contexts. Results from the Student Health Behaviour Survey could be generalised to a similar New Zealand student population. Qualitative data collected and analysed in this case study are recognised to have validity in that:

Although the results may not be generalisable to other locations, the results presented accurately reflect the opinions or actions of the people in the study (Davidson & Tolich 1999:34).
3.6 Report deliberations

Presentation of the *chain of evidence* (Yin 1994) or audit trail is a component of research report composition based on a notion similar to that used in police detective work. The aim is to allow the reader of the case study to follow the source of any evidence from initial research questions to ultimate case study conclusions. Davidson and Tolich (1999) considered that quantitative research reports should be written in sufficient precision and detail to allow replication of the study, and should present explanation and possibly prediction. Whereas qualitative research reports should be written to enable the reader to arrive at the same perspective on the topic as the researcher through presentation of the context and interpretation made by the researcher Davidson and Tolich (1999). Stake (1995) considered that care should be taken and artistry used to present the case study report in an organised but engaging manner by shaping sections into narrative that makes the case comprehensible and engaging. Using this technique the reader is able to develop his or her own meanings assisted by the way the report is written and aims identified. This report attempts to present information in a manner that respects the intent of presenting what I have discovered as well as meeting the requirement of both qualitative and quantitative research paradigms. My objective has been to address the construct and internal validity and reliability discussed by Yin (1994) as part of the case study method of inquiry, the philosophical stance of health promotion, with the more critical and qualitative trustworthiness required by the constructivist paradigm of inquiry.
3.7 Contribution of the method

This project has attempted to utilise methods in a unique manner to fulfil the multiple intents and objectives of the research. The need for the school to have a report in a format that could be used to assist health gains for the school community informed the shape of the end product. The need for me to use a research method that honoured the ontological manner of working with, that was congruent with health promotion and was a defensible research process, guided the ethical position and protocols of the project. The use of both qualitative and quantitative data collection and analysis methods was a challenge that provided rich contextualised information that aimed to ensure validity and trustworthiness for the project.

The direct benefits of this research to the school are that a complete audit/assessment will have been completed and documented from which future changes and further activity can be planned and measured. Towards that end the contribution that this work will make includes the use of the health promoting school framework as an assessment tool that could be further refined and utilized by teachers and health professionals as a needs assessment format for strategic and curriculum health planning. The potential exists for simplification and separation of discrete health-promoting school components or topics in the student health behaviour survey that could be utilised in pre and post programme evaluations to measure knowledge gains made following health promotion student programmes.

Furthermore utilisation of the student health behaviour survey adapted from the survey used in NSW (Bauman et al. 1996) provided an example of the tool being used under different conditions, (in New Zealand) with a younger population of students, than was the case in the original
survey. The results from this New Zealand school can be used to inform parents, teachers and health professionals involved with Cannons Creek School of the current health issues for their student group, and can also be compared to results from the Australian survey.

Chapter four will present the context of the case and cover the city of Porirua within which is situated the suburb of Cannons Creek. The suburb will then be described and then the physical location of Cannons Creek Primary school will be explored.
4 THE CASE IN CONTEXT

4.1 A City well studied

In the last 25 years Porirua City has been the subject of many health focused needs assessments and related research projects (Salmond 1975, McCombs 1986, Knight 1993, National Research Bureau 1994, Central Regional Health Authority 1994, Cody 1998). One of the key features of these projects has been the deliberate move to involve the community with the aim of eliciting their concerns about health and health services in their communities. Potential solutions that individuals and community groups have suggested have been incorporated into the recommendations of many of these reports. In this chapter these ‘archival records' will be used to identify the health status and health issues relevant to the Porirua community.

The first research report was completed by Salmond (1975), who later became Director General of Health (1986 to 1991) and is currently involved in the Porirua Health Partnership. This report was initiated by the Department of Health joint Plunket and Department of Health steering committee that was set up to:

…examine and report on existing policy as it related to the delivery within the community of nursing services concerned with the health and welfare of infants and pre-school children (Salmond 1975:13).

52 The Porirua Health Partnership (PHP), was established in 1995 in response to findings of the ‘Strong Links' report (Central Regional Health Authority 1994). The PHP aims to contribute to the development of roles and relationships that improve health status and quality of health care in Porirua (Cody 1998).
This group decided to carry out a pilot study to investigate gaps and overlaps in health and welfare services for preschool children that were thought to lead:

…to the children in some areas not getting adequate supervision while in other areas services were being over-provided (Salmond 1975:13).

The study compared the use of maternal and child health services of mothers in five areas of Wellington (Tawa, Porirua, Newtown, Northland to Island Bay and, Khandallah). Each area varied in socio-economic status and access to services. The research:

…depicted a striking difference between Porirua and the other areas (Salmond 1975: 45).

Mothers in Porirua had fewer home visits from nurses and fewer episodes of care were received when the father of the family was in semi-skilled rather than professional employment.

Fifteen percent of Porirua mothers received no care, a further 38 percent received fewer than 7 episodes of care and only 13 percent received care on more than nine occasions. In the other four areas half the mothers received care on 10 or more occasions and few received less than seven episodes of care (Salmond 1975: 45).

The study revealed an inequitable distribution of services in relation to need, and a lack of appropriate interpersonal relationships including cultural sensitivity in service delivery, especially for Polynesian mothers. Fifty percent of mothers living in Porirua compared to eight percent of mothers in a middle class satellite suburb requested more home visiting. A situation that was explained by the fact that the Porirua group were being
visited less often, had less access to other health services and had greater health care needs. Recommendations in the report stated that:

Community involvement is essential to the success of any preventative educational enterprise (Salmond 1975:83).

The report concluded with the comment that:

For the community care concept to become a practical reality would require inspired leadership. Jealously guarded traditional beliefs about the practice of medicine, the division of labour, the relationships between doctors and allied health workers would have to change. Tolerance, understanding and a willingness to change and compromise sectional interests would be a basic requirement of all staff. Idealistic? Perhaps - but if such a concept could be made to work in a medically under-developed area like Porirua, the idea might take root and flourish elsewhere (Salmond 1975:84).

In 1986 the Wellington District Health Office completed a health survey, the report of which was entitled An assessment of health status amongst standard two (year 7, age 12 years) pupils in a sample range of Wellington primary schools. This survey was initiated by an expression of concern about the health status of school students made by a Porirua School principal (McCombs, 1986). Methods in the survey included comparing physical health assessment results from standard two students enrolled in schools of average need\textsuperscript{53} with students from schools with more than average need (ie lower socio-economic status). Individual student assessment results from the same form two students were also

\textsuperscript{53} Average need and more than average need were measured in terms of the health and equity scale suggested by Reinken, McLeod and Murphy in a Department of Health Special Report Series 72 entitled Health and Equity published in 1985 (McCombs, 1986 introduction page).
compared with their year one (five-year old) physical assessment results. The study revealed that for all students in both groups seven out of 10 had a specific health problem. Ear complaints were found in one of every five students and skin complaints in one of every four students.

When the two survey groups were compared skin complaints were found to occur more than twice as often in areas of more than average need (McCombs 1986:26).

Two in every 10 students were already in active care for health problems and one in 10 required immediate care for problems that were detected during the study. Three complaints in 10 had been previously recorded for the same students when they had been examined at school entry. Marked differences between the average need and more than average need student groups were noted. Research recommendations strongly supported the concept of targeting primary school health care for at risk children, which would be able to both identify and react to specific health needs at an individual level (McCombs, 1986).

In 1994 the Central Regional Health Authority, which at the time was responsible for health service funding, completed a comprehensive health needs assessment of Porirua. The overall goal of this assessment:

…has been to develop a purchasing strategy for health and disability support services that will improve access, based on information about the existing health and disability status of the population, what is working well now, unmet needs, and any barriers to access (Central Regional Health Authority 1994:1).

The method for this comprehensive study included a questionnaire sent to a sample of the population and to multiple community organisations,
and focus group interviews held with ten identified interest groups. These groups included parents of young children, mental health consumers, consumers with chronic health conditions, and new settlers (refugees from overseas). The issues that were identified by consumers in this study were similar to the findings of the 1975 Salmond research with costs, lack of transport, access to information, advice and services among the barriers identified. Access to specialist services, after hours services and issues of lack of culturally appropriate services were also identified as issues. The report concluded that:

The level and character of the health and disability services purchased in Porirua needs to be adjusted to better mesh with population characteristics and needs of the community. The report tabled recommendations that were directed to achieving:

- Enhanced primary health services for Maori, particularly in east Porirua
- Enhanced primary health services for Pacific Island people
- An improved response to the health and disability needs of the refugee New Settler population here and elsewhere in the Wellington region
- A more coordinated and systematic response by general practitioners to immunisation, diabetes and smoking-related problems
- Increased provision of asthma education
- Improved community based diabetes education and detection
- Coordination and promotion of community-based responses to smoking issues
- Additional ENT services
- Purchasing of more targeted youth health and disability support services
- Implementation of recommendations from a recent review of mental health services tailored to the particular characteristics of Porirua, including the needs of Maori and Pacific Island people
- Purchasing of culturally appropriate assessment and coordination, home support services (Central Regional Health Authority, 1994; vii)
In 1999 the most recent report on health and health services for Porirua (McGrath 1999), was produced by the Porirua Health Partnership and was later incorporated into the Porirua City Health and Disability Report Plan (Porirua Kapiti Healthlinks Project 2000). This report will provide much of the evidence presented in the following Porirua City and cannons Creek sections of this chapter.

The research evidence that has been presented as part of this section is significant because of the number of studies that have been completed, and the fact that so few health gains appear to have been made as a result of recommendations made by these reports. The various research projects have been driven by the desire to describe and improve inequities in health status for this, the most easily identifiable low socio-economic population close to the capital city, Wellington. This population has been identified as being at risk for high mortality and morbidity due to the many identifiable factors that have been discussed as the socio-ecological determinants of health in chapter two. The population is diverse and different groups have been part of many initiatives aimed at improving health. In the past many of these actions for health were set up by well meaning rescuers (Karpman 1973). More recently as needs assessments and research has been designed to fully include as many persons in the community as possible support has been given for different sectors to develop initiatives that include governance and action by the group concerned, for the group concerned. It is interesting to note that it was the first report (Salmond 1975) that articulated the need for power if health
stakeholders to be fully addressed as the solution to the provision of relevant health services for the population.

The evidence that has been built in this city against the growing epidemiological and socio-ecological knowledge (chapter 2., section 2.5) and the effects of poverty and associated poor environmental conditions on health is strong for this population. The most recent report (Porirua Kapiti Healthlinks Project 2000) is clear about what can be done to make a difference and the need for integration of services. I consider that recommendations from this report that have informed the District Health Board can be linked to the new national health strategies (that align with the ideas proposed by Salmond in 1995) are more likely to support health gains. This is because they are more closely aligned to the socio-ecological determinants of health (Dahlgren & Whitehead 1991) and the Ottawa Charter action points that address each relevant factor. Appendix 4.1 (with acknowledgment for the ideas of McGrath, 2001) provides a visual picture of these links.

The first section of this chapter has presented a background context to health in the area in which the school is located. Information from the reports introduced in this section and other relevant sources will be utilised in the rest of the chapter to provide a health-related picture of the city, the Cannons Creek area, and then Cannons Creek School.
Porirua City

Porirua\textsuperscript{54} City is located in the Wellington Region of the North Island of New Zealand, 23 km north of the capital city, Wellington, on the main state highway (Highway 1). The suburb of Cannons Creek is in the south-eastern area of the city of Porirua. Cannons Creek School is one of five primary schools in the suburb or area of Cannons Creek. A map of the area and the location of the school can be found in Appendix 4.2.

The population of Porirua in the 1996 census was recorded as 47,700 persons. The rapid growth of the city, a feature of the 1960’s and early 1970’s had slowed by 1996 and between 1991 and 1996 there was a net gain of only 83 persons.\textsuperscript{55} The cause of this trend over the five-year period 1991 to 1996 was attributed to a natural increase, that is fewer deaths (1346) than births (5148), offset by migration of 3719 persons away from the area. There are significant differences between suburbs within Porirua City. Continued growth is evident in the northern and western suburbs where large private homes are still being constructed. There is a decline in growth in the central area, largely attributed to the closure of factories. This same pattern is evident in the eastern areas where it was attributed to the change to market rentals for government owned houses in 1996, which had a noticeable effect of increasing the number of people leaving the area.

Porirua City has a relatively young population with an average age of 31 years, of which 27 percent are less than 15 years of age. Seven

\textsuperscript{54} The original name for Porirua was Parirua, which means the flowing or ebb of two tides (Tauroa 1990).
\textsuperscript{55} Information and figures quoted in this chapter are from the Porirua Health and Disability Report and Plan (Porirua Kapiti Healthlinks Project 2000) unless otherwise stated.
percent of the population of Porirua City is over 65 years of age, compared with 12 percent of the population nationally. Maori constituted 20.7 percent of the population of Porirua in 1996 compared to 15.1 percent nationally. Ngati Toa are the Tangata Whenua of Porirua and their marae, Takapuwahia is sited on Ngatitoa St in the Takapuwahia area of western Porirua City. Porirua residents who indicated iwi affiliation in the 1996 census came from 84 different iwi. Among those indicating iwi affiliation, Ngati Toa made up 7.6 percent (864), Ngati Porou 16.9 percent, Ngapuhi 9.9 percent and Ngati Kahungunu 9.8 percent. These four iwi accounted for 44.2 percent of all Maori who were resident in Porirua and who indicated iwi affiliation. Maraeroa marae, in Waitangirua, two kilometres north east from Cannons Creek was built to provide an urban centre for Maori, from iwi based in other parts of New Zealand who resided in Porirua City. Maraeroa marae is also used by Pacific Island communities for events such as tangi.56

Porirua residents of Pacific Island ethnicity comprised 21.6 percent of the total population compared to five percent nationally in the 1996 census.

The composition of the representative groups are listed in table 4.1

<table>
<thead>
<tr>
<th>Pacific Island group</th>
<th>n</th>
<th>Percentage of the Porirua population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samoan</td>
<td>5,196</td>
<td>12.1</td>
</tr>
<tr>
<td>Cook Island</td>
<td>2,040</td>
<td>4.7</td>
</tr>
<tr>
<td>Tokelauan</td>
<td>1,574</td>
<td>3.3</td>
</tr>
<tr>
<td>Niuean</td>
<td>334</td>
<td>0.7</td>
</tr>
<tr>
<td>Tongan</td>
<td>191</td>
<td>0.4</td>
</tr>
<tr>
<td>Fijian</td>
<td>95</td>
<td>0.2</td>
</tr>
<tr>
<td>Other Pacific Island groups</td>
<td>95</td>
<td>0.2</td>
</tr>
<tr>
<td>Total</td>
<td>9,525</td>
<td>21.6 %</td>
</tr>
</tbody>
</table>

56 Maori for funeral ceremony or a weeping lament (Orsman and Orsman 1994).
Pakeha comprised 54.7 percent of the population of Porirua in 1996 compared to a national figure of 74.8 percent, and Asian people in Porirua were recorded as 2.8 percent compared to a national figure of 4.6 percent.

Porirua City is characterised by a diversity of ethnic groups and incomes (Porirua Kapiti Healthlinks Project 2000:10).

Incomes in Porirua are ranked as the fourth highest for any city in New Zealand but this figure disguises the range of incomes which spreads from an upper level of an average household income of $83,868 in the suburb of Endeavour to a low of $29,271 per household in Cannons Creek north. Economically, Porirua City is an integral part of the Wellington region with many residents commuting to the city of Wellington to access work, education, services and retail opportunities. Industry has changed in Porirua over the last decade, and reflects the national downward trend in manufacturing industries. A large car assembly factory was a major employer in the area until the mid 1990’s. It provided impetus for the establishment of the state housing area in eastern Porirua, built to accommodate many of the Pacific Island immigrant labour work force. From the mid nineties the factory progressively downsized then closed as a result of government policy changes. Service-based industries currently provide the largest proportion of the employment opportunities in Porirua City as the city is progressively developed and marketed as a major retail centre for the wider regions of Wellington. Professional and technical occupations, located throughout the Wellington region, provide the highest employment rates for Porirua residents. Unemployment in Porirua is high and is unequally distributed amongst ethnic groups. In June 1999 10.7 percent of
the total population of Porirua were recorded as unemployed compared to the national figure of 6.7 percent. Porirua Maori recorded unemployment rates of 14.7 percent, which was lower than the national rate of 18.2 percent. Pacific Island people in Porirua recorded a rate of 21.8 percent unemployed persons in June 1999, which was higher than the national rate of 12.8 percent. The unemployment rate varies within the city with significantly higher unemployment rates in Cannons Creek and Waitangirua, its bordering suburb, than the more affluent northern suburbs of Whitby and Plimmerton, (not shown in the map in Appendix 4.2). Eleven areas of Porirua City (40 percent of the city population) are in the least deprived groups at 1 to 4 on the NZDep96 (Davis et al. 1996), index, and 10 areas of the city (53 percent of the population) are in the most deprived, 7-10 on the NZDep96 index (Davis et al. 1996).

On the positive side the 1996 census recorded that Porirua people contribute to voluntary activities such as, child care, fundraising and attending meetings at a higher than the national average. Also recorded were a high number of active community groups providing a range of social, cultural, spiritual, sporting, artistic and family-based services in the city. Almost 54 percent of Porirua city residents voted in the 1998 elections compared to the national average of 51 percent.

The life expectancy rates for Porirua residents are 72.3 years for males, which is 1.9 years less than the national average, and 77.2 years for females, which is 2.3 years less than the national average. Smoking, obesity, lack of physical exercise, hypertension and alcohol misuse, were all identified as factors that increase the risk of developing a variety of health
related problems relevant to the Porirua population. One third of the population of Cannons Creek was identified as being regular cigarette smokers in the 1996 census.

Hospital discharge rates, which provide morbidity data as a direct measure of service utilisation, and an indirect measure of health status, are higher for preventable conditions\textsuperscript{57} and ambulatory sensitive hospitalisations\textsuperscript{58} in Porirua than for other areas of Wellington.

Data on higher avoidable morbidity and hospitalisations strongly suggests that public health programmes have been less effective for Maori and Pacific peoples and people living in areas of higher deprivation (Porirua Kapiti Healthlinks Project 2000:30).

The most significant condition for hospitalisation of Porirua residents was recorded as asthma, which if well managed should preclude the need for hospital admission. Hospital discharge rates for asthma were 32 percent higher for Porirua residents than for residents in the Wellington region or other parts of New Zealand. High rates of rheumatic fever that can lead to chronic heart problems were also noted in the Porirua population and were attributed to inadequate treatment of streptococcal sore throat in children. Government expenditure on pharmaceutical subsidies for Porirua residents per head of population is approximately half that spent on the total Wellington population according to data provided by

\textsuperscript{57} Preventable conditions include vaccine preventable diseases (such as whooping cough), lung cancer (mainly caused by smoking), and nutritional deficiencies (caused by unbalanced diets).

\textsuperscript{58} Ambulatory sensitive hospitalisations are those for which hospitalisation could be avoided by effective primary health care setting strategies. Conditions in this category include epilepsy, gastroenteritis, diabetes, respiratory infections, rheumatic heart disease, asthma, cellulitis and ruptured appendix (Porirua Kapiti Healthlinks Project 2000:119).
Porirua pharmacies (Chalmers 1995).

Primary Health Services in the Porirua City in 1998 included 33 general practitioners working in a range of settings, from a variety of individual and organisation linked regular practice clinics to marae-based settings. General practitioner visits for Porirua people were higher per person per annum than in the greater Wellington region, in spite of the fact that fewer general practitioners practice per head of population in the Porirua area. Lower prescription subsidy uptake has been attributed to fewer prescriptions being provided per general practitioner visit, the lower cost of medication that is prescribed, difficulty in paying for prescription part payments, confusion about potential prescription charges, difficulty in accessing a pharmacy, and lack of understanding about the need for, and how to, access repeat prescriptions (Chalmers 1995). Drugs used for control of asthma, diabetes and cardiovascular diseases for Porirua residents were well below the rates for prescriptions accessed by Wellington residents, despite the likelihood of an ethnicity-linked higher prevalence of conditions requiring these medications. The Director of Planning and Funding, Capital and Coast District Health Board stated that

A real worrying trend is that Maori and Pacific people are affected by diabetes and cardiovascular conditions a full 20 years before other people – when they’re in their forties and fifties rather than in their seventies (Betts 2001).

Cannons Creek residents expressed concern about the difficulty in getting to a general practitioner because of the high patient numbers per general practitioner in the area and the related inability of new patients to access the current services. Urgent (same day) appointments were also
difficult to access because of the high demand. General practitioners in Porirua employed fewer practice nurses, reported as one to 3774 patients compared to one per 2195 patients for the remainder of the Wellington region. Expense was cited by doctors as the reason for not employing more nurses and Porirua general practitioners requested a fully funded government subsidy to employ practice nurses (Porirua Kapiti Healthlinks Project 2000). The current subsidy paid to general practitioners to employ practice nurses is $11.00 per hour for up to 27 hours per week, which equates to approximately 50 percent of an average practice nurse wage (pers comm practice nurse, 2001).

When compiling information for the Porirua City Health and Disability Report Plan the focus group meetings held to gain information about community issues and health needs identified that:

- Current contracts fund separately, services that people thought should be provided in an integrated way (Porirua Kapiti Healthlinks Project 2000:27).
- People thought more attention to self management and to prevention programmes would help reduce Porirua's high rate of hospital admissions and the level of avoidable morbidity (Porirua Kapiti Healthlinks Project 2000:27).

There is some feeling that the community is confused about the different roles of public and primary health services, as shown by misunderstanding over roles the public health nurse plays. There is also concern about the number of public health nurses covering the Porirua Basin, this having decreased to four, with consequent effects on their ability to impact positively on health outcomes (Porirua Kapiti Healthlinks Project 2000:30).

As well as confusion concerning services and health professional roles there appears to be a lack of nurse visibility in the Porirua area, a
situation which has not changed since that reported in 1975 (Salmond 1975). This lack of visibility can be attributed to the low number of practice nurses in general practices and a decrease in numbers, type of contract and subsequent nurse visits to homes by public health nurses. Contracts for health services in the last 10 years have also reduced the number of visits made by Plunket nurses to families with children under five years of age. This also adds to a lack of nursing presence in the Porirua area. An integrated one-stop-shop type of health service, similar to that suggested by Salmond (1975), with multiple health professionals located in one central building was a suggestion made by the community when they were consulted as part of the Porirua Health and Disability plan formulation.

Health issues persistently identified in Porirua City include a lack of services in the community, and at the local Kenepuru Hospital, which is also difficult to access. These issues are compounded by a lack of private transport for many of the population who are also affected by other negative health determinant factors such as unemployment and overcrowded housing. Recurrent threats of closure and/or of a further reduction of services at Kenepuru Hospital are a perpetual issue for the community. These threats have required prolonged and persistent community input to counter over the years. The Emergency Department at Kenepuru Hospital is open from 8:30 to 4:30 p.m. weekdays and is staffed by a receptionist, two nurses, and a senior house officer all of whom are on rotation from Wellington Hospital Emergency Department.

Many of the outpatient clinical services required by the community are not available locally and require a 25 km trip to Wellington Hospital.
Public transport to Wellington Hospital requires a train journey (cost $ 3.50 pp) of 15 to 20 minutes and a bus journey for 20 to 30 minutes (cost $ 2.50 pp) from the Wellington railway station to the Wellington Hospital, in the suburb of Newtown. Because of the limited services offered by the local hospital (ie no functioning paediatric ward due to lack of medical staff; no 24 hour operating theatre, laboratory or X-ray services) many patients requiring hospital treatment are referred directly by general practitioners to the base tertiary hospital in Wellington. Lack of knowledge concerning services currently available at any one time cause confusion and lead to persons going directly to Wellington for all perceived emergencies, rather than trying to access local care. Attendances at Kenepuru Hospital have been steadily declining over the years. In the 1994–95 period, 5207 patients used the service; in the 1999-2000 year 2901 patients used the service.

It is estimated that at present 78.4 % of people residing in the Porirua and Kapiti areas who access Emergency Department services go to Wellington Hospital in the first instance (Porirua Kapiti Healthlinks Project, 2000:179).

A private ‘after hours’ clinic, located in the Porirua city centre is open from 5pm to 8am and weekends, and a 24-hour, free, ambulance service, with a base at the motorway end of Mungavin Avenue (Appendix 4.2), operates effectively in the area.
Cannons Creek

The area of Cannons Creek comprises of three of the identified 40 sub-areas within Porirua City. The heart of the Cannons Creek area is 3.5 km from the Porirua city centre at a convergence of three main roads (Champion St, Mungavin Ave, and Warspite Ave) that are bounded by a shopping centre on one side, Cannons Creek School and the Presbyterian Interdenominational Church of Christ the King on another with a petrol station on the third aspect of the intersection (Appendix 4.2 and Appendix 4.4 Fig.2). Housing in the area is predominantly owned by Housing New Zealand, a Government body that rents houses at income related prices. This policy was reintroduced during 2000 following the election of the Labour-led coalition Government in 1999 and signalled a move away from the market rental pricing policies of the former Government. The largest building in the shopping centre, previously a supermarket, is now a community hall (Te Akapuaunga Kuki Airana), which is owned by the Cook Island community and is available for rental by other members of the Porirua Community. The Fanau Centre, one of six Government-funded pilot family service centres in New Zealand, is also located in the shopping centre. Activities provided by the centre include a Home Instruction Programme for Preschool Youngsters (HIPPY), an asthma clinic, counselling, and family support. Work and Income New Zealand (WINZ), the Whitireia Community Law Centre, and the Ear Van all have regular clinics/office times at the centre. Other health and welfare related agencies

59 The Ear Van is a mobile hearing assessment unit that moves to different Porirua locations to enable preschool children to have their hearing assessed. It is staffed by a registered nurse who is employed by Hutt Valley Health.
within and adjoining the shopping centre include:

- The Wesley Centre (a branch of the Wesley Wellington Mission);
- The Porirua Community Health Service and associated Pacific Health Service;
- A Plunket Clinic\(^{60}\), and Plunket Family Centre\(^{61}\);
- The Opportunity Centre, and laundrette;
- Te Akamata Anga Ora\(^{62}\) ‘The New Beginning’
- A branch of the Porirua library (Appendix 4.4 Fig 1).
- A community Policing Unit.

Recreational services include a volley ball and basketball court and community swimming pool, which is used by the school for regular class swimming lessons, and recycling centre. Available shops include: two dairies (convenience stores), three takeaway food outlets (two seafood orientated), a butcher, a fruit and vegetable retailer, a chemist, a small supermarket (superette), with Lotto outlet\(^{63}\), a TAB\(^{64}\), a bar/casino, cycle and mower shop, a video shop, a bakery and a hairdresser. There are two ATM ‘money machines’. One is situated close to the video shop and the other close to the TAB. Car parking is available surrounding the retail area and volleyball courts.

The population of Cannons Creek at the time of the 1996 census was recorded as 8753 persons, with 30 percent of the less than 15 years of age. The average income levels in Cannons Creek were the lowest in the

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\(^{60}\) The base for Plunket nurse well child clinics.
\(^{61}\) A centre for parents to go with under five year olds for help, support, education etc to assist them with infant feeding, child rearing etc.
\(^{62}\) Cook Island run drop in centre that advertises a home work centre, and computer resources/classes for the community.
\(^{63}\) Lotto is a gambling game with a weekly prize draw.
\(^{64}\) The TAB is the national Totalizator betting shop, mainly used to bet on horse racing, and now also used for sports betting.
city of Porirua at $31,931 per annum. Twenty five percent of Cannons Creek residents were recorded as unemployed in the 1996 census, compared to the Porirua City average of 10.7 percent and the national rate of 6.1 percent. Cannons Creek has a NZDep96 index rating of 10, which on the one to ten scale situates it as one of the most deprived areas in New Zealand. Mobility is an issue for Cannons Creek residents. It was reported that 18 percent of dwellings in Porirua, compared to 13 percent in the Wellington region did not have motor vehicles. The Motor vehicle ownership rate for Cannons Creek residents was 66 percent (National Research Bureau Ltd 1994).

The past two sections of this chapter have presented evidence that provides a health determinant context to the school being studied. The aim has been to allow a comprehensive picture of the environmental, social and health issues that have been identified locally and which in a socio-ecological framework are recognised as impacting on the health of the child within a school and family context.

The last section of this chapter will introduce the school.
Cannons Creek School

The community of Cannons Creek School in 2000 included 215 students, the principal, nine full time classroom teachers, one part-time reading recovery teacher, one part-time teacher for non-English speaking background (NESB) students, two teacher aides and one teacher aide/librarian who shared two full-time position equivalents. Two office staff and one caretaker complete the permanent staff at the school. Of the 18 staff members, three were male and 15 female. In the 2000 school year, two KiwiCan leaders, two social workers, a public health nurse and other visitors, including teaching and nursing students also formed part of the school community. The ethnic composition of the school population is Pacific Islands 63 percent, Maori 28 percent, Pakeha six percent and Asian three percent. Female students comprise 51 percent of the student population and males 49 percent (E.R.O., 2000).

The physical environment of the school is set out in the plan of buildings and grounds (Appendix 4.3). Buildings include eight classrooms, in three separate blocks (Block 1 Appendix 4.4 Fig 18,), 2 and 3 (Appendix 4.4 Fig 19) on the plan. One group of four classrooms is located in one building on the north-western side of the asphalt playground (block 3). Two classrooms are located in block 2, closest to the hall, also on the northern aspect of the asphalt playground and two classrooms are attached to the administration building (block 1) on the east side closest to the road.

On 26 July 1965, the school roll became 1000 and Cannons Creek School was the largest primary school in New Zealand, catering for pupils from new entrant to form two. Later the roll dropped when an intermediate school and another local primary school opened (Cannons Creek School 2001).
Each classroom has adjoining toilets and cloakrooms. A small toilet block for use during play times is located towards the south end of the asphalt area (block 5). A library, the school office, the principal’s office, a meeting room, the medical room, store rooms, staff toilets and the staff room are located in the administration building (block 1). A dental clinic, which has a separate front entrance parallel to the main entrance to the school (Appendix 4.4 Figs 3 & 4) is also attached to the main administration block. A school hall that includes a large open space with a stage at one end (Appendix 4.4 Fig 13), a kitchen, a meeting room and toilet facilities (block 4), is situated on the northern side of the asphalt area adjoined by the one-way drive-on Warspite Ave entrance. Car parks are located between the hall and other buildings. Two grassed play areas are located at south and north ends of the school site. Climbing and adventure play equipment (Appendix 4.4 Figs 16 & 17) and the happy wall (Appendix 4.4 Fig 15) are located at the western end of the playground close to the staffroom. The school and buildings were built in the early 1960’s to serve the needs of the then new state housing area. Since that time two preschools have been sited inside the perimeters of the school grounds. Following consultation, the Board of Trustees and Staff agreed to support these initiatives with the aim of encouraging preschool participation based on evidence that preschool participation can assist a child’s readiness to engage in learning when they start primary school.

The Kapuaunga opened in the 1990’s was originally a Samoan preschool and now and serves the local Cook Island population. The Griffin School opened in April 2000 to provide childcare and early childhood
education for children of parents who attend He Huarahi Tamariki (A Chance for Children) school, which opened in 1995 to meet the needs of female students who have had their formal schooling interrupted by childbirth (Baragwanath 1996).

The photographs of the grounds, buildings and community are presented in Appendix 4.4 Figs 1-19 to assist the reader to gain a visual picture of Cannons Creek School.

In the next chapter, components and checkpoints from the six areas named in the World Health Organization health-promoting school framework (W. H. O. 1996), are stated, in italics, and evidence from the student health behaviour survey and sources listed in Appendices 3.9, 3.10, and 3.11 are used to answer each checkpoint. Data related to each component, significant issues, and supporting evidence are identified at the end of each component section.
5 THE CASE AND ITS HEALTH PROMOTING EVIDENCE

The board has a sound policy framework that gives good direction for the management of staff, resources, assets and finance. Policies are reviewed regularly to ensure they reflect current practice (E.R.O., 2000:9)

5.1 School Health Policies

School health policies are the clearly defined and broadly promulgated directions, which influence the school’s actions and resource allocation in areas, which promote health (W. H. O. 1996:5).

Evidence

Cannons Creek School has a number of policies, listed in Appendix 3.3, that aim to contribute to the health of the students and staff who form the school community. The rationale for school policies is stated in the Cannons Creek School Policy Development and Review Policy as:

Policies are written to provide a framework for the organisation and development of working documents.

The process for policy development includes the following guidelines:

1. Policies must always reflect the national curriculum and other national and/or legal requirements.
2. Policies will always reflect the special nature of the school.
3. A writing committee, which may include staff, Trustees and parents, will consult relevant regulations and seek advice where necessary before writing a draft policy.
4. One person from the writing committee is to be delegated to “steer” the policy through all the stages, listed below, until it is approved.
   a. The draft policy is presented to staff for comment and amendments made where necessary.
   b. The amended draft is presented to trustees and, after any further amendments, is formally approved.
c. If any changes are proposed by Trustees, the changed policy should be presented back to staff for discussion.

5 A table showing all policies and their status (current, being written, planned, needing review) will be kept up to date.

6 A review may include step 3 and must include step 4a, 4b and 4c.

7 In general all curriculum policies will be reviewed every three years, some management and personnel policies may be reviewed more often.

8 A policy may be reviewed in addition to the review date at any time should circumstances require it.

9 Copies of all policies will be kept in a ‘desk file’ and will be available to all staff and trustees.

Conclusion: All policies written at Cannons Creek School will give clear guidelines to the staff and wider school community.

**W.H.O. Component P1: The school has a policy on healthy food.**

The nutrition policy is part of the *Cannons Creek School Health Policy* and includes the rationale ‘*Healthy children learn better*’ therefore:

We actively promote opportunities for our children to be healthy, physically, mentally, emotionally and socially.

Guidelines include regulations about lunches and food in the school and state that:

- We sell a wide range of food for lunch and encourage children to select healthy food options.
- We do not allow children to bring chippies, lollies, canned and bottled fizzy drinks, roll-ups etc to school.
- We will promote the drinking of water\(^{66}\) as a healthy practice.
- Teachers are to monitor children’s lunches each day and follow up any problems.
- We do not use sweets etc as rewards.

\(^{66}\) commonly referred to as ‘rain juice’ by teachers and students
Healthy school lunches are available at the school. It is improbable that the food is locally grown, but food is mainly produced in New Zealand. The *Food Safety Plan* covers food hygiene, delivery, storage, preparation, and distribution of food in the school and is relevant to school lunches, especially the storing and heating of meat pies. During the early 1990’s when, following benefit cuts in 1991, national awareness of the numbers of students going to school with no breakfast or lunch was reported in the media, Cannons Creek, like many other schools, provided free school lunches for these students. What was then noted at the school was a rapid increase in the number of students coming to school without food. Numbers were reported as reaching 150 students in 1999. The school considered that if it continued to provide free lunches it would reinforce dependence in a population that already had a history of high welfare dependence. In July 1991 two school lunch days were held at which parents and students were taught by teachers, the public health nurse, the dental nurse and the community dietitian about healthy lunch food, how to prepare healthy lunches and the importance for children of eating breakfast before coming to school. Since this time the food provided for students, either prepared by themselves or by their parents, has usually been considered by teachers as adequate in quantity and complying with the school policy on food. A 2001 website entry from Room 4 students stated

*We have also studied lunch options which was fun (Room 2, Cannons Creek School website).*
Documented *Unwritten Rules* at Cannons Creek School cover supervision of lunch times, lunch orders, and adequate food provision. In these rules is the statement that *gum and sweets are banned.* The *Unwritten Rules* also indicate that:

- Students are not allowed to go to the shops at lunchtime because of the dangers of crossing the road.
- If a student does not have adequate food the school supplies noodles or yoghurt and fruit from the range available for purchase and parents are invoiced for the purchase.
- The teacher is expected to note if a student does not have food and discuss the circumstances with the principal so the issue can be addressed with parents if necessary.

Cannons Creek School was the first primary school in the West Coast region of the Wellington area to be awarded the Heartbeat Award\(^{67}\) from the New Zealand Heart Foundation. This award was presented in November 1991 for introducing healthy eating to parents and students of Cannons Creek School.

**Checkpoint P1.2:** *Teachers act as role models by eating healthy food in school.*

The school has a *Role Models Policy* that states:

Cannons Creek School recognises that the most important teaching method is the teachers attitude as a role model; as a person not bound by stereotypes; as a person who cares for people; as a person who is assertive, supportive, respectful, strong, considerate, sharing and listening.

\(^{67}\) The Heartbeat programme was started in 1987 to encourage children to eat more healthy food and to know what was good for them.
Teachers stay with students in their respective classrooms for 10 minutes at the commencement of the 12:30 p.m. lunch break while students eat their lunch. The aim of this strategy is to ensure students eat their lunch and therefore have adequate energy for the school afternoon. The strategy also has the effect of reducing litter in the playground and avoiding excessive sun exposure during the highest risk sunburn period of the day. Teachers use the time while children are eating to discuss healthy food and provide positive reinforcement to students for the choices they have made in food selection. Students mainly see teachers as healthy nutrition role models if they happen to go into the staff room during morning tea or lunch breaks and during social occasions, when teachers aim to act as role models. Classroom activities also encourage children to make and sample healthy foods. One of the class room stories on the school website states:

We eat healthy food and we make yoghurt and popcorn. We like yogurt and popcorn because its yum (C. Year 3, Room 3. Cannons Creek School website)

**Checkpoint P1.3: Health food is available at school social events like sports days.**

Social events are usually celebrations at which parents contribute festive food rather than food that is normally eaten every day. Sandwiches, sausage rolls cakes and sweet treats are often prepared for social

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68 Senior students act as staff room and office monitors in the school breaks and may go to the staff room to access a staff member if they need to. The staff room door was always open and students seemed to feel comfortable going to the staffroom at any time for a valid reason.
occasions. Parents may also provide ethnic-specific food. For example, Pacific Island people may provide hot food including, chop suey, taro, green banana in coconut and other traditional delicacies.

Supporting evidence and significant issues regarding school policy on healthy food

Healthy food and nutrition has a very high profile at Cannons Creek School and within the school community. The school Health Policy that includes nutritional guidelines was implemented in 1991 at the same time as awareness was raised about healthy school lunches and during a time when links between what students were eating and their behaviour were being identified. At that time food additives and food colouring was implicated as contributing to a reduced attention span and learning problems in children. Improvements in attention and the behaviour of students, especially after lunch, was noticed by the school staff following the implementation of the nutrition policy.

Currently, Cannons Creek School staff are not aware of any students taking the drug Ritalin, commonly prescribed for students diagnosed with Attention Deficit Hyperactivity Disorder (ADHD)

Estimated to affect five out of every 100 children aged six to 14 years old (Steeds 2001:5).

Figures published in November 2001 stated that the number of prescriptions for children on Ritalin in New Zealand had increased from 21,000 in the year to June 1996 to 44500 in the year to June 2001. These increases were
attributed to better diagnosis of the disorder (Steeds 2001). The incidence of students at Cannons Creek School on this drug may be related to diet, or linked to a variety of other factors that may include: that parents of students at the school do not consider their child’s level of activity to be abnormal; that parents may have difficulty accessing specialist medical care; and, if they do access specialist care, treatment may be impeded by the low rate of prescription uptake described by Chalmers (1995).

As part of the introduction of the Health Policy in 1991 a drinking mug was given to each child to encourage them to drink water at school. More recently drinking bottles were issued to each student to support drinking of water during the school day. Analysis of the nutrition section of the student health behaviour survey (Appendix 5.1 section 5.1.7 p19) confirmed the high levels of water intake with 92.7% (103) of the 111 participants reporting that they drank water once or more a day. Provision of water bottles also overcame the need for students to rely on the drinking fountains, which have rusting pipes resulting in poor tasting water.

Adequate and appropriate nutrition is important for the energy and growth requirements of primary school aged students. The student health behaviour survey analysis (Appendix 5.1 section 5.1.7 p19) identified that fresh fruit, breakfast cereal, white bread and milk were all consumed by more than 70 percent of the survey participants daily or more often. Fruit juice and fresh vegetables were reported as being consumed on a daily or more frequent basis by 63.9 percent of students (for fruit juice) and 62.1

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69 The school had been promised sponsorship for this initiative which did not eventuate, so the school bore the full cost of this project.
percent (for vegetables). Biscuits or cakes, cola or aerated (fizzy) drink, hot chips, and brown or wholemeal bread, were reported as being consumed by between 57.6 percent and 48.6 percent of the survey participants daily or more often. Meat, sweets, chocolate etc, potato chips, corn chips (CCs, cheezels), hamburgers or hot dogs, muesli bars and eggs were reported as being consumed by between 46.8 and 38.7 percent of the student participants on a daily or more frequent basis. Over 47.7 percent of the student participants reported never eating peanuts, 44.1 percent reported never eating fish, 37.8 percent reported never eating muesli bars, 36.0 percent reported never eating brown or whole grain bread, 33.3 percent reported never eating eggs, 25.2 percent reported never eating meat and 11.7 percent reported never drinking milk. The analysis of these data reveals that most students in the participating group reported a fairly high consumption of carbohydrate, fresh fruit and vegetables, a fairly low consumption of the full variety of protein rich foods and a medium consumption of convenience foods.

Obesity is an issue of concern for the population as it is estimated that over half adult New Zealanders are overweight and that Maori and Pacific Island people are more likely than New Zealanders of European descent or other ethnic backgrounds to be in this category. The leading causes of death in the Porirua population are heart disease, stroke and cancers, which are all negatively impacted upon by obesity. Type two Diabetes, which is largely prevented by ‘normal’ weight maintenance, is also more common in Maori and Pacific Island people. The student health behaviour survey identified seven students who, when weight percentiles at
stated heights were correlated exceeded the 97th percentile, or were overweight. Teachers of junior classes at the school expressed a concern that some parents came to school at lunchtime to feed their children, especially when they were newly enrolled. The concern of teachers was that they considered the amounts of food these children were given during this process was sufficient for the energy requirements of two students. When this activity persisted the teacher spoke to the parent, and sensitively discussed suitable food requirements for school age children and the student’s need to develop independence around the amount and types of food they required.

One of the findings during the students focus group interviews held following the student health behaviour survey was that the majority of the focus group made or purchased their own breakfasts and lunches, and some students also purchased food for themselves and their siblings for an evening meal. These students were aware of the school nutrition policy and sometimes tried to flout the rules by buying banned food for breakfast or lunch.
**W.H.O. Component P2**: The school is totally smoke-free and prohibits alcohol and illicit psychoactive substances in all activities.

**Checkpoint P2.1**: The school has developed a strategy for phasing out smoking completely within the premises, with a deadline for being totally smokefree: this policy applies to staff, students and visitors.

**Evidence**

The school has a smoke free policy that includes active promotion of a healthy environment and adults serving as positive role models for students. The provision of a room named the ‘throne room’ for adults who smoke is in acknowledgment that many parents and some staff members smoke, and to meet their needs this room has (not without dispute) been set aside for that purpose. The rationale for this strategy was that it was culturally inappropriate not to make provisions for the parents who, when the school grounds became smoke free stated that they were affronted when they could not smoke at their school. It was considered better to provide this space than for adults, as role models, to be seen outside the smoke-free school grounds smoking. As per New Zealand legislation the smoke-free policy is reviewed annually. Students can readily identify which staff members smoke and students stated that they would prefer that all smoking in the school – including in the throne room ceased immediately. To encourage non-smoking behaviour the Cannons Creek School Smokefree Policy states that staff members will be reimbursed the cost of an anti-smoking course if they are successful in stopping smoking for two months. This offer has not been taken up in recent times. The smoke free policy

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70 The throne room gained its name from its use as the office of a former Principal.
stated that 2000 was the deadline for a smokefree school however currently the aim of the school is to be entirely smoke free as soon as feasible\textsuperscript{71}.

Checkpoint P2.2: The school has prepared an appropriate action plan to eliminate alcohol and illicit psychoactive substances in all school activities.

The school does not have an alcohol or drug policy per se but students were aware that these substances are banned from school grounds. The students who were interviewed as part of the focus group had a high level of awareness of alcohol abuse and the effects of drunkenness and drugs, including knowledge about drug dealing in their community. Alcohol and drug use and resulting graffiti and vandalism has been an ongoing problem in the school grounds after school hours. The school is used as a thoroughfare and is close to alcohol outlets. In 1999 there were 19 graffiti incidents and 16 occasions of drug/alcohol use in the school grounds resulting in one stabbing, one broken arm and two broken windows. One seat and one door were also damaged during that period and on numerous occasions alcohol containers and on five occasions drug ‘gear’, was found in the school grounds. In the early 1990’s when there was a very high level of vandalism in the school a concerted effort was made to involve parents and relocate the school as a focal point in the community. This occurred following a proposal from the Ministry of Education to enclose the

\textsuperscript{71} This intent may be hastened by impending legislation tabled by Minister of Health in 2001 to make all schools entirely smokefree.
school in high fences to keep intruders out of the grounds. The Ministry of Education solution was not acceptable to the school or the local community which wanted the school to be an open inclusive environment and a resource that was accessible.

Towards this aim a mural was painted by staff, parents and students and students were actively involved in improving the environment so that the community would have pride in the school. From 1990 to 1992, following this initiative, the cost of vandalism dropped from $12,000 to $4,000 per annum. At one stage during this period parents stayed overnight in the school to protect the grounds and buildings. Now a ‘town watch’ scheme funded by the school and local businesses operates to protect the area. Local persons, dressed in uniforms and equipped with two way radios patrol the school during the evenings and weekends which has been attributed with keeping vandalism to very low levels. Only two broken windows were reported during the summer holidays of 2001-2002.

**Supporting evidence and significant issues regarding school policy on alcohol and drugs.**

The student health behaviour survey included questions about the use of cigarettes and alcohol, and peer pressure around these behaviours. Based on self reporting and peer behaviour question analysis, alcohol use could be as high as 9.9% and smoking rates could be up to 11.7% for the 111 survey participants (average age 9 years 5 months) in the school (Appendix 5.1 section 5.1.4 p13&14). There was a high level of awareness among the student focus group about the dangers of cigarette smoking. However with 30% of the adult population in Cannons Creek reporting they
were regular smokers in the 1996 census it would be interesting to follow up teenage smoking behaviour patterns for this cohort.

During the 1999/2000 period a proposal to open a bar and casino in the Cannons Creek shopping centre was received by the Porirua City Council. As part of the licensing procedures objections were called for and Cannons Creek School Board of Trustees and staff submitted a lengthy objection and ensured media attention was gained to highlight the community concerns at the initiative. Objections were based on the potentially negative effects of increased access to gambling in an area where families were financially struggling, on increased access to alcohol and on the likelihood of students being exposed to poor adult role modelling, drunkenness, violence and vandalism in the school grounds. The ‘Grafiti’ bar was subsequently opened and has resulted in the negative effects predicted by the school community.
W.H.O. Component P3: The school upholds equity principles by ensuring that girls and boys have equitable access to school resources.

Checkpoint P3.1: The school has reviewed customs and practices prevailing within the school with respect to the utilization of play space, equipment, teacher time and other resources and, where necessary, taken action to redress inequities between girls and boys.

Evidence

Many of the school policies include equity statements and support gender, ethnic equality and the principles of inclusion for children with special learning needs. For example the Role Models Policy states that staff should avoid the use of stereotyped language, and not to accept it from pupils, and that all resources purchased must be evaluated on their portrayal of the roles of gender and ethnicity. There is also a specific Equity Policy, which states that all students at the school will have access to learning programmes and physical resources suited to their needs. This policy further states that the aim is for equitable learning outcomes for all students and that the school encourages co-operation rather than competition. An Equity in Teaching Programmes and Resources Policy focuses on guidelines for the selection of non-racist, non-sexist resources aimed at equitable student outcomes. Selection criteria for resources include to:

1. Ensure that the main characters and illustrations are not stereotyped on the basis of gender and race so that both boys and girls might be shown as clever, sensitive, courageous, witty.
2. Selection is possible if background character (s) are stereotyped but the main characters offer the reader a positive role model.
3. Offer positive role models for children in learning and teaching programmes.
4 Have carefully selected resources that are neither sexist or racist when planning units of work.
5 Include ‘girl and boy friendly’ materials in resources you use eg. specific computer programmes and science resources.
6 Aim to have quality, relevant materials that have been written by authors of varied backgrounds and cultures whose writing reflects their own experiences.
7 Choose resources which accurately present a balanced world view.

**Supporting evidence and significant issues regarding school policy on equity.**

It would appear that equity issues in this school are not an issue except for the fact that staff members are predominantly Pakeha and female rather than reflecting the ethnicity and gender mix of the students. Mono cultural dominance was ameliorated by one Pacific Island KiwiCan Leader, one Maori and one Pacific Island social worker and a Samoan public health nurse becoming part of the school community in 2000. Students with special needs are supported by the educational philosophy of inclusion and included within the school policy aims of *equity of outcome and achievement for each student*. Teaching assistants are employed, as funding allows, to work with and support individual students with special learning needs. Three students were eligible for this funding in the 2000 school year.

Female students, during a focus group interview when bullying was discussed, stated that they would prefer that Cannons Creek School was an all girls’ school. Male students felt they were treated more harshly by teachers than the female students but acknowledged that this was usually because their behaviour was worse than that of their female counterparts. A revealing statement about male/female relationships in senior primary school students was:
Our class is quite different from any other, because boys and girls get along together which is pretty good (I. Year 6. Room 2, Cannons Creek School website).

Equity was apparent in the student survey results where there was little or no significant difference between the health behaviours of females and males. Behaviour such as not wearing a cycle helmet, and not wearing a seat belt was reported as of no significant difference by gender (Appendix 5.1 section 5.1.8 p20). Tooth brushing rates also demonstrated no significant difference by gender (p<0.4). In the survey the other significant differences between males and females were that males considered that the teacher thought less well of their work (Appendix 5.1 section 5.1.6 p18) than the rate reported by the female students (p<0.36). More males used computer/ video games and engaged in more physical activity outside school hours than was reported by the female student participants, but this was not statistically significant (Appendix 5.1 section 5.1.5 p16).

A review of the equity, and some other related policies during this project identified that some policies had not been reviewed within the intended time period stated in the School Policy Development and Review Policy. This identification subsequently had the effect of initiating a general check and review of policies that were outside their review timeframe. All policies are now on the school website and include review dates. A request was made of me, as an available health professional to take part in the review of some of the health related policies. I participated as requested in this process as part of a researcher reciprocity activity in my ‘nurse as researcher’ role.
During the period of my involvement in the school I discussed the issue of administration of medication by students and teachers with school staff. School staff had requested assistance from the public health nurse, which apart from the provision of written guidelines, had not been forthcoming. There was an awareness by staff that some students were bringing medication to school and in some cases teachers were either noticing students self medicating or were being asked to give medicine to the student, with no written instructions from the parent or health professional. One example of the reality for one teacher was when a five-year-old came to school with an antibiotic in his/her schoolbag. The bottle had broken and the teacher retrieved the remainder and administered it according to the instructions on the bottle but was unable to send the bottle home due to the breakage. The parent was not contactable by phone, as the household did not have a telephone so a note outlining the situation was sent home to the parent. The teacher knew the importance of the student having this medication but could not get support from a relevant health professional to follow the situation up, and/or could not contact the parent to ensure the appropriate continuation of the medication. The teacher continued to administer the medication during school hours until it was finished. My advice as an available health professional was sought and following an evaluation of the situation I concurred with the actions of the relevant teacher.

On other occasions school staff, have taken a student to the local doctor and administered the medication subsequently prescribed, at school,
when parents were not able to be contacted or did not act on the advice of the school regarding the need for treatment for their child. One example of this type of situation was when a student who came to school limping from an infected burn to one foot. The incident was described thus:

Principal to student ‘What happened to your foot?’
Student ‘The stove fell on me’
Principal ‘Have you been to the doctor?’
Student ‘Yes’. Older sister of student ‘No’.

When the parents of the student could not be contacted the principal took the student to the local general practitioner and paid for prescribed antibiotics, which were administered at school. Both the general practitioner and chemist knew and agreed with this course of action and the parents were informed of the action and of appropriate follow up treatment through a letter sent home from the school with the student.

The outcome of the actions of school staff involved in both of the cases cited above was that the students were returned to optimum health for learning with the minimum disruption, within the available school resources. The school staff knew their actions were not the best theoretical or legal option, but they were prepared to act *in loco parentis* if necessary to achieve a positive, education focused outcome for the student. In cases such as those cited, decisions made by a teacher always involved gaining the agreement, and most often the active participation of the principal on the course of action to be taken.

During focus group interviews students gave a variety of answers about administration of medication at school. The most common was that they self medicated at school, if necessary. One student said they would
take medication to the office if they needed to take it during school time. The variety of medications these students had taken to school included eye drops, an asthma inhaler, antibiotics, cough mixture and medicine for a stomach-ache. The student health behaviour survey (Appendix 5.1 section 5.1.10 p23) included questions about the medication taken by students in the month preceding the survey. The most commonly reported medications were taken for coughs (47.7% of the student group), cold or flu (43.2% of the student group), headaches (43.2% of the student group), sore throat (38.7% of the student group), pain (33.3% of the student group), and injury (33.3% of the student group). Rates for cause-identified student absences (Appendix 5.2) were 16 of 415 reports (3.8% of the absences for the year) related to chest infections, 126 (30.3 %), headaches 33 (7.9%) and sore throats 20 (4.8%). The student participants in the focus group reported that they had all suffered from flu at least once that year, some said they had suffered from skin problems and sore stomachs, and one had ongoing asthma and eczema.

**Checkpoint P4.1:** All medication distributed by the school is recorded.

During the 2000 school year policies and processes to ensure medication distributed in the school was recorded were under discussion and development. As part of these discussions a new recording system was in the process of being trialed, but at the end of the data collection period for this project was not yet being fully utilised by the whole school.

There was a concern raised by staff that although they were aware of a number of students that had been diagnosed as asthmatic (23 to 25) only
one student, who required peak flow meter readings during the school day, had a documented asthma action plan held by the school. Concern was expressed by some school staff that not only are there fewer general practitioners in the area but it would appear that the treatment options given to local families by some general practitioners were less than the staff would be given by their practitioner.

The Cannons Creek School Health Policy states that an asthma action plan for each student who has been diagnosed as asthmatic should be held at the school. Asthma action plans should be written by the general practitioner or practice nurse with the aim of prescribing immediate treatment in the event of an acute asthma attack with the aim of reducing the severity of the attack. The plan is also intended to document any ongoing prophylactic medication use. As this project progressed I became aware that a further health policy goal (an annual seminar for students with asthma and their parents), had not been implemented in the past year.

When the school staff expressed a desire for expert input I offered to act as a liaison person. I was aware that an asthma nurse specialist was based at the Maraeroa Marae. However, this nurse had not visited the school or been involved with asthmatic students at the Cannons Creek School. Contact with the school was outside the scope of practice for this nurse. I subsequently, in my ‘nurse as researcher’ role had an opportunity to discuss the needs of the school with her and asked if she could contact the

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When the school wrote to general practitioners in 2001 and requested asthma action plans and immunisation certificates for students one general practitioner replied that they did not know what the school wanted.
school. Subsequent contact resulted in education sessions for the student and parent group and initiation of asthma action plan development.

**Checkpoint P4.2: Local health officials provide advice on suitable storage and distribution of medication.**

The school requested information regarding suitable storage and distribution of medications. This resulted in the public health nurse providing some examples of written guidelines. These guidelines were not considered appropriate for the school and discussion and amendments, in consultation with a health professional, were deemed to be necessary. This process is still on-going.

**Supporting evidence and significant issues regarding the school policy on medication**

The issue of medication at Cannons Creek School is one of growing concern as awareness of consent, responsibility and liability issues are raised in the school context. At times students are required to take prophylactic medication or occasional courses of drugs that should ideally be administered during school hours. School staff are aware that altering the prescribed medication policy could impact on the severity of the condition and make the treatment less effective and possibly cause an organism (eg a specific bacteria) being treated to become drug resistant. At times children may be kept at home inappropriately to ensure a medication

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Teachers stated that they had observed that many asthmatic students were not using prophylactic medication but were depending on curative inhalers once an asthma attack had commenced.
regime is followed, and this may impact negatively on their education. Teachers at Cannons Creek School consider that they are not qualified to administer medications and by doing so without written instruction they are taking inappropriate responsibility, which could be a risk to their professional liability. Teachers at the school feel they are forced to act in loco parentis in giving medication and when diagnosing and treating illness or injury events for the students in this school. Teachers stated that they consider a nurse would be better suited to adopt this role, especially when a situation is complex and parents are not able to be contacted readily, such as in the examples cited.
Evidence

Cannons Creek School is able to provide first aid care for its staff and students. The two office staff are the first line of contact for emergencies, and students know and routinely access this service. On one occasion I observed a student being accompanied to the office following an accident in the playground, that had caused the student to sustain an ankle injury. The duty teacher had seen the student in the first instance and sent her, accompanied by a friend, to the office. The cause of the injury as stated by the teacher was “it’s the curse of the Spice Girls shoes”, which translated meant the student had fallen off shoes with an excessively high sole, resulting in an ankle injury. The student was taken to the medical room, the office staff member assessed her ankle and massaged it with Arnica cream (a homeopathic remedy used to prevent bruising). Details of the injury and treatment were recorded in the logbook and as the injury was not serious and the student was capable of walking with a slight limp, she was instructed concerning followup treatment if it became worse, and sent back to the classroom.

Checkpoint P5.1: There are adequate first aid kits for the school population.

All first aid equipment is located in the medical room, which is close to the office and is the responsibility of one of the teaching staff. First aid supplies are replenished by school office staff as required. During interviews with staff members the need for more comprehensive first aid
equipment that included more complex dressings, creams and preparations to clean and treat skin infections was identified. This need was based partly on the fact that often teachers are made aware of student injuries and infections that had not been treated in the home in the first instance. In these circumstances staff members aim to teach students how to clean and care for their own wounds, as appropriate, as part of the overall aim of teaching health care and independence to the student.

When checked against the standard first aid equipment list (Appendix 5.3), all essential equipment was available in the medical room. The room has a bed, kitchen type bench and sink (with locked cupboard underneath), a first aid box situated high on the wall, a table and chair, an adjoining shower room and a cupboard in the hall outside the room containing spare recycled clothes (which are also available for purchase at a very low price per item) for emergency use. The accident/treatment logbook is kept on the bench and is completed for each injury/illness event. During the 2000 school year there were 106 injury and 38 illness events recorded in the logbook. A spreadsheet record of the events that occurred during the 2000 school year is included as Appendix 5.4. The most common injury event recorded was a bleeding nose (18 students), followed by bruising to the head (12 students), and to the knee (9 students). On most occasions, 59 of 106 events (55%) there was no record of how the injury occurred, and therefore analysis of the cause of the injury was not possible. For example 13 of the 18 cases of nosebleed events were recorded but no cause was identified. Unidentified events may have been caused by an injury but may
also have been spontaneous bleeds caused by nasal inflammation related to viral or bacterial infection.

Nineteen injuries were recorded as being caused by a fall, 13 by the student being hit by another student, and 11 caused by the student being injured by equipment. Lack of comprehensive reporting and therefore accurate analysis of injury events was probably due to insufficient detail in the form. During the 2000 year the log book record form was replaced with a more comprehensive incident register (Appendix 5.5). This form required a record of date, time, injury location, pupil identification, problem, management, a note to parents and signature of staff member. This subsequently improved the quality of data collection and potential usefulness of the information.

As well as the essential first aid kit equipment (Appendix 5.3) a number of other preparations were available for use in the medical room. These included:

- Tui Bee Balme – a general skin salve.
- Arnica cream - a homeopathic remedy used to alleviate bruising.
- Prioderm shampoo – malathion - used for head lice treatment (The New Zealand Medical Association 1990).
- Anthisan cream – a topical antihistamine containing mepyramine - used for allergy type rashes eg hives (The New Zealand Medical Association 1990).
- Benhex Creme – gamma benzene hexachloride, an insecticide used to treat scabies and body lice.
Betadine – povidone-iodine antiseptic ointment – used on minor grazes/wounds to reduce the chance of infection (The New Zealand Medical Association 1990).

Calamine lotion – zinc carbonate solution coloured with ferric oxide and used as an antipruritic to soothe irritated skin (The New Zealand Medical Association 1990).

Steristrips - used to treat cuts not requiring suturing.

Telfa non-stick dressings - used on moist wounds.

An asthma emergency kit, (which was approved to be sold to school principals by the Ministry of Health in 1997) complete with instructions for use in an asthma attack that contained five ventodisks, a space chamber aerosol spacer, a disk haler, and a bronchodilator inhaler.

**Checkpoint P5.2: An appropriate number of teachers are trained in first aid procedures.**

At any one time three or four school staff have completed first aid training.

**Checkpoint P5.3: Emergency procedures are set out in the event that the urgent referral of a student or teachers to a hospital or clinic is indicated**

Emergency procedures in the medical room Policy state:

Emergency procedure:

- Inform Principal or Deputy Principal.
- Don't move child after a bad fall if they cannot get up.
- Get help from another staff member.
- Notify parents or emergency contact.
• Call ambulance if necessary, ring child’s doctor or Accident and Emergency.
• If in doubt about any treatment for accidents ask the Teacher responsible for first aid.

Supporting evidence and significant issues regarding the school policy on first aid.

Treatment and care of student injury and illness events by staff appears to meet the needs of the school population. Students readily use the available services. Staff identified issues concerning administration of medication and the responsibilities they take for diagnosis and treatment of student illness and injury events. Difficulties in contacting parents and parents not taking responsibility for treating and accessing appropriate care for student illness can result in staff action in place of the parent. Difficulty in accessing health professionals who have the resources to visit the school and work with parents is an issue for the school. Parents may then not be fully informed and/or not have the opportunity to give consent to actions made by the school staff for their child. Improved recording has now commenced at the school with the aim of identifying and comparing the more common types of injuries and illness events. This may result in the purchase of other treatment preparations considered by staff to be of benefit to the student group, and specific injury prevention education programmes.
W.H.O Component P6: Where appropriate the school has a policy on the control of helminth and other parasites.

Evidence

Control of helminth (endoparasitic flatworms and roundworms) is not generally considered necessary in terms of policy in New Zealand schools. The pinworm, *Enterobus vermiclais*, a nematode roundworm occurs in New Zealand populations and can be transferred by direct contact through the transfer of eggs from the hands of an infected host to the mouth of another person. The school could be environmentally conducive to the spread of pinworms especially if there is inadequate provision for effective hand washing. The *Staying Healthy* section of the *Health Policy* states that:

*Children will be taught basic hygiene such as washing their hands before handling or eating food and after using the toilet.*

Towards this end students are encouraged to wash their hands before morning break and lunch time. Cold water, soap and paper towels are provided for this purpose.

More health threatening parasites such as hookworms (*Ancylosoma* sp. and *Necalor* sp.) have been detected in immigrant Pacific Island people but in none of these cases has the complete lifecycle of the parasite occurred in New Zealand (Andrews 1976). Parasites can be a persistent problem in New Zealand school populations. Scabies (*Sarcoptes scabei*) is the most commonly occurring skin mite in New Zealand and causes intense itching when it burrows into the epidermal skin layer and lays eggs. Scratching the affected area can cause bleeding, scab formation and increased risk of skin infection (The New Zealand Medical Association 248).
1990). Head lice (*Pediculus humanus capitis*) are one of three types of lice or kutu\textsuperscript{74}, the others being body or clothes lice and the ‘crab’ or pubic lice. Head lice are most commonly found in school populations (Andrews 1976). Lice cause itching and lay eggs (nits) that look like grains of rice on the hair shaft close to the scalp. Both mites and lice are passed on by direct contact with an infected person or, in the case of scabies and body louse, from contact with infected bedding or clothing. Both scabies and head lice are an ongoing problem for parents and teachers, as the parasites are difficult to eradicate in a school population.

The parent focus group identified head lice as major issue for them. The problem was that unless all infected students are treated effectively as soon as they are infected, a treated student could be re-infected very quickly if they are in still in physical contact with a student who still has an untreated infestation. Primary school aged children are in constant close contact with each other and on many occasions during classroom instruction and play their hair can touch that of someone else, which provides an environment with potential for serial infestation. Head lice crawl from hair to hair when heads are close together. They do not die in water and females lay seven to ten eggs a day, which take around seven days to hatch, and live for up to 40 days (Consumer 2001b). Treatment of head lice and scabies is expensive\textsuperscript{75} (effective shampoos for head lice range in price from around

\textsuperscript{74} Maori word for head or body louse – sometimes spelt cooter, cootoo or kootie (Orsman and Orsman 1994) or called kuiti bug (Ministry of Health, Head Lice Facts brochure).

\textsuperscript{75} To overcome this problem at one stage the school purchased shampoo from the local pharmacy in bulk and sold it to parents in recycled plastic containers. When the school realised they were breaking pharmaceutical regulations they ceased the practice.
$9.00 to $23.00 per 100 mls) (Consumer 2001b), and requires vigilance and organised effort to control or eradicate.

Treatment for scabies involves the use of specific cream or lotion over all the body, following a bath or shower. The cream must be left on for 8 to 12 hours if gamma benzene hexachloride is used, or 48 hours if benzyl benzoate is used. One or two treatments of cream are required and bedding and clothing requires washing and drying in conditions that will kill the mite. This involves washing clothes etc in a hot (60°C) machine wash and/or drying them in a clothes drier. Alternatively, sealing items such as pillows in plastic for a minimum of two days can be effective to kill the mite. Advice is that all persons in the infected household should be treated at the same time to stop further infestation (Consumer 2001b).

Head lice infestations are usually treated with shampoo that contains permethrin or malathion. This must be left on the scalp for the recommended time period and used again in 10 days to kill any lice that have hatched from eggs adhering to the hair shaft. Herbal extracts have been developed because of the fear of using insecticides on children, but have not proven to be effective (Consumer 2001b). Fine combs are also used to remove the lice and eggs and are more effective if used in conjunction with hair conditioner, but are also not as effective as a specific treatment shampoo. Recently an electronic comb that ‘zaps’ the lice has been developed which makes them more readily combed out of the hair, but does not kill them (Consumer 2001b).
**Checkpoint: P6.1 Students are taught basic knowledge and prevention methods.**

At Cannons Creek School when head lice are detected the process is that a letter is sent home to parents of infected students. Parents of other students in the class are also notified and asked to check the hair of their child/ren. A Ministry of Health pamphlet is available for parents and the school newsletter may be used to notify parents if there is a persistent problem. Students are also educated about avoidance, detection and treatment of head lice.

**Supporting evidence and significant issues regarding school policy on helminth and parasitic control.**

Treatment and control issues relevant to head lice and the Cannons Creek School may include the cost of treatment, especially for large households. The care in following instructions is essential and may be negatively impacted if instructions are not understood. This may be compounded if parents cannot understand complex English language instructions. Lack of responsibility for regular inspection of students for infestation by the public health nurse, or teachers, neither of whom consider the activity appropriate to their scope of practice is an issue for the school. Acceptance of scabies or head lice as a normal childhood condition that does not require treatment may impact on control of the parasite. Inappropriate and traditional treatments such as shaving the head and/or treatment with the application of kerosene to the scalp can be demeaning for the student, and in the case of kerosene application, dangerous. Side
effects from the prescribed chemical treatments can also preclude correct reuse of the product if rashes and irritation occur. This can happen especially if the eyes or mouth come in contact with the chemical agent in the shampoo or cream (The New Zealand Medical Association 1990).
W.H.O. Component P7: Where appropriate the school has a policy on sun protection.

Evidence

Cannons Creek School has a sun protection policy named the Shade Policy that states:

Cannons Creek School will ensure the effect of the sun on children's health is minimized.

Guidelines

1. All children will have lunch inside, or sit under the designated shade areas for their class.
2. We will investigate portable shade areas to be erected when the weather is suitable which can be dismantled at the end of each school day.
3. Children will be encouraged to wear suitable sunhats and clothing to protect them from the sun in summer.
4. Parents will be encouraged to supply sunscreen for their children.
5. Children will be encouraged to use sunscreen while they are outside for any length of time.
6. School supplies of sunscreen are available for school trips and sports days. SP15 sunscreen will be available from class teachers, who may obtain it from the supplies held in the medical room.
7. Classes will include 'sunsmart' as a health unit each year.
8. Shade trees will be planted each season to increase existing shade areas.
9. Parents are informed of aspects of this policy through newsletter items.

One class also had wearing sunhats outside as a class rule listed on the classroom wall. Sunhat wearing was not obvious during my observations in the school playground at Cannons Creek School, but is encouraged as much as possible. Discussions with staff about sun hazards and shade provision in the school revealed that there was concern that the
school did not have enough shade areas to protect students from the sun. The cost of providing sun screening, compounded by the likelihood that the screens could become costly targets of vandalism out of school hours has meant that shade provision has not yet been satisfactorily resolved. Trees have been planted in the school grounds but they provide little effective shade. The part of the playground with the least shade is the area most heavily utilised by students during playtime and during all outside activities. This area includes the large expanse of asphalt between classroom block 1 and blocks 2 and 3 (Appendix 4.3 & Appendix 4.4 Fig 19), which contains play equipment (swings, slides and climbing frames) and does not readily lend itself to tree planting, without causing obstacles to current play and activity patterns. The fact that the majority of children at the school have melanin pigmented skin means that the risk of sunburn and subsequent increased risk of skin cancer is not considered as much of an issue as it would if the majority of the student group were fair skinned.

**Checkpoint P7.1: Students are not permitted to play in the sun without protective clothing.**

The wearing of hats and sunscreen by students is encouraged but not compulsory at Cannons Creek School. As stated in the *Shade Policy*, the school provides sunscreen for school trips. School provision of sunscreen recognises that parents may not consider this as a funding priority when resources are scarce. Hats are not compulsory for the same reason. The cancer society ‘sunsmart’ messages of slip (on a shirt) slap

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76 During the 2001 school year a business sponsorship provided hats for all students in the school.
(on a hat) and slop (on some sunscreen) are revisited by each class, each year which reinforces the sun safe message for children and encourages them to take responsibility for their own safety in the sun.

**Checkpoint P7.2: Teachers act as role models by wearing protective clothing while in the sun**

Teachers, the majority of whom have fair skin, tend to wear clothing that covers their skin, hats, and sunscreen when on playground duty and on school trips.

**Supporting evidence and significant issues regarding school policy on sun safety.**

The school staff consider that more action is required to provide areas of shade in the school grounds. A solution that is financially possible for the school, is not likely to be the target of vandalism and is an enhancement to the school environment has yet to be found.
**W.H.O. Component P8: The school has a policy on health screening**

**Checkpoint P8.1: Children are provided with routine health checks in line with local priorities and with a view to cost effectiveness**

**Evidence**

The regional public health service, a division of the Hutt Valley Health District Health Board is contracted to provide Personal Health for school aged children in the Wellington region. Current policy for the health screening of students aged five to 10 years includes hearing and vision testing for new entrants and a child referral service to the public health nurse. Children who require followup after a ‘failed’ vision or hearing test or who are referred to the vision hearing tester because of the concern of a parent or teacher are included within this contract. Service delivery or response to referrals by the public health nursing service depends on the “needs of the setting” (pers comm, Hutt Valley Health public health manager). There are no universal general physical health checks currently available for students in this primary school setting. The universal five-year-old checks that were carried out in all schools up to the late 1980’s were discontinued because they were not considered to be a cost-effective use of resources.

The Cannons Creek School *Health Policy* includes a section named *Staying healthy*, which states:

- When children are enrolled we will record any health problems on “Pupil files” and update as needed.
- We will encourage the appropriate follow up after hearing and vision tests.
- Childrens health concerns are to be recorded on the priority pupil list so they can be addressed.
• If a teacher is unsuccessful in solving a health issue with a pupil referrals will be made to an appropriate agency for further action.

National requirements under which Cannons Creek School must operate include meeting the 1995 *Health Immunisation Regulations*, questions about immunisation records are asked as part of the Education Review Office self review questionnaire, which states:

18 Does the board take reasonable steps to ensure:

(a) Either before or promptly after enrolment, that the caregiver\(^{77}\) of a child born on or after 1 January 1995 is requested to provide to a school employee and immunisation certificate?

(b) That an immunisation register is maintained

(c) That the immunisation register contains required information (full name, date of birth, whether or not and immunisation certificate has been provided)?

(d) Where an immunisation certificate is provided, that the immunisation register includes a record of whether the child has been fully immunised or, if not fully immunised, a record of which diseases the child has been immunised against. (E. R. O. 2001:7).

**Supporting evidence and significant issues regarding school policy on health screening.**

During the 1980’s the public health nurse was responsible for the health screening of all new entrant children. This involved a parent or guardian attending the examination and full details about the child’s health and immunisation history being recorded. Any immunisations that were not up to date and any health problems that were considered potentially detrimental to the student’s education were followed up by the nurse. This

\(^{77}\) The term *caregiver* has replaced the term *guardian* used for an adult, other than a parent who takes responsibility for a child. *Guardian* is the term used for a person who has legal responsibility for a child (Collins 1994).
process has now ceased and been replaced with the expectation that the school has sole responsibility for gathering information regarding any health issues including immunisation status when a child enrols at school. Until 1999 the public health nurse was responsible for checking the information gathered by the school and following up any health issues or missed immunisations. Since 2000 this nurse led follow-up process ceased and follow-up now appears to have fallen through a gap as it is not to be considered the responsibility of either the school or the public health nurse. Very often the information required by the 1995 *Health Regulations Act* is not provided by the parent/caregiver when the child enrols at school. Reasons may include: that parents/caregivers do not remember details of immunisations given to their child; that parents/caregivers do not know how to access this information from the general practitioner; that parents/caregivers do not have records with a local practitioner; or, that parents/caregivers do not know what immunisations should have been given to their child. Lack of information may also be affected by parents/caregivers being new to the country and therefore not being familiar with the New Zealand health system. The school staff do not have the time, nor do they consider it the primary educational priority, to followup health and immunisation documentation. Lack of completion of new entrant health documentation, and lack of knowledge on how to access health information may have also contributed to the lack of asthma action plans for students with asthma who are enrolled at the school.
**W.H.O. Component P9:** The school has a policy on closure in the event of emergencies or other circumstances which would endanger student's health

**Checkpoint P9.1:** Students are dismissed if there is a continuing interruption to the supply of fresh water, in the event of an outbreak of infectious disease, if there are extremes of heat or cold from which they cannot be protected adequately, or if the sanitation arrangements are considered to be health threatening by the school after consultation with local health services.

**Evidence**

The 1989 *Education Act* governs the number and length of days the school must be open for student instruction and also governs closure of the school in case of an emergency. The principal can close the school, after gaining approval from the Board of Trustees and notifying the Ministry of Education if an adequate classroom temperature cannot be maintained, or if the water supply is cut off for a prolonged period. When there is an event that causes concern the situation is carefully managed with the aim of avoiding closure and the difficulties associated with getting parents to collect children from school earlier than usual. For example, on one occasion during a very cold winter period when the boiler\(^\text{78}\) which heated the school broke down, children wore extra clothes in the classroom (provided from the recycled clothes store) and did physical exercises to keep warm until the situation was remedied. The school did not need to be shut down as a result of this creative problem solving.

\(^\text{78}\) The original boiler has since been replaced by a more reliable double boiler gas fuelled heating system.
Supporting evidence and significant issues regarding school policy on closure in emergencies.

When considering the possibility of school closure in the event of an emergency many contextual issues clearly need to be considered against the legislative directives. At Cannons Creek School there is a high level of regard for the logistical difficulties in informing parents of an emergency situation and of parents collecting students at non scheduled times. Difficulties include a lack of current telephone, or an out of date contact number caused by frequent telephone disconnection\textsuperscript{79} and reconnection when accounts are unpaid. Distance from the school to homes, compounded by lack of transport (access to private or public conveyance) for some families is also a factor that is considered. In the example of the non-functioning boiler system there was also an awareness that during excessively cold weather many of the students could return to home environments colder than those remaining at the school, due to lack of adequate home heating.

\textsuperscript{79} This situation is slowly changing as more families invest in prepaid cell phones that can still receive calls without incurring the owner a cost.
**W.H.O. Component P10:** The school has a safety plan for implementation in the event of natural or other disasters.

**Checkpoint P1.1:** The school has an evacuation plan in the event of fire; students are drilled in the carrying out of this plan.

**Evidence**

Cannons Creek School has a *Fire Action Plan* that sets out what should be done if a fire occurs in the school. The plan includes warning other people to leave the building safely by the designated route and telephoning the fire service. Designated wardens (school staff) have responsibility for checking all rooms including classrooms, toilets, kitchen, and cloakrooms and to ensure that all persons in the school at the time assemble at the designated assembly point. As soon as teachers arrive at the designated location (sited well away from buildings) they check the class register (checked first thing in the morning and after lunch) to ensure everyone at school that day is accounted for. The *Fire Action Plan* is also provided to any persons who hire the school hall. In this instance the person responsible for the hire fee is given a copy of the *Fire Action Plan* and must sign a letter stating that they agree to follow the procedures outlined in the plan.

The evacuation of the school, or *fire drill* is practised with the assistance of the local fire safety officers, at least once a year. During one of the student focus group interviews the alarm sounded and a practice fire drill occurred. I asked the group of students what was happening and what I had to do. I specifically said I did not know anything about the drill and could they tell me all they knew. They carefully told me where the assembly point was, that we must shut the door to the room we occupied and use the
nearest exit. They instructed me to walk quickly, but not to run and guided me by the arm to the assembly point where children were being checked against the class registers. The time taken to evacuate buildings was recorded and the principal noted any delays or unsafe acts. When the drill was complete, staff and students were praised for their actions and any ideas for improvements were announced by the principal before the ‘all clear’ signal was given for students and staff to return to class.

**Checkpoint P10.1:** The school has emergency plans for other circumstances which could be expected in the local area for which little forewarning is likely eg, flood, typhoon, physical attack in the event of hostilities.

The most likely circumstance that may occur, and for which there is little forewarning is an earthquake. New Zealand is prone to earthquakes and Cannons Creek School is situated 23km from Wellington which has been the site of major earthquakes in the history of, and prior to, its settlement. Many minor earthquakes are experienced in the course of a year. Cannons Creek School therefore has a policy named the *Earthquake Drill* that states that the procedure should be reviewed with students and practised at least once a term (four times a year minimum). The policy outlines that:

In the event of an earthquake children should:

1. Take cover beneath a solid piece of furniture, normally their own desk, or a table.
2. Face away from any glass that may shatter – internal or external windows, partitions and doors.
3. Hold onto desk or table legs.

The policy also includes instruction for vacating the buildings and states that the building should be safe in most earthquake conditions but the
principal or a teacher may instruct evacuation if they consider that such action is in the best interests of student safety. When evacuation is considered necessary the same drill as for a fire is to take place except that children should leave the area in small groups (two’s and threes) and at intervals to avoid a concentration of children in any one place. Assembly sites and register checks in the Earthquake Drill follow the same procedures as for the fire drill.

**Supporting evidence and significant issues regarding school policy on emergency procedures**

A civil defence plan is required in all New Zealand schools (Civil Defence Act 1983) in recognition that in the event of a major earthquake students and staff at an education institution may need to remain at the school for at least 24 hours and may not have access to water, electricity or heating. The relevant question in the Education Review Office self-review (2001) questionnaire asks:

47 Has the Board:
(a) Prepared plans, which will enable the school to continue functioning during or after a national or civil defence emergency?
(b) Made adequate provision for rescue, first aid and relief and provided necessary training consistent with local civil defence plan?
(c) Since the last Education Review Office report had any occasion to undertake civil defence measures or to perform functions or duties in relation to civil defence? [Education Review Office, 2001 #31]

Cannons Creek School was the subject of an Education Review Office Review in 2000 and the only area in which it did not adequately
comply was the lack of a civil defence policy and plan. Since that time the Civil Defence Officer employed by the Porirua City Council has had discussions with school staff and a comprehensive Civil Defence plan has been developed. Parents have been informed about procedures and asked to give written consent for an alternative caregiver to collect their child from school in the event of an Civil Defence emergency.
Evidence
Cannons Creek School does not have a specific policy for HIV/AIDS control and safe management. A Ministry of Education guidelines document was published and sent to all schools in July 1999 (Ministry of Education 1999), which has been considered by staff as part of the medical room policy review that occurred in May/June 2000. The policy states that:

All surfaces in the medical room and the playground that have come into contact with body fluids must be cleaned with Janola spray and an antiseptic fluid.

Checkpoint P11.1: Issues of practical management such as blood spill procedures are clearly documented and rehearsed and suitable equipment is available in the event that it is required.

Staff at Cannons Creek School consider that the procedures in place for care of wounds and the potential presence of body fluids in the medical room are adequate to ensure the safety of staff and students and prevent transmission of blood–borne infections including Hepatitis B and C. The Ministry of Education policy guidelines include the statement that:

A child’s health status should not affect their right to an education (Ministry of Education 1999:2).

The guidelines document also states that about 20 schools in New Zealand have had HIV positive students in the last few years and that Hepatitis B is more common in New Zealand and is preventable through
vaccination. Hepatitis B vaccine is routinely given to infants at 6 weeks, three months and five months as part of the New Zealand immunisation schedule. Hepatitis B vaccine is given to babies of HbsAG positive mothers at birth and household and sexual contacts of hepatitis B cases and carriers are offered Hepatitis B immunisation (Ministry of Health 1996).

The Ministry of Health guidelines state that in dealing with any injury all children should be treated as if they have a blood-borne virus. The procedures used at Cannons Creek School include the use of gloves if a staff member cleans or touches a wound. Hand washing with antiseptic soap prior to and after any treatment is also expected as part of the medical room procedures.

**Checkpoint P11.2: Teachers and other school personnel are provided with training about HIV/AIDS prevention and management.**

The Ministry of Education guidelines were tabled at a staff meeting following receipt of the publication by the school. The guidelines were circulated to each staff member to ensure they were aware of the content and intent of the document.

**Supporting evidence and significant issues regarding school policy on HIV/AIDS control and management.**

Although HIV/AIDS is relatively rare and Hepatitis B should be prevented by immunisation of the New Zealand school aged population, vigilance is essential to guard against practices in the school that could allow cross infection to occur. Risks to Cannons Creek School staff and students may be greater than for some other New Zealand school
populations due to the enrollment of a number of children (refugees and immigrants from the Pacific Island) who have not been New Zealand residents since birth. These students may have come from countries which have a greater incidence of blood-borne infections than occurs in New Zealand and may not have completed effective immunisation regimes. A further risk could be low immunisation rates in the student population. According to a 1992 survey, immunisation rates for children in the Porirua-Kapiti area were about 5% lower than the Wellington regional average. In the 1992 survey (McGrath 1999) it was reported that only 50 percent of Maori children in the Central Region of New Zealand were fully immunised by age two, and nationally only 49 percent of children in Pacific Island families were found to be fully immunised. Since this time immunisation has been a targeted activity for health professionals and it has been reported that general immunisation rates in the Porirua–Kapiti area have risen from 60% in 1996/97 to between 85 to 90% in 2000 (Porirua Kapiti Healthlinks Project 2000). No figures are available for ethnic-specific rates for this time period.

Based on the evidence, Cannons Creek School appears to have appropriate policies that are effective and are used as intended to guide practice in the school.

Issues identified in this chapter will be further expanded in Chapter 6, which will focus on literature linked discussion of the major issues that have been identified.
In our classroom there is something called the Oticon system. It has speakers and a microphone. The teacher has it and it doesn’t matter if she is inside the classroom we can still hear her.

5.2 The Physical Environment of the School

The physical environment of the school includes buildings, grounds, equipment for both indoor and outdoor activities and the areas surrounding the school. The term also refers to basic amenities such as sanitation and the availability of water (W. H. O. 1996:8).

W.H.O. Component PE.1: The school provides a safe environment for the school community

Checkpoint PE1.1: In selecting any new play and sporting equipment the school takes safety into account and, if appropriate, ensures that guidelines for their use are in place.

Evidence

The Cannons Creek School Maintenance Policy states that the school will maintain the buildings, grounds and equipment to the highest possible (standard) with the finance available.

Guidelines include:

1. Education Services Central is contracted to produce a long Term Maintenance Plan, which is to be revised annually.

2. Education Services Central will supervise all major maintenance work.

3. Education Services Central will produce an annual maintenance programme which details work to be completed from the Long Term Plan.

4. Trustees will set aside each year sufficient finance to carry out that years programme.

5. A maintenance reserve will be kept to enable sufficient finance to be available for high cost maintenance.

6. Once a month the Property Committee is to make a thorough check of the cleaning of the school using the checklist.

7. The Property Committee is to report in writing each month to the Board of Trustees.
8. Once a term the Property Committee is to make a safety check of the whole school and report to the Board of Trustees.
9. Any safety hazard or vandalism is to be repaired as soon as possible.
10. Minor maintenance is to be carried out as soon as possible.

Play and sporting equipment purchase is discussed and prioritised by school staff, and approved by the Board of Trustees through the annual budgeting process. During the data collection phase of this project I observed the process of selecting *Quiet Playground Monitors* whose role was to set out small play equipment at lunchtime and to ensure equipment was used safely and appropriately. The goal of the initiative was to provide small play facilities, such as cards and games for children who did not want to engage in more physically active pursuits during the lunch break. Monitors were also expected to know the rules of the games, how to deal with any issues that arose during the play, and to collect and put away equipment at the end of the break. The process of becoming a monitor included students submitting a written application for the job, attending a meeting to discuss the duties and guidelines for equipment use, and being available to be rostered as a monitor once every three weeks. Twenty-nine students applied and all became monitors. An example of the letter from one applicant was:

Dear Mrs *, I would like to apply for the vacancy that has been advertised for a quiet playground monitor. I think I am the best person for the job because I am good at setting things out but best of all I share things with children and teach children how to play other games and how to play properly. Yours Sincerely **

Teachers are rostered on playground duty which includes supervising specific areas of the playground during morning (10.30 to 10.45 a.m.) and
lunch (12.40 to 1.30 p.m.) breaks. Teachers on duty are instructed to be: visible; acknowledge appropriate behaviour; sort out problems quickly; record any problems; ensure children needing medical treatment are accompanied to the staffroom for help; and, inform classroom teachers of any serious (behavioural or medical) incidents concerning their students. To protect children from potential injury the unwritten rules state that:

- Gangs
- Bullrush
- Rugby without a teacher directly supervising
- Sticks and toy guns
- Playfights
- Skates and skateboards
- Shoes off outside

are all BANNED.

**Checkpoint PE1.2: The school undertakes periodic safety audits of all buildings, plant and equipment to ensure they are safe.**

The school caretaker is responsible for all fixed equipment and minor maintenance of buildings and equipment in the school. The school also has a contract with Education Services Central, which provides regular planned maintenance such as painting buildings, resurfacing grounds etc. The caretaker responds to reports of equipment that requires repair and ensures heating, lighting cleaning and maintenance is satisfactory.

As part of the data collection process I completed a playground safety check using a questionnaire developed by the Nelson City Council that included a checklist for maintenance (eg use of rounded timber, no splinters, bolts recessed, safe gap size etc), surfacing (including drainage,
use of safety standard surfacing etc\textsuperscript{80}, water (eg availability for cleaning and drinking), layout (eg space, shade and amount of equipment for numbers of children etc), and suggestions for safe use of playground equipment. Generally, all relevant checkpoints on the questionnaire gained an affirmative response except for an area of rubber safety matting under a swing bar and some protruding metal bolts on wooden climbing frames. On completion of the survey, in my ‘nurse as researcher’ role I reported findings to the principal who spoke to the caretaker about repairs. There was considerable delay in the repair of safety matting – an event that required an outside expert who had delayed the work. The repair did not occur until pressure was put on the contractor just prior to the Education Review Office visit mid 2000.

\textit{Checkpoint PE1.3: in conjunction with the local community the school takes action to minimise local traffic hazards eg. those related to traffic, drug dealing.}

The main hazard in this category for Cannons Creek School students is road traffic. The school is situated on Warspite Ave which is the main through-road for Porirua east. Between 1990 and 1998, 58 children were injured on roads in the Porirua East area (Porirua News 1998). The school takes an active part in protecting students from road hazards by patrolling the two main road crossings outside the school gates. Students on road patrol are trained and rewarded for their work. Students wear bright reflective vests and hold barriers, which are swung out to stop cars.

\textsuperscript{80} See photograph (Appendix 4.4 Fig 16) for an example of rubber safety matting that complies with playground safety standards.
while the pedestrian crossing is used by students and adults. School patrols provide a responsible role for senior students and a comprehensive policy and clear procedures are followed\textsuperscript{81}. In 1994 new, larger and more visible swing signs to be used by school patrols were introduced (Kapi Mana 1994). In 1997 a National Safer Route to School campaign was initiated with the intent of surveying main routes children used to get to school, identifying and then addressing any major road safety hazards (Porirua News 1998).

Patrols are supervised by teachers before and after school each day, and parents and students are encouraged to use the crossings when patrols are operating. Parents are also reminded, intermittently in the fortnightly school newsletter, of the safest area around the school grounds to collect their children by car.

**Checkpoint PE1.4:** The school puts procedures in place to see that students are protected from unwanted visitors to school.

The school has a *Visitors Policy* which states that:

All visitors to Cannons Creek School are to be made welcome by staff and pupils so that the purpose of the visit is successfully accomplished within the bounds of this policy.

Guidelines include:

- All visitors need to report to the office on arrival.
- When it is known that a visitor is coming it is important for the contact person on the staff to record the visitors name on the whiteboard in the staff room in advance and to inform the principal.
- Tradespeople need to be encouraged to come out of school hours, and informed that the school prefers this.

\textsuperscript{81} The MacDonalds cup awarded for the ‘best patrol of the year’ has been won on three different occasions by Cannons Creek School - the only school to have won the cup more than two times.
If it is necessary for tradespeople to test any equipment in the classrooms it is important that the office staff inform all teachers in advance.

During interviews with the principal I discussed the situation of visitors to the school that may be a threat to members of the school community. The most obvious people in this category are those who use the grounds as a thoroughfare or a place to drink or take drugs and/or vandalise the school. This activity usually occurs outside school hours, and greater potential risks to students are from people who come into the grounds during school hours. More specific risks are from parents who visit the school with the aim of defying child custody orders. The school has a set of procedures that are followed for circumstances when non-custodial parents visit their children without the consent of the custodial parent or caregiver. The process includes discussion with the child and class teacher on actions to be taken in the case of an event occurring, which includes the child being instructed to go straight to the principals office if the non custodial parent comes to the school. There have been instances at the school when these processes have been used to ensure the safety of the student. Parents are encouraged to inform the principal of any such situation as this or any other circumstances that may impact on the student, their safety or their educational progress. The Welcome to Cannons Creek School brochure and the fortnightly newsletter include a message from the principal that states:

Problems, Worries or Concerns
If you have problems at all involving the school, or your child, or you would like to talk about how your child is getting on at school, please come and see me. No problem is too big or too small and while I am never able to say that we can solve all problems we can listen.
Supporting evidence and significant issues regarding safety in the physical environment of the school.

When students are taken out of the school grounds on a school trip a Trip/Performance/Event Form is required to be completed and given to the principal at least one week prior to the trip. Details on the form include departure and return time, place, purpose, cost, and the number of students, adults and teachers accompanying the group. Arrangements for non-participating students are also required, as is a risk analysis and management plan. Emergency and normal risk management strategies for the planned event and any potential dangers and risks (such as accident, injury or other loss) to people, equipment and the environment are recorded on the form. The aim is to ensure: that any trip is well organised; that the trip has the required level of support and resourcing; that notifications to parents and school staff are sufficient; and, that risks to student safety are minimised.
W.H.O. Component PE2: Adequate sanitation and water is available

Checkpoint PE2.1: There are sufficient toilets for both males and females.

Toilets for staff and students at Cannons Creek School are adequate, although the teacher group did comment on the fact that since students have had water bottles in the classroom there is increased demand on the toilet facilities, and that occasionally the services can only just cope. On inspection I found that the toilet block situated in the playground that is used by students during break times appeared to be old and while both female and male facilities are clean and in good repair the facilities do not seem to invite use.

Checkpoint PE2.2: Safe and clean water is available for drinking and hand washing.

As previously discussed students have their individual drinking bottles which are kept in the classroom and filled from the tap from the safe fluoridated regional water supply. There are also drinking fountains in the playground for use at other times. However, the drinking fountains have old rusting pipes that supply the water to the fountains, which negatively affect the taste of the water from the fountains.

Hand basins with soap and cold water are available to students in the toilets blocks adjacent to classrooms. Paper handtowels are provided for drying wet hands.
**Checkpoint PE 2.3**: An adequate quantity of water is available for washing facilities and sanitation.

Water supply is not a problem at the school. The Wellington Regional Council, which has responsibility for collection, treatment and supply of water in the greater Wellington region, maintains adequate water supply. Catchment lakes situated at Te Marua, north of Upper Hutt supply the Porirua area. There has been some concern expressed about potential water supply to the area in a civil defence emergency but under normal circumstances this is not an issue (pers comm, Civil Defence Officer, 1999).

**Supporting evidence and significant issues regarding the availability of adequate sanitation and water.**

There are no major issues regarding the provision of adequate sanitation and water at Cannons Creek School. However washing hands adequately following toilet use may be more likely if warm water and soap was supplied in all toilets, and if the playground facilities were more attractive to use. A potential, but calculated risk also exists from the use of drinking bottles if they are not regularly and thoroughly washed as they may harbour or transmit gastrointestinal bacteria. The recorded number of absences from stomach-ache and vomiting was reported as 56 in the 2000 school year.
W.H.O. Component PE3: The school upholds practices which support a sustainable environment

Checkpoint PE3.1: Recycling of renewable resources such as paper, glass and aluminium, is undertaken.

Evidence

All school rubbish is collected by a contractor. In 2000, Porirua City Council did not operate a recycling scheme. There are recycling bins for glass and aluminium cans situated behind the Cannons Creek shopping centre, but these are not used by the school. Because all aerated drinks are banned at the school there is virtually no aluminium waste. Plastic waste is also minimised by the school food and drink policy. In the student health behaviour survey, when students were asked to identify what was the most important thing they could do to protect the environment (Appendix 5.1 section 5.1.12 p27), the greatest proportion (27.9%) of participants chose the recycle glass, paper and plastic option. The second highest option selected in the survey was the collect rubbish option, which was chosen by 25.2% of the participant group.

Checkpoint PE3.2: The use of disposable plastic containers is discouraged.

Children are encouraged to bring their food from home in recyclable lunch boxes. Water bottles are re-used and only disposed of when they are judged to be a health hazard. Food provided by the school includes yoghurt – which is in plastic containers, and noodles – in cellophane wrappers.
Supporting evidence and significant issues regarding the use and disposal of recyclable materials.

Students at Cannons Creek School have a relatively high awareness with regard to recycling issues as part of action for the environment, in spite of the fact that it is not part of their everyday experience. Most areas of Wellington are supplied and encouraged to use recycling bins for paper, cardboard, cans and plastics. Encouragement is also given to residents to compost any organic matter to reduce the strain on landfills. In some parts of the country, for example the Taupo Region, recycling includes mulching vegetation for compost, re-using concrete for fill. Recycling white-ware products is commonly practised at ‘transfer stations’. The Porirua City Council had not, in 2000, implemented these policies. During 2001 pilot recycling schemes were introduced to Porirua with a universal scheme planned for 2002. Students at Cannons Creek School engage in ongoing energy conservation programmes\(^2\), which extend to the home environment as well as school, and are aimed at reducing the use of energy resources.

\(^2\) Four worm farms were developed by senior students during 2001.
**W.H.O. Components PE4: Students are encouraged to take care of the school facilities**

**Checkpoint :PE4.1: The school has an adequate garbage disposal system, suitable to its situation.**

**Evidence**

Rubbish, deposited in bins in classrooms and in the school grounds is collected by the school caretaker and placed in a skip which is removed by a contractor on a regular basis.

**Checkpoint PE4.2: Students participate in keeping the school clean.**

Students are expected to keep the grounds tidy by using the rubbish bins provided and by picking up rubbish that may have been dropped or blown into the school grounds. One of the school rules includes *Look after Cannons Creek School*. Students are rostered on ‘litter duty’ to ensure the grounds are kept clean and attractive.

**Checkpoint PE4.2: Students participate in beautifying the school e.g. by painting murals, planting trees and shrubs.**

The *happy wall* (Fig 15 p 220), which is a feature of the playground was designed and painted during the drive to improve community pride in the school. Parents, staff and students were involved in this project. Students also participate in initiatives such as annual Arbor Day tree planting. Adults more commonly carry out general ground improvements, either as part of a maintenance contract, or during parent ‘working bees’ which may be held for specific purpose such as building climbing frames.
There was a general agreement that students could be more involved in activities that enhanced the school grounds.

**Supporting evidence and significant issues regarding student care of school facilities**

Cannons Creek School grounds are well maintained, clean and well kept through the efforts of staff and students. Students are aware of the environment and the need to care for, and take pride in, their school. In the student health behaviour survey (Appendix 5.1 section 5.1.2 p9), questions asked included how students felt about their school. Eighty-one (72.9%) survey participants chose the *like it a lot* option, with only four students selecting the *don’t like it much* option. When asked about the cleanliness and safety of the school 79.2 percent of the student participants *agreed or strongly agreed* with the statement that *our school is clean* and 81.9 percent *agreed or strongly agreed* with the statement that *our school is safe*. 
W.H.O. Component PE5: the school endeavours to enrich learning by ensuring the physical conditions are the best they can be

Checkpoint PE5.1: Adequate ventilation exists in all school areas where students gather.

Doors and windows that can be opened as necessary usually provide adequate ventilation in all Cannons Creek School buildings. Classrooms have doors and windows on both the north facing (large windows and a glass door facing the afternoon sun) and south facing (high windows and wooden doors sheltered by a porch, facing the cold wind) aspects, which provide ventilation. Teachers mentioned that at times the ventilation in classrooms was not adequate due to windows not being able to be opened in a southerly wind. The library has the same basic architectural design as the classrooms. The hall has high windows on each side of the main body of the hall that can be opened as required for ventilation.

Checkpoint PE5.2: The lighting is adequate.

Lighting for classrooms is mainly from natural light through the windows and glass door. Electric lighting supplements natural light as required on dull days. Some teachers said that they avoided using the lights as they considered the fluorescent bulbs could cause headaches and detrimentally affect student and teacher health.

Checkpoint PE5.3: Basic heating is available when needed.

The school has reliable gas fuelled boilers that heat water which is circulated through radiators into all rooms in the main buildings. When
required, the boiler is turned on in time for all rooms to be heated when students arrive at the school on winter the morning.

**Checkpoint PE5.4: Care is taken to reduce unnecessary sound disturbances.**

Noisy ground maintenance is not completed close to buildings during school time and tradespeople are asked to complete necessary work outside school hours. At times when other classes are engaged in Physical Education the playground areas may be noisy during class times.

Most of the classrooms face towards a reserve that slopes down from the school grounds. The reserve is planted with mature trees, which shelters the school from suburban noise. Some of the trees were recently removed after students wrote to the Porirua City Council (which owns the reserve) because the trees were blocking light and sun from the classrooms. The junior classrooms, which are part of the main administration building also face north, away from the road. A band of trees and shrubs shelter these school buildings from road noise along the road boundary. Inside classrooms external noise is minimal, but the background noise of movement and talking can interfere with student’s ability to hear the teacher.

In 1998 a study was conducted in the Porirua basin into classroom noise and the effects of installing phonic ear FM sound systems in junior classrooms (Allcock 1999). The project was initiated by a concern about factors that interfere with listening skills, which for young children occupy 45 to 60 percent of the school day. The report stated that a reduction in listening skill development has been linked to a delay in development of language, and delayed literacy acquisition. Interference with listening can
be caused by hearing problems, which are most commonly caused by colds and ear infections, environmental exterior noise, caused by traffic or playground use and interior noise caused by items such as computers and aerated fish tanks (Allcock 1999).

Two Porirua basin schools, one a Decile 9, the other a Decile 1 school took part in the hearing research project. In the Decile 1 school 69 percent of students tested failed one or other of the two hearing tests that were conducted eight weeks apart. Fifty-four percent of students failed both of the hearing tests, conducted during winter months. In the Decile 9 school 30 percent of children tested, failed one or other of the two hearing tests conducted eight weeks apart. Ten percent failed both of the hearing tests conducted during summer months. Other findings of the research were that poor acoustic conditions caused high background noise levels, which were measured at 52 to 65 dB in the empty classrooms (ambient sound). Measurements of background sound were recorded in classrooms as 50 to 60dB when students were present and were quietly sitting on a carpeted area listening to the teacher. These signal-to-noise ratios were well above the recommended international standards for children with normal hearing, which should be 30 to 35, dB (Allcock 1999). There are currently no building code standards for insulation or sound proofing for classrooms in New Zealand.

83 The highest reports for cause of absence at Cannons Creek School during 2000 were for colds/flu, which accounted for 126 of 622, or over 20% of cases. Seventeen reports of ‘ear infection’ were also recorded and amongst the 50 cases when the reason for the absence was given as ‘going to the doctor’ there were likely to be cases of students with ear nose or throat infections seeking treatment from a general practitioner or specialist at outpatient clinics.

84 dB is the symbol for decibel which is a unit for measuring the intensity of sound (Collins 1994).
Following the introduction of the sound system which included four directional speakers and a portable microphone worn by the teacher results were stated as follows:

The introduction of FM sound-field amplification systems to the classrooms involved in the research project, showed significant improvement in on-task\textsuperscript{85} behaviour (average improvement of 18%), and phonological awareness skills (Allcock 1999, executive summary).

During 2000 Cannons Creek School installed a phonic sound systems in all classrooms to assist student learning and overcoming the issues identified in the hearing research project. Results from this initiative have yet to be determined, but informal teacher feedback indicates that students spend more time in on task behaviour.

\textit{Checkpoint PE5.5: The school should identify what standards already exist and explore with relevant authorities how resources can be obtained to meet those standards.}

The Board of Trustees and staff of Cannons Creek School are aware of the environmental standards and legislative requirements that they need to comply with to ensure the physical conditions in the school are the best they can be to enrich student learning.

\textit{Supporting evidence and significant issues regarding optimum physical conditions.}

One area regarding physical conditions that is not well addressed in New Zealand schools is that of the design, size and condition of school

\textsuperscript{85} On-task behaviour was observed as the student concentrating on the task as directed by the teacher in a given time period.
furniture (desks and chairs) for students. Ergonomic designs are available that could enhance the physical conditions for students who spend long periods sitting at poorly designed and ill-fitting furniture. As children grow they require furniture that fits their particular height and size (Knight & Noyes 1999). Desks and chairs at Cannons Creek School appear to be provided for an average size per age group in classrooms (i.e. large for senior classes, small for juniors). Students at this school are likely to be larger than the average New Zealand school student due to the percentage of students from Maori and Pacific Island ethnic backgrounds. Furniture originally provided to meet the needs of a former population of students by the pre 1986 Department of Education is now the responsibility of the school and consideration may need to be given regarding the need to replace it with more appropriate desks and chairs. The increasing use of computers and high incidence of occupations overuse syndrome (OOS) and carpal tunnel syndrome (CTS), both linked to computer use, is also likely to be of concern if suitable furniture is not affordable and made available for school students. Advice on computer workstation positioning and keyboard usage is introduced at the earliest possible age/stage of computer usage. The school has a plan for gradual replacement of furniture, but has not considered this a priority in the past when other more immediate demands on finances have been made.

A factor that may mitigate physical damage from the use of inappropriate school furniture is the activity levels of primary school age children. Research indicates that students rarely used the backrest of the chair as they spend a higher proportion of their time (80%) sitting forward
and leaning on the desk while working (Knight & Noyes 1999). Reported rates of back pain in children are as high as 36 percent in children aged 11 to 17 years (Knight & Noyes 1999). In the student health behaviour survey (Appendix 5.1 section 5.1.10) 11 (10.3% of participants) reported experiencing symptoms of backache more than weekly and 10 students reported symptoms once a week.

From my observations it appeared that the younger the age of students the higher the level of activity in the classroom setting. Use of interactive teaching sessions and awareness of short attention spans requiring changes of state are part of the teaching strategies employed at Cannons Creek School. Such strategies may mitigate the effects of furniture that otherwise may cause physical symptoms for students.
One of the rules at Cannons Creek School is “Look after children at Cannons Creek School” and we learn some good ideas on how to do this at KiwiCan. We pat our friends on the back when they are sad and say, “Are you alright? I care for you.”

(E, Year 1. Cannons Creek School. Room 11. Website)

5.3 The Schools Social Environment

The school’s social environment is a combination of the quality of the relationships among staff, among students, and between staff and students. It is often strongly influenced by the relationship between the parents and the school which in turn is set in the context of the wider community. It is also influenced by senior staff from within the school and by health and education personnel who visit the school, all of whom provide role models for students and staff by the attitudes and values they display in their social behaviour (W. H. O. 1996:10).

W.H.O. Component SE1: The school ethos is supportive of the mental health and social needs of students and staff.

Evidence

Cannons Creek School’s mission statement is:

Cannons Creek school will provide, with community support, a stimulating and caring environment where all children are given the opportunity to develop their learning skills to enable them to succeed in everyday life.

School rules which were originally developed by classes and the student council state:

1. Look after children at Cannons Creek School
2. Co-operate with teachers
3. Look after Cannons Creek School
4. Ask permission before you leave the school grounds
5. On wet days stay inside at lunchtime and playtime. Stay sitting down with something sensible to do
6. Be sensible at all times.
During one interview with the principal I inquired how students learnt the school rules and how they knew what the rules meant. The response from the principal was that he made a point of regularly visiting classrooms to discuss the social expectations at Cannons Creek School, and the school rules which guided them. As an involved member of staff, the principal frequently visits classes, takes students for reading, maths and computer skills, and when the occasion arises during these activities he takes the opportunity to discuss the rules and their application with students. The principal is clearly valued by school and community members as is noted in the 2000 Education Review Office Accountability Review Report (E.R.O., 2000).

Students at the 2000 leavers’ dinner composed the following poem which alludes to how the principal sets the ethos of the school:

Memory of a diary
Busy as a teacher
Leader to everyone
Computer Brains
Tough as an army of pupils
Trusted with serious matters
Unlocks doors to opportunity
Important as Prime Minister
(S. and S. year 6. Cannons Creek School website)

The principal has the expectation that all students from age six or seven should know the rules off by heart as well as understanding what the rules mean. The interpretation of rules 1, 2, 5 and 6 which the principal gives to students are:
1. Look after children at Cannons Creek School. ‘That means I expect you to say nice things and do nice things to others and for others to say and do nice things to you. If they don’t I expect you to do something about it. You have to get a big kid or your teacher or me to sort it out otherwise you may be teaching someone that it’s okay to do bad things’.

2. Co-operate with teachers. At home you have to do what your parents say – they are the boss at home – the teachers are the boss at school you have to do what they say and not break the rules.

5. On wet days stay inside at lunchtime and playtime. Stay sitting down with something sensible to do.

6. Be sensible at all times. ‘What I mean by that is that if you are ever going to do something which you think your family will be ashamed or upset about or your teacher will be ashamed or angry or upset about don’t do it because it is probably wrong. But if you want to do something that I will be happy about or your teacher will be happy about and your family will be happy and proud about then it is probably a good thing!’

There is an understanding by staff that at times when children are involved in ‘doing their own thing’, especially in the playground, they do not always remember to obey the rules. The playground action plan is based on a philosophy of behaviour modification and includes rewarding students for good behaviour, with a caught being good label. The aim is to reinforce good behaviour and deter students from breaking the rules, through appropriate deterrents including not being able to play at break times. I was interested in how students interpreted the rules, especially the term sensible86.

Subsequently I came across a student who was in the foyer outside the principal’s office during the lunchtime play break writing out the rule I

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86 Sensible: level headed(adj) aware(adj), sane, rational, reasonable, shrewd, wise, sagacious(wise, sage, learned, clever, perceptive, astute, knowledgable), prudent, judicious (Microsoft Word thesaurus).
must be sensible at all times as many times as possible. I took the opportunity to ask why he was writing the lines and said:

What do you think sensible means?
Response: It means being good.
I asked: What does being good mean?
No response
I asked: Why are you writing lines?
Response: Cos I was arguing.
I asked: Why?
Response: Cos he (another student) said I couldn’t fight.
I asked: Do you think lines are a good idea?
Response: No (pause) Yes.
I asked: Why?
Response: Cos if you fight when you grow up you go to jail.

During 1999 as part of the Strengthening Families (Strengthening Families 1998) initiative a pilot scheme that funded school based social workers employed by the Pacific Taeaomanino Trust and Te Roopu Awhina Ki Porirua commenced. Cannons Creek School was part of a cluster of schools in Porirua East that started to have designated social workers who regularly visited and responded to the needs of the school community. This initiative was proposed and driven by the Cannons Creek School principal in his role as the ICAN chairperson. Prior to this initiative when major social issues came to the attention of the school staff referrals were made to the Child, Youth and Family Service, then the police. Responses were often too slow for the needs of the school and student/s.

School staff were very positive about the Social Workers in Schools scheme, especially with how quickly referrals were dealt with, and the difference that effective solutions had made to students. One example of how effective the social workers had been was when a nine-year-old student...
had arrived at school with a preschool sibling (age two years) and the house keys. A six-year-old child from the same family had left home but not arrived at school. The school principal contacted the social worker, who arrived within 10 minutes, and within a short time had found the missing six year old, arranged for relations to care for the preschooler and arranged a meeting with the parents to work out what had happened, and how it could be avoided in the future. One student in the focus group recounted that since he had been working with the social workers he was less of a bully because they had encouraged him to use his energy to skateboard and break-dance when he felt grumpy.

A peer mediation scheme also forms part of the whole school approach to a safe social environment in the school. In recognition of the fact that one duty teacher cannot see or know what is going on in all areas of the playground, or respond to all issues that arise, a peer mediation scheme was started. Peer mediators are on duty during breaks and have the role of supporting students to sort out their issues using conflict resolution processes. Peer mediators are senior students trained for their role and made visible by wearing brightly marked tops when they are on duty. Teachers encourage students to work with peer mediators to solve problems rather than expecting the teacher to solve an issue for the student. The process enables the student to maintain control and learn how to deal with the situation, and hopefully with similar situations in the future. The student view of the value of this initiative is summed up in the statement:

*We like playing in the playground and the big kids are kind to us. If something goes wrong some of the big kids have been trained as Peer*
Mediators and they help us to sort things out. If we are caught being good in the playground we are given a blue ticket by a teacher or a peer mediator and we might get a prize or a certificate at assembly (G. Year 1. Room 11. Cannons Creek School website).

**Checkpoint SE1.1:** Teachers do not use harsh discipline and are supportive of and respectful towards students.

Corporal punishment is not used in the school. *The Pupil Behaviour Policy* states that

The Cannons Creek Board of Trustees does not permit any form of physical punishment of pupils.

School rules are reinforced through positive reinforcement and rewards with the objective that students understand the rules, and put them into practice through an internal rather than external locus of control. Punishments are limited, and students are made aware of the consequences of their actions. If students obey school rules they are given a ‘caught being good’ ticket. If they break the rules they are given demerit points that may result in them being sent to the ‘reflection room’ at playtime.

The school ethos encourages respect and support for students by their teachers. In the student health behaviour survey (Appendix 5.1 section 5.1.2 p10), responses to the statement *students are treated too strictly at this school* were recorded as:

- 16.2 percent of participants *strongly agreed*;
- 23.4 percent of participants *agreed*;
- 23.9 percent of participants selected *neither (disagreed or agreed)*;
- 34.2 percent of participants either *disagreed or strongly disagreed*. 

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When asked to respond to the statement *the rules in this school are fair*, 48.6 percent of participants *strongly agreed*, 33.3 percent *agreed*, 15.3 percent selected the *neither disagree or strongly disagree* options.

**Checkpoint SE1.2: Students are encouraged to participate in school decision-making processes.**

There is a student council composed of class representatives which forms part of the decision making body in the school. Students are encouraged to participate at all levels of school activity and to take responsibility through participation. The *quiet play monitor, road safety patrols* and *peer mediation* programmes, *class room, office and computer monitor* roles are designed to provide opportunities for students to be involved in the governance of the school and to work alongside staff to maintain an environment that supports all community members. As part of the ICAN initiative (see section 5.2 p325) student representatives attended a collaborative school day at which they brainstormed concerning what makes a good person, a good school, and a good community. Teachers later used the information resulting from this exercise at the Improving Co-operative Achievement Networks (ICAN) teachers-only professional development day.

Analysis of the student health behaviour survey (Appendix 5.1 section 5.1.2 p10) found that when participants were asked to respond to the statement that *in our school the students take part in the making the rules* 51.3 percent of participants selected the affirmative (*agree or strongly agree*) options. The negative option was chosen by 26.1 percent, and 18.9 percent neither *agreed*, nor *disagreed* with the statement.
**Checkpoint SE1.3: Students are encouraged to be active participants in the learning process.**

Cannons Creek School has a *Pupil Achievement* Policy, which states that:

Cannons Creek School staff, Board of Trustees and parents expect a very high standard of achievement from all pupils, in spite of health, social, and other barriers to learning. High standards will be achieved by:

- Teachers having very high expectations of pupils’ achievement and conveying these expectations to pupils daily.
- Reinforcing achievement by using appropriate reinforcers. See *Pupil Behaviour* Policy.
- Teachers regularly and closely monitoring pupils’ work. See *Work Rules*. Written work should, wherever possible, be discussed with pupils. All written work should be marked every day.
- Discussing regularly with Senior Teachers and the Principal those pupils whose work is not of a high enough standard or whose work is not improving at an appropriate rate.
- Senior Teachers and the Principal going into classrooms once a term, examining standards and looking at pupils' work, then discussing with teachers and the syndicate.
- Following the *Monitoring and Assessment* Policy and discussing trends and making changes where needed.
- Setting, and reaching, syndicate goals each year.
- By following the goals set out in Curriculum Policies.
- Keeping Senior and Junior portfolios of work, which illustrate the best work, or photographs of best work, in all curriculum areas. These exemplars to be regularly shown to pupils.

Students at Cannons Creek School are very active participants in the formal and informal learning processes of the school. In the formal setting many activities are initiated and carried out by students. Examples can be found on the school website [http://sites.tki.org.nz/cannonscreek](http://sites.tki.org.nz/cannonscreek) where students have contributed by writing their own classroom information pages. Students stories and their artwork is put forward to be judged for the writer
of the week award. The winning stories are then displayed on classroom walls and on the school website. One website entry states:

We have a black wall where we put our KiwiCan work. We have a certain amount of wall where all our writing goes. The rest of the wall is for our topic work and art work (S & T, Room 4, Cannons Creek School website).

Rewards for school-work achievements are given in the form of certificates and on occasions, other items such as books or other donated goods that can be chosen by students who have achieved well or made significant progress in their learning. Awards are made during the fortnightly whole school assembly to which parents and other family members are invited. Encouraging schemes such as Computers in Homes and Books in Homes (see section 5.3 p314) projects are fully supported in the school and are recognised as initiatives that encourage participation in learning. Homework is an expectation at Cannons Creek School. The Homework Policy states that:

Homework is a good way of reinforcing learning that has started at school.

The policy sets out how parents will be informed about homework and their role, the expectation the school has of parents and students regarding homework that is given to students every weeknight excluding Friday, and gives the following examples of homework:

- Maths sheets – work that has been covered and pupils can do independently.
- Learning spelling words, particularly Spellwrite Essential Lists 1,2,3,4.
- Reading books, at an easy level.
- Researching/finding things, eg. news or items to bring to school.
- Learning basic facts. (All pupils should know all addition facts by the end of year four, and all pupils should know all multiplication facts by the end of year five).
- Homework sheets in relation to topics being studied.
- Practising handwriting.

Homework tutorials for maths, spelling, writing and other subjects are also available to access via the school website, which has hyperlinks to many other sites that encourage students to use them to increase their knowledge. The principal also rewards students by teaching them new computer skills (eg. how to put text boxes into photographic images), which the student is then expected to teach to other members of their class. In the student health behaviour survey statements regarding interactions with teachers elicited the following responses from participants:

*Table 5.1 Student perceptions of interactions with teachers*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree and strongly agree options added together</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am encouraged to express my own views in class</td>
<td>77.8 percent affirmation</td>
</tr>
<tr>
<td>Our teachers usually treat us fairly</td>
<td>86.6 percent affirmation</td>
</tr>
<tr>
<td>When I need help I can get it</td>
<td>82.8 percent affirmation</td>
</tr>
<tr>
<td>Teachers are interested in me</td>
<td>79.2 percent affirmation</td>
</tr>
</tbody>
</table>
Supporting evidence and significant issues regarding school ethos that supports mental health and social needs of staff and students

The purpose of the Cannons Creek School Pupil Behaviour Policy includes the rationale:

Teachers and students have the right to expect appropriate pupil behaviour at all times.

The Purpose of the policy is to ensure:

- Pupils exhibit appropriate behaviours according to school and class rules.
- Academic learning takes place.
- Children learn appropriate social behaviour.

Guidelines documented in the Pupil Behaviour Policy include the planning of class behaviour programmes that are focused on teaching behaviour in the same way that other curriculum topics are taught, and school and class rules (developed by the class) being displayed in the classroom. The document also outlines the course of action for inappropriate behaviour that includes conflict resolution, a variety of specific strategies and support for the teacher during the process. As a last resort, if all other interventions have failed, or a student commits an action which is so serious that in the first instance, other interventions are not appropriate the Suspension Policy may be used. The focus of the pupil behaviour policy is to prevent such an occurrence through positive reinforcement of appropriate behaviour. Therefore the Pupil Behaviour Policy document also states that pupils following rules may receive:

- Praise and smiles, stamps and stickers, certificates, assembly certificates
- letters to parents, a visit from or to the principal.
In the student health behaviour survey several questions were asked about aspects of mental well being and perceived health (Appendix 5.1 section 5.1.9 p21). These included self-rated items about life in general, feelings of loneliness and self-confidence. When asked how they felt about life and happiness 94 of the 110 participants reported that they felt very happy or okay. Six female, and two male students selected the not happy at all option. When asked do you ever feel lonely most participants (38.7% - who responded never plus the 43.2% who responded sometimes) reported that they did not feel lonely at the time. Six female and nine male students selected the all the time option. When asked do you feel confident about your self, 96 of the 110 participants selected the always or sometimes options, with two male and two female participants reported never feeling confident. Chi-square analysis revealed no significant gender differences for responses to any of these three questions (Appendix 5.1, Tables 5.1.26 - 5.1.28 pp 21 & 22).

The student health behaviour survey also asked about sources of support that students could use if they were really bothered about something (Appendix 5.1 section 5.1.11 p25). Potential sources included their parents, peers, school and other professionals and other adults. Responses could be selected from a range that went from very easy (to talk to), easy, hard, then very hard. An option of I don't have was also available to allow students that did not have a mother, brother, etc to make an appropriate choice. When responses from the very easy and easy options were merged and responses from hard and very hard were treated in a
similar manner, the following results (tabled below as percentages) were recorded.

Table 5.2 Ease of talking to adults

<table>
<thead>
<tr>
<th>How easy is it to talk to your...</th>
<th>very easy/easy %</th>
<th>Hard/very hard %</th>
<th>I don’t have %</th>
<th>Total n = 95-109 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother</td>
<td>87.3</td>
<td>18</td>
<td>1.8</td>
<td>98.2</td>
</tr>
<tr>
<td>Friends</td>
<td>74.7</td>
<td>18.9</td>
<td>3.6</td>
<td>97.3</td>
</tr>
<tr>
<td>Sister/s</td>
<td>70.2</td>
<td>13.5</td>
<td>12.6</td>
<td>96.4</td>
</tr>
<tr>
<td>Father</td>
<td>67.5</td>
<td>22.5</td>
<td>6.3</td>
<td>96.1</td>
</tr>
<tr>
<td>Teachers</td>
<td>63.9</td>
<td>31.9</td>
<td>2.7</td>
<td>98.2</td>
</tr>
<tr>
<td>Brother/s</td>
<td>63</td>
<td>14.4</td>
<td>18.0</td>
<td>85.5</td>
</tr>
<tr>
<td>Doctor</td>
<td>62.1</td>
<td>24.3</td>
<td>9.0</td>
<td>95.5</td>
</tr>
<tr>
<td>Principal</td>
<td>60.3</td>
<td>32.4</td>
<td>4.5</td>
<td>97.3</td>
</tr>
<tr>
<td>School staff</td>
<td>59.4</td>
<td>31.5</td>
<td>4.5</td>
<td>95.5</td>
</tr>
<tr>
<td>Social worker</td>
<td>57.6</td>
<td>22.4</td>
<td>17.0</td>
<td>97.3</td>
</tr>
<tr>
<td>Other adults</td>
<td>56.7</td>
<td>24.3</td>
<td>13.5</td>
<td>94.6</td>
</tr>
<tr>
<td>Nurse</td>
<td>54.9</td>
<td>26.1</td>
<td>13.5</td>
<td>94.6</td>
</tr>
</tbody>
</table>

From these results it would appear that there were at least five (4.5%), unreliable data sets, as obviously all these school students did have contact with school staff and a principal. Clearly mothers, then friends, then sisters, and then fathers were the easiest persons to talk to, for the greatest proportion of student participants. Teachers were easier to talk to than brothers or doctors and school staff and the principal were ranked at a fairly similar level (60.3% and 59.43% respectively). Nurses were clearly ranked as lowest. At the time of the survey social workers had been present in the school for seven months and the weekly school nurse clinic had not yet commenced. No discrimination was made in the question as to whether difficulty in talking to identified persons was due to lack of access to that person or as a result of interactional problems with an individual.

In the student health behaviour survey a number of other questions were asked to elicit information about peers, and peer support (Appendix
Only a small proportion of students (2.8%) reported having no close friends at all. However, a total of five respondents either did not respond to the related questions, or gave unreliable responses. The number reporting to have no friends in the three related questions numbered three or four participating students, with nine percent reporting that they had one close friend and the majority (88.2%) reporting that they had more than one close friend. When participants were asked to respond to statements about relationships with other students, the majority (73.8%) either agreed or strongly agreed that most of the students in their class enjoyed being together. Slightly fewer, but still a majority (72.9%) reported that most of the students in my class are kind and helpful, and 70.2 percent reported that most other students accepted me as I am.
**W.H.O. Component SE2: The school creates an environment of care, trust and friendliness which encourages students attendance and involvement.**

**Checkpoint SE2.1: The school actively discourages physical and verbal violence, both among students and by staff towards students.**

**Evidence**

The school has a *Non Violence Policy* that states that:

At Cannons Creek School violence is totally unacceptable. Trustees and staff will take active steps to discourage all forms of violence. The school will maintain an active concern with this issue.

Guidelines:
1. Violence includes verbal and physical abuse and threats.
2. All complaints about violence or bullying, from parents or pupils, written or oral will be acknowledged and acted on.
3. Any staff member who receives a complaint, or witnesses any violence, has the responsibility to act.
4. Our non-violence policy is to be emphasised by notices in school newsletters, “No Hitting” notices displayed, class discussions detailing school stance, procedures and reassurance for pupils with concerns.
5. For dealing with violence see Pupil Behaviour Policy.
6. Programmes available: “Kia Kaha” (Police), “Eliminating Violence” (SES\(^87\)), “Kool Schools” (Foundation for Peace studies)

**Supporting evidence and significant issues regarding school environment of care and trust that encourages attendance and involvement.**

In spite of the intent of the *Non Violence Policy* the student health behaviour survey (Appendix 5.1 section 5.1. 2 p11) identified a high incidence of bullying, defined in the student health behaviour survey as:

\(^{87}\) Special Education Service.
We say a student is being bullied when another student, or group of students, say or do nasty and unpleasant things to him or her. It is also bullying when a student is teased repeatedly in a way he or she doesn’t like. But it is not bullying when two students of the same strength quarrel or fight.

The survey revealed that only five students of the participant group of 111 students had never been bullied. Five participants reported they had never been involved in bullying other students. Almost half the participants (43.2%) reported that they were bullied several times a week and 47.7 percent reported that they engaged in bullying others. The student focus group indicated a high incidence of bullying behaviour that was not reported to or noticed, by teachers. The student focus group discussed that girls tended to engage in more verbal abuse than boys do and that boys tended to engage in more physical abuse. However, they also explained that boys could also be smart and girls could also get physical. Chi-square analysis of the student survey data (Appendix 5.1, Table 5.1.12 p11) demonstrated no significant gender differences for being bullied or bullying others. The focus group also explained that the principal did not want to be a principal of a school where bullying took place. They explained however, that if one student started some verbal or physical action the student on the receiving end retaliated. The student writing lines outside the principal’s office was an example of when taunting from one student had resulted in inappropriate physical action from the recipient. The recipient, not the taunter was noticed and subsequently punished.
During the 2000 school year a KiwiCan\textsuperscript{88} education programme commenced at Cannons Creek School. This programme was run by two (one male and one female), youth leaders and aimed to meet the schools needs in terms of the content and direction of the sessions. The KiwiCan leaders were made aware of the incidence of bullying following the student health behaviour survey analysis, and incorporated this topic into their programme. Each school class had one half day per week session with KiwiCan leaders for most of the 2000-year and the programme recommenced in 2001. Some of the classroom information posted on the school website revealed student perceptions of the KiwiCan programme and how it contributed to behavioural awareness:

- We learn good things at KiwiCan. We learn to behave well, take care of others, and respect everyone else and work together as a team (T. Age 10, Year 6).
- On Fridays after lunch we go to KiwiCan. At KiwiCan we learn new social skills each time we go. We have got great KiwiCan leaders. They taught us that using manners means saying please, may I, thank you, and excuse me. Patience means waiting for your turn quietly, teamwork means together everyone achieves more; you can do it, and relax and breathe (S. & T. Room 4).

The general ethos of the school was evident in class rules that were present in classrooms. In room 2 the class rules for group work were:

- Share ideas
- Listen to each other
- Be helpful to one another

\textsuperscript{88}KiwiCan is a values based educational initiative that commenced in 1999 and offers physical skills, mental agility, creative communication, environmental education and pride in being a New Zealander, programme components. A pre and post programme questionnaire is given to students to gain information about the effectiveness of the programme. Two young leaders who can relate to school-aged children run the programme (pers comm KiwiCan Coordinator, 2000).
Be encouraging to others
Have no putdowns
Participate equally in all activities
Co-operate with teacher and group members
Follow instructions
Be a good role model

Cannons Creek School also has a *Pupil Attendance Policy* that states:

Cannons Creek School Board of Trustees will take all reasonable steps to ensure every pupil attends school regularly.

This policy includes guidelines for the awarding of positive attendance and incentives for *perfect attendance* and *excellent attendance*. A class attendance shield is also awarded and presentations are made at the end of term assembly to which letters of invitation are sent to parents of students with perfect attendance. Parents are made aware of the attendance expectations for students and that the school must be notified and a satisfactory reason given for an absence. The absence record (Appendix 5.2) provides a breakdown of student absences during the 2000 year. In 1999 it was found that the records did not always state a reason for the absence. The principal needed to identify which reasons were acceptable or appropriate and which were not to make it clearer to parents, and to inform a truancy programme being initiated in the area. Therefore, upon request I developed a new form (Appendix 5.6) in my ‘nurse as researcher’ role. The form had a numbering system to improve the ease of recording for office staff and to more clearly identify if reasons were acceptable or not. The numbered recording form developed was based on analysis of the reasons given for school absences during the preceding
school year. The trial form was used for approximately three months then altered to improve ease of use, and statistical analysis.

Teachers identified one deficiency in the encouragement of perfect attendance, specifically that on occasions some students came to school inappropriately when they had health conditions that should have been cared for at home. One example was when a student had been hospitalised overnight with an exacerbation of asthma. The student had been treated with a nebuliser and other appropriate drugs then discharged early in the morning. The student subsequently arrived at school to complete a day of school activities. It was not clear that the student’s attendance was driven by the individual attendance rewards, a love of school or by parental circumstances. The risk of over encouraging perfect attendance however, has the potential to be to the detriment of the health of some students, or their peers if for example a student with an infectious disease came to school.
**W.H.O. Component SE3:** The school provides appropriate support and assistance to students who are at a particular disadvantage relative to their colleagues.

**Checkpoint SE3.1:** The school and or the education authorities recognize that some students have special needs and ensure appropriate facilities, learning aides and programmes are offered to students with disabilities and students from less advantaged backgrounds.

**Evidence**

As stated in the *Equity Policy* the school supports the philosophy of inclusion. Physically the school is equipped with ramps and rooms that can be accessed by students with physical disability. The school operates a priority pupil scheme guided by the *Priority Pupils Policy* which outlines processes to ensure the early identification of students who do not experience successful outcomes from the school, or who show special abilities in any area. The aim of the policy is to identify any students in the categories stated below as soon as possible, so that programmes can be designed to improve the student’s situation. Priority pupil programmes and their review and relevant student progress occurs at least once a term. The groups at potential risk categorised in the policy are:

1. Those pupils who socially and academically play little part within the classroom.
2. Mainstreamed pupils.
3. Priority pupils with specific learning needs.
4. N.E.S.B. (Non English Speaking Background) pupils.
5. Students who do not attend regularly.
6. a) Pupils with parents or guardians who do not support the educative process b) Pupils whose parents or guardians lack confidence in the school’s ability to supervise extra curricular activities.
7. Pupils who have not spent significant time at pre-school.
8. Pupils with physical disabilities - hearing, vision, speech and mobility and health problems.
9. Pupils experiencing a personality clash with their teachers.
10. Pupils with special abilities in any area.
11. Reading Recovery pupils including Discontinued Reading Recovery pupils.
12. Pupils with behaviour problems which interfere with learning.
13. Pupils who have suffered physical, sexual, emotional or peer abuse.

Supporting evidence and significant issues regarding school ethos that supports students who are at a particular disadvantage relative to their colleagues

Other policies relevant to supporting students who are potentially disadvantaged include a Reporting Child Abuse Policy that aims to ensure that children at the school are safe from abuse. Guidelines in the policy outline the role of the teacher in recognition and reporting of suspected abuse. Appropriate reference material held at the school is also listed in the policy. The Health Policy includes a number of references to social and mental health including:

- Appropriate social skills will be taught, and applied by our children.
- Emotional/mental support will be available to children.
- In some circumstances the school may financially assist parents with visits to the doctor, the purchasing of glasses, specialist visits etc, after consultations with the principal.
- We have a store with clothing and shoes for sale at a nominal cost

Although the school is situated in a predominantly low socio-economic area, students at Cannons Creek School do not seem to consider that they are financially disadvantaged. When participants of the student
health behaviour survey were asked about the perceived wealth of their family (Appendix 5.1 section 5.1.1 p8) 66.6 percent reported that they considered their families were either average, well off, or very well off. Almost a quarter of the participants selected the don’t know option and less than 10 percent (8.1%), or nine students selected the not very well off or not well off at all options.

The school, through policies and actions, recognises the relative disadvantage of the student population it serves and through the school ethos aims to ensure that the students at this school gain every educational opportunity within their grasp. The focus is on the ideology that every child is able to succeed and that it is up to the school to provide the students with the opportunity and the support to ensure that they reach their potential. A notice on the principal’s office door announces:

Success is the best revenge.
W.H.O. Component SE4: The school provides a fully inclusive environment in which all students are valued and differences are respected.

Checkpoint SE4.1: The school provides opportunities to celebrate cultural, religious and tribal diversity eg. through food, costume, dance, craft, displays, festivals and exhibitions.

Evidence

The ethnic composition of the students and their parents encourages the celebration of cultural diversity that is respected and valued as part of the identity of each child, and the school as a community. The student health behaviour survey asked a number of questions to elicit ethnicity and the number of languages spoken by the student participants (Appendix 5.1 section 5.1.1 p6). When asked their country of birth 83.7 percent (93 students) recorded that they were New Zealand born, 11 students reported that they were Samoan born, four students stated that they were born in the Cook Islands and two students reported being born in a country that was not specifically identified in the questionnaire. In the table below the ethnicities selected by student participants are recorded. Ethnicity is reported in descending student number/percentage order and when more than one ethnicity was selected the dual ethnicities are reported in alphabetic order.

<table>
<thead>
<tr>
<th>Table 5.3 self reported ethnicity by number (110) and % (99.1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samoan</td>
</tr>
<tr>
<td>Cook Island</td>
</tr>
<tr>
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A total of nine spoken languages and sign language were used in the homes of the student participant group. Forty-four participants reported speaking two languages and five students reported speaking three languages at home. The school takes an affirmative action to encourage students to retain knowledge of their own language in spoken and written form. Older students read books in their own language to younger students. Maori and Samoan translations of *Watercress Tuna and the Children of Champion Street* by Patricia Grace and Robyn Kahukiwa, which is set in Cannons Creek and has past pupils of Cannons Creek School as characters, are used for this purpose. The school library subscribes to two Samoan newspapers, *Tauatoa Samoa* and *Samoa Post* and family members are encouraged to come to the library and read them. Students are encouraged to write stories in their own language, with an emphasis on Pacific Cultures. The school website also supports this emphasis as the Education Gazette report stated:

Pacific Islands languages and cultures are an important focus for the Cannons Creek website, developed by a website committee made up of the principal and three other teachers, and launched by the school in May 2000. The website committee developed the site to publish student’s writing (in English and Samoan) and art, to raise the profile of the school and to provide a gateway to Pacific Islands resources for New Zealand primary schools as part of the Place and Environment and Social Organisation Strands of the Social Studies Curriculum (Boyer-Blaikie 2001).

An example of the pride in the knowledge of language of one student was recorded on the room 8 page on the school website thus:
I am special because I help the teacher talk to K. I can talk Lao and the teacher can't (K. Age 6).

An example of the cultural activities that take place in the classroom is:

At the moment we are learning to do a Cook Island welcome for when visitors come to our school. We are learning to do koru and siapo patterns for art and you can see some of our pictures on this website. We like school. (E, A, P, A, Year 1, Room 11. Cannons Creek School website).

The school has an active cultural group that is often invited to provide cultural input and/or entertainment at significant events in the Wellington region. During the 2000 school year the group participated in the launch of National Library’s Te Puna Website and welcomes for the Samoan Minister of Education and educationalists from Fiji, Kiribati, China, South Africa, United States, Mexico and Rumania. The school culture group also recorded a Compact Disc (CD) of their music and songs during the 2000 school year. The room page of each class on the school website gives information about the ethnicity of the particular student group. A sense of pride is obvious in the statements made by students arising from valuing cultural diversity in the school. One such entry records:

My favourite sport is lape. I can speak English and Samoan. I can spell English and Samoan words. I love school because I can learn. I am good at writing, reading and spelling. I am also a computer monitor (S. Age 7, Room 8, Cannons Creek School website)

The school exterior entrance is arched by a wooden Carved Mural *Te Moana Nui o Kiwa*, which:

Represents the Pacific Ocean, which joins Aotearoa with the Islands in the Pacific. The central figure of the octopus represents Te Wheke a Muturangi
– the octopus of Muturangi. There is also a rat on the octopus from the Polynesian legend of the Rat and the Octopus. The octopus has only four tentacles and they represent the four winds – Nga Hau e Wha. On two corners of the mural are two paua shells, which represent the two pointing stars of the Southern Cross. The five fish represent the Polynesian Islands throughout the Pacific. The eel near the base of the mural represents the Watercress Tuna, the eel book “Watercress Tuna and the Children of Champion Street” which was launched at Cannons Creek School. The Turtle, which is found through the Pacific, represents the Cook Island legend of Tinirau and the Turtle and also the Samoan legend of the blind woman, her grand daughter and the turtle. The dark brown surface decoration represents the magical net Kahukura. The green coloured background represents the Pacific Ocean (Knight 1993:title page).

The internal entrance of the school, which is of generous proportions, is light and welcoming and holds a number of display areas used to display many cultural artefacts from the full range of student cultures as well as photographs and examples of student written and art work (Appendix4.4 Figs 6 & 7).

**Checkpoint SE4.2 The curriculum provides opportunities for students to learn about cultural, religious and racial diversity**

Because the cultural, religious and racial diversity of the student group is valued and supported, all curriculum topics are enhanced by the inclusion of culturally diverse examples and references. The social studies curriculum provides the formal focus for specific cultural learning. Students are encouraged to talk and write about their experiences outside school, and this gives all students the opportunity to learn about the cultural and religious experiences of others. During 2000, as a lead up to Mothers Day celebrations, students we encouraged to enter a writing competition giving
reasons why their mother should win a *Caught being a good Mum* award with a cookbook as prize. Two of the entries were:

- Why my Mum is the best. She is a scholar and the prettiest Queen in the whole school. She is one of the most famous models on earth. She is a good artistic teacher at Porirua. She is so helpful that she helps me with my homework and is respectful all the time to me. Love S.

- My Mum is best because she feeds me every day. She is pretty like an actress. She has looked after me since I was a baby. I like my Mum because she has paid for my Stationary since I started school. My Mum is the best because she is sensible, respectful, loving, kind and patient. She buys me presents and cakes to celebrate birthdays. She is helpful to my family, especially when someone is sick. She is the Doctor at my house. She always does our washing and washes our dishes. She is the best Mum in my entire life. C, Room 5.

**Supporting evidence and significant issues regarding school ethos that supports inclusion.**

Data that identify how the ethos of Cannons Creek School supports inclusion was gained mainly from time I spent in the environment, experiencing the social milieu and observing the school as a whole. The school activities, the philosophy in action, the manner with which students, parents, visitors and people in general are treated, and the wide range of activities students are encouraged to take part in make up the total social environment of the school. The statement from the 2000 Education Review Office review sums up the ethos in the statements:

Whole school singing, with a multicultural emphasis, is a strength of the school. Students participate with skill, pride and enjoyment. The school and wider community appreciate multicultural club performances (E.R.O.2000:6).

The school provides a stimulating and caring environment where students have opportunities to develop the skills necessary for successful participation at school (E.R.O. 2000:8).
**W.H.O. Component SE5:** The school is attentive to the education needs of parents and how these can influence the well-being of students.

**Checkpoint SE5.1:** Where appropriate the school provides the setting for the provision of specific educational services for parents eg literacy, parenting skills, helminth education.

**Evidence**

School staff are very aware of the influence of parental educational levels and lack of educational qualifications held by many of the parents on the well-being of students. Due to other local tertiary and community educational organisations formal parental education is not necessarily seen to be part of the school role. Many initiatives taken by the school have served to assist parents to overcome their negative school experiences and provide them with learning opportunities. In the past, the initiative that had the greatest impact and involved parents in improving the well-being of their children was the healthy school lunch initiative in 1991. Two of the more recent initiatives that the school has supported to overcome potential inhibition of student learning in the home environment have been the *Books in Homes* and the *Computers in Homes* schemes.

The *Books in Homes* initiative aims to provide students with books of their own to read at home. The aim was to change the home environment in homes where there were no or few books and where reading was not encouraged, or seen as part of every day life. The scheme initiated by the Maori author Allan Duff regularly supplies each school in the scheme with books to distribute to students so that they can own their own books. The expectation that all students at Cannons Creek School complete homework
three of four times a week supports reading, writing and learning activities
during which parents often learn from and with their children.

The Computers in Homes\textsuperscript{89} initiative appears to have had as much
impact on parents learning as it has on the school student’s. The two-year
pilot project commenced in 2000 with the aim of narrowing the digital divide
in less-advantaged New Zealand communities whose schools are in the
Decile 1 socio-economic category. The programme is an initiative of the
2020 Communications Trust, with financial support from the Ministry of
Education, volunteer support from tertiary institutions and community
groups, with paid support technicians. Twenty-five families in each of the
two pilot areas, Cannons Creek School and Panmure Bridge School in
Auckland, are taking part, and the project is being researched by Victoria
University of Wellington. During 2001 the number of participating families
increased to 35 in Porirua through funding that provided 10 more
computers. Each of the families:

have been provided with CANZ recycled Pentium 75-100 computers with
Windows 95, MS Works, MS Word, a package of shareware educational
games, modem, Xtra Internet connection and a phone line where
necessary. Participating families pay $50 and sign an agreement which
commits parents to attend five training sessions, call the designated
technician if their computer develops faults, make family rules about use of
the computer and the Internet, supervise use of the computer and teach a
family member or neighbour the IT skills they have learned (Computers in
Homes 2001).

\textsuperscript{89} On September 27 2001 the Wellington Computers in Homes initiative was one of the 14
winners of The Stockholm Challenge (an international Information Technology award) from
742 entries received from 90 countries.
Parents that are part of the pilot programme are able to attend weekly computer training sessions provided by Whitireia Community Polytechnic computer students. A retired computer tutor from the Polytechnic has also written a self-paced learning package on computer use, which is freely accessible from the Cannons Creek School website. Feedback from involved parents and students is very positive as can be seen from the following quote:

Everything about the computer is new and interesting to me, especially because I have never in my whole life ever learnt to use one. I have never ever used a typewriter. Now you wouldn’t believe how good I can type. I can also touch type. My kids are learning to touch type as well. The interesting thing about the computer is my kids love doing their homework

(Maori mother of three who is participating in the Computers in Homes Project. Source Computers in Homes website)

Some of the parents that attended the focus group interview were part of the computers in homes initiative. They were really enjoying the opportunity to learn but expressed a need for general child health information, such as normal sleeping and eating patterns and management and treatment of head lice. One issue that teachers consider requires appropriate parental education and guidance is the amount of sleep that students require. Teachers identified this issue when they remarked that students were often sleepy at school in the mornings – or were late for school because they had slept in. The student health behaviour survey findings confirmed that many students were tired in the morning (Appendix 5.1 section 5.1.10 p22). More than half the participants (50.4%) reported that they felt tired four or more school mornings a week. Only 11.7 percent of the student participants reported never feeling tired at this time of day.
The gender balance was equal in each case (Appendix 5.1). Discussion was held at the follow-up student focus group interview at which half the group reported setting their own bedtimes, going to bed after 10 p.m. or getting less than eight hours sleep per night. The students who reported setting their own bedtimes were also usually responsible for getting themselves to school on time without parental involvement in the mornings. During the 1999 academic year the principal had written bedtime guidelines for students of different age groups in the fortnightly newsletter after being asked for the information by parents who did not know what was an appropriate bedtime for their children.

Supporting evidence and significant issues regarding school ethos that supports educational needs of parents.

Teachers often oblige parents in their day to day needs for information - for example how to deal with government organisations, including who to go to and how to fill out forms and applications. School staff were acutely aware that there was an educational deficit for many parents, that they did not have the resources to address. Preliminary findings for the Computers in Homes project revealed that none among the student group knew what a university was, and only four students from a group of 30 recalled that they had visited Wellington city (23 km distant).

One of the benefits of the increased computer usage by parents and students at home since the Computers in Homes project commenced has been the increased communication between the home and the school. Information sent via email regarding the 2001 Board of Trustees elections
was more widely disseminated in 2001 through utilization of this medium than in previous years. Parents with access to email now email the school regarding concerns or absences of students and can obtain information themselves by using the school website and the Internet. Parents in the *Computers in Homes* project come to school to learn computer skills on a weekly basis, which has increased their learning confidence and familiarity with the school and school staff. The computer skills they have acquired have developed to the point that some parents have gained employment as a direct result of this initiative.
We have a special relationship with the local community. They take pride in our school and we consult with them on important decisions. We also have a very skilled and supportive Board of Trustees.
(Cannons Creek School brochure)

5.4 Community Relationships

Community Relationships are connections between school and the students’ families plus the connection between school and key local groups who support and promote health. By definition a health-promoting school is one where parents are closely consulted about and involved in the school’s health promotion activities (W. H. O. 1996:11).

W.H.O. Component C1 Family and community involvement in the life of the school is fostered

Checkpoint C1.1: Families are involved in making decisions about suitable health-promoting activities e.g. food policies, the development of a school garden, physical activities.

Evidence

The Heading on all Cannons Creek School literature including the brochure (Appendix 5.8) and the website reads:

Cannons Creek School – the heart of the Community,

followed by greetings in nine languages. Families of school students are involved in making decisions about health-promoting activities through their membership and involvement at Board of Trustees meetings. Board members are elected every three years and parents and interested community members can put themselves forward for nomination to become a Board of Trustee member. Nominated persons are voted onto the board by parents and any staff member, parent or interested community member, can also attend monthly board meetings, advertised in the school newsletter.
According to the former chairman of the Cannons Creek School Board of Trustees.

Spare time and an interest in the education of your community’s children is all candidates for next month’s school trustee board elections require. (Teahan 1992:1).

Basic training is provided for Board of Trustees members once the board is elected, and one person is selected by the group to be chairperson. The Board of Trustees is responsible for the management of the school and takes part in policy review processes and endorses programmes of study developed by the teaching staff.

Checkpoint C1.2: The curriculum contains health-related activities which involve children working with their families.

The integrated curriculum provides opportunities for students to work with their families. Parents are encouraged to be involved as sports coaches, teachers of specific skills, (for example culture) and to accompany students on school trips such as the annual senior camp held at Otaki Health Camp. Family members are encouraged to visit the school at any time and to attend and take part in reading, cultural events and the whole school fortnightly assembly. Most recently family members were invited to provide musical backing for the CD recorded by the school students.

The Books in Homes and Computers in Homes schemes are initiatives that encourage family members to take an interest in the school activities of students and to become involved with the school and its learning programmes. Many of the general school curriculum topics for example mathematics, literacy or science involve health either directly in the content
or indirectly in the learning methods. It could be argued that when parents and family members take an interest in the school activities of their children there is a social and mental health gain. In the case of the Computers in Homes project parents involvement included learning that has the potential to advance their own education and therefore their employability which could have a health benefit for their children.

**Checkpoint C1.3: Local groups with an interest in child and adolescent health and health organisations providing services in the local community participate collaboratively in school activities.**

Because of the ethos of the school, groups who approach the school are welcomed to participate in school activities. The KiwiCan programme and The Life Education Trust both provide health-focused education programmes to students in the school. The Wellington College of Education, places primary school student teachers in the school as part of their health curriculum module. The aim is for student teachers to learn about the collective and individual health needs of the students. The local School of Nursing at Whitireia Community Polytechnic also places student nurses in the school to provide them with an opportunity to work with primary school age children and to determine health and health education needs of this age group. Both teaching and nursing students work on school initiated projects as part of their placement, as the opportunity allows.
Many parents of students at Cannons Creek School do not take advantage of the opportunities provided and do not become involved with the school to any great extent. Teachers articulated a sense of frustration on occasions when students with specific health and learning needs had parents who did not appear to respond when the school communicated with them. Examples given were parents of students with identified vision and/or hearing problems who had not taken their child to a specialist for followup care or who, in the case of spectacles had not had the child's prescription filled. The school offered to assist parents to pay for these items. There is currently free specialist care also available for students under the age of six, and benefits are available from Work and Income New Zealand (WINZ) for spectacles. However at the time of writing these incentives had not resulted in a solution for some students in need. In some cases when spectacles were lost or broken and not replaced, the school had purchased new ones and kept them at school to ensure the student could use them effectively in the educational environment. School staff acknowledged the socio-economic pressures and possible cultural differences in the prioritisation of available resources by some parents, but at times were at a loss to know how to respond to the health needs of students at the school.
**W.H.O. Component C2:** The school is pro-active in linking with its local community.

**Checkpoint C2.1:** Students and teachers participate in local events on a regular basis e.g. culture, sports, festivals.

**Evidence**

As recorded in section 5.2 Component SE4 the school’s cultural group often participates in local events. Teachers are expected to be involved in community events as part of their role in the school. The *Class Teacher Job Description* includes the sections:

5. General contribution to school life.
   Involvement in some aspects of school life beyond classroom commitment.
7. Community Responsibilities Maintain open and regular communication with caregivers and show an interest in community issues.

Teachers and school staff, especially those of Pacific Island ethnicity are all involved with community events. All staff provided examples of participation and of being involved with significant events such as weddings and birthdays of former students. Other examples of community involvement included Pacific Island radio, church events, Board of Trustees meetings, Saturday sports events, fund raising, and taking students to performances (e.g. to Parliament) outside school times.

**Checkpoint C2.2:** The school informs the local community of its health initiatives e.g. through the use of local media, school open days, students providing “healthy school” displays at community functions.

The school is very proactive in ensuring that local media report on any health initiatives involving the school. The nutrition initiative (policy and
food preparation) in 1991 was reported in a number of local newspapers. An article on the ‘politics of school lunches’ was printed in 1993 and other nutritional items were published in 1992, 1993 and 1994. The national *Healthy School Newsletter* published by the New Zealand School Trustees Association featured the school in 1993, and in 1993, 1994 and 1998 road safety articles included photographs and quotes from the principal. Dental health and the local Ear Van were also the topics of newspaper articles featuring Cannons Creek School in 1992, 1993 and 1999. The sponsored drink bottles given to the school were included in a local news item in 1999.

The school website provides health information for parents and community members who can freely access the site. Topics on the site at November 2001 included:

- Health Issues Involving Cannons Creek School and Pacific Islanders.
- Deafness Awareness Week, September 2001.
- Healthy Lifestyles.
- Beat those Boils.
- Water fluoridation.
- Free Water Bottles.
- Cannons Creek School Health Policy.
- Salt - Health Information for Parents.
- Luisa Togia - Public Health Nurse.
- Immunisation Certificates.
- Eat Right.
- Photograph of the Ear Van.
- No Bully.
- Pacific Health Research.
- Pacific Health Research Database.
- Porirua Kapiti HealthLinks Project.
- Photograph of Sun Hats Donated by Mainfreight.
- A Full Service Cluster for Porirua East - A Proposal.
The fortnightly school newsletter also contained many health-related items. An alphabetically listed health content analysis of the 2000 Cannons Creek School newsletters identified the following:

- Civil defence plan and consent for children to be collected from school (no 13)
- Clothing for sale (no 14)
- Free Medical clinics at the Fanau Centre (nos 8 & 15)
- Health meeting (no 13)
- Heart foundation school starter packs for new entrants - containing book bag, skipping rope, ball, water bottle, and lunchbox. (no 8)
- Kiwi Can teaching respect for others and fair play (no 11)
- Life Education Trust on site for teaching sessions (no 9)
- Road safety including school patrol selection for 2001 and parents collecting students in cars (nos 10, 14, 15, 19)
- School camp for senior students (no 9)
- School public health nurse clinics (nos 5, 7, 16)
- School rules reminder re looking after children at Cannons Creek School (no 8)
- Smokefree policy (no 2)
- Straight home after school message (no 9)
- Strengthening families and social workers in schools (no 30)
- Talking to principal about problems (nos 8, 14, 17, 18)
- Toothache, tooth care and free toothbrushes to be given to children (no 12)
- Well child week and free immunisations available from public health mobile van (no 7)

Supporting evidence and significant issues regarding proactive links with the local community.

The school is part of the Improving Co-operative Achievement Networks (ICAN) cluster of schools. The cluster is comprised of six primary, one intermediate and one secondary school that have grouped together to work to improve the educational outcomes for students in the Porirua East area. The aim of the group is to foster collegiality, co-operation and consultation and to model how a community can work collectively for the benefit of the young people and the community served by their schools.
The schools work closely with their local community and businesses, and have entered a formal partnership with social service providers, the Taeaomanino Trust and Te Roopu Awhina Ki Porirua, which currently employ the social workers who work in ICAN schools. The ICAN group has also signed a contract with Opus International Consultants Limited. This company undertakes to provide professional expertise for the schools and their Boards of Trustees. The ICAN group has also been able to gain Ministry of Education funded support for a variety of projects that would not have been possible for any of the schools to develop, organize or gain funding for individually.

ICAN had its origins in 1997 when competition between schools, driven by the New Right philosophy (Price 1993) in the Tomorrows Schools government educational policy reached its momentum. At that time Porirua College was involved in the Achievement In Multi Cultural High Schools (AIMHI) research project, which was focused on improving education outcomes for Pacific Island students (Hawk & Hill 1996). One of the goals of AIMHI was to encourage participating schools to consider strategies for involvement in schooling improvement initiatives.

In early 1998, Porirua College and Brandon Intermediate schools, which had both been discussing whether to alter their status and directly compete with each other for a diminishing pool of students agreed not to change their status and held a meeting with their four contributing schools – Cannons Creek, Maraeroa, Russell, and Glenview primary schools to consider ways to cooperate. Natone Park and Porirua East schools have subsequently joined the ICAN group. The schools agreed to cluster
together as a schooling improvement initiative, and in August 1998 all eight schools signed an agreement with the Ministry of Education. The researchers who had been involved in the AIMHI initiative subsequently consulted with the ICAN cluster teachers, Boards of Trustees, parents and the community to determine the challenges and needs of all schools involved. A 16-page action plan for the cluster was developed from which strategic and business plans are being developed for the group as a whole as well as for each individual school. A spin-off from the AIMHI research and the developed action plan was an unofficial code of conduct between the schools, that comprised of three basic rules which were:

- that the schools must say positive things about each other
- that the schools must share resources
- that the schools must consult if any of them planned to do something that might affect any of the other school in the cluster.

The initiative is now considered to be providing the structure for cooperation that reflects local social and economic aspirations. The future vision for the group is that ICAN can go beyond cooperation between schools and foster constructive relationships with health, education, welfare, and community policing agencies (Cranshaw 2000).
5.5 Personal Health Skills

Personal health skills are the formal and informal curriculum whereby students and others gain age-appropriate knowledge, attitudes and understanding and skills in health which will enable them to become more autonomous and responsible in individual and community health matters (W. H. O. 1996:12).

_W.H.O. Component PS1: The curriculum approaches health issues in a coherent and holistic way._

**Checkpoint PS1.1:** The health curriculum is designed to be interesting, engaging and relevant to students.

**Evidence**

The school follows the national Health and Physical Education Curriculum (Ministry of Education 1997a). The underlying philosophy of the curriculum is based on te Whare Tapawha model (Durie 1994), that incorporates the four dimensions of hauora (mental and emotional well-being, social well-being, physical well-being and spiritual well-being), and how they influence and support each other. This approach to health is considered very relevant for the mainly Polynesian (Maori and Pacific Island) students that attend Cannons Creek School. However teachers at the school did not consider that when they attended Teachers Training College (15 to 25 years ago for the majority) they gained sufficient health knowledge to enable them to be competent teachers of the new health curriculum which has not been well supported by professional development opportunities. Because of other curriculum demands, teachers at Cannons
Creek School consider that they have not had the opportunity to become fully conversant with the new Health and Physical Education curriculum. Therefore the school contracts KiwiCan and the Life Education Trust\(^{90}\) to provide the majority of the specific health topic teaching, and classroom teachers ensure appropriate health knowledge is integrated into all other curriculum areas and school activities.

At Cannons Creek School the Health and Physical Education curriculum is included in the Term Overview Teaching plan that covers all curriculum teaching areas\(^{91}\). Teachers from each of the two syndicates (classroom groupings of the junior and the senior school), plan the main topic themes for each of the four school terms. These topics are then taught in an integrated and holistic manner. All physical activities such as sports, swimming and action to music (e.g. poi and dance) are components of the Cannons Creek School physical education curriculum. Health and Physical Education are not specific foci of regular school assessments as curriculum areas or Education Review Office reporting. In the classroom, health education is often incorporated into other topic areas, and physical education is part of routine physical activity at the school. In the student health behaviour survey (Appendix 5.1 section 5.15), questions were asked about the amount of time students spent in physical activity, which teachers suggested was under-reported by the student participants. In-school,

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\(^{90}\) Life Education Trust is a national organisation that promotes the message that each person is a unique individual and that respect for the individual and the world we live in is essential. The Life Education Trust believes that all children need to understand their bodies and how they work in order to live a full, healthy and useful life free from the harm caused by substance abuse” (pers comm Life Education Trust Manager 2000)

\(^{91}\) Other listed curriculum areas include mathematics, reading, writing, language, science, social studies, technology and arts.
physical activity was reported by students as between one and four periods a week (options were 1, 2, 3, or 4), with the majority (41.4%) reporting that they participated in physical education four times a week. When students were asked how much of this time they were sweating or out of breath 13.5 percent reported half the time and 20.7 percent reported all the time. The majority of the participants (75.7%) reported that they liked Physical Education classes very much and only one student reported that they disliked them (Appendix 5.1 section 5.1.5 p15).

**Checkpoint PS1.2: The learning process places an emphasis on student participation.**

This question is addressed with reference to the health component of the curriculum as the physical education component obviously involves student participation. The learning processes for the KiwiCan and Life Education Trust programmes differ but each places an emphasis on student participation. Students attend KiwiCan for one half day per week for the majority of the school year. The KiwiCan leaders have informally become part of the school teaching staff and the school community and formulate the programme to respond to the needs of the school. For example following the analysis and reporting of the student health behaviour survey, bullying and student social behaviour became the focus of the KiwiCan programme. Student learning in this programme takes place while they play games, take part in sporting activities and work in groups with the emphasis on participation and learning through practical experience (pers comm KiwiCan coordinator).
Life Education Trust programmes aim to focus on the four formal school curriculum strands. There are a number of set teaching plans for each strand area, and the school selects which classes cover which topics during the annual Life Education Trust visit to the school. Relevant written material is provided to each class the week before they have their teaching sessions with Life Education Trust educators (who are registered teachers). The class teacher is expected to attend the Life Education Trust education sessions with their class. Workbooks are given to each student to complete at home with parents following the formal teaching session, and there is an expectation that the class teacher will integrate the topic into ongoing classroom work. The Life Education Trust educator brings a purpose built classroom, in the form of a converted articulated truck\(^\text{92}\), onto the school site for the time that they are working with the school. The classroom is fully equipped with visually stimulating and interactive equipment for the student group.

Checkpoint PS1.3: The content reflects issues which students can relate to in their own community, and which draws on their own experience, and which supports their routine health – care management.

The school classroom health topics and KiwiCan focus tends to reflect content that is topical and relevant to what is happening in the school community. Teachers are quick to take an opportunity to reinforce health learning when a media report or a child health issue becomes topical. Examples that the school has utilized for health education are the healthy lunch initiative, hydration and drinking fluids and oral hygiene for students at

\(^{92}\) There are 34 throughout New Zealand (pers comm Life Education Trust Manager).
the school. The healthy lunch initiative has already been discussed in section 5.2 of this thesis.

During 1999 there was considerable local publicity and public meetings held as forums for expression of concern at the comparatively poor oral health status of school students in Porirua. Statistics revealed that five-year-olds starting school in Porirua had a ten to fifteen percent higher rate of filled or missing teeth than equivalent students in the Wellington region (Porirua Kapiti Healthlinks Project 2000). Furthermore the incidence of filled or missing teeth at age five was reducing in the Wellington region and continuing to increase in Porirua. Analysis of the data revealed that figures for European five year olds had reduced by 28 percent between 1994 and 1997 and the figures for Maori children, while higher than those for the European group had also reduced over the same time period by 11 percent. The incidence of filled or missing teeth for children of Pacific Island ethnic origin, who in 1994 had a minimally higher rate that Maori children, had increased in incidence by 28 percent between 1994 and 1997 (Porirua Kapiti Healthlinks Project 2000). The most significant factors that influenced tooth decay included children’s eating and drinking patterns, the types of food and drink they were given, and lack of regular dental checks exacerbated by not being enrolled at a dental clinic (Porirua City Council 1999). Porirua primary teachers also reported that many children did not have a toothbrush or access to toothpaste, and did not live in environments in which good oral hygiene was role modelled.

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93 Fluoridated water is available in the whole of the Wellington region including Porirua.
94 The Child Health and Development Record book suggests enrollment at age two and a half years (Department of Health 1984).
Cannons Creek School unsuccessfully lobbied Mainfreight Limited (one of their sponsors) to provide drinking bottles for students, then used them to teach students about the importance of drinking water for general health and the importance of fluoridated water rather than sweet drinks to improve dental hygiene. In the year 2000 the school also obtained free toothbrushes and toothpaste for each student from Unilever Australasia (which has a Wellington based factory manufacturing these products). School dental clinic staff were then able to teach the importance of teeth cleaning and how to clean teeth effectively, knowing that all students had access to the equipment required. The dental therapist and dental assistant also encouraged students to drink water between meals to reduce the caries-producing bacteria in their mouths.

When participants of the student health behaviour survey (Appendix 5.1 section 5.1.6 p18)\textsuperscript{95} were asked about their oral hygiene behaviours 52.5 percent (58 of 109 students) reported that they brushed their teeth more than once a day and 31 students reported brushing daily. Twenty three participants reported that they brushed their teeth weekly or less. When asked about the use of dental floss 69 (76.6%) students reported that they rarely or never used the product and 18 students reported daily use of dental floss. In a survey question that focused on medication use (Appendix 5.1 section 5.1.10 p23) 22 of the participating students (19.8%) reported using medication for toothache in the month prior to the survey.

\textsuperscript{95} The survey was completed prior to toothbrushes being obtained for all students.
Checkpoint PS1.4: The curriculum provides developmentally appropriate learning experiences for children.

The Health and Physical Education curriculum (Ministry of Education 1997b) has been developed in four topic strands, which are:

A: Personal Health and Physical Development.
B: Movement concepts and Motor skills.
C: Relationships with other people.
D: Healthy Communities and Environments (Ministry of Education 1997b p64).

Each strand has age appropriate achievement objectives (Appendix 2.4) that link to the New Zealand Qualifications Authority framework, commencing at level one (primary school year one level education) and ending at level eight (tertiary institution, masters level education). For example in the Personal Health and Physical Development strand, level one that usually spans years one to three, students could be expected to be able to:

- describe feelings and ask questions about health, growth, development, and personal needs;
- use regular, enjoyable physical activity for self-care and personal well-being;
- describe and demonstrate simple health care and safety procedures;
- describe themselves in relation to a range of contexts (Ministry of Education 1997b:64).

Senior primary school students would be expected to achieve level three objectives, which for the Personal Health and Physical Development strand include:

- identify factors that affect personal, physical, social, and emotional growth and develop skills to manage changes;
- maintain regular, enjoyable physical activity with an increasing understanding of its role in self-care and well-being;
• identify and use safe practices and basic risk-management strategies;
• describe how their own feelings, beliefs, and actions and those of other people contribute to their personal sense of self-worth (Ministry of Education 1997a:64).

**Supporting evidence and significant issues regarding coherent and holistic curriculum approaches to the health curriculum.**

Cannons Creek School students gain Health and Physical Education curriculum knowledge from classroom teachers and experts who work in the school. There is potential for lack of integration of the formal health component of the curriculum because persons who are not part of the formal teaching staff provide the bulk of this education. Teachers at the school considered that they lacked knowledge of the new curriculum and thought that having a health professional, such as a school nurse involved as part of the school community, would improve the relevance and information content component of the health curriculum.
W.H.O. Component PS2: The curriculum is designed to improve students’ theoretical understanding of health issues and how to apply this in practice.

Checkpoint PS2.1: Students gain a basic understanding relevant to their age and culture, of nutrition, disease-prevention and hygiene, physical activity, safety, mental health, sexuality (including HIV/AIDS), tobacco and drug use prevention, oral health and environmental issues.

Evidence

In the Education Review Office self-review questionnaire (E.R.O. 2001) it is stated that the Board of Trustees has the responsibility, as per section 105 c of the 1964 Education Act, to consult parents and guardians of students enrolled at the school about the treatment of the health syllabus.96

Relevant questions in the document are:

28. Has the board met its obligations with regard to consulting parents and guardians of students enrolled at the school about treatment of the health syllabus?

If NO, go to question 29. If YES:

(a) Did the board direct the principal to include in the syllabus any elements of sex education?97

(b) Does the principal ensure that those students whose parents or guardians have provided written notice, are excluded from classes where any sex education element is taught?

29. Does the principal ensure that:

(a) Treatment of the health syllabus is in accordance with the board’s most recent determination?

(b) In the course of teaching the health syllabus, that treatment is not departed from? (Education Review Office 2001:10 & 11).


97 Most contemporary documents ie the Health & Physical Education curriculum refer to human relationships rather than the 1964 ‘sex education’ terminology.
As most senior students, with few exceptions, are mainly age 10 years or under it is generally considered that they are not old enough to receive ‘sex education’ (Department of Education 1985). However the majority of the pupils at Cannons Creek School tend to reach physical maturity at an earlier age than their smaller peers and education on this topic may need to be considered in the future. Teachers at the school have asked for facilities for female students who are beginning to menstruate while they are still primary school students. The issue of fertility and education about human relationships and methods of contraception is often a contentious issue for Board of Trustees of schools. In this school community the majority of parents are from Pacific Island backgrounds and tend to follow traditional ideas about the place of relationship education which many believe should be left to parents to address (pers comm, public health nurse). Education concerning puberty is currently avoided at Cannons Creek School and left for intermediate and/or secondary schools to address. The national Health and Physical Education curriculum introduces achievement objectives that relate to changes during puberty at NZQA level four, which locates this learning at intermediate or secondary school. For students who mature at an earlier this could leave them at risk of a knowledge deficit resulting in teenage pregnancy.

Safe choices in a range of contexts, social stereotyping and self worth, investigating and practising safety procedures, and strategies to minimise risk are in the NZQA level five objectives of the Health and Physical Education curriculum. These appear to be the objectives that most closely allude to ‘sex education’, prevention of HIV, and tobacco and drug
Chekpoint PS2.2: Students have opportunities to gain skills with respect to specific and relevant health issues eg. resistance to tobacco and drug use, maintaining oral hygiene.

Part of the Life Education Trust philosophy includes the aim of educating students about the dangers of drug, alcohol and tobacco use.

The Life Education Trust believes that:

all children need to understand their bodies and how they work in order to live a full, healthy and useful life free from the harm caused by substance abuse (pers comm, Life Education Trust manager).

Chekpoint PS2.3: Students are helped to acquire skills in problem-solving, decision-making, effective communication, interpersonal relationships, coping with emotions, and stress and critical and creative thinking, with a view to enhancing their own well-being and their effectiveness as advocates of health.

The focus of the Cannons Creek School ethos, and the policies and practices of inclusion, socialisation, behaviour modification, respect, and all the other components described in section 5.3 of this thesis work towards meeting this checkpoint.
Supporting evidence and significant issues regarding improvement of theory and practical understanding of health issues.

The national Health and Physical Education curriculum states in the foreword that:

It (the Health and Physical Education curriculum) sets clear direction, which will guide schools as they plan programmes to address the critical health and physical education issues facing our young people. Through learning in this curriculum, students will gain the knowledge, skills and attitudes, and values to enjoy a healthy lifestyle and to contribute actively to the well-being of other people and the well-being of their communities (Ministry of Education 1997a:5).

The Health and Physical Education curriculum, whilst being comprehensive and contemporary, has objectives that are open to interpretation and that assume a level of knowledge that may not be attainable for many teachers, especially generalist primary school teachers. This is a departure from the previous health syllabus that had eight clearly defined topic areas each with specific handbooks for each age band. The syllabus books whilst now considered prescriptive were easier for teachers to utilise and work through, thereby ensuring that students gained a broad curriculum based health education. There were many publications and programmes taught by specialist members of the community that supported the education syllabus approach. With the introduction of the new curriculum programmes and publications developed for the health syllabus are no longer entirely relevant thus necessitating realignment, a time consuming task for all concerned.
W.H.O. Component PS3: Teachers are adequately prepared for their role as key participants in health-promoting schools.

Checkpoint PS3.1: PS3.1 Pre-service and in-service programmes on health promotion (e.g. short courses and workshops with refresher and update opportunities) are provided to teachers.

Evidence

Contemporary pre-service student teacher education includes 30 hours of health curriculum focused teaching per year for each of the three years of the Bachelor of Education programme (pers comm, College of Education Health Lecturer). The first year introductory course aims to lead the student teacher in developing a personal philosophy of effective health education and in gaining an understanding of the Health and Physical Education curriculum. The course outcomes aim to ensure that the student will:

1. identify essential learning areas in health and link both health promotion and socio-ecological perspectives to beliefs and attitudes held by children.
2. use the conceptual and structural framework for the Health and Physical Education Curriculum to plan lessons in health.
3. use a range of strategies to identify needs from which to plan effectively for health education.
4. incorporate an interactive approach to teaching health and use a range of assessment strategies to evaluate programme effectiveness.
5. use current research to help inform approaches to establishing both cognitive and conceptual constructs of children’s health.
6. demonstrate the concept for hauora as an aspect of holism and be able to incorporate this concept into the structural framework (Wellington College of Education 1999:1 & 2).

The teaching content of the degree programme also links to Physical Education and Home Economics subjects. In the second year the focus of
student teacher education is on the Physical Education component of the curriculum. In the third year student teachers are placed in designated schools (such as Cannons Creek) to complete an introductory health needs analysis by working with one student, to determine their health education requirements, with parental consent. The aim is for student teachers to become familiar with some of the social determinants of health and the effects these determinants have on the lives of children whilst they are at primary school.

Since the Health and Physical Education curriculum has been written there have been a number of professional development days held at the Wellington College of Education (Wellington College of Education Lecturer, pers comm) for current teachers. Few primary school teachers and no staff from Cannons Creek School have been able to access these sessions. The lack of access to these professional development days has been due to lack of time and other priorities requiring teacher attention.

**Checkpoint PS3.2: Teachers are supported by receiving adequate information, on an ongoing basis, about the availability and use of health resources.**

There are two teachers, one in the senior and one in the junior syndicate who are responsible for the Health and Physical Education curriculum and the updating of resources to support the programme. Delivery of the new curriculum commenced in 2001. The access to adequate and up to date health information appears to be somewhat ad hoc, is dependant on adequate health knowledge, on the personal interest of the teacher who is responsible, and on that teacher knowing who can
provide appropriate resources. Specific directives such as the guidelines for HIV/AIDS (Ministry of Education 1999) are automatically sent to each school, but many agencies such as public health, family planning, the police, social welfare and Ministry of Health all produce resources that could be used in Primary school health education.

**Supporting evidence and significant issues regarding teacher preparation for teachers health-promoting school role.**

Teachers at Cannons Creek School do not consider themselves adequately prepared for their role in health education and meeting the health (illness) needs of the students. Teachers consider that they act *in loco parentis* for many student health issues and they do not consider that they are competent for this role or to teach the new curriculum. The health-promoting school initiative was first discussed with schools in the Wellington region during the 2000 year (pers comm, Hutt Valley Health public health manager). During that year public health nurses were asked to assess the schools they served concerning their state of readiness to become a health-promoting school. Public health nurses were asked to rank schools as:

- Ready to take health-promoting schools on board.
- Have some readiness.
- Were not ready at all (pers comm Hutt Valley Health public health manager).

During the 2000 year a health-promoting school co-ordinator was appointed by Hutt Valley Health (the health service agency responsible for public health nursing services in the Wellington region) whose role it will be to
support the public health nurses who are to market the health-promoting school framework to local schools. Based on the evaluations of pilot schemes the appointment of a coordinator was considered essential to the uptake of the health-promoting school initiative (BRC 1999).

**W.H.O. Component PS4:** Other key stakeholders have the opportunity to gain skills relevant to health promoting schools.

**Checkpoint PS4.1:** Training sessions are made available for parents, key health and education personnel and local community members in addition to the professional development programmes provided for teachers.

Cannons Creek School does not provide health-training sessions for parents or community members as a matter of course. During the 2000 year one staff member had an involvement in local antenatal classes, due to her personal community commitment. Staff who want to gain a qualification in first aid are reimbursed when they access one of a number of health training programmes that are available in the Porirua area. The school does not offer health related programmes for the adult community to date, because its primary focus is on education of the student group. Also teachers consider they have limited health knowledge, that there are constraints on their time, and that presently there are no available public health nurse resources. Furthermore it is considered that outside agencies that employ health professionals would be more appropriate than teachers for these roles.
Supporting evidence and significant issues regarding health promotion skill gains relevant to other stakeholders.

Over the last five to ten years Hutt Valley Health public health nursing service has gradually changed their philosophical direction and scope of nursing practice from a personal health approach to a health-promoting school approach. The original scope of public health nurse practice included working with the Cannons Creek School community (staff, students and parents) to provide for the health and illness needs of the school populations. Since the mid 1990’s there has been a policy led erosion of the personal health approach, and an alignment with the health-promoting school approach, (pers comm, Hutt Valley Health public health and public health nurse managers). It appears that this change in focus has not been explained in a manner readily understood by the school, or it would appear from the school staff perspective that the change in direction has not been explained at all. As contracts for health services secured by Hutt Valley Health with the Health Funding Authority have changed relevant written information has been sent to the school in the area (pers comm, Hutt Valley Health public health manager and public health nurse). School staff continuing to request nursing input for immediate health needs consider that the public health nurse service has, for a number of years not effectively addressed these needs, or explained how they should be met.
The new Public health nurse for Cannons Creek School is L. T. She will continue to have free clinics at the school on a Tuesday from 10.00am

(Cannons Creek School newsletter No 7. 11 May, 2000)

5.6 Health Services

Health services include local and regional health services which have a responsibility for child and adolescent health care and education, through the provision of direct services to students and in partnership with schools (W. H. O. 1996:14).

W.H.O. Component HS1: Basic health services which address local and national needs are available to students and staff.

Checkpoint HS1.1: The school actively seeks immunisation for its students.

Evidence

On school entry information about immunisation status is requested from the parent/caregiver of the new student. From 2001 an immunisation certificate will be required as proof of the immunisation status of each five-year-old. As discussed until the year 2000 the immunisation records were checked, and students who had not completed the full immunisation schedule were followed up by the public health nurse. A change in roles for the public health nurse has meant that the school requests information but neither school staff nor the public health nursing service is responsible for following up the immunisation status of the student. It is assumed that it is the role of the general practitioner, or practice nurse to recall patients for overdue immunisations. Given the low numbers of general practitioners and practice nurses relative to the population in the Porirua area, compounded by the fact that many people in the area have not traditionally used a single
health professional for their health care and that many do not have telephones, this may not be an effective strategy for Cannons Creek School students. A recent initiative to improve the immunisation status of children in the Porirua area is the *Porirua Basin Medical Service Groups Immunisation Co-ordination* scheme which employs both a registered nurse and a Pacific Island community health worker on a part time basis. Initially, the objectives of the scheme were to ensure that adequate immunisation registers were kept by all general practices and that vaccines were cool-stored according to manufacturer’s instructions. More recently the focus has been on updating immunisation records, including rationalisation of double entries where records for the same child were held by more than one general practice, and home visiting to administer immunisations to the estimated 300 to 350 children who have overdue immunisations at any one time (Porirua Kapiti Healthlinks Project 2000). The immunisation status is reported to have risen from 60 percent to 85-90 percent in the last three years which is the time that this collective action has been operating (Porirua Kapiti Healthlinks Project 2000)\(^98\).

**Checkpoint HS1.2:** Appropriate health screening is provided e.g. vision, hearing.

Vision and hearing testing is provided by Hutt Valley Health audio-visual technicians who visit the school three times per year and test all new entrant students, and those new to New Zealand, for hearing acuity in their first year at school. Students who are suspected of having hearing or vision

\(^98\) In the late 1990’s when Hepatitis B vaccine became available at a cost to parents the school paid one of the local general practitioners to immunise all children whose parents had consented. 18 months later free immunisations were available for all five year olds.
problems referred by teachers or parents are also assessed by the audio-
visual technicians. Hutt Valley Health also employs ear nurse specialists
who work from a mobile van and offer free ear and hearing checks for
children in Porirua. This service is advertised in the school newsletter. In
the Staying Healthy section of the Cannons Creek School Health Policy, is
the statement:

We will encourage appropriate follow up after hearing and vision tests.

Follow up of a ‘failed’ hearing or vision test is often something that is
of concern for school staff. The process for hearing follow ups after an initial
test that is not ‘within normal limits’, usually involves the student being re-
tested after 16 weeks at a clinic that has the facilities to complete more
comprehensive tests under sound-proof conditions. If a problem is still
present the test is recorded as a fail and the student may then be referred to
the general practitioner who may in turn refer the student to an Ear Nose
and Throat (ENT) specialist. An ENT outpatient appointment at Kenepuru
Hospital may not be available for up to six months or longer, and then if the
appointment is missed because the parent has forgotten, has no transport
or has a diverting family event, a further time delay will occur. Under current
government health funding an under six-year-old is entitled to free medical
care, which includes outpatient specialist services. However, if there is the
time delay for accessing the service as described above the student may
well have reached their sixth birthday. In that case not only is there the
educational impact for the student arising from impaired senses, but there is
also a financial burden for the family.
It was reported in the hearing study undertaken by Allcock (1999) that students in the Hutt Valley Health district (which included Porirua students) during the 1996/97 year recorded the highest hearing failure rates in New Zealand (14.1% compared with the national average of 8.4%). The number of affected Maori children in the Hutt Valley Health district during that time period was 22 percent compared to 13 percent nationally. The number of Pacific Island children affected was 23.5 percent compared with 16.1 percent nationally. Children of other ethnic groups (national average 6.4 percent) were recorded as having a rate of 11.3 percent in the Hutt Valley Health district (Allcock 1999).

When a visual problem is detected a referral is made through the Medical Officer of Health to an eye specialist for a comprehensive eye test and in most cases, for a prescription for spectacles. There may be a delay for an outpatient appointment (which is the responsibility of the parent to organise), unless the parent can afford private care at $70 to $100 per appointment. The outpatient appointment is likely to be at Wellington Hospital which will require transport to that facility. The under-six year old health funding policy also includes partial funding for spectacles for community services cardholders.99 However there has been a very low uptake of this funding, possibly because parents have not been made aware of their entitlements (public health nurse, pers comm). Parents may not fulfil the prescription for their child because they do not think they can afford to pay for the spectacles.

99 A Community Health services card is available to people on low incomes, and beneficiaries and facilitates fee reductions for services, and other benefits.
The school therefore has, as part of the Health Policy the statement:

In some circumstances the school may financially assist parents with visits to the doctor, the purchasing of glasses, specialist visits etc. after consultation with the principal.

During the 2000 year the principal and teachers made appointments for, transported, and paid for a number of students to attend a private specialist (with consent from parents) when frustration with the system and delays in treatment were considered to be making too great an impact on learning for the students concerned. Since the social workers have been available, and nurses have been less accessible for home visits, the social workers have assisted the school by following up vision and hearing issues with parents when requested by the school.

Checkpoint HS1.3: Appropriate basic oral health services are provided, e.g. annual examination, sealant application and restoration of teeth.

Hutt Valley Health employs a school dental therapist and dental assistant who are employed to 'regularly' visit Cannons Creek School and provide annual examinations, sealant application and restoration of teeth. If a student has an urgent oral health problem when dental service personnel are not based at their school they can visit the therapist at another school (if transport is available\textsuperscript{100}). Cannons Creek School has a fully equipped dental clinic on the school site. During 1999, as part of the increased

\textsuperscript{100} Teachers transport students if parents cannot access transport or a taxi is paid for by the school. Teachers stated that they are often the backup transport system. One example was of a parent coming to school because she could not start her car (and had no money to go elsewhere) to take her child to a hospital appointment. The teacher went home with the mother to assist but when the car still would not start drove her to the appointment.
awareness of the oral health status of Porirua school students it was reported in the media that the dental service had only visited the Cannons Creek School twice during the 1998 year (Patterson 1999). This fact was publicised at a time when the number of dental caries and extractions for young children in the area was considered to be one of the highest in the country (Dennison 2000). A link was made between lack of access to preschool dental care and the high incidence of tooth decay.

Children can be enrolled at a school dental clinic from age two and a half years. If there are severe preschool dental problems the child is referred to the dentist based at Kenepuru hospital. It is not unusual for preschool children from Porirua to require extensive extractions under general anaesthetic for bottle caries, which are caused by the child regularly drinking for prolonged periods out of a baby bottle that contains sweetened fluids such as fruit juice or cordial. One of the problems raised by the school and dental clinic staff was the need for parental consent before any dental treatment can be given. Prior to 1998, when a child was first enrolled at a dental clinic the initial consent given on the application form covered all subsequent dental clinic treatments. With changes to Hutt Valley Health policy to bring it in line with the principles of The Code of Health and Disability Consumers Rights consent must now be obtained for each treatment event. This requirement can delay or preclude oral and general health treatment for some children at Cannons Creek School, especially if parents cannot be contacted by telephone or do not understand the requirement due to language differences.
In 1992 it was reported that only one third of Porirua five year olds were enrolled at a dental clinic prior to starting school. The percentage of dental decay in the Cannons Creek School new entrant population was reported as 56 percent in 1989, 78 percent in 1992 (The Evening Post 1992), and 52 percent in 1998 (Porirua Kapiti Healthlinks Project 2000), compared to 74% for the closest school with a similar population. No researched reason for the improvement between 1992 and 1998 has been identified but one could speculate that the nutrition policy instituted by the school has educated some parents about healthy food and the benefit of water for preschool children to drink.

**Checkpoint HS1.4:** Appropriate health records are kept on children’s health status by relevant authorities.

A student health record is completed when a student commences school. Other health records are kept by the student’s general practitioner. The Plunket or public health nurse may also have kept preschool health records if these services were involved with providing well child services for the family. Each New Zealand born child also receives an individual Health and Development Record Book at birth. This should contain a record of all health professional visits including advice and/or medication given and immunisations that have been administered. Developmental milestones, height and weight, tooth eruptions and other relevant information can all be recorded in this book which is kept by the family. A preschool application form and dental clinic enrollment form can also be found in the Child Health and Development Record Book record book. Unfortunately these record books which could provide the school with valuable immunisation and health
details about new entrants and serve as a prompt for enrolment at preschool and dental clinics are not well utilised. Many health professionals do not ask for them or enter details of health care events other than the Plunket nurse during the early life of the child. What should be a document that assists the family to have some knowledge and information about family members health is often over looked and information – and the associated power through knowledge is left to the records of the general practitioner.

**Checkpoint HS1.5:** Counselling and support services are available for socially distressed students and those with medical problems.

Since the social workers in schools scheme commenced in 1999 counselling and support services have been provided by the social workers as previously outlined. Teachers can also provide informal services for students and parents when they are approached. School students who have special needs that may be of physical or psychological origins are also supported by Special Education Services (SES) which assists with family liaison and the development of Individual Learning Programmes (IEP) in consultation with teachers and parents. Resource teachers of learning behaviour (RTLB’s) are also based at and accessed form a local school. SES staff can be involved in student assessment and can advocate for extra funding for student support, where needed. Services for medical problems are provided by the general services available in the community. These include the District Health Board funded Puketiro Centre which is a base

101 Waiting lists to access the psychologist at Puketiro have resulted in the school staff transporting students and their parents to Wellington for child psychological assessment - upon which resource approval is based.
for child psychologists, therapists and related health professionals, all of whom can be accessed by the local population. At Cannons Creek School teachers often provide what are essentially primary health care services for many students. Children ask their teachers about infected cuts, accidental injuries, toothache and the full variety of childhood complaints. Teachers notice when students are unwell and as discussed teachers transport children to health services when required.

**Supporting evidence and significant issues regarding the provision of basic health services for students and staff.**

In May 1998, the principal of Cannons Creek School wrote to the Chief Executive Officer of Hutt Valley Health expressing grave concerns about

...bureaucracy impeding the health care of children at this school.

The concerns were about parental consent, the reduction in the number of public health nurses and subsequent lack of response to the health needs of students at the school. The public health nurse was visiting the school once a fortnight and because individual consent was required for each student before the nurse could assess them, very few students were being referred. Teachers were required to obtain the consent if they wanted to refer a student to the nurse and because they did not have time to complete this task, students could not be referred. Ongoing health issues were therefore not being appropriately addressed. The other concern the principal expressed was that the public health nurse numbers in the Porirua area had reduced from eight nurses to three. A copy of the letter was sent to the
Prime Minister, Minister of Health, Minister of Education and Commissioner for Children.

The outcome of the letter was that a meeting between Hutt Valley Health public health managers and eastern Porirua school principals was held in October 1998. Meeting notes documented by Hutt Valley Health stated that the project name was the *Porirua East Action for Child Health* (PEACH) and that the meeting was convened to discuss the health needs of the students and families of that area. Minutes also stated that:

The principals expressed frustration at:
- lack of co-ordination at the local level of health services.
- lack of co-ordination at the local level of health education.
- perceived bureaucracy surrounding the assessment of children in schools by the Public Health Nursing staff.
- real needs of some of the children and families of the community – identified as nutritional Iron deficiency, inadequate and inappropriate nutrition, unmanaged asthma, high incidence of accidental injuries, high incidence of vaccine preventable disease, substance abuse, poor mental health, lack of knowledge related to sexual and reproductive health, high incidence of Sudden Infant Death Syndrome, inadequate parenting, difficult access for families to primary health care and tertiary hearing and vision services.

The convened group formed a smaller representative group who, at a further meeting decided that a single focus, well planned community strategy would be more productive and sustainable than dealing with each issue as a ‘one off’. The Health issues identified which could be considered and may have potential to be managed by community activities were asthma and respiratory tract infections, hearing loss prevention, nutrition, accidental injury prevention, immunisation and skin care.
The *PEACH* project aimed to address each issue for a period of one school term over the following two years. Subsequent meetings involving an ever increasing number of community groups were held in November, and December 1998, and January and February 1999. The February meeting minutes stated that the goal agreed on by the group was:

To improve the health of Porirua East Children and families by undertaking an intersectorial health promotion approach to identified family health issues.

The aim of the meeting was stated as:

To introduce the basic steps in taking your own project from the idea stage to a plan ready for implementation.

The topic focus of the meeting was *nutrition* and the mission statement was developed and documented as:

To help children and their families make healthy choices by:
- Creating a supportive environment.
- Developing personal skills.
- Strengthening community action – involve parents etc.
- Build health policies (eg. nutrition policies in schools).

Short term tasks from the meeting were documented as:

1. Nutrition to be put on the agenda for Board of Trustees meetings, Principals cluster (ICAN), School Council, Student Councils, PTA’s and Fund raising committees.
2. Current policies to be reviewed – action plans to be developed that will address any gaps
By mid 1999 the Porirua Healthy Safer City\textsuperscript{102} Trust had become the group leading the \textit{PEACH} project. By that time Cannons Creek School had realised that although \textit{PEACH} had raised awareness about health issues, the project had not addressed the issues that had caused the frustration expressed by the principals at the first meeting with Hutt Valley Health, in October 1998. In May 2000 the Cannons Creek School principal, in his role as chairperson of the ICAN cluster again wrote to the Chief Executive Officer of Hutt Valley Health stating that:

\begin{quote}
\textit{PEACH has had a significant impact by organising health themes in Porirua East schools. The themes include nutrition, hearing and asthma. The impetus for organising PEACH is now almost entirely from the schools.}
\end{quote}

The letter went on to ask for a renewed link with Hutt Valley Health to assist the schools’ child health programmes and stated that:

\begin{quote}
\textit{We support the idea of a ‘full service cluster’ where local providers whose management is working with school management meet all of a pupils physical, emotional and mental needs through the school. We would also like to be part of the ‘Health Promoting Schools’ movement, which is so successful in Auckland and Victoria, Australia.}
\end{quote}

The principal did not receive a response to his letter.

\textsuperscript{102} Healthy cities is an international movement developed by the W.H.O. as part of its Health for All by the Year 2000 strategy. 'At the heart of the Healthy Cities movement is the concept of using intersectoral action and community development strategies to build strong lobby for public health and health promotion activities within a city or rural area' (Maskill \& Hodges 2001:12).
W.H.O. Component HS2: Local health services contribute to the school’s health programme.

Checkpoint HS2.1: There is consultation between health services personnel and teachers about the design and implementation of the health-related curriculum

Evidence

From time to time there has been consultation between teachers and health services (the public health nurse assigned to Cannons Creek School) about the implementation of the health curriculum. The official policy is that teachers should teach the curriculum and health service personnel should provide resources information, advice and support to teachers (pers comm Hutt Valley Health public health nurse manager, 1999).

The public health service commitment to healthy schools states:

We support school Health Education by:
- providing teachers with health advice and information
- accessing specialist services and information
- supporting the Heartbeat School Food programme.

In past years when the school staff considered that they had a trusting relationship with the visiting public health nurse, the nurse has been actively involved in health education consultation and at times in teaching specific health focussed sessions, such as, the annual asthma seminar for students and their parents. Correct procedures for effective hand-washing, nose-blowing and other appropriate sessions where a person with some health authority provides students with a different perspective on health topics is considered by the school staff to be a very effective strategy for teaching health practices to students. During these events the nurse can also answer informal questions and take the opportunity to get to know the
students and staff in order that they would feel more comfortable approaching her on a future occasion. Between 1998 and 2000 Cannons Creek School has had at least three different public health nurses visiting the school and the public health nurse nursing base has been relocated from the Porirua city centre to Hutt Hospital, Lower Hutt, approx 30 km away from Porirua. The public health nurse now works under a mainly under a ‘population based’ funding contract\textsuperscript{103} and involvement and participation in the health curriculum is not considered part of that role (pers comm Hutt Valley Health public health manager, and public health nurse manager, 1999). The ‘personal health’ role formerly undertaken by the public health nurse now plays a minor role in the scope of her activities.

In the year 2000, when the Health Funding Authority provided new funding for low decile schools, an initiative commenced to provide a school, nurse-led clinic to undertake personal health assessments and referral for students (Appendix 5.10). This initiative, which was welcomed by Cannons Creek School, has not been entirely successful to date. The nurse is on site for two to two and ½ hours per week and services seven other weekly school clinics, including five other schools. Parents can bring any child for a consultation with the nurse who will assess and refer the child to the appropriate person, as necessary. The nurse considers her role in the clinic is to listen, interpret, assess and refer, rather than to treat students and teachers (pers comm public health nurse #2, 2000). The school staff did not consider that the nurse currently had the time to become known to the

\textsuperscript{103} Priorities under population based contracts are for specific health focused groups. During the 2001 school year when a national immunisation campaign was in progress no nurse was available to visit Cannons Creek School.
school community, a situation that has been exacerbated by nursing staff changes. Parental consent is also needed before the nurse can see a student without a parent being present (Appendix 5.11) and the nurse does not have time to follow up on issues or address commonly occurring health problems.

One health issue that has been addressed by the nurse through the use of the website was how to prevent boils and skin infections. During the 2000 school year the incidence of boils and skin infections was commented upon by teachers, and the school absence records for that year show that 35 students were away from school, and another 25 students were treated in the medical room for boils and skin infections. Information provided by the public health nurse about prevention and treatment of boils and skin infections is now accessible on the school website.

Checkpoint HS2.2: Health services personnel complement the work of teachers by participating in the delivery of relevant aspects of the curriculum.

As previously documented (section 5.6), health services personnel do not participate in delivery of relevant aspects of the health curriculum due to contracting constraints. The only example of this happening in the year 2000 was when the asthma nurse, employed by the local marae, came to the school to deliver an education session for students with asthma and their parents.

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104 This is estimated to be available to approximately 40 families, the 35 in the computers in homes scheme and approx five with independent computer access to the internet.
Checkpoint HS2.3 Health service agencies are active in approaching schools with offers of support to them in their work on health promotion.

The experience of staff at Cannons Creek School (as described with respect to the PEACH initiative) has been that health service staff have been keen to offer support for the school and community so they can identify their own health promoting solutions to health issues. However, health service staff have been reluctant to work with the school or to offer support for health and illness related issues requested by the school, as these are now outside their contract specifications and therefore outside their resourced roles.

Checkpoint HS2.4: Local health services support schools in explaining and implementing local health campaigns

The PEACH initiative was an example of local health services assisting the local community to implement a local health campaign. The initiative initially organised by the public health service provider, involved as many health-related local organisations as possible. Ownership of the initiative was then handed over to a local organisation (Healthy Safer Cities Trust) so that local people were responsible for the initiative, and so that involvement was maintained at a local level. As already discussed this initiative was however started by the regional health service as a response to health issues identified in the local schools. As such it was doomed to failure because although it was managed in a health promotive manner it did not incorporate the health promotion philosophical stance of working with the person/s in need.
Supporting evidence and significant issues regarding local health services contribution to the schools health programme.

In a brochure entitled *Working with you towards your Healthy School* (Appendix 5.9) the public health service commitment to schools states:

- We advocate child health and well being
- We provide personal health services
- We support school health education
- We assist with development of health policies

At the foot of the brochure is the statement

For further information contact the Public Health Nurse in your area.

Personal health services documented in the brochure relevant to Cannons Creek School include vision and hearing tests, child health assessments, monitoring New Entrant health and immunisation status, assessment, treatment and referral of ear problems (Porirua), and follow up of communicable disease incidents in schools. The school considers that the provision of these services does not meet the needs of their student population.

In August 1989 an article in a Wellington-based daily newspaper reported that:

Some Porirua schools are considering paying for their own nurses because the health needs of their pupils are failing to be met (Drent 1989).

This discussion followed the release of the Tomorrow Schools government policy, which was considered to enable schools to have greater flexibility to meet the needs of their student population. The rationale was to assist students that:
Seem to be falling through the gaps in the health system (Drent, 1989).

By mid 2000 the principals in the ICAN group were again considering how they could employ a nurse, an action that was put on hold when Hutt Valley Health provided weekly public health nurse clinics for many of the schools in the cluster group. An article (Appendix 5.12) entitled Principal's Proposal for Closing the Gaps is posted on the Cannons Creek School website. The article discusses the concept of Full Service Schools based on a model defined by Dryfoos (1994). The principal suggests that the ICAN cluster of schools would have the population to support the provision of dental services, a school nurse to provide personal health, social workers, family counselling, a dietitian, child counselling/therapy, an early childhood advocate, annual hearing, vision, skin and asthma checks, regular checks for diabetes, Hepatitis B, Tuberculosis (TB), a co-ordinator, and an on call doctor. The philosophy of the Full Service Cluster model for health service provision is that it is wholly community based and includes being sensitive and responsive to community needs.

_W.H.O. Component HS3 Health services contribute to teacher training._

**Checkpoint HS3.1: Relevant health services personnel provide training programmes for teachers in appropriate topics e.g. helminth control, first aid.**

School staff access training such as first aid through local agencies that provide courses for the general public. It does not appear to be part of the public health nurse role to take part in training programmes for teachers at Cannons Creek School.
This concludes the presentation of evidence. The next chapter will discuss the issues that have arisen from the evidence collected using the World Health Organization framework components and checkpoints. These will be discussed, with reference to relevant literature.
6 DISCUSSION AND ASSERTIONS

In this chapter evidence in relation to health-promoting school components will be discussed. Each of the six areas of the health-promoting school framework (W. H. O. 1996): school health policies; physical environment; the school’s social environment; community relationships; personal health skills; and health services will be addressed. To avoid reiterating the evidence already presented general discussion of components that have positive evidence to support them will not be the emphasis of the discussion. In making this decision however I am aware that by following the issues approach (Stake, 1995) I could be accused of going in the opposite direction to the salutogenic health promoting position. By taking direction from Stake (1995) I am focusing on answering the objectives that were posed at the outset of the research components of which have subsequently been confirmed as issues for the school.

The aim of the project was to investigate the way in which one low decile New Zealand primary school in the greater Wellington region practised health. I consider that the evidence collected and method used to collect, analyse and present that evidence in response to the health-promoting school framework has met this aim. The objectives of the project defined at the outset were:

1. To explore the concept of the ‘health-promoting school’ in a specific New Zealand context;
2. To develop and use appropriate research methods to assess a single low decile school in relation to World Health Organization health-promoting school components and checkpoints;
3. To record external and internal changes that could impact on school health over a finite time period; and

4. To work with the school community to identify health issues.

The concept of the health-promoting school has been explored through examination of the literature relating to the formation of the World Health Organization through to the development of the Western Pacific health-promoting school framework. This framework, used as an assessment tool upon which to examine the school as a case study, has been central to the research process in this thesis. The framework could be considered to err on the side of the prescriptive scientific model of inquiry but for this project which has explored and viewed it through a nursing lens it has been found to be a useful tool. The framework has served to enable examination of one health-promoting school to tell their story (Hartrick 2000) in a manner that has enabled them to identify issues that they consider need to be addressed.

In the context of the socio-ecological determinants of health (Dahlgren & Whitehead 1991) government and local body policy, cultural and political impacts, living and working conditions, social and community influences, lifestyle factors and genetic predispositions all have a potential impact on the health of students. These areas have been addressed within the health-promoting school framework developed by the World Health Organization (1996). From this in-depth examination health issues have been identified and solutions to them suggested by the school and/or myself.
My approach may seem to be contrary to a health promotion approach but is one that to me is in integrity with the health promotion nursing philosophy defined by Hartrick et al. (1994) because it is more likely to be of use to the school. I will explore a range of services and options and make assertions as to what I consider are most likely among these to meet the needs of this community. The intent is to provide concrete examples or a pragmatic approach that can be considered, rejected or accepted, as the school community decides.

In attempting to provide potential solutions to these issues I will make use of my professional nursing knowledge and recent policy and health committee involvement to allow the school to have something tangible to explore when working towards possible future actions. Initially my intention was to provide the school with my analysis and discussion of the evidence so that they could gain a new perspective on the issues and develop their own solutions. During the time I spent working with the school gathering the evidence I came to realise that a major issue for the school was the lack of health systems knowledge held by the school, caused in part by the non-availability of a trusted health professional (public health nurse). Therefore I have taken the step of offering my informed ideas for their consideration.

This chapter will address identified health issues and potential solutions. In congruence with the philosophy of health promotion the focus of the discussion of these issues will be on the *emic*, or insider identified issues.

The issues of the actors, the people who belong to the case (Stake 1995:20).
6.1 School Health Policies

Cannons Creek School has numerous health and health related policies and a process for policy development. Review processes to ensure that policies are relevant, current and owned by the school community are well utilised. During the course of this research the review process has been refined and all policies are accessible for public viewing on the school website. School policies are clearly developed from a shared philosophical view held primarily by educational professionals (teachers) then disseminated and owned by all involved school community members. I consider that this philosophy is closely aligned to the health promoting ontological stance and incorporates trust, belief in the other and focuses on the positive future potential of each student.

With regard to current school health policy my professional consideration is that the medication and the medical room policies require further refinement with health professional input. I assert that all health related policies would be strengthened if a health professional was involved in the review process to ensure that current evidence based health practice is incorporated into policy and to ensure that the personal safety of all school members is maintained.
6.2 The Physical Environment

In my view the physical environment of Cannons Creek School is sound and adequate. New developments have been prioritised with a focus on changes of most benefit to the needs of the school population. For example, installation of the Oticon sound system, rather than replacement of furniture was clearly a strategic decision that will be of more significant benefit to student learning than new chairs and desks. This prioritisation of need is based on the reality of the school within the New Zealand education system, especially in an area where fund raising for provision of non funded equipment is an unrealistic option. Collaboration with businesses which have provided resources for the school and are consequently given publicity appears to be of mutual benefit to both partners.

Strategic planning to set a time frame for action on lower priority needs such the provision of more shade areas, a solution to intermittent ventilation problems in classrooms, a review of the adequacy of toilet facilities, the replacement of water pipes to drinking fountains, and a furniture replacement plan would enhance the physical environment of the school.

6.3 The Schools Social Environment

The philosophy and ethos of respect, success and reward for following school rules and demonstrating appropriate behaviour appears to work towards a positive social environment in the school. KiwiCan programmes, peer mediation and a behaviour modification approach to
discipline, are actively addressing issues of bullying that cannot be attributed solely to school conditions. The school works hard to overcome the negative social influences that many students are exposed to in the context of their lives. The confidence and positive approach to learning shared by students and teachers appears to mitigate against the view that schools inevitably reproduce existing unequal power relations of the society in which they are situated (Alton-Lee, Densem & Nuthall 1991).

I consider that as well as the positive educational philosophy of staff who have chosen to work in this school a related reason for the positive social environment for students is because the majority of students at Cannons Creek School are from minority ethnic groups with respect to the total New Zealand population. This has meant that it is more likely that the teachers and Pakeha students, who are usually in the power position, have had to think about power dimensions within the school and create a climate of respect and acceptance for what in this school is the majority (Pacific Island and Maori) student group. The result has been that the culture of the school has enabled empowerment for all students at Cannons Creek School and many of their parents. Probably this will still not ensure that all students are treated equally by teachers and their peers as Jones (1985) found when researching gender and racial inequity. However the life skills approach to communication is likely to raise awareness of the need for positive relationships for all students.

Alton-Lee et al (1991) considered that more research was needed to understand the experience of individual students in particular educational and societal contexts to ensure that effective social change occurred in New
Zealand primary schools. I consider that exploration of contexts similar to that of Cannons Creek School in relation to equity of gender and ethnicity, and whether the majority influence comes from the mainly Pakeha teachers or from the mainly Polynesian students and parents, would be of considerable educational significance.

6.4 Community Relationship

The evidence presented in chapter 5 indicates that the Computers in Homes project is currently enhancing the relationship that the school has with parents. Further relationship building between parents and the school is necessary to ensure the health needs of their children are met. This will require ongoing energy to ensure that the school is a safe environment and that parents are encouraged to be part of their children’s educational lives. The need for further education about relevant child health topics could be addressed to the advantage of parents and students in the future.

The Computers in Homes project has provided a tangible reason for parents to visit the school and this could be expanded to include other types of information sharing for parents. A philosophical discussion with all community members to explore the knowledge and resources Cannons Creek School students need to prepare them for a healthy life could be beneficial to family involvement in child health education. It is clearly a more holistic health practice to involve rather than disregard parents who thus far have not opted to be involved in their children’s education for health. Zerwekh (1991) when describing a public health nurse model of family care-
giving stated that effective teaching of parents requires expert building of trust and timing to match teaching to client emotional and intellectual readiness for learning. Zerwekh (1992) also considered that:

Nurses seek to foster responsibility among clients who often deny responsibility and are perceived as irresponsible. The expert public health nurse has learned to do a figurative dance, stepping forward with nurse assertion and then backing off to await client initiative. (Zerwekh 1992:102)

Health educators involved in the school benefit students when they concentrate on teaching the students themselves to become informed, self-sufficient health conscious consumers of the future. These messages would be reinforced if parents were also able to gain health information relevant to their lives. Educators with broad health knowledge and experience would be better able to provide such information.

Relationships with local (Porirua) health agencies, schools, community agencies and the media are well supported due to the ethos and openness of the school. Relationships with personnel from the designated health service providers (Hutt Valley District Health Board public health service) leave a lot to be desired from the school’s perspective. Trust and collaboration, considered to be essential elements of a school/community agency working relationship (Dryfoos 1994) are largely absent. The relationship between the health service provider and the school could be viewed in the same way as suggested for working out the objectives for parent interaction. Either energy/resources could be directed towards frank and open facilitated dialogue between the school and Hutt Valley District Health Board public health service, or the school could choose to disregard Hutt Valley District Health Board as a service provider and put resources
into a new model of health service that meets the perceived health needs of
the school community.

My considered opinion is that the school will not get what it wants (a
personal health focused service) from Hutt Valley Health, which is now
committed through Ministry of Health contracts to provide population health
under the umbrella of health promotion.

Although Health Promoting schools are currently being supported by
Hutt Valley District Health Board Regional Public Health Service, a limited
number of schools (20 of 222 in 2002) in the Wellington region have been
selected as ‘suitable’ by the health service to be supported by the health-
promoting schools coordinator. Documentation that preceded this initiative
included the objective of supporting the aim of making schools more self
sufficient for their own health and health education needs (pers comm public
health manager #2). While I do not dispute that the end outcome should be
that a community can support themselves I do not consider that Cannons
Creek School can do this currently without the full range of health services
including the provision of personal health care. I support that whatever is
provided must be health-focused, and not illness-focused for it is vitally
important that the long-term focus is health promotion, but in the short term
it is equally important that personal health issues, identified as problematic
for over 30 years in this area are addressed to the satisfaction of the school
community. I will further elucidate the relationship aspect of health services
in the section 6.6.
6.5 Personal Health Skills

The main issues that have arisen from the evidence with respect to teachers is their lack of confidence, content knowledge and opportunity to gain relevant knowledge in relation to the Health and Physical Education curriculum. However the use of two community agencies for health education topic teaching has addressed the needs of the school to some extent. I contend that the philosophy and teaching methods that support the KiwiCan programme are more closely aligned to the school philosophy and health promotion school approach (W. H. O. 1996) than those of the Life Education Trust. The integrated approach of the KiwiCan programme provides for the social, mental and physical dimensions of health proposed in Te Taha Wha model (Durie 1994) as well as the objectives of the Health and Physical Education curriculum (Ministry of Education 1997b). I consider that the Life Education Trust model, content and philosophy has less appeal and a more tenuous place in the holistic integrated approach to health education. Currently Cannons Creek School teachers lack knowledge and confidence to deliver the new health curriculum and public health nurses (when available) lack opportunity, confidence and support from their employer/manager to impart the health knowledge they hold.

These issues need to be explored and student focused solutions found, or students, especially those who need to be self sufficient health consumers, will miss out on vital information and become conditioned to pursue unhealthy behaviours during their primary school years. Lack of healthy behaviour development in primary school could then predispose these students to further peer pressure and involvement in increasingly risky
adolescent health behaviours that could have a negative life-long impact (Dryfoos 1994). The way forward is clearly to support the life skills or empowering education approach (Tones 1997), integrated with topics relevant to the student group some of which were identified in the Health Behaviour survey. The involvement of parents in this process could strengthen parental knowledge and the possibilities for health-promoting student behaviours.

6.6 Health Services

Clearly from the viewpoint of the school, the main issue concerning the school meeting the health needs of the students is the manner in which health services are provided by the agency responsible. Health issues that were identified in the Porirua population (Porirua Kapiti Healthlinks Project 2000) are impacting on the Cannons Creek School student population. Student physical health problems that affect learning have been identified by teachers, but are not being appropriately assessed or treated. There is a lack of follow-up to ensure that students who fail hearing or vision tests are treated. Specialist appointments are delayed resulting in avoidable costs for appointments and prescriptions.

Requests by the school to discuss and work on what the school requires have not been considered within health promotion partnership nor client-centred approach. The PEACH initiative was a prime example of how a health promotion approach was used to meet the health promotion objectives of the service agency but did not actually address the health issues raised by the client group. I will elucidate this example because for
me it provided the key to understanding the reality of the relationship between the school and the health service agency.

The process was that the school on behalf of a group of school principals wrote to the Chief Executive Officer of the health service agency to express a number of specific concerns which included:

- A lack of health service staff (public health nurses);
- A lack of health needs being addressed by the health service;
- A lack of health education coordination; and,
- Problems regarding the process of gaining parental consent.

The health service manager responsible subsequently met with the school principals to discuss the issues, but the minuted outcomes suggest that the manager concerned took a pre-set health promotion agenda to the meeting. The principals wished to discuss the specific health needs of the student groups and the lack of health service personnel, but this did not occur. Further meetings continued to be driven by this inappropriate health promotion agency agenda and ultimately resulted in documented objectives that mimicked the Ottawa Charter (W. H. O. 1986). Effectively no action was taken to address the issues and needs identified by the principals and a community health education campaign was initiated. At times, but not consistently, relevant school staff attended and actioned the PEACH meeting agendas and ultimately no person who had been at the initial meeting was directly involved with the project.

As apparent in the evidence provided in chapter 5, Cannons Creek School did not need to encourage good nutrition, hearing awareness, and asthma education - the issues that became the foci of the PEACH project in
2000. Cannons Creek School already had policies and educational practices in place in the school to address these health issues. The problems for the school were as the principals had identified, lack of health service staff to follow up treatment in appropriate and affordable timeframes, problems with ongoing consent requirements prior to public health nurse or dental examination and issues aligned with local specialist health services (not located in an accessible place, and too few clinics for children to be seen within an appropriate timeframe).

In this instance the rhetoric of health promotion was used by the health service management but the philosophical intent was not from a working with, power sharing approach but rather a doing to, power over approach (Heron 1992). This ultimately, and predictably made no difference to the health issues for the students at Cannons Creek School during, or following the two year PEACH project. After the project was completed the school realised that nothing had changed – in fact services had further eroded, so a further letter was written to the health service agency which did not receive an acknowledgment, response or action.

I can only surmise that the reason why the health issues ultimately needed to be taken to the head of the health service organisation was because repeated requests at a lower level received no satisfactory response. The school was disempowered and then decided to take the matter into their own hands – following the classic model discussed by Friere (1972, 1994) of taking control to enable self empowerment. I can also only suggest that the response to the letter by the head of the organisation to staff allegedly ‘not performing’ would not have been viewed
positively by health service staff, with an element of horizontal violence or persecution (Karpman 1973) toward the school an end outcome.

I consider one of the reasons the schools resorted to this approach was the lack of appropriate and timely communication from the service organisation to the school, compounded by lack of staff who were available to maintain a relationship with the school. The personal position of health service front line staff (the public health nurse) was very difficult, no doubt compounded by the fact that she was not able to work to her potential scope of practice due to limitations of a defined role, limited by prescriptive population based public health funding contracts. When these funding contracts changed from a mainly ‘personal health’ to a ‘population health promotion’ approach the school needed to know what had changed, why it had changed and what the effect would be for them.

It is clear to me that the expectation of the health service resulting from policy and funding these changes was that if health problems were present the school would refer a student to a health professional (general practitioner) in the local community, rather than rely on the public health nurse to assess the student, visit the home, and generally facilitate an individual referral and treatment plan. This assumes a level of health assessment knowledge beyond the expertise of teaching staff. The philosophy being applied was a change to an approach that assumed each family had the resources (knowledge, finances, transport and access) to effect their own treatment options when a child was not well. Public health rhetoric supported a belief that if public health nurses provided services they supported dependence rather than supporting the empowerment aspect of
health promotion philosophy. I assert that this application of health promotion was to effectively remove the nurse or glue\textsuperscript{105} from the system. Zerwekh (1991, 1992) contended that public health nurses are central to the process of encouraging self help.

The primary focus of public health nurse visits to vulnerable families is to develop their personal capacity to take charge of their own lives and make their own choices (Zerwekh 1991:214).

The shift in philosophy of practice and removal of personal health care by public health nurses was not explained to the school community. No consideration was given to the fact that provision of a health promotion service also includes provision of what the client perceives that they need – including illness care/advice at times, if an holistic practice is to be supported.

Further confusion, then frustration was caused when a nurse-led public health clinic was commenced at the school in 2000. This clinic was rapidly set up when extra funding for decile 1 schools became available and proved to be inaccessible due to ongoing rigid consent processes (viewed as obstructive by the school). The fact that the nurse was only able to assess and refer a student to another health professional had the effect of adding an extra referral layer before a student utilised local health services. The nurse was not available or accessible outside the clinic hours (1 ½ to 2 hours per week) which meant that she did not become a trusted

\textsuperscript{105} During public consultation that occurred as part of the Porirua needs assessment (Porirua Kapiti Healthlinks Project 2000) a number of participants described public health nurses as the glue or the factor that used to hold things together for families in the community (pers comm Porirua Kapiti Healthlinks member 2001).
member of the school community. This turned out to be a further frustration for the nurse (who subsequently resigned after less than one year in the role) and for the school staff.

The policy requiring parental consent for each referral episode, was one of the issues cited in the letter from the principals to the Chief Executive Officer of regional health services that was not discussed with the school. Currently there is debate concerning the age at which a child can consent to certain procedures. In a recent article that explored this issue for nurses in New Zealand the statement was made that:

> Under the Code of Health and Disability Services Consumer Right Regulations, 1996, it is presumed all consumers of health and disability services, including children, are competent to make informed choice and to give informed consent, unless there are reasonable grounds for believing otherwise. The code operates on the basis there is no age of consent and it is the functional level of competency that determines whether a child is able to make an informed choice (Johnson & Trim 2001:22).

The article goes on to state that the Ministry of Health advises that the Guardianship Act does not preclude a child under 16 from giving valid consent and the authors asserted that the Gillick principle (named after a case in English law) would prevail. The Gillick principle is that:

> Parents rights in relation to their children are for the benefit of the child and decrease in proportion to the increasing level of understanding and maturity of the child. And where a child is competent to understand and is sufficiently interested, the child has a right to decide whether or not to consent (Johnson & Trim 2001:22).

I assert that although current public health practice in New Zealand schools may provide a degree of safety for health service staff, it is too rigid,
disregards the needs of the student, and acts to preclude access to health services for many students. I further consider the term that appropriately describes what has occurring between the school and health services was *Talking Past Each Other* – appropriately the title of a book about the problems of cross cultural communication by Metge and Kinloch (1978). These authors were describing communications between people of different ethnic origins (Maori, Pacific Island and Pakeha) in their cultural context. I have become convinced that in the context of this project for the two cultures of health and education:

> A good deal of mis-communication occurs between members of these groups because the parties interpret each others' words and actions in terms of their own understandings, assuming that these are shared when in fact they are not - in other words, because of cultural differences that are not recognised because we all take our own culture very largely for granted and do not question its general applicability (Metge & Kinloch 1978:8).

What has impressed me most as I reflect on how this school operates is that the philosophy, purpose and practices of this school are wholeheartedly directed towards health promotion. Teachers and parents are all focused on the long-term positive educational gains that are possible for each student. Every policy that influences practice supports this stance. Every new development the school becomes engaged in, for example, the ICAN cluster, Books in Homes, Computers in Homes and KiwiCan project is directed to meeting the long term goals of high achievement for every student with an awareness of the need to influence the potentially detrimental socio-ecological context of many students.
In my analysis I contend that it has been the interface with the health services that fails to be health promotive, and this has in fact worked to inhibit the health promotive goals of this school. I conclude this section with the assertion that Cannons Creek School requires a health promotion focused service that can meet student health needs as the school perceives them, and not as perceived by the health service agency.

In the next section of this chapter I will present different models of health service provision in schools and a potential model for Cannons Creek School specifically.

6.7 School health clinics

In this section I will outline two nursing services currently available in primary schools in New Zealand then I will discuss the full-service school model proposed by the principal as the logical solution to the needs of Cannons Creek School. Discussion will include the scope of nursing practice, philosophical alignments, employment, and link to other social and health agencies/providers and other relevant contextual information.

The two examples of New Zealand school health clinics are that of a Wellington based school nurse employed in a private female school that educates 680 year 5 to 12 students. The second is that of a nurse-led clinic situated in Auckland, New Zealand, in a low socio-economic primary school with a population and socio-economic profile similar to that of Cannons Creek School. During my research I visited both nurses in each of these contexts.
The school nurse in the private school had been employed by the school in the role for over 10 years and had ‘grown’ the job and subsequently expanded her scope of practice. This was possible when she became a trusted member of the school community, facilitated by her meeting both the perceived needs of the school and utilising her own knowledge of the best nursing practice for an occupational health setting (school). The nursing position, originally termed ‘Matron’ had been established in the school for 70 to 80 years, the time over which the school had been operating as a boarding school. The school now operates as a day school. When the current nurse took the position there were some inappropriate aspects to her role (e.g. making staff morning tea) which she gradually changed as she became fully acknowledged in her health professional role. The nurse now considers her role to be that of an occupational health nurse\(^{106}\) for the school community encompassing care for both staff and students. As well as being regularly available in a clinic for accidents and illness events, the nurse takes responsibility for potentially traumatic incidents and disaster planning (including civil defence), reporting and maintenance of occupation health and safety standards and being part of the team that plans and teaches the Health and Physical Education curriculum. The nurse is considered part of the school staff and has a pastoral care student group, and as a qualified counsellor she works with other school counsellors to provide for the needs of the school community.

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\(^{106}\) Occupational health nursing was defined by the New Zealand Occupational Health Nurses Association as the application of nursing principles in conserving the health of workers and students in all walks of life. It involves recognition and treatment of illness and injury and requires special skills and knowledge in the fields of accident prevention, health education and counselling, environmental health, rehabilitation and human relations. (Pybus 1983:139)
Staff utilise the nursing service for monitoring Blood Pressure (BP), illnesses events, stress reduction advice, and other personal health needs. A local general practitioner has a Memorandum of Understanding with the school which enables the nurse to refer students to the general practitioner or to take them to the local family planning clinic as appropriate (pers comm school nurse #1, 2000).

The Hutt Valley Health public health service is also involved with the school in providing vision and hearing testing and immunisations. The school nurse has found this interface frustrating, as visiting dates for the service are not reliable. This makes it difficult to ensure that timely screening and immunisations are maintained for students. A problem for the nurse is the absence of other similar nursing positions in New Zealand and the lack of a professional nursing group for school nurses that could support suitable role and professional development (pers comm school nurse #1, 2000).

The second example of a nurse-led clinic in New Zealand is that of a relatively new service in Auckland that commenced in May 2000. This clinic is situated at Wesley primary school that enrols 680, year one to six students. The clinic started from the school’s involvement in the Auckland health-promoting schools pilot project and the desire of the school to overcome learning barriers generated by poverty. The clinic aimed to meet the needs of the school community that were:

under-resourced in terms of health care and primary health care (Velde 2000:1).
The nursing scope of practice was defined during the needs analysis that preceded the opening of the clinic (Clendon 1999b, Hinder 2000) as that of Advanced Nurse Practitioner\(^{107}\) whose role includes health advice for any student or family member, screening (e.g. asthma, diabetes, BP monitoring), and referral to other health services. The aim is to provide:

> an opportunity for parents who think their children might have a health problem to access a service before a problem becomes too bad (Velde 2000:1).

This Auckland venture is a three year pilot joint project between the school and the health service (the child and youth health arm of the local public health service), funded by Auckland Healthcare. The school continues to provide its own first aid services and consent must still be gained by a parent for every referral, or alternatively the parent must accompany the student to the clinic. The clinic is open at various times during each school day, no appointment is necessary and comprehensive data are gathered and sent to another health professional when a student is referred.

The nurse stated that some of the difficulties in setting up the clinic have been a lack of resources (e.g. phone and computer), the amount of time to become ‘known’ and utilised, and relationships with some other local health professionals who have felt threatened by this new free service. The nurse still belongs to the public health nursing service so she continues to obtain support and professional development from this source (pers comm school nurse # 2, 2001).

\(^{107}\) The Advanced Nurse Practitioner role (now termed Nurse Practitioner by the Nursing Council of New Zealand 2001a) - see Appendix 6.1 for defined competencies for this role.
6.8 Full Service Schools

The full-service school model that the Cannons Creek School principal considers would ‘close the gaps’ and provide the services required by the school is a different model than either of the nurse-led clinic models discussed above. The full-service school model has been developed in the USA and variations had been adopted in 574 schools across the USA by 1992 (Dryfoos 1994). Full-service schools support school based health clinics, mainly located in high schools (New Zealand secondary school equivalent) and middle schools (New Zealand intermediate school equivalent) in the USA. The initiative supports a holistic view of health and aims to provide services that include a Nurse Practitioner, a social service worker and a mental health service worker. A coordinator for the centre is considered essential (Dryfoos 1994). Various models include school-based or school-linked (off-site) clinics but Dryfoos (1994) found that greater utilisation of services occurred in school based clinics that allowed confidential access to services by staff and students. The majority of full-service clinics in the USA are in areas of socio-economic deprivation where access to health services and medical insurance is low, and children are considered to be ‘at risk’ because they live in high-risk environments. The aim of the school-based service is to be accessible and affordable and to provide appropriate responsive health focused care for the entire school population. Primarily, the objective has been to address the fact that:

a universal call has been issued for a one stop unfragmented health and social service system that are consumer orientated, developmentally appropriate and culturally relevant (Dryfoos 1994:11).
The model of service is based strongly on collaborative partnerships between education, health and social agencies to provide quality education and support services detailed as follows:

<table>
<thead>
<tr>
<th>Quality Education Provided by Schools</th>
<th>Support Services Provided by Community Agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective basic skills</td>
<td>Health screening and services</td>
</tr>
<tr>
<td>Individualised instruction</td>
<td>Dental services Family planning</td>
</tr>
<tr>
<td>Team teaching</td>
<td>Individual counselling</td>
</tr>
<tr>
<td>Cooperative learning</td>
<td>Substance abuse treatment</td>
</tr>
<tr>
<td>School-based management</td>
<td>Mental health services</td>
</tr>
<tr>
<td>Healthy school climate</td>
<td>Nutrition/weight management</td>
</tr>
<tr>
<td>Alternatives to tracking</td>
<td>Referral with follow-up</td>
</tr>
<tr>
<td>Parent involvement</td>
<td>Basic services: housing, food, clothes</td>
</tr>
<tr>
<td>Effective discipline</td>
<td>Recreation, sports, culture</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quality Education Provided by Schools or Community Agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensive health education</td>
</tr>
<tr>
<td>Health promotion</td>
</tr>
<tr>
<td>Social skills training</td>
</tr>
<tr>
<td>Preparation for the world of work (life planning)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Support Services Provided by Community Agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family welfare services</td>
</tr>
<tr>
<td>Parent education, literacy</td>
</tr>
<tr>
<td>Child care</td>
</tr>
<tr>
<td>Employment training/jobs</td>
</tr>
<tr>
<td>Case management</td>
</tr>
<tr>
<td>Crisis intervention</td>
</tr>
<tr>
<td>Community policing</td>
</tr>
</tbody>
</table>

The reasons that full-service schools have been supported in the USA are very similar to those identified by Salmond (1975) in the Porirua community (Porirua Kapiti Healthlinks Project 2000), and by the school principal (Cannons Creek School website 2001), which included an identified need for a one-stop-shop type of integrated community based health service. Prior to the development of full service schools in the USA similar patterns of service reduction in schools had occurred.
The history of school nursing in the USA has had similar cycles of support and withdrawal of school health services that appears to be happening in New Zealand at present. The first health services commenced in USA schools in the late 1800’s and the supply of school health services have been progressively ‘turned off and on’ since that time, depending on the national financial and social environment. In periods of relative affluence and in the absence of new immigration populations school health service provision was limited. In periods of poverty, political and social unrest and obvious disadvantage, support and funding for school service provision was increased. Provision of school health services have also been restricted by the private health sector and wherever school services appeared to be in competition with medical practitioners the American Medical Association (AMA) has withdrawn support for services (Dryfoos 1994).

Dryfoos (1994) also discussed that school nurses were involved in health care delivery in many USA schools since early in the provision of health services in schools. Nurses first worked with medical officers of health then became responsible for health screening, assessment, and referral of students during the 1970’s. Currently, Nurse Practitioners, some of whom have prescribing rights, are employed in school-based health clinics in many parts of the USA. A School Nurse Association provides professional support for the role. School based clinics gain consent from parents for treatment on an annual basis, and the average clinic enrollment is 700 students. In full-service schools the nurse, social workers and health educators are all involved in health promotion activities and classroom
presentations. As community members they also participate in events such as running workshops and coordinating health focused support groups, which involve the whole school community (Dryfoos 1994). Dryfoos also considered that evaluation of services, funding, lead agency (employer) fiscal and legal responsibility - including scopes of practice for health professionals, and consent issues all need to be worked out in a collaborative manner if the goals of any health service programme are to be successfully achieved. The calibre of staff and their commitment are also considered to be important to success, as staff need to be:

  smart, flexible, culturally sensitive, creative, highly organised, very dedicated, willing to work hard, tolerate stress and genuinely care about people (Dryfoos 1994 p164).

6.9 A solution for consideration by Cannons Creek School and Capital and Coast District Health Board

I consider that the New Zealand example of the private school occupational nursing service approach, expanded to include the full-service school range of services and objectives, is likely to be most successful health service model to meet the needs of Cannons Creek School in the current New Zealand health care context. I contend that many other New Zealand schools could benefit from this approach, but that each school may differ in the approach it took to access and provide services, as provision and arrangements would depend on what is identified as a need by the population and what was available in their local community. The approach would include five-year-old health screening to gain baseline data and to identify any potential or actual problems, in the same way as any
A school entry health assessment would enable the health status of each student to be monitored, and vision, hearing and immunisation status to be collected. These data could then be used to track alterations in health and assess health education and service needs for each child. A database shared by other members of the health service would overcome duplication of records between areas of the service.

The health service staff working in the school would be employed by the Primary Health Organisation, referred to in Chapter 2 section 2.2 and Appendix 2.2. Ideally all families of the one school would be enrolled with the local Primary Health Organisation, which would be contracted to provide all the health services required by that population. Members of the school would have the opportunity to be part of the governance group of the Primary Health Organisation, thus ensuring that resourced services to meet the needs of schools were directed to school communities, as appropriate. Health service staff that work with the school would include a range of health professionals positioned in the role most effective to make health gains and most suited to their preparation, knowledge and skills.

I do not support the Auckland school clinic model as a suitable model of school health service provision. My rationale is that its services continue to be fragmented and therefore confusing with regard to what is provided and why it exists. It is also constrained by the consent process in the same way as the Hutt Valley District Health Board public health nurse practice is.

The vision I have for health service provision at Cannons Creek School basically involves expanding and strengthening the model set by the
social workers in schools initiative and utilising the other services already available locally. For example those provided by the Fanua centre, and the dental, vision and hearing services of the Hutt Valley District Health Board. This would enable the school to take advantage of the current changes in the health care system including developments in Primary Health Care nursing initiatives in New Zealand to regain a health workforce that can address ongoing health issues identified in the many research projects previously cited.

The philosophical intent would be true health promoting practice that includes for nursing the caring and empowering strategies that affirm client responsibility and capacity for autonomy (Zerwekh 1991). Described by Benner, Tanner and Chesla (1996) as:

Caring practices which create possibility for the nurse to know the patient as a person also open new horizons for seeing and understanding what is most important to the patient and family (Benner et al, 1996:15).

Benner et al (1996) also described the actions of the nurse as having:

…an underlying moral dimension: the fundamental disposition of the nurse towards what is good and right and action toward what the nurse recognises or believes to be the best good in a particular situation (Benner et al 1996:6).

I consider it essential that nurses working in the school setting are able to practice nursing using the full scope of their professional preparation that includes the nursing work referred to by Zerwekh (1991) and Benner et al (1996).
In columns 1 & 2 of Table 6.1 I have identified the current provision of
the health components of the full-service school model discussed by
Dryfoos (1994). The third column identifies the gaps or issues that still
require appropriate service provision at Cannons Creek School.

Table 6.1 Full-service school provision for Cannons Creek School

<table>
<thead>
<tr>
<th>1 Hutt Valley Health Service provision</th>
<th>2 Local social and health services</th>
<th>3 Current gaps in service provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental services</td>
<td>Fanau centre</td>
<td>Follow up vision &amp; hearing screening</td>
</tr>
<tr>
<td>Vision screening</td>
<td>diabetes screen &amp; monitor</td>
<td>Screening &amp; primary health care for students and staff</td>
</tr>
<tr>
<td>Hearing screening</td>
<td>asthma clinic</td>
<td>Data base of school student health status</td>
</tr>
<tr>
<td>Population health information</td>
<td>counselling</td>
<td>Health education knowledge &amp; expertise</td>
</tr>
<tr>
<td>Population immunisation</td>
<td>Family support</td>
<td>Consumer advocacy</td>
</tr>
<tr>
<td>Health-promoting school support</td>
<td>WINZ</td>
<td>Knowledge of health services</td>
</tr>
<tr>
<td></td>
<td>Whitireia Community law centre</td>
<td>Input into policy development &amp; disaster planning</td>
</tr>
<tr>
<td>Local Trust provision</td>
<td>Wesley Centre</td>
<td>Health &amp; Safety Act compliance</td>
</tr>
<tr>
<td>Social workers in school</td>
<td>Opportunity centre</td>
<td>Parent education</td>
</tr>
<tr>
<td>KiwiCan programme delivery</td>
<td>Community policing</td>
<td>Health promoting school audits</td>
</tr>
</tbody>
</table>

I consider that the key to the provision of these services in the school
would, as Dryfoos (1994) asserted, be in coordinating what was available,
when, where, and by whom. Currently this is the role of the teaching and
school staff in spite of their professional preparation, job description and
purpose having a primary focus on education of students. Personnel that
would be most suited to ‘close the gaps’ identified in Table 6.1 would be one
or more Nurse Practitioners and one or more Community Health workers
with access to other health professionals on a case by case basis. Nurses
would need to be operating at an Advanced Practice level (Nursing Council of New Zealand 2001b) in Child and Family health nursing practice and working towards Nurse Practitioner status (Nursing Council of New Zealand 2001a).

Competencies to include in a Nurse Practitioner scope of practice relevant to school nursing include:

- appropriate first contact care;
- diagnostic tests and X-rays;
- counselling and support;
- prescribing;
- referral to specialists;
- complex health and wellness maintenance for individuals;
- contraceptive advice and teaching,
- sexual health care and
- care of families with complex health problems.

Community Health Workers would require education similar to that provided by the Pacific Community Health Worker certificate programme (Appendix 6.2). The current programme available from Whitireia Community Polytechnic, Porirua was developed collaboratively in 1999¹⁰⁸ to meet the needs of the Pacific community in the Wellington region.

¹⁰⁸ This qualification was developed following a pilot education programme to train sexual and reproductive educators for the Pacific community of the Wellington region. Agencies involved in the development were Whitireia Community Polytechnic, Hutt Valley Health, Capital Coast Health and the Union Health service.
I consider that over the next three years, as the emphasis on the development of Primary Health Organisations gains momentum there is an opportunity for collaboration across health disciplines that includes analysis and matching of appropriately skilled and educated personnel to work towards population health gains in the community. My view would be that Community Health Workers would be the ideal people to work as supportive client advocates with nurses and general practitioners all working together to reduce inequities in health. Nurses employed to work to the full capacity of their competencies could then enable general practitioners to work with those who require their medical knowledge, ability and skill.

The key to Cannons Creek School receiving the health service it requires will be in the nature, context and specifics of the service delivery. If services continue to be driven by what is written into contractual obligations in terms of:

…the technical-rationality model of professional practice or theory of appropriate responses (Benner, et al. 1996:6)

then the community of Cannons Creek School will continue to be poorly served. If however Primary Health Organisations can become truly health promoting in their philosophy and delivery of care, and schools gain nurses that can operate in a manner appropriate to the community, then nurses will be able to work in the manner Benner et al (1996) described as

Being attuned to subtle situation changes, attending to salient information, and understanding and responding to patients issues or concerns (Benner et al, 1996:2)
This is the listening, participatory dialogue, recognition of patterns and envisaging action and positive changes that Hartrick et al (1994) describe as being health promoting nursing practice. If the governance and intent of the Primary Health Organisation defined by the Ministry of Health is supported by the District Health Board to address needs-based socio-ecological determinants of health for individuals and families in this community, this will be possible. However as Salmond stated:

For the community care concept to become a practical reality would require inspired leadership. Jealously guarded traditional beliefs about the practice of medicine, the division of labour, the relationships between doctors and allied health workers would have to change. Tolerance, understanding and a willingness to change and compromise sectional interests would be a basic requirement of all staff (Salmond 1975:84).

Before a new school health service for Cannons Creek School that includes Nurse Practitioners can be effective, a number of issues will need to be considered in collaboration with health professional employers, the school, and the present nominated health service agency (Hutt Valley District Health Board). These include employment/management lines of accountability, support and supervision, including scope of practice, professional development needs and nursing leadership. I propose that this initiative is a model for one of the proposed pilot programmes that are currently being developed to support the Primary Health Care nursing strategy. As discussed in Chapter 2 section 2.2, at the present time implementation of the New Zealand Primary Health Care strategy is being planned to include a new form of funding for Primary Care Organisations (PHO) funded by the District Health Boards. The key feature of these
organisations is to be that they support the aim of the Primary Health Care Strategy, which is to:

…improve health and reduce inequalities by moving to a system where services are co-ordinated around the needs of a defined group of people (King 2001b:1).

Primary Health Organisations are expected to work with their communities to achieve the aims of the Primary Health Care Strategy, with the main focus being:

On achieving results in terms of better health, reducing health inequalities and easier access to services (King 2001b:1).

It is with this in mind that I assert that at the present time it is opportune for Cannons Creek School to take advantage of the changes in the health care system, and, in collaboration with their local health service agency enter into negotiations to gain a full-service school approach to support their health-promoting school. The model I suggest for this community could well provide the framework for the provision of the School Nursing service of the future.

In the next and final chapter I will conclude this odyssey by reflecting on the holistic picture of health promotion, the case of the study, and the knowledge I have gained from this research journey.
7 CONCLUSION

I began this journey of discovery with a keen interest, a real need to know and a sense of apprehension which at times felt exciting. I spent a great deal of time planning my research to ensure my travel would be safe for me and for those I encountered along the way. These plans were influenced by the wisdom of my guides or supervisors who have trodden similar paths. Their guidance ensured I could enjoy this journey, trust the process and continue to be stimulated through responding and interacting with whomever I met along the way. My passion for health and the health of children has not diminished. In fact the most pleasurable moments of this process were during my times at Cannons Creek School watching, talking to and reflecting on the amazing qualities of children and childhood. Being part of that community was a privilege that allowed me to tell this story as my thesis.

The documentation and evidence I have presented in this case study has identified that the collaborative ideology encouraged between the Health and Education sectors stated in both the Health Schools – Kura Waiora (Ministry of Health and Public Health Commission 1995) and The Health-Promoting Schools Regional Guidelines (W.H.O., 1996) is yet to be achieved in the New Zealand context.

The World Health Organization Expert Committee on comprehensive School Health Education and Promotion report (W.H.O. 1997b) included 10
recommendations, of which three of those itemised below were considered most likely to have direct effects on child health. These were:

- The school environment must provide safe water and sanitary facilities; protect from infectious diseases; protect from discrimination, harassment, abuse and violence; and reject the use of tobacco, alcohol and illicit drugs.

- Every school must enable children and adolescents at all levels to learn vital skills. Health education should include topics such as infectious diseases, nutrition, preventive health care and reproductive health and should enable young people to protect the well-being of the families for which they will eventually become responsible and the communities in which they reside. Life skills education should help them make healthy choices and adopt healthy behaviour throughout their lives.

- Every school should prevent when possible, treat when effective, and refer when necessary, common health problems. Schools should provide safe and nutritious food and micronutrients to combat hunger, prevent disease, and foster growth and development. They should establish prevention programmes to reduce the use of tobacco, alcohol and illicit drugs, and behaviour that promotes the spread of HIV infection. They should when possible identify and treat infections, and oral, vision and hearing problems and psychological problems, and refer those affected for appropriate treatment. (World Health Organization 1997b:85-86).

The New Zealand Child Health Strategy (King 2000) stated that epidemiological studies have indicated that a number of health, social and economic disadvantages including prolonged low income, long term unemployment, poor housing and low educational and vocational attainment of parents can impact negatively on the health of children. The strategy acknowledged that children from these families tend to have poorer health and development than other children, and can also culminate in poorer educational, vocational and welfare outcomes.
Findings from my research journey suggest that whilst many detrimental factors are reduced by the health promotive nature of Cannons Creek School there is still the risk that current students will perpetuate the cycle of poverty and poor health that many members of their community are currently experiencing. The solution to this, I consider, is to provide effective interventions to support healthy behaviours and improved access to responsive and appropriate health services for the community through the school.

I am of the opinion that Cannons Creek School presents a wonderful example of a health–promoting school, and that the educational philosophy espoused by the school is very closely aligned to the philosophy of health promotion. The school is doing its utmost to support healthy behaviours, but the nominated school health services have not yet effectively tackled health issues that have been identified on numerous occasions since the early 1970’s.

This study has enabled me to identify areas in which the school is currently contributing to the health of the student population, the details of community services available to support the health of the school, and to identify appropriate new initiatives needed to be put in place to address ongoing health issues.

The use of the World Health Organization health-promoting school framework has assisted me to identify specific components which contribute to this health-promoting school. In this respect I have found the framework useful. Generalising the framework beyond the case of Cannons Creek School may require modification in accordance with other specific contexts.
The research method used in this thesis to gather evidence in support of the framework has been appropriate, but has been too time consuming to be generally employed. I therefore suggest that the framework be reconfigured into a self-review questionnaire similar to that completed by a joint project in Australia (N.S.W. Department of School Education 1996). This could be used by schools in partnership with involved health professionals to audit health-promoting school activities and identify gaps. Needs could then be prioritised and as part of strategic planning addressed with the assistance of the local Primary Health Organisation and relevant community groups. New Zealand schools are already familiar with the procedure of using the self-review format in relation to Education Review Office audits (E.R O. 2001). An expanded version that includes community feedback would be a suitable model for this purpose.

At the outset of this thesis I discussed that my inquiry was driven by my need to investigate the teaching of school health education, and why and how the role of the public health nurse in schools had changed so as to be considered no longer satisfactory for some schools and for many public health nurses. I consider that I have accomplished my aims and objectives. My journey has been stimulating, and the side tracks that I have been travelling (such as my involvement in the development of a framework for nursing in the Primary Health Care Strategy), have all directed me to suggest a solution for consideration by Cannons Creek School and by local health service providers as the school continues to support healthy children to learn in accordance with their full potential.
I think, however, that what I have presented here is probably only the journey to the foothills of the mountain. Already armed with the knowledge I have gained I am attending meetings with people determined to address the health needs of the primary and preschool children of the Porirua area through school health clinics. They too see the possibilities presented by current changes in the health care system.

I feel I now have a responsibility to be involved in these developments and also to ensure they are well planned, collaborative and include evaluations as part of their development. It is timely that I have completed this work and as I conclude this thesis I reflect on the challenge firmly attached to the door of office of the Cannons Creek School principal

**Success is the best revenge.** Time will tell……..
HEALTH PROMOTION IN ONE NEW ZEALAND PRIMARY SCHOOL: A CASE STUDY

BY

JANET RUTH PEARSON

VOLUME TWO
APPENDICES & REFERENCES

A thesis submitted to the Victoria University of Wellington in fulfilment of the requirements for the degree of Doctor of Philosophy in nursing

VICTORIA UNIVERSITY OF WELLINGTON

2002
VOLUME TWO

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ANNEX I

OTTAWA CHARTER FOR HEALTH PROMOTION¹

17–21 November 1986

The first International Conference on Health Promotion, meeting in Ottawa this 21st day of November 1986, hereby presents this Charter for action to achieve Health for All by the Year 2000 and beyond.

This Conference was primarily a response to growing expectations for a new public health movement around the world. Discussions focused on the needs in industrialized countries, but took into account similar concerns in all other regions. It built on the progress made through the Declaration on Primary Health Care at Alma Ata, the World Health Organization’s Targets for Health for All document, and the recent debate at the World Health Assembly on intersectoral action for health.

HEALTH PROMOTION

Health promotion is the process of enabling people to increase control over, and to improve, their health. To reach a state of complete physical, mental and social well-being, an individual or group must be able to identify and to realize aspirations, to satisfy needs, and to change or cope with the environment. Health is, therefore, seen as a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities. Therefore, health promotion is not just the responsibility of the health sector, but goes beyond healthy life-styles to well-being.

Prerequisites for Health

The fundamental conditions and resources for health are peace, shelter, education, food, income, a stable eco-system, sustainable resources, social justice and equity. Improvement in health requires a secure foundation in these basic prerequisites.

Advocate

Good health is a major resource for social, economic and personal development and an important dimension of quality of life. Political, economic, social, cultural, environmental, behavioural and biological factors can all favour health or be harmful to it. Health promotion action aims at making these conditions favourable through advocacy for health.

Enable

Health promotion focuses on achieving equity in health. Health promotion action aims at reducing differences in current health status and ensuring equal opportunities and resources to enable all people to achieve their fullest health potential. This includes a secure foundation in a supportive environment, access to information, life skills and opportunities for making healthy choices. People cannot achieve their fullest health potential unless they are able to take control of those things which determine their health. This must apply equally to women and men.

Mediate

The prerequisites and prospects for health cannot be ensured by the health sector alone. More importantly, health promotion demands coordinated action by all concerned: by governments, by health and other social and economic sectors, by non-governmental and voluntary organizations, by local authorities, by industry and by the media. People in all walks of life are involved as individuals, families and communities. Professional and social groups and health personnel have a major responsibility to mediate between differing interests in society for the pursuit of health.

Health promotion strategies and programmes should be adapted to the local needs and possibilities of individual countries and regions to take into account differing social, cultural and economic systems.

HEALTH PROMOTION ACTION MEANS:

Build Healthy Public Policy

Health promotion goes beyond health care. It puts health on the agenda of policy makers in all sectors and at all levels, directing them to be aware of the health consequences of their decisions and to accept their responsibilities for health.

Health promotion policy combines diverse but complementary approaches including legislation, fiscal measures, taxation and organizational change. It is coordinated action that leads to health, income and social policies that foster greater equity. Joint action contributes to ensuring safer and healthier
own health and over their environments, and to make choices conducive to health.

Enabling people to learn throughout life, to prepare themselves for all of its stages and to cope with chronic illness and injuries is essential. This has to be facilitated in school, home, work and community settings. Action is required through educational, professional, commercial and voluntary bodies, and within the institutions themselves.

Reorient Health Services

The responsibility for health promotion in health services is shared among individuals, community groups, health professionals health service institutions and governments. They must work together towards a health care system which contributes to the pursuit of health.

The role of the health sector must move increasingly in a health promotion direction, beyond its responsibility for providing clinical and curative services. Health services need to embrace an expanded mandate which is sensitive and respects cultural needs. This mandate should support the needs of individuals and communities for a healthier life, and open channels between the health sector and broader social, political, economic and physical environmental components.

Reorienting health services also requires stronger attention to health research as well as changes in professional education and training. This must lead to a change of attitude and organization of health services, which refocuses on the total needs of the individual as a whole person.

MOVING INTO THE FUTURE

Health is created and lived by people within the settings of their everyday life; where they learn, work, play and love. Health is created by caring for oneself and others, by being able to take decisions and have control over one’s life circumstances, and by ensuring that the society one lives in creates conditions that allow the attainment of health by all its members.

Caring, holism and ecology are essential issues in developing strategies for health promotion. Therefore, those involved should take as a guiding principle that, in each phase of planning, implementation and evaluation of health promotion activities, women and men should become equal partners.

Commitment to Health Promotion

The participants in this conference pledge:

- to move into the arena of healthy public policy, and to advocate a clear political commitment to health and equity in all sectors;
- to counteract the pressures towards harmful products, resource deple-
tion, unhealthy living conditions and environments, and bad nutrition; and to focus attention on public health issues such as pollution, occupational hazards, housing and settlements;

- to respond to the health gap within and between societies, and to tackle the inequities in health produced by the rules and practices of these societies;

- to acknowledge people as the main health resource; to support and enable them to keep themselves, their families and friends healthy through financial and other means, and to accept the community as the essential voice in matters of its health, living conditions and well-being;

- to reorient health services and their resources towards the promotion of health; and to share power with other sectors, other disciplines and most importantly with people themselves;

- to recognize health and its maintenance as a major social investment and challenge; and to address the overall ecological issue of our ways of living.

The Conference urges all concerned to join them in their commitment to a strong public health alliance.

Call for International Action

The Conference calls on the World Health Organization and other international organizations to advocate the promotion of health in all appropriate forums and to support countries in setting up strategies and programmes for health promotion.

The Conference is firmly convinced that if people in all walks of life, non-governmental and voluntary organizations, governments, the World Health Organization and all other bodies concerned join forces in introducing strategies for health promotion, in line with the moral and social values that form the basis of this Charter, Health for All by the year 2000 will become a reality.
This Charter for action [The Ottawa Charter for Health Promotion] was developed and adopted by an international conference, jointly organized by the World Health Organization, Health and Welfare Canada and the Canadian Public Health Association. Two hundred and twelve participants from 38 countries met from November 17 to 21, 1986, in Ottawa, Canada to exchange experiences and share knowledge of health promotion.

The Conference stimulated an open dialogue among lay, health and other professional workers, among representatives of governmental, voluntary and community organizations, and among politicians, administrators, academics and practitioners. Participants coordinated their efforts and came to a clear definition of the major challenges ahead. They strengthened their individual and collective commitment to the common goal of Health for All by the year 2000.

This Charter for action reflects the spirit of earlier public charters through which the needs of people were recognized and acted upon. The Charter presents fundamental strategies and approaches for health promotion which the participants considered vital for major progress. The Conference report develops the issues raised, gives concrete examples and practical suggestions regarding how real advances can be achieved, and outlines the action required of countries and relevant groups.

The move towards a new public health is now evident worldwide. This was reaffirmed not only by the experiences but by the pledges of Conference participants who were invited as individuals on the basis of their expertise. The following countries were represented: Antigua, Australia, Austria, Belgium, Bulgaria, Canada, Czechoslovakia, Denmark, Eire, England, Finland, France, German Democratic Republic, Federal Republic of Germany, Ghana, Hungary, Iceland, Israel, Italy, Japan, Malta, Netherlands, New Zealand, Northern Ireland, Norway, Poland, Portugal, Romania, St. Kitts-Nevis, Scotland, Spain, Sudan, Sweden, Switzerland, Union of Soviet Socialist Republic, United States of America, Wales and Yugoslavia.
Appendix 2.3 Minimum requirements for Primary Health Organisations

Introduction
Implementing the Primary Health Care Strategy is a key first step towards achieving the goals set out in the New Zealand Health Strategy. The Primary Health Care Strategy aims to improve health and reduce health inequalities by moving to a system where services are co-ordinated around the needs of a defined group of people. Primary Health Organisations (PHOs) will be organisations of providers working with their communities to achieve this.

The process for fully implementing the Strategy is to be an evolutionary one over the next few years building on the strengths of the existing services provided by general practitioners, nurses, community health workers and others.

Many of these practitioners operate under existing organisational arrangements such as IPAs, Maori Provider Organisations, rural trusts and so on. Implementing the Strategy means that DHBs will work with these organisations and their communities in order to find the best way locally to set up Primary Health Organisations.

Key points about PHOs
The Strategy (page 5) notes key points about PHOs as follows.

1. Primary Health Organisations will be funded by District Health Boards for the provision of a set of essential primary health care services to those people who are enrolled.

2. At a minimum, these services will include approaches directed towards improving and maintaining the health of the population, as well as first-line services to restore people’s health when they are unwell.

3. Primary Health Organisations will be required to involve their communities in their governing processes. They must also show that they are responsive to communities’ priorities and needs.

4. Primary Health Organisations must demonstrate that all their providers and practitioners can influence the organisation’s decision-making, rather than one group being dominant.

5. Primary Health Organisations will be not-for-profit bodies and will be required to be fully and openly accountable for all public funds that they receive.

6. While primary health care practitioners will be encouraged to join Primary Health Organisations, membership will be voluntary.

Minimum Requirements

The main focus is on achieving results in terms of better health, reduced health inequalities and easier access to services. The following minimum requirements set the parameters within which DHBs and local groups will find their own best answers. DHBs will decide whether an organisation is meeting the minimum requirements both in terms of services delivered and its overall structure and governance before allowing it to become a Primary Health
Organisation. A set of national guidelines will be distributed to assist DHBs, primary providers and their communities with tools and ideas for PHO establishment and meeting minimum requirements. The process of establishing a PHO will reflect the principles of the Treaty of Waitangi - partnership, participation and protection.

What a PHO will do

1. **PHOs will aim to improve and maintain the health of their populations and restore people’s health when they are unwell. They will provide at least a minimum set of essential population-based and personal first-line services.**

DHBs are required, under national service coverage specifications, to ensure people have access to a set of primary health care services. The service agreements they enter with PHOs will specify these services in more detail. The agreements will include associated requirements such as understanding their population, information systems, coordination, and management of referred services within a budget. They will set out expectations about availability, affordability, quality, and cultural competence. For example, PHOs which include rural communities will need to ensure equitable and effective access to primary health care services within their rural communities or within acceptable travel times.

2. **PHOs will be required to work with those groups in their populations (for example, Maori, Pacific and lower income groups) that have poor health or are missing out on services to address their needs.**

The DHB must be satisfied that the PHO’s planning, prioritisation and service delivery will contribute to a reduction in health inequalities.

3. **PHOs must demonstrate that they are working with other providers within their regions to ensure that services are co-ordinated around the needs of their enrolled populations.**

The DHB must be satisfied that PHOs demonstrate they are working with other providers as appropriate to co-ordinate care for their enrolled populations in ways that best meet the needs of their communities.

Key considerations when establishing a PHO

4. **DHBs will use a national formula to fund PHOs according to their enrolled populations**

A formula is being developed nationally so that funding will reflect characteristics of the population that determine their need for primary health care services. The formula will cover the minimum essential services – DHBs may choose to enter other arrangements for other services.

5. **PHOs will use a national enrolment system to enrol people through primary providers**
People will only be able to enrol with one PHO at any time. They will usually enrol at the level of the general practice or primary health clinic. A nationally agreed set of rules will set out people’s and providers’ rights and responsibilities and will establish requirements for information collection and protection.

6. **PHOs must demonstrate that their communities, iwi and consumers are involved in their governing processes and that the PHO is responsive to its community**

The DHB must be satisfied that community participation in PHO governance is genuine and gives the communities a meaningful voice. In addition, DHBs will require PHOs to show how they respond to their communities.

7. **PHOs must demonstrate how all their providers and practitioners can influence the organisation’s decision-making.**

The DHB must be satisfied that PHOs seek the views of providers and practitioners and have sufficient processes to ensure that decisions take account of the range of views.

8. **PHOs are to be not-for-profit bodies with full and open accountability for the use of public funds and the quality and effectiveness of services.**

Before an organisation can become a PHO, the DHB will need to be sure that the organisation has a suitable not-for-profit status and that the requirements for reporting and disclosure will allow the DHB and the public to fully understand the use of public funds and the quality and effectiveness of services in order to evaluate the results.
Appendix 2.4 Components of Health Promoting Schools

Components and checkpoints developed by World Health Organization (W. H. O. 1996)

1. SCHOOL HEALTH POLICIES (P)
2. THE PHYSICAL ENVIRONMENT OF THE SCHOOL (PE)
3. THE SCHOOL’S SOCIAL ENVIRONMENT (SE)
4. COMMUNITY RELATIONSHIPS (C)
5. PERSONAL HEALTH SKILLS (PS)
6. HEALTH SERVICES (HS)

1. School health policies (the clearly defined and broadly promulgated directions which influence the school’s actions and resource allocation in areas which promote health).

<table>
<thead>
<tr>
<th>Components</th>
<th>Checkpoints</th>
</tr>
</thead>
</table>
| P.1: The school has a policy on healthy food | P1.1 The school has taken action to ensure that healthy (locally grown) food is available to the students  
P1.2 Teachers act as role models by eating healthy food in school  
P1.3 Health food is available at school social events |
| P.2. The school is totally smoke-free and prohibits alcohol and illicit psycho-active substances in all activities | P2.2 The school has prepared an appropriate action plan to eliminate alcohol and illicit psycho-active substances in all school activities |
| P3 The school upholds equity principles by ensuring that girls and boys have equitable access to school resources | P3.1 The school has reviewed customs and practices prevailing within the school with respect to the utilization of play space, equipment, teacher time and other resources and, where necessary, taken action to redress inequities between girls and boys |
| P4 The school has formal procedures in place relating to the distribution of medication | P4.1 All medication distributed by the school is recorded  
P4.2 Local health officials provide advice on suitable storage and distribution of medication |
| P5 The school has a policy and programme on first aid | P5.1 There are adequate first aid kits for the school population  
P5.2 An appropriate number of teachers are trained in first aid procedures  
P5.3 Emergency procedures are set out in the event that the urgent referral of a student or teachers to a hospital or clinic is indicated |
| P6 Where appropriate the school has a policy on the control of helminth and other parasites | P6.1 Students are taught basic knowledge and prevention methods |
P7 Where appropriate the school has a policy on sun protection

P7.1 students are not permitted to play in the sun without protective clothing
P7.2 Teachers act as role models by wearing protective clothing while in the sun

P8 the school has a policy on health screening

P8.1 children are provided with routine health checks in line with local priorities and with a view to cost effectiveness

P9 the school has a policy on closure in the event of emergencies or other circumstances which would endanger student’s health

P9.1 Students are dismissed if there is a continuing interruption to the supply of fresh water, in the event of an outbreak of infectious disease, if there are extremes of heat or cold from which they cannot be protected adequately, or if the sanitation arrangements are considered to be health threatening by the school after consultation with local health services

P10 the school has a safety plan for implementation in the event of natural or other disasters

P10.1 The school has an evacuation plan in the event of fire; students are drilled in the carrying out of this plan
P10.1 The school has emergency plans for other circumstances which could be expected in the local area for which little forewarning is likely e.g (*earthquake), flood, (**typhoon, physical attack in the event of hostilities)

P11 Where relevant the school has a policy on the control of HIV/AIDS including its safe management

P11.1 Issues of practical management such as blood spill procedures are clearly documented and rehearsed and suitable equipment is available in the event that it is required
P11.2 teachers and other school personnel are provided with training about HIV/AIDS prevention and management

2. The physical environment of the school (buildings, grounds, equipment both indoor and outdoor activities and the areas surrounding the school).

<table>
<thead>
<tr>
<th>components</th>
<th>Checkpoints</th>
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</table>
| PE.1. The school provides a safe environment for the school community | PE1.1 in selecting any new play and sporting equipment the school takes safety into account and if appropriate, ensures that guidelines for their use are in place
PE1.2 The school undertakes periodic safety audits of all buildings, plant and equipment to ensure they are safe
PE1.3 In conjunction with the local community the school takes action to minimize local traffic hazards e.g. those related to traffic, drug dealing |
PE1.4 The school puts procedures in place to see that students are protected from unwanted visitors to school

PE2 Adequate sanitation and water is available

PE2.1 There are sufficient toilets for both males and females
PE2.2 safe and clean water is available for drinking and hand washing
PE 2.3 an adequate quantity of water is available for washing facilities and sanitation

PE3 The school upholds practices which support a sustainable environment

PE3.1 Recycling of renewable resources such as paper, glass and aluminium, (*plastic) is undertaken
PE3.2 the use of disposable plastic containers is discouraged

PE4 students are encouraged to take care of the school facilities

PE4.1 the school has an adequate garbage disposal system, suitable to its situation
PE4.2 students participate in keeping the school clean
PE4.3 students participate in beautifying the school e.g painting murals, planting trees and shrubs

PE5 the school endeavours to enrich learning by ensuring the physical conditions are the best they can be

PE5.1 adequate ventilation exists in all school areas where students gather
PE5.2 The lighting is adequate
PE5.3 basic heating is available when needed
PE5.4 Care is taken to reduce unnecessary sound disturbances
PE5.5 The school should identify what standards already exist and explore with relevant authorities how resources can be obtained to meet those standards

SE1 The school ethos is supportive of the mental health and social needs of students and staff

SE1.1 Teachers do not use harsh discipline and are supportive of and respectful towards students
SE1.2 Students are encouraged to participate in school decision making processes
SE1.3 Students are encouraged to be active participants in the learning process

3 The schools social environment (a combination of the quality of the relationships among staff, among students, and between staff and students. It is often strongly influenced by the relationship between the parents and the school which in turn is set in the context of the wider community. It is also influenced by senior staff from within the school and by health and education personnel who visit the school, all of whom provide role models for students and staff by the attitudes and values they display in their social behaviour).
**SE2** The school creates an environment of care, trust and friendliness which encourages students attendance and involvement

**SE2.1** The school actively discourages physical and verbal violence, both among students and by staff towards students.

**SE3** The school provides appropriate support and assistance to students who are at a particular disadvantage relative to their colleagues.

**SE3.1** The school and or the education authorities recognize that some students have special needs and ensure appropriate facilities, learning aides and programmes are offered to students with disabilities and students from less advantaged backgrounds.

**SE4** The school provides a fully inclusive environment in which all students are valued and differences are respected.

**SE4.1** The school provides opportunities to celebrate cultural, religious and tribal diversity e.g. through food, costume, dance, craft, displays, festivals and exhibitions.

**SE4.2** The curriculum provides opportunities for students to learn about cultural, religious and racial diversity.

**SE5** The school is attentive to the education needs of parents and how these can influence the well-being of students.

**SE5.1** Where appropriate the school provides the setting for the provision of specific educational services for parents e.g literacy, parenting skills.

### 4 Community Relationships

*connections between school and the student’s families plus the connection between school and key local groups who support and promote health. By definition a health promoting school is one where parents are closely consulted about and involved in the school’s health promotion activities.*

<table>
<thead>
<tr>
<th>components</th>
<th>Checkpoints</th>
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<tbody>
<tr>
<td>C1 Family and community involvement in the life of the school is fostered</td>
<td>C1.1 Families are involved in making decisions about suitable health –promoting activities e.g. food policies, the development of a school garden, physical activities. C1.2 The curriculum contains health-related activities which involve children working with their families C1.3 Local groups with an interest in child and adolescent health and health organisations providing services in the local community participate collaboratively in school activities.</td>
</tr>
</tbody>
</table>
**C2** the school is proactive in linking with its local community

| C2.1 Students and teachers participate in local events on a regular basis e.g. culture, sports, festivals  
C2.2 The school informs the local community of its health initiatives e.g through the use of local media, school open days, students providing "healthy school" displays at community functions |

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5 **Personal health skill** (the formal and informal curriculum whereby students and others gain age-appropriate knowledge, attitudes and understanding and skills in health which will enable them to become more autonomous and responsible in individual and community health matters)

<table>
<thead>
<tr>
<th>components</th>
<th>Checkpoints</th>
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</table>
| **PS1** The curriculum approaches health issues in a coherent and holistic way. | PS1.1 The health curriculum is designed to be interesting, engaging and relevant to students.  
PS 1.2 The learning process places and emphasis on student participation  
PS1.3 The content reflects issues which students can relate to in their own community, and which draws on their own experience, and which supports their routine health –care management  
PS1.4 The curriculum provides developmentally appropriate learning experiences for children |

| **PS2** the curriculum is designed to improve students’ theoretical understanding of health issues and how to apply this in practice | PS2.1 Students gain a basic understanding relevant to their age and culture, of nutrition, disease-prevention and hygiene, physical activity, safety, mental health, sexuality(including HIV/AIDS), tobacco and drug use prevention, oral health and environmental issues.  
PS 2.2 Students have opportunities to gain skills with respect to specific and relevant health issues e.g. resistance to tobacco and drug use, maintaining oral hygiene  
PS2.3 Students are helped to acquire skills in problem-solving, decision making, effective communication, interpersonal relationships, coping with emotions, and stress and critical and creative thinking, with a view to enhancing their own well-being and their effectiveness as advocates of health |

| **PS3** Teachers are adequately prepared for their role as key participants in health-promoting schools | PS3.1 Pre-service and in-service programmes on health promotion (e.g. short courses and workshops with refresher and update opportunities) are provided to teachers  
PS 3.2 Teachers are supported by receiving adequate information, on an ongoing basis, about the availability and use of health resources |
Other key stakeholders have the opportunity to gain skills relevant to health promoting schools. Training sessions are made available for parents, key health and education personnel and local community members in addition to the professional development programmes provided for teachers.

6 Health services (local and regional health services which have a responsibility for child and adolescent health care and education, through the provision of direct services to students and in partnership with schools).

<table>
<thead>
<tr>
<th>components</th>
<th>Checkpoints</th>
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</table>
| HS1 Basic health services which address local and national needs are available to students and staff | HS1.1 The school actively seeks immunization for its students  
HS1.2 Appropriate health screening is provided e.g. vision, hearing  
HS 1.3 Appropriate basic oral health services are provided, e.g. annual examination, sealant application and restoration of teeth  
HS 1.4 Appropriate health records are kept on children’s health status by relevant authorities  
HS1.5 Counselling and support services are available for socially distressed students and those with medical problems |
| HS2 Local health services contribute to the school’s health programme | HS2.1 There is consultation between health services personnel and teachers about the design and implementation of the health-related curriculum  
HS2.2 Health services personnel complement the work of teachers by participating in the delivery of relevant aspects of the curriculum  
HS2.3 Health service agencies are active in approaching schools with offers of support to them in their work on health promotion  
HS 2.4 Local health services support schools in explaining and implementing local health campaigns |
| HS3 Health services contribute to teacher training | HS3.1 Relevant health services personnel provide training programmes for teachers in appropriate topics e.g. first aid |

Reference
### Appendix 2.5 Structural Framework of the Physical and Health Curriculum

The structure of this curriculum is based on general aims, strands, achievement aims, achievement objectives, underlying concepts, and key areas of learning.

<table>
<thead>
<tr>
<th>General Aims</th>
<th>A develop the knowledge, understandings, skills, and attitudes needed to maintain and enhance personal health and physical development;</th>
<th>B develop motor skills through movement, acquire knowledge and understandings about movement, and develop positive attitudes towards physical activity;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strands</td>
<td><strong>A</strong> Personal Health and Physical Development</td>
<td><strong>B</strong> Movement Concepts and Motor Skills</td>
</tr>
</tbody>
</table>
| Achievement Aims | **A1** Personal growth and development  
students will:  
gain understandings and skills to manage and adjust to the processes of growth and maturation;  
**A2** Regular physical activity  
understand and appreciate, as a result of experience, the contribution of physical activity to personal well-being;  
**A3** Safety and risk management  
meet and manage challenges and risks in positive, health-enhancing ways;  
**A4** Personal identity and self-worth  
analyse attitudes and values and take actions that contribute to their personal identity and self-worth.  
(In this document, “personal identity and self-worth” includes the ideas of self-concept, self-confidence, and self-esteem.) | **B1** Movement skills  
develop and apply, in context, a wide range of movement skills and facilitate the development of physical competence;  
**B2** Positive attitudes and challenge  
develop a positive attitude towards physical activity by accepting challenges and extending their personal capabilities and experiences;  
**B3** Science and technology  
develop and apply a knowledge and understanding of the scientific, technological, and environmental factors that influence movement;  
**B4** Social and cultural factors  
develop and apply knowledge and understanding of the social and cultural factors that influence people’s involvement in physical activity. |
| Achievement Objectives at Each Level | Focus  
A1 Personal growth and development  
A2 Regular physical activity  
A3 Safety and risk management  
A4 Personal identity and self-worth | Focus  
B1 Movement skills  
B2 Positive attitudes and challenge  
B3 Science and technology  
B4 Social and cultural factors |
<table>
<thead>
<tr>
<th>C develop understandings, skills, and attitudes that enhance interactions and relationships with other people;</th>
<th>D participate in creating healthy communities and environments by taking responsible and critical action.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C Relationships with Other People</td>
<td>D Healthy Communities and Environments</td>
</tr>
<tr>
<td>C1 Relationships come to understand the nature of relationships; C2 Identity, sensitivity, and respect increase their understanding of personal identity and develop sensitivity to, and respect for, other people; C3 Interpersonal skills use interpersonal skills effectively to enhance relationships.</td>
<td>D1 Societal attitudes and beliefs find out how societal attitudes, values, beliefs, and practices affect well-being; D2 Community resources identify the functions of resources and services that support well-being, find out about their availability, and identify the roles of individuals and groups that contribute to them; D3 Rights, responsibilities, and laws understand the rights and responsibilities, laws, policies, and practices that relate to people's well-being; D4 People and the environment understand the interdependence between people and their surroundings and use this understanding to help create healthy environments.</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Focus</th>
<th>Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1 Relationships C2 Identity, sensitivity, and respect C3 Interpersonal skills</td>
<td>D1 Societal attitudes and beliefs D2 Community resources D3 Rights, responsibilities, and laws D4 People and the environment</td>
</tr>
</tbody>
</table>
Figure 3.3  The main determinants of health

(Dahlgren and Whitehead, 1991)
HE KUPU WHAKATAKI

Ko Wikitoria te Kuini o Ingarani i tana mahara atawhai ki ngā rangatira me nga hapū o Nu Tiran, i tana hiahia hoki kia tohungia ki a rātou o rātou rangatiratanga me to rātou wenua a kia mau tonu hoki te rongo ki a rātou me te Atanohi hoki kua wakaaro ia he mea tika kia tukua mai tetahi rangatira hei kai wakarite ki ngā Tangata Māori o Nu Tiran kia wakaetaia e ngā rangatira Māori te Kawanatanga o te Kuini ki ngā wahipounamu o te wenua nei me ngā motu - nā te mea hoki he tokomahu ke ngā tangata o tona hui kua noho kia tenei wenua e a haere mai nei.

Na ko te Kuini e hiahia ana kia wakaritea te Kawanatanga kia kaua ai nga kindia puta mai ki te tangata Māori ki te Pākeha e noho ture kore ana.
Na kua pai te Kuini kia tukua ahu a Whenu Hapuhapua te Kaptanita i te Roaara Nawi hei Kawana mo ngā wāhi katoa o Nu Tiran i tukua atenei a mau atu ki te Kuini e mea atu ana ia ki ngā rangatira o te wakamīnei ngā hapū o Nu Tiran me era rangatira atu e nei ture ki Kōrero Tū Kawaatanga nei.

KO TE TUATAHI

Ko ngā rangatira o te Wakamīnei ngā hapū katoa hoki, kiai i uru ki taa Wakamīnei, kia tuku rawa atu ki te Kuini o Ingarani kia kore tonu atu te Kawanatanga katoa o rātou wenua.

KO TE TUATORU

Hei wakaritea mai hoki tenei mo te wakamīnei o te Kawanatanga o te Kuini. Ka tiakina o te Kuini o Ingarani ngā tangata Māori katoa o Nu Tiran. Ka tukua ki a rātou ngā tikanga katoa rite tahi ki ana mea ki ngā tangata o Ingarani,

Na, ko matou ko ngā rangatira o te Wakamīnei ngā hapū o Nu Tiran ka huihui nei ki Waitangi ko matou hoki ko ngā rangatira o Nu Tiran ka kite nei i te ritenga o enei kupa. Ka tangohia ka wakaetaia katoaatia atu. Kina ko tohungia ai o matou nga inga o matou tohu.

Ka meaia tenei ki Waitangi i te ono o ngā ra o Pepurei i te tau kotahi manu, e waru rau e wa te kau o to tatou Arikī.

TREATY OF WAITANGI

A LITERAL ENGLISH TRANSLATION OF THE MAORI TEXT

Signed at Waitangi, 29 February 1840, and afterwards by about 500 chiefs.

VICTORIA, the Queen of England, in her kind (gracious) thoughtfulness to the Chiefs and Hapūs of New Zealand, and her desire to preserve to them their chieftainship and their land, and that peace and quietness may be kept with them, because a great number of the people of her tribe have settled in this country, and (more) will come, has thought it right to send a chief (an officer) as one who will make a statement to (negotiate with) Maori people of New Zealand. Let the Maori chiefs accept the governorship (Kawanatanga) of the Queen over all parts of this country and the Islands. Now, the Queen desires to arrange the government lest evils should come to the Maori people and the Europeans who are living here without law. Now, the Queen has been pleased to send me, William Hobson, a Captain in the Royal Navy to be Governor for all places of New Zealand which are now given up or which shall be given up to the Queen. And she says to the Chiefs of the Confederation of the Hapūs of New Zealand and the other chiefs, these are the laws spoken of.

THIRD IS THE THIRD

This is the arrangement for the consent to the governorship of the Queen. The Queen will protect all the Maori people of New Zealand, and give them all the same rights as those of the people of England. William Hobson, Consul and Lieutenant-Governor.

Now, we the Chiefs of the Confederation of the Hapūs of New Zealand, here assembled at Waitangi, and we, the Chiefs of New Zealand, see the meaning of these words and accept them, and we agree to all of them. Here we put our names and our marks.

FOURTH ARTICLE

Two churchmen, the Catholic Bishop, Pompallier and the Anglican Missionary William Colenso recorded a discussion on what we would call religious freedom and customary law. In answer to a direct question from Pompallier, Hobson agreed to the following statement. It was read to the meeting before any of the chiefs had signed the Treaty.

E mea ana te Kawanatanga ko ngā whakapono katoa o Ingarani o ngā Weterianu o Roma, me te ritenga Māori koko ti aukio kāhui pākeha mea e whakapono i ngā wakaatanga whakataukia o te Kawanatanga.
ENGLISH VERSION

PREAMBLE

Her Majesty, Victoria, Queen of the United Kingdom of Great Britain and Ireland, regarding with her Royal Favour the Native Chiefs and Tribes of New Zealand, and anxious to protect their just Rights and Property, and to secure to them the enjoyment of Peace and Good Order, has deemed it necessary, in consequence of the great number of Her Majesty's Subjects who have already settled in New Zealand, and the rapid extension of Emigration both from Europe and Australia which is still in progress, to constitute and appoint a functionary properly authorised to treat with the Aborigines of New Zealand for the recognition of Her Majesty's Sovereign authority over the whole or any part of these islands. Her Majesty therefore being desirous to establish a settled form of Civil Government with a view to averting the evil consequences which must result from the absence of the necessary Laws and Institutions alike to the Native population and to Her Subjects has been graciously pleased to empower and authorise me William Hobson, a Captain in Her Majesty's Royal Navy, Consul, and Lieutenant-Governor of such parts of New Zealand as may be or hereafter shall be ceded to Her Majesty, to invite the confederated and independent Chiefs of New Zealand to concur in the following Articles and Conditions.

ARTICLE THE FIRST

The chiefs of the Confederation of the United Tribes of New Zealand and the separate and independent Chiefs who have not become members of the Confederation, cede to Her Majesty the Queen of England, absolutely and without reservation, all the rights and powers of Sovereignty which the said Confederation or Individual Chiefs respectively exercise or possess, or may be supposed to exercise or to possess over their respective Territories as the sole Sovereign thereof.

ARTICLE THE SECOND

Her Majesty the Queen of England confirms and guarantees to the Chiefs and Tribes of New Zealand and to the respective families and individuals thereof, the full exclusive and undisturbed possession of the Lands and Estates, Forests, Fisheries, and other properties which they may collectively or individually possess, so long as it is in their wish and desire to maintain the same in their possession, but the Chiefs of the United Tribes and the Individual Chiefs yield to Her Majesty the exclusive right of Pre-emption over such lands as the proprietors thereof may be disposed to alienate, at such prices as may be agreed upon between the respective proprietors and persons appointed by Her Majesty to treat with them in that behalf.

ARTICLE THE THIRD

In consideration Herewith, Her Majesty the Queen of England extends to the Natives of New Zealand Her Royal Protection and imports to them all the Rights and Privileges of British subjects.

W. Hobson, Lieutenant-Governor

NOW therefore, We the Chiefs of the Confederation of the United Tribes of New Zealand being assembled in Congress at Victoria, in Waitangi and We the Separate and Independent Chiefs of New Zealand claiming authority over the Tribes and Territories which are specified after our respective names having been made tally to understand the Provision of the foregoing Treaty, accept and enter into the same in the full spirit and meaning thereof. In witness of which, we have attached our signatures or marks at the places and the dates respectively specified.

Dated at Waitangi, this sixth day of February in the year of Our Lord, one thousand eight hundred and forty.

AS YOU CAN SEE, THERE ARE TWO TREATIES: THE MAORI TREATY, (INCLUDING ITS TRANSLATION INTO ENGLISH), AND THE ENGLISH VERSION

WHICH TREATY IS THE REAL ONE?

There are 512 signatures but only 30 are on an English version. The rest are all on the Maori Treaty. The Waitangi Tribunal is instructed to have regard to both Maori and English versions as both have signatures.

IS THE TREATY LEGAL?

Yes, but like other treaties, the Treaty of Waitangi is not directly enforceable by the courts unless Parliament has so directed in an Act of Parliament.

WHAT HAPPENS WHEN THE TWO TEXTS ARE INTERPRETED DIFFERENTLY?

In International law, in any ambiguity the contra proferentum principle applies. This means that a provision should be interpreted against the party who drafted it and that the indigenous language text takes precedence.

FOR MORE INFORMATION CONTACT: PROJECT WAITANGI, P.O. BOX 825 WELLINGTON. PH. 829-300
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MEMORANDUM

TO: Jan Pearson
Nursing and Midwifery

FROM: Graeme Kennedy
Convener, Human Ethics Committee

DATE: 21 April 1999

SUBJECT: ETHICAL APPROVAL: DOING HEALTH IN A NEW ZEALAND PRIMARY SCHOOL.

Your application for human ethics approval has been considered by the Human Ethics Committee. The committee has been impressed by your well-designed proposal from an ethics viewpoint and has approved the proposal subject to your sending to the committee copies of any questionnaires or interview guides developed for the project.

While the committee considers that the consent form and information sheet are of a high standard, the wording may sometimes be such that participants who are not native speakers of English may have some difficulty understanding them. You may, therefore, wish to consider whether the provision of interpreters might be appropriate for some participants.

Date of Approval : 21 April 1999
Duration : 31 May 2002

Graeme Kennedy
Convener, Human Ethics Committee
Appendix 3.2 Whitireia Community Polytechnic Ethical Approval

28 May 1999

Jan Pearson
School of Nursing and Health Studies
Whitireia Community Polytechnic

Dear Jan

CONTRACT FOR RESEARCH APPROVAL

This letter is to formally notify you that your research proposal entitled: "Doing Health in a New Zealand Primary School" has been considered and approved by the Research Committee, with $1000.00 funding approved by Directorate.

This letter constitutes a formal contract. The terms of which are:

4. That you follow your original objectives;
5. Submit 6 monthly progress reports to me (the first by 30 November 1999);
6. Submit one copy of your completed paper to the Research Co-ordinator (this will be catalogued and held in the Polytechnic Learning Resource Centre);

Should your objectives or time-frames alter from the original proposal, a formal request to re-negotiate the conditions of your contract will be required by the Committee.

Please sign and return a copy of this letter to me in recognition of your agreement to the terms stated.

The Committee commends your intentions and wishes you every success in your research. If you have any concerns please do not hesitate to contact me.

Yours sincerely

Susan Forbes
Research Co-ordinator

Signed: ____________________________

Jan Pearson

Cc Jeanette Page, Director Te Kuponga
Appendix 3.3 Cover Story for Meeting with Cannons Creek BOT

(18/5/99)
Research proposal and my background
‘Doing Health’ in a New Zealand Primary school: What does this mean?

My current position, qualifications and work history as a nurse and in Porirua community

Request
For consent to work with the school to the advantage of both
School – information/baseline data about the health of the school (using Health
promoting schools model– specific information about the health of senior pupils
Me -gaining my PhD qualification

Process
Last year discussing the issues and approaches with Ashley, reading, contacting key
persons etc
Ethics approval from VUW April, From Whitireia Community Polytechnic this week
Now have refined approach, written proposal, gained consent

Take:
1. Copy of proposal & ethics approval
2. OHP &10 copies of H-P School model
3. OHP &10 copies of stages of the project
4. 10 copies information sheet
5. health behaviour questionnaire
6. Consent form for BOT

Offer:
3-6 monthly (negotiated) meetings

Request: Approval/ consent
CASE STUDY OF CANNONS CREEK SCHOOL
HEALTH-PROMOTING SCHOOL MODEL

SCHOOL HEALTH POLICIES (documentation & interviews)

THE PHYSICAL ENVIRONMENT OF THE SCHOOL (observation)

THE SCHOOL’S SOCIAL ENVIRONMENT
Interviews & documentation

COMMUNITY RELATIONSHIPS
Documentation/interviews

PERSONAL HEALTH SKILLS (H-B survey)

HEALTH SERVICES (interviews)

DATA ANALYSIS

ACTION RESEARCH TO ADDRESS HEALTH ISSUES IDENTIFIED BY SCHOOL
Appendix 3.4 Board of Trustees consent for health-promoting school research to be undertaken at their primary school

We have been given, and have understood an explanation of this research project entitled “Doing Health” in a New Zealand Primary School: What does this mean?

We have had an opportunity to ask questions and have them answered to our satisfaction.

We understand that this project has been approved and complies with the New Zealand Association for Research in Education ethical guidelines for research in educational institutions and that ethical approval has been gained from the Victoria University of Wellington Human Ethics Committee.

We understand that the board will be kept informed of the progress and findings of the research and the school Principal will first approve the publication of any information that identifies the school.

Information will be kept confidential to the researcher, supervisors and the person who may transcribe tape recordings of interviews.

A copy of the final report will be provided to the board at the end of the project.

Signed……………………………………………………………………………………

Position…………………………………………………………………………………

On behalf of the School Board of Trustees

Date……………………

The researcher will hold the original of this form and a copy will be given to the participant
Appendix 3.5 Principal’s consent for health-promoting school research to be undertaken at the primary school

I have been given, and have understood an explanation of this research project entitled “Doing Health” in a New Zealand Primary School: What does this mean?

I have had an opportunity to ask questions and have them answered to my satisfaction.

I understand that this project has been approved and complies with the New Zealand Association for Research in Education (NZARE) ethical guidelines for research in educational institutions and that ethical approval has been gained from the Victoria University of Wellington Human Ethics Committee.

I understand that the board and myself will be kept informed of the progress and findings of the research and that information will be kept confidential to the researcher, supervisors and the person who transcribes tape recordings of interviews.

Any issues of confidentiality in which the identification of myself or the school is at risk will in the first instance be discussed with myself and no sensitive information will be disclosed without prior written approval from myself.

A copy of the final report will be provided to me at the end of the project.

Signed…………………………………………………………………………………………………………………………
Principal

Date……………………..

The researcher will hold the original of this form and a copy will be given to the participant
Appendix 3.6  Letter to Board of Trustees members

March 5, 2001

Board of Trustee Members
Cannons Creek School
Warspite Ave
Porirua East

Dear Board of Trustee Members,

I am writing to gain clarification on the confidentiality issues that are surfacing in my research project.

Having previously sought and gained your approval to:
1. work with the school on this project (see copy of approval form attached);
2. administer the Health Survey;
3. report results to yourselves, the Principal and parents;
I am now entering the writing up stage of my thesis project, while I continue to work with school staff on health issues.

I am often in the position of talking about the positive health initiatives that are part of the practice of your school and about the results of my work. During these conversations I am often asked which school I am working with.

I would therefore like to ask you to decide if you want me to use the name of your school in my report and conversations/presentations, or if you would prefer that the school is not identified.

If you wish to discuss this matter with me I would be happy to meet with you.

Thank you, for your permission to work with the school and your consideration of this matter.

Yours Sincerely,

Jan Pearson

PH 4759799 or
025 2703052
7 May 2001

Jan Pearson
33 Creswick Terrace
Northland
Wellington 6005

Dear Jan

Thank you for your letter of 5 March 2001 with reference to clarification on the confidential issues surfacing in your research project.

At the Board of Trustees meeting held on 20 March, members discussed your letter. The Board were happy for you to discuss Cannons Creek School to help raise the profile of the school through your research.

The Board wish you well with your research.

Yours sincerely

Freda Kelly
Secretary
Cannons Creek School Board of Trustees
Appendix 3.8 Information sheet for a study of a Health Promoting School.

I am currently enrolled as a PhD student at Victoria University of Wellington. I am interested in undertaking research with the community of your Primary School on health, health education and health issues relevant to the school.

The main objective of the research is to gain in-depth knowledge of how your school works to improve the health of the children who attend the school. The aim of the research is to use the ‘Health Promoting School’ concept, developed by the World Health Organisation, as a guide to obtain a baseline school health assessment and then to work with relevant persons at the school on identified health issues.

To gain a full assessment I will need to get information from a variety of people including the principal, teaching and other school staff, students, parents, board of trustee members, health service providers and interested community members.

I will require to meet with you in an interview (individual or group –arranged at a time and place suitable to you) situation to ask you specific questions about school health. I will want to audio tape the interview and transcribe it. I will give you an opportunity to verify the information you have given to me and I will ensure that you can not be identified in any written research reports.

You will be free to withdraw from the research project at any time without giving any reasons and without any consequence to you.

I intend working with you in a collaborative manner that is safe, considerate, appropriate and acceptable in terms of culture and other constraints eg. time frames.

Minimal disruption to usual school activities will be paramount.

If you have any further questions about what will be involved please phone me at home in the evenings on 475 9799 or during the day on 237 3103 extension 3729 or you may contact either of my supervisors who are: Dr Alison Dixon Ph 4715363 and Dr Cedric Hall Ph 4721000 at Victoria University of Wellington.

Thank you for your consideration.

Jan Pearson, 33 Creswick Tce, Northland, Wellington
Appendix 3.9 The six components of Health-Promoting Schools

1. School health policies (P)
2. The physical environment of the school (PE)
3. The school's social environment (SE)
4. Community relationships (C)
5. Personal health skills (PS)
6. Health services (HS)

World Health Organization (W. H. O. 1996)

<table>
<thead>
<tr>
<th>Data collection method</th>
<th>code</th>
<th>Source of information</th>
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<tbody>
<tr>
<td>documents</td>
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<td>physical artefacts</td>
<td>phys</td>
<td>teacher</td>
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<td>archival records</td>
<td>arch</td>
<td>school staff</td>
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<td>interview</td>
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<td>survey</td>
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<td>student</td>
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<tr>
<td>observation</td>
<td>obs</td>
<td>health services</td>
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<td>external other</td>
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</table>

1. **School health policies.** Defined as: The clearly defined and broadly promulgated directions which influence the schools actions and resource allocation in areas which promote health.

<table>
<thead>
<tr>
<th>Components</th>
<th>Checkpoints</th>
<th>Data collection</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.1: The school has a policy on healthy food</td>
<td>P1.1 The school has taken action to ensure that healthy (locally grown) food is available to the students P1.2 Teachers act as role models by eating healthy food in school P1.3 Healthy food is available at school social events like sports days</td>
<td>docs arch inter obs surv</td>
<td>principal teacher parent staff student</td>
</tr>
<tr>
<td>P.2. The school is totally smoke-free and prohibits alcohol and illicit psychoactive substances in all activities</td>
<td>P2.1 The school has developed a strategy for phasing out smoking completely within the premises, with a deadline for being totally smokefree: this policy applies to all staff, students and visitors P2.2 The school has prepared an appropriate action plan to eliminate alcohol and illicit psychoactive substances in all school activities</td>
<td>docs inter obs</td>
<td>principal teacher student</td>
</tr>
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<td>Components</td>
<td>Checkpoints</td>
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<tr>
<td>P3 The school upholds equity principles by ensuring that girls and boys have equitable access to school resources</td>
<td>P3.1 The school has reviewed customs and practices prevailing within the school with respect to the utilization of play space, equipment, teacher time and other resources and, where necessary, taken action to redress inequities between girls and boys</td>
<td>docs inter obs</td>
<td>principal teacher staff student</td>
</tr>
<tr>
<td>P4 The school has formal procedures in place relating to the distribution of medication</td>
<td>P4.1 All medication distributed by the school is recorded P4.2 Local health officials provide advice on suitable storage and distribution of medication</td>
<td>docs inter obs</td>
<td>teacher staff exother student</td>
</tr>
<tr>
<td>P5 The school has a policy and programme on first aid</td>
<td>P5.1 There are adequate first aid kits for the school population P5.2 An appropriate number of teachers are trained in first aid procedures P5.3 Students are offered training in first aid P5.4 Emergency procedures are set out in the event that the urgent referral of a student or teachers to a hospital or clinic is indicated</td>
<td>docs arch inter obs</td>
<td>principal teacher parent staff student</td>
</tr>
<tr>
<td>P6 Where appropriate the school has a policy on the control of helminth and other parasites</td>
<td>P6.1 Students are taught basic knowledge and prevention methods</td>
<td>docs inter obs</td>
<td>Parent staff teacher</td>
</tr>
<tr>
<td>P7 Where appropriate the school has a policy on sun protection</td>
<td>P7.1 Students are not permitted to play in the sun without protective clothing P7.2 Teachers act as role models by wearing protective clothing while in the sun</td>
<td>docs inter obs</td>
<td>principal teacher staff</td>
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<tr>
<td>P8 The school has a policy on health screening</td>
<td>P8.1 Children are provided with routine health checks in line with local priorities and with a view to cost effectiveness</td>
<td>docs arch inter obs</td>
<td>principal teacher parent hservice</td>
</tr>
<tr>
<td>P9 The school has a policy on closure in the event of emergencies or other circumstances which would endanger student’s health</td>
<td>P9.1 Students are dismissed if there is a continuing interruption to the supply of fresh water, in the event of an outbreak of infectious disease, if there are extremes of heat or cold from which they cannot be protected adequately, or if the sanitation arrangements are considered to be health threatening by the school after consultation with local health services</td>
<td>docs arch inter</td>
<td>principal teacher parent staff</td>
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<td>Components</td>
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<td><strong>P10</strong> The school has a safety plan for implementation in the event of natural or other disasters</td>
<td>P1.1 The school has an evacuation plan in the event of fire; students are drilled in the carrying out of this plan P10.1 The school has emergency plans for other circumstances which could be expected in the local area for which little forewarning is likely eg (<em>earthquake</em>), flood, typhoon, physical attack in the event of hostilities)</td>
<td>docs inter obs</td>
<td>principal teacher parent staff student</td>
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<tr>
<td><strong>P11</strong> Where relevant the school has a policy on the control of HIV/AIDS including its safe management</td>
<td>P11.1 Issues of practical management such as blood spill procedures are clearly documented and rehearsed and suitable equipment is available in the event that it is required P11.2 teachers and other school personnel are provided with training about HIV/AIDS prevention and management</td>
<td>docs arch inter obs</td>
<td>principal teacher staff</td>
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- *addition to schedule for New Zealand context*
2. **The physical environment of the school.** Defined as: buildings, grounds, equipment both indoor and outdoor activities and the areas surrounding the school. The term also refers to basic amenities such as sanitation and the availability of water.

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<tr>
<td><strong>PE.1</strong></td>
<td>The school provides a safe environment for the school community</td>
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<td>PE1.1 in selecting any new play and sporting equipment the school takes safety into account and if appropriate, ensures that guidelines for their use are in place</td>
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<td></td>
<td>PE1.2 The school undertakes periodic safety audits of all buildings, plant and equipment to ensure they are safe</td>
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<td>PE1.3 In conjunction with the local community the school takes action to minimise local traffic hazards eg. those related to traffic, drug dealing</td>
<td></td>
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<td>PE1.4 The school puts procedures in place to see that students are protected from unwanted visitors to school</td>
<td></td>
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<td><strong>PE2</strong></td>
<td>Adequate sanitation and water is available</td>
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<td></td>
<td>PE2.1 There are sufficient toilets for both males and females</td>
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<td>PE2.2 safe and clean water is available for drinking and hand washing</td>
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<td></td>
<td>PE 2.3 an adequate quantity of water is available for washing facilities and sanitation</td>
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<td><strong>PE3</strong></td>
<td>The school upholds practices which support a sustainable environment</td>
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<td></td>
<td>PE3.1 Recycling of renewable resources such as paper, glass</td>
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<td>and aluminium, (<em>plastic</em>) is undertaken</td>
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<td>PE3.2 the use of disposable plastic containers is discouraged</td>
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<td>teacher</td>
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</table>
### PE4 students are encouraged to take care of the school facilities

| PE4.1 the school has an adequate garbage disposal system, suitable to its situation |
| PE4.2 students participate in keeping the school clean |
| PE4.3 students participate in beautifying the school eg painting murals, planting trees and shrubs |

**Important Roles:**
- **docs**
- **inter**
- **obs**
- **phys**
- **arch**
- **principal**
- **teacher**
- **staff**
- **student**

### PE5 the school endeavours to enrich learning by ensuring the physical conditions are the best they can be

| PE5.1 adequate ventilation exists in all school areas where students gather |
| PE5.2 The lighting is adequate |
| PE5.3 basic heating is available when needed |
| PE5.4 Care is taken to reduce unnecessary sound disturbances |
| PE5.5 The school should identify what standards already exist and explore with relevant authorities how resources can be obtained to meet those standards |

**Important Roles:**
- **docs**
- **inter**
- **obs**
- **phys**
- **arch**
- **principal**
- **teacher**
- **parent**
- **student**
3. **The schools social environment.** Defined as: a combination of the quality of the relationships among staff, among students, and between staff and students. It is often strongly influenced by the relationship between the parents and the school which in turn is set in the context of the wider community. It is also influenced by senior staff from within the school and by health and education personnel who visit the school, all of whom provide role models for students and staff by the attitudes and values they display in their social behaviour.

<table>
<thead>
<tr>
<th>Components</th>
<th>Checkpoints</th>
<th>Data collection</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE1</td>
<td>The school ethos is supportive of the mental health and social needs of students and staff</td>
<td>SE1.1 Teachers do not use harsh discipline and are supportive of and respectful towards students SE1.2 Students are encouraged to participate in school decision making processes SE1.3 Students are encouraged to be active participants in the learning process</td>
<td>docs obs inter survey arch</td>
</tr>
<tr>
<td>SE2</td>
<td>The school creates an environment of care, trust and friendliness which encourages students attendance and involvement</td>
<td>SE2.1 The school actively discourages physical and verbal violence, both among students and by staff towards students</td>
<td>docs obs inter survey</td>
</tr>
<tr>
<td>SE3</td>
<td>The school provides appropriate support and assistance to students who are at a particular disadvantage relative to their colleagues.</td>
<td>SE3.1 The school and or the education authorities recognize that some students have special needs and ensure appropriate facilities, learning aides and programmes are offered to students with disabilities and students from less advantaged backgrounds</td>
<td>docs obs inter arch</td>
</tr>
<tr>
<td>SE4</td>
<td>The school provides a fully inclusive environment in which all students are valued and differences are respected</td>
<td>SE4.1 The school provides opportunities to celebrate cultural, religious and tribal diversity eg. through food, costume, dance, craft, displays, festivals and exhibitions. SE4.2 The curriculum provides opportunities for students to learn about cultural, religious and racial diversity</td>
<td>docs obs inter survey arch</td>
</tr>
<tr>
<td>SE5</td>
<td>the school is attentive to the education needs of parents and how these can influence the well-being of students.</td>
<td>SE5.1 Where appropriate the school provides the setting for the provision of specific educational services for parents eg literacy, parenting skills.</td>
<td>docs inter obs arch</td>
</tr>
</tbody>
</table>
### 4. Community Relationships

Defined as: connections between school and the students’ families plus the connection between school and key local groups who support and promote health. By definition a health-promoting school is one where parents are closely consulted about and involved in the school's health promotion activities.

<table>
<thead>
<tr>
<th>Components</th>
<th>Checkpoints</th>
<th>Data collection</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>C1</strong> Family and community involvement in the life of the school is fostered</td>
<td>C1.1 Families are involved in making decisions about suitable health-promoting activities eg. food policies, the development of a school garden, physical activities. C1.2 The curriculum contains health-related activities which involve children working with their families. C1.3 Local groups with an interest in child and adolescent health and health organisations providing services in the local community participate collaboratively in school activities.</td>
<td>docs inter obs phys arch survey</td>
<td>Principal hservice parent exother student</td>
</tr>
<tr>
<td><strong>C2</strong> The school is proactive in linking with its local community</td>
<td>C2.1 Students and teachers participate in local events on a regular basis eg. culture, sports, festivals. C2.2 The school informs the local community of its health initiatives eg through the use of local media, school open days, students providing “healthy school” displays at community functions</td>
<td>docs inter obs phys arch</td>
<td>principal teacher exother student</td>
</tr>
</tbody>
</table>

### 5. Personal health skills

Defined as: the formal and informal curriculum whereby students and others gain age-appropriate knowledge, attitudes and understanding and skills in health which will enable them to become more autonomous and responsible in individual and community health matters.

<table>
<thead>
<tr>
<th>Components</th>
<th>Checkpoints</th>
<th>Data collection</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PS1</strong> The curriculum approaches health issues in a coherent and holistic way.</td>
<td>PS1.1 The health curriculum is designed to be interesting, engaging and relevant to students. PS 1.2 The learning process places and emphasis on student participation. PS1.3 The content reflects issues which students can relate to in their own community, and which draws on their own experience, and which supports their routine health-care.</td>
<td>docs inter obs survey phys arch</td>
<td>principal teacher parent exother student</td>
</tr>
<tr>
<td>PS2</td>
<td>The curriculum is designed to improve students’ theoretical understanding of health issues and how to apply this in practice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PS2.1</td>
<td>Students gain a basic understanding relevant to their age and culture, of nutrition, disease-prevention and hygiene, physical activity, safety, mental health, sexuality (including HIV/AIDS), tobacco and drug use prevention, oral health and environmental issues.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PS2.2</td>
<td>Students have opportunities to gain skills with respect to specific and relevant health issues eg. resistance to tobacco and drug use, maintaining oral hygiene.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PS2.3</td>
<td>Students are helped to acquire skills in problem-solving, decision making, effective communication, interpersonal relationships, coping with emotions, and stress and critical and creative thinking, with a view to enhancing their own well-being and their effectiveness as advocates of health</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| PS3 | Teachers are adequately prepared for their role as key participants in health-promoting schools |
| PS3.1 | Pre-service and in-service programmes on health promotion (eg. short courses and workshops with refresher and update opportunities) are provided to teachers |
| PS3.2 | Teachers are supported by receiving adequate information, on an ongoing basis, about the availability and use of health resources |

| PS4 | Other key stakeholders have the opportunity to gain skills relevant to health promoting schools |
| PS4.1 | Training sessions are made available for parents, key health and education personnel and local community members in addition to the professional development programmes provided for teachers |
**Health services.** Defined as: local and regional health services which have a responsibility for child and adolescent health care and education, through the provision of direct services to students and in partnership with schools.

<table>
<thead>
<tr>
<th>components</th>
<th>checkpoints</th>
<th>Data collection</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS1 Basic health services which address local and national needs are available to students and staff</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS1.1 The school actively seeks immunization for its students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS1.2 Appropriate health screening is provided eg. vision, hearing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS 1.3 Appropriate basic oral health services are provided, eg. annual examination, sealant application and restoration of teeth</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS 1.4 Appropriate health records are kept on children’s health status by relevant authorities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS1.5 Counselling and support services are available for socially distressed students and those with medical problems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS2 Local health services contribute to the school’s health programme</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS2.1 There is consultation between health services personnel and teachers about the design and implementation of the health-related curriculum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS2.2 Health services personnel complement the work of teachers by participating in the delivery of relevant aspects of the curriculum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS2.3 Health service agencies are active in approaching schools with offers of support to them in their work on health promotion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS 2.4 Local health services support schools in explaining and implementing local health campaigns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS3 Health services contribute to teacher training</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS3.1 Relevant health services personnel provide training programmes for teachers in appropriate topics eg. first aid</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Reference

Appendix 3.10 Tables of Convergent Sources of Evidence

**School Health Policies**
- **Interview source**
  - Parents
  - Teachers
  - Students
  - Principal
  - School staff

- **Interview Method**
  - Semi-structured
  - Open-ended
  - Focused
  - Survey

- **Archival Records**
  - Health reports
  - Education Review
  - Office reports

- **Documentation**
  - Policies
  - Medical room
  - Absence records
  - Ministry of Education documents

**Observation**
- Classroom
- Playground
- Staffroom
- Medical room

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**The Physical Environment of the School**

- **Interview source**
  - Teachers
  - Students
  - Principal
  - School staff
  - Caretaker

- **Interview method**
  - Semi-structured
  - Open-ended
  - Focused
  - Survey

- **Documentation**
  - Playground checklist
  - Medical room equip checklist

- **Observation**
  - Classrooms
  - Playground
  - Staffroom
  - Medical room
  - Dental clinic
  - School Hall
  - Common spaces
  - Traffic Safety

- **Physical artefacts**
  - Photographs
  - Artwork
  - Stories
  - Wall decoration

---

**Table 1** School Health Policy convergent sources and methods of data collection

**Table 2** Physical Environment convergent sources and methods of data collection
Table 5 Personal Health Skills convergent sources and methods of data collection

Table 6 Health Services convergent sources and methods of data collection
Appendix 3.11 List of Documents used as sources of evidence

Cannons Creek School policies relevant to health

- Mission statement
- School Rules
- Child abuse Policy
- Earthquake drill
- Equity policy
- Fire Action Plan
- Food Safety Plan
- Health Policy Aug
- Homework policy
- Information technology strategic plan
- Maintenance policy
- Medical room procedures policy
- Non Violence Policy
- Playground action plan
- Priority Pupils Policy 1997
- Pupil achievement
- Pupil attendance
- Pupil behaviour Policy
- Reporting Policy
- Road patrol procedures
- Role Models policy
- Sexual Harassment Policy
- Shade Policy
- Smokefree Policy
- Staff discipline Policy
- Suspension Policy
- Trip/performance/event
- Unwritten rules
- Visitors Policy
- Wet Day procedures

Minutes and documents

- Porirua Community Health Group, Health Partnership and Healthy Safer Cities Trust overview of Dental Health Issues in Porirua 25 November 1998
- Social worker in schools Project outline 1999
- Porirua District Truancy Service Discussion Paper May 2000
- Ministry of Health circular number 1999/21 re Guidelines for infection control of HIV/AIDS and other blood borne viruses in Schools
- Notes from the ICAN vision day 9/11/98
- Porirua City Council (1999) Background papers regarding Porirua Dental Health Concerns – tabled at a meeting held 27 April 1999.

• Strengthening Families Porirua/ Hutt Initiative. Notes presented at a meeting held Dec 1998

Letters
• To regional Public Health, Ministry of Health, Commissioner for Children, Ministry of Health from Principal 28 May 1998.
• Responses from Ministry of Health, Ministry of Education, Commissioner for Children, John Cody (Porirua Health Partnership)
• To CEO Hutt Valley Health from Principal May 2000

Brochures
• Health camp skills for kids Summary
• Healthy Teeth are happy teeth
• Strengthening families
• The health of your child
• Hutt Valley Health Regional Public Health Service
• Cannons Creek School
• Welcome to Cannons Creek School

Checklists
• First aid kits and room equipment July 2000
• Playground Safety Checklist August 1999

Cannons Creek School Statistics
• Absences for 2000
• Medical room events for 2000

Public Health Documents
• Public Health Nurse Action for Child-referrals October 1999
• Memorandum of Understanding between Hutt Valley Health and Cannons Creek School for weekly school nurse clinic
• Guidelines for Medication management
• First Aid in schools risk assessment
• Public Health Nurse Referral forms
• Children Health Camp Referral forms

Cannons Creek School Website http://sites.tki.organization.cannonscreek/
November 2001
• Life Education Trust New Zealand
• Social working in schools
• Computers in Homes
• Cannons Creek School Health Matters
• My Mum is the Best
• What I like at school
• Te kete Ipurangi Webguide
• Poems about Staff by Year 6 students. December 2000
• One thousand pupils at Cannons Creek School
• ICAN Newsletter –July/August 2000
• ICAN teacher only day July 2000
• Community Index
• Room 1 –2001
• Room 2 –2001
• Room 3 – 2001
• Room 4 – 2001
• Room 5 – 2001
• Room 6 – 2001
• Room 8 – 2001
• Room 10- 2001
• Room 11-2001
• Pacific Research Discussion paper
• Principals Proposal for closing the gaps

Fortnightly School Newsletter
• 6 May to 2 December 1999
• Feb 3 to November 23 2000

Archives Documentation
Newspaper/Media articles in alphabetical order


Cronin, T (1994) ‘School signs designed to be seen’. Kapi-Mana, 9 March, Porirua


Heart Foundation (1992) ‘Eating for Healthy Children’ (2-12 years) Heartbeat Awards Newsletter Issue 10 Term 3


**Publications in chronological order**


Central Regional Health Authority (1994) *Strong Links : Building better services to meet the health and disability support service needs of people in Porirua*. CRHA, Wellington.


**Hutt Valley Health & Cannons Creek School**

- Public Health service reports 1998, 1993
- School Health Plan 1993, 1994

**Education Review Office**

- Accountability Review report 2000
- Confirmed Effectiveness Review 1997
- Confirmed Effectiveness Review 1995
- Effectiveness Review 1992

**Cannons Creek School Principals Annual Report 1998**
### Appendix 3.12 List of Interviews completed and sources of evidence

<table>
<thead>
<tr>
<th>Source</th>
<th>Type</th>
<th>Date/s</th>
<th>Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
<td>Semi-structured</td>
<td>8/2000</td>
<td>Interview schedule, Journal notes</td>
</tr>
<tr>
<td>Teachers #1</td>
<td>Focus group semi-structured unstructured &amp; opportunistic</td>
<td>2/2000 7/98 – 12/98, 5/99-12/99, 2/00 – 11/00</td>
<td>Interview schedule, Journal notes, tape, computer document record</td>
</tr>
<tr>
<td>Caretaker</td>
<td>Unstructured</td>
<td>10/99, 5/00</td>
<td>Journal notes</td>
</tr>
<tr>
<td>Social workers</td>
<td>Unstructured</td>
<td>2/00</td>
<td>Journal notes</td>
</tr>
<tr>
<td>Public health nurse #1</td>
<td>Semi-structured</td>
<td>5/00</td>
<td>Journal notes, tape, computer document record</td>
</tr>
<tr>
<td>Public health nurse 2</td>
<td>Semi-structured</td>
<td>10/00</td>
<td>Journal notes, tape, computer document record</td>
</tr>
<tr>
<td>School nurse</td>
<td>Semi-structured</td>
<td>6/00</td>
<td>Journal notes, tape, computer document record</td>
</tr>
<tr>
<td>Public health nurse manager #1</td>
<td>Semi-structured</td>
<td>9/99</td>
<td>Journal notes, tape, computer document record</td>
</tr>
<tr>
<td>Public health nurse manager #2</td>
<td>Semi-structured</td>
<td>7/00</td>
<td>Journal notes, tape, computer document record</td>
</tr>
<tr>
<td>Role</td>
<td>Methodology</td>
<td>Year(s)</td>
<td>Notes</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------</td>
<td>---------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Health education manager #1</td>
<td>Semi-structured</td>
<td>7/00</td>
<td>Journal notes, tape, computer document record</td>
</tr>
<tr>
<td>Health education manager #2</td>
<td>Semi-structured</td>
<td>7/00</td>
<td>Journal notes, tape, computer document record</td>
</tr>
<tr>
<td>Health education lecturer</td>
<td>Semi-structured</td>
<td>9/99</td>
<td>Journal notes, computer document record</td>
</tr>
<tr>
<td>Ministry of Health personnel</td>
<td>Unstructured</td>
<td>10/99</td>
<td>Journal notes,</td>
</tr>
<tr>
<td>Ministry of Education personnel</td>
<td>Unstructured</td>
<td>5/98</td>
<td>Journal notes,</td>
</tr>
<tr>
<td>Health educators</td>
<td>Unstructured</td>
<td>2/00, 3/00, 5/00</td>
<td>Journal notes,</td>
</tr>
</tbody>
</table>
Appendix 3.13 Consent to participation in research

I have been given, and have understood an explanation of this research project entitled "Doing Health" in a New Zealand Primary School: What does this mean?

I have had an opportunity to ask questions and have them answered to my satisfaction.
I understand that I may withdraw myself or any information I have provided for this project before data collection and analysis is complete without having to give reasons or without penalty of any sort.

I understand that I will participate in at least one interview with the researcher and that the interview will be taped and may be transcribed.
I understand the information will be kept confidential to the researcher and the transcriber of the tape recording of our interview.
I understand that the tape recording of interviews will be electronically wiped at the end of the project unless I indicate that I would like them returned to me.

☐ I would like the tape recordings of my interview returned to me at the conclusion of the project

I understand that the data I provide will only be used for the thesis and any publications resulting from the findings.
The published results will not use my name and care will be taken to ensure that I can not be identified.

☐ I would like to have access to a summary of the results of this research when it is completed.

I agree to take part in this research

Signed…

Name of participant…………………………………………………………………………………………

Contact address…………………………………………………………………………………………

Contact Phone number………………………………………………………………………………

Date……………………

The researcher will hold the original of this form and a copy will be given to the participant.
Appendix 3.14 Consent for my child to participate in research

My child and I have been given, and have understood an explanation of this research project titled “Doing Health” in a New Zealand Primary School: What does this mean?

My child and I have had an opportunity to ask questions and have them answered to my satisfaction. I understand that I may withdraw my child’s participation and/or any information he/she has provided for this project before data collection and analysis is complete without having to give reasons or without penalty of any sort.

I understand that my child will participate in a group interview with the researcher. The interview will be taped and may be transcribed. I understand the information my child gives will be kept confidential to the researcher. I understand that the tape recording of interviews will be electronically wiped at the end of the project.

I understand that the information my child provides will not be used for any other purpose or released to others without my written consent. The results will not use my child’s name and care will be taken to ensure that my child cannot be identified.

☐ I would like to have access to a summary of the results of this research when it is completed.

I give permission for my child to take part in this research.

Signed………………………………………………Date …

Name of parent or guardian……………………………………………………………………

Contact address………………………………………………………………………………

Contact Phone number,………………………………………………………………………

Name of child…………………………………………………………………………………

Signature of child……………………………………………………………………………

The researcher will hold the original of this form and a copy will be given to the child.
Appendix 3. 15 Parent Information sheet for a study of a Health-Promoting school.

I am currently enrolled as a PhD student at Victoria University of Wellington. I am undertaking research on health, health education and health issues relevant to your Primary School.

The main purpose of the research is to gain knowledge of how your school works to improve the health of the children who attend the school.

The aim of the research is to use the ‘Health-Promoting School’ concept, developed by the World Health Organisation, as a guide to complete a school health assessment and then to work with the school on identified health issues.

To gain a full assessment I will have been getting information from a variety of people including the principal, teaching and other school staff, students, parents, board of trustee members, health service providers and interested community members.

I will require to meet with your child in a group situation at school to ask questions about school health. I will want to tape the interview

I will ensure that your child cannot be identified in any written research reports.

You will be free to withdraw your child from the research project at any time without giving any reasons and without any consequence to you or your child.

I intend working with you in a manner that is safe, considerate, appropriate and acceptable in terms of culture and other constraints eg. time frames. Minimal disruption to usual school activities is expected.

If you have any further questions about what will be involved please phone me at home in the evenings on 475 9799 or during the day on 237 3103 extension 3729 or you may contact either of my supervisors who are: Dr Alison Dixon Ph 4715363 and Dr Cedric Hall Ph 4721000 at Victoria University of Wellington.

WOULD YOU PLEASE SIGN THE ATTACHED CONSENT FORM AND RETURN IT TO SCHOOL AS SOON AS POSSIBLE.

Thank you for your consideration.

Jan Pearson
Appendix 3.16 Feedback to Parents at Cannons Creek school on the Student Health Survey

At the end of last year I conducted a health survey on 110 senior pupils at the school. In the survey I asked a number of questions about a variety of things related to health and the wellbeing of the children at the school. Some of the questions asked about the languages children spoke at home (8 different languages were reported and many children spoke 2 or 3) and the work their parents did. (many children knew who their parents worked for but not what they did at work). The questions included what children thought their teachers thought about their work. Most children (41%) replied very good or good, 35% okay and only 2% replied, not good. Most of the children really liked the school and the teachers and thought that the rules were fair, that the school was a nice place to be, that they felt they belonged to a school that was clean and safe.

When asked about bullying the definition of

“We say a student is being bullied when another student, or group of students, say or do nasty and unpleasant things to him or her. It is also bullying when a student is teased repeatedly in a way he or she doesn’t like. But it is not bullying when two students of the same strength quarrel or fight.”

was given.

Students reported that 44.0% were bullied several times a week, 22% weekly, 26.6% sometimes, and 2.8% 1-2 times that term. Only 4.6% reported that they had not been bullied. When asked if they had bullied others 48.6% reported several times per week, 22.9% weekly, 22.9% sometimes, 3.7% 1 or 2 times that term, and 4.6% never. More males than females were bullied several times per week (29% males to 20% females) but 29% of females reported bullying others several times per week to 24% of males.

When I did a followup interview with a small group of children they told me that much of this bullying was people saying nasty things rather than physically hurting. The boys said they were more inclined to fight physically and the girls to say nasty things to each other.

Very few children had ever tried smoking tobacco or had drunk alcohol (with the exception of communion wine)

Very few children were overweight and most did physically active things at school and after school but some children watched a lot of television, videos and played computer games.

Most children said they brushed their teeth more that once a day but a few stated that they never brushed their teeth.
They ate a varied diet and many children prepared their own breakfast and lunch or had money to buy lunches. Some children brought pies on the way to school for breakfast. About half the children had takeaway meals at least once a week.

When asked about riding bicycles and wearing helmets only 30% said they always used a helmet and over 16% said they never used one but almost 80% said they always used seat belts.

Most children said they were very happy and most felt confident but a few stated they were not happy and that they were lonely.

Over 50% said they were tired more that 4 mornings a week when they came to school and at the followup interview a number of children said they set their own bedtimes and went to bed later that 10pm most nights.

Most children had support from parents adults, teachers and friends and spent some time each week or in the weekends with their friends.

Generally the children had few illnesses that they reported and took medication if they need it for colds, asthma sore throats etc.

The survey was very useful for giving an idea about the health of the children at the school.

I am also using medical room and absence records to get a picture of what illness and accidents happen to children at Cannons Creek School.

Questions about Cannons Creek School and Parent/Community Involvement in Health Issues

Do you know about the school policy and what happens if your child needs first aid or emergency treatment?

What happens when your child gets sick or has an accident at school?

Does this work for you?

If not what would be better?

Do you know about the school policy on sun protection?

Do you know about the school policy on smoking?

What health checks and health service do your children get at school?

What health service would you like to have for your school children?

What health education does your child get at school

Do your children have any health issues that you think the school should address?

Have you any other comments you would like to make about the school and health?
STUDENT HEALTH SURVEY
CANNONS CREEK SCHOOL 1999

Adapted with permission from the Student Health Survey NSW (National Centre for Health Promotion, University of Sydney, 1996)

By answering these questions you will help me find out more about the way young people live. Similar information has been collected in countries in Europe and Australia, which has been useful in improving child health.

The form will be completed as a class exercise with assistance from myself who will help explain anything you do not understand. Please write down your own answers, as I am interested in what you think and do.

I will be the only person who will see the answers you write.

Thank you for your help in completing this survey.

Jan Pearson, Health-Promoting Schools Researcher

HOW TO COMPLETE THIS FORM

Most questions can be answered by filling in a box. Please tick the box you select.

EXAMPLE QUESTION

How often do you watch a video?

☐ Now and then
☐ One a month
☐ Once a week
☐ A few times a week

or by writing your answer on the line provided.

Please write your answer clearly___________________________
1. Are you male or female? (please tick one box)

☐ Male  ☐ Female

2. How old are you?

______________________ years ____________________ months

3. In what country were you born?

☐ New Zealand

☐ Other (please specify) _______________________

4. Are you? (Please tick any box that applies)

☐ NZ Maori  ☐ Tokelauan

☐ NZ Pakeha  ☐ Fijian

☐ Samoan  ☐ Tuvaluan

☐ Cook Islander  ☐ Other  

☐ Tongan  (Please specify)

☐ Niuean

5. What language/s are spoken at home (please tick any box that applies)
10. What do you think your class teacher(s) generally thinks about your schoolwork?
She/he thinks I am: (Please tick one box)
☐ Very good
☐ Good
☐ Okay
☐ Not good

11. How do you feel about school at present? (Please tick one box)
☐ I like it a lot
☐ I don’t like it very much
☐ I like it a bit
☐ I don’t like it at all

12. During the last four weeks how many whole days of school have you missed?
   a. because of illness __________________________ days
   b. because I wagged __________________________ days
   c. because of other reasons _____________________ days

13. How much money do you usually have to spend on yourself each week? (This includes pocket money and money you earn) If you do not have any write none.
   __________________________________________ dollars __________________ cents

14. How many physical education (PE) classes do you usually attend at school each week? (Please tick one box)
   ☐ None
   ☐ Two per week
   ☐ One per week
   ☐ Three or more per week

15. During PE (Physical Exercise) classes how much time do you spend exercising that makes you out of breath or sweat? (Please tick one box)
   ☐ Not much time or none at all
   ☐ More than half of the time
   ☐ About a quarter of the time
   ☐ Almost all of the time
   ☐ About half of the time

16. What do you feel about your PE (Physical Exercise) lessons at school (please tick one box)
   ☐ I like them very much
   ☐ I dislike them
   ☐ I like them
   ☐ I dislike them very much
   ☐ I neither like nor dislike them

17. OUTSIDE SCHOOL HOURS how many hours do you exercise so much that you get out of breath or sweat? (Please tick one box)
   ☐ None
   ☐ About 2-3 hours per week
   ☐ About ½ an hour per week
   ☐ About 4-6 hours per week
   ☐ About one hours per week
   ☐ More than 7 hours per week
18. How often do you brush your teeth? (Please tick one box)
- [ ] More than once a day    [ ] Less than once a day
- [ ] Once a day    [ ] Never
- [ ] At least once a week but not every day

19. How often do you use dental floss? (Please tick one box)
- [ ] Daily    [ ] Rarely or never
- [ ] Weekly

20. When did you last visit the dental clinic or a dentist?
- [ ] In the last week
- [ ] In the last month
- [ ] In the last year

21. How often do you drink or eat any of the following? (Please tick one box per line)

<table>
<thead>
<tr>
<th>Item</th>
<th>More than once a day</th>
<th>Once a day</th>
<th>At least once a week</th>
<th>seldom</th>
<th>never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tea</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coffee</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coke or fizzy drink</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breakfast cereal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sweets, chocolate etc</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fresh vegetables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peanuts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fresh fruit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potato chips, CC’s, cheezels etc</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hot chips</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hamburgers or hot dogs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brown or wholegrain bread</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>White bread</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Milk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruit juice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meat</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eggs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biscuits or cakes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muesli bars</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

22. How often do you eat fast food from places such as McDonalds, chicken shops or pizza places? (Please tick or fill in one line)
- [ ] Hardly ever or never

Or
_________________________________________ Times per week

_________________________________________ Times per month
23. How often do you use a seat belt in a car or van etc? (Tick one box)
- [ ] Always
- [ ] Often
- [ ] Sometimes
- [ ] Never
- [ ] Usually there is no seat belt where I sit

24. How often do you wear a helmet when riding a bicycle? (Tick one box)
- [ ] Always
- [ ] Often
- [ ] Sometimes
- [ ] Never
- [ ] I don’t ride a bicycle

25. Have you ever smoked (at least one cigarette, cigar or pipe)? (Tick one box)
- [ ] Yes
- [ ] No (If your answer is No go to question 27)

26. How often do you smoke at present? (Tick or complete one line)
- [ ] _________ per day
- [ ] _________ per week
- [ ] Less than once a week
- [ ] I do not smoke

27. Have you tasted an alcoholic drink (beer, wine, cider, cooler or spirits eg whisky)?
- [ ] Yes
- [ ] No
- [ ] Don’t know
(If you answer No go to question 28)

28. How often do you drink anything alcoholic (beer wine etc)?

<table>
<thead>
<tr>
<th></th>
<th>Every day</th>
<th>Every week</th>
<th>Every month</th>
<th>Less than once per month</th>
<th>never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spirits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cider</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

29. Have you ever had so much alcohol that you were really drunk? (Please tick one box and if yes add number of times)
- [ ] No, never
- [ ] Yes _________________ times

30. How healthy do you think you are now? (Please tick one box)
- [ ] Very Healthy
- [ ] Not very healthy
- [ ] Quite Healthy
31. In general, how do you feel about life at present? (Please tick one box)

☐ I feel very happy
☐ I feel Okay
☐ I don’t feel happy
☐ I am not happy at all

32. Do you ever feel lonely? (Please tick one box)

☐ Yes, all the time
☐ Yes often
☐ Yes sometimes
☐ No

33. How often do you feel tired when you go to school in the morning?

☐ Rarely or never
☐ Occasionally
☐ 1-3 times a week
☐ 4 or more times a week

34. During this school year have you had any of the following?

<table>
<thead>
<tr>
<th></th>
<th>Every day</th>
<th>More than once a week</th>
<th>Once per week</th>
<th>About every month</th>
<th>Less than once a month or never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headache</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stomach ache</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Backache</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sore throat</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeling unhappy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grumpy or bad tempered</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeling nervous</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difficulty in getting to sleep</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeling dizzy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asthma, wheeze or cough</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Skin rash or infection</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cold or flu</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injury</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

35. During the last month, have you taken any medicine or tablets for the following? (Please tick one box for each line)

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coughs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A cold or flu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Headache</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tooth-ache</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stomach-ache</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sore throat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difficulty in sleeping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nervousness/anxiety</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asthma</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chest infection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dieting/sliming</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin problem</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pain</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please check you have ticked a YES or NO for every line
36. How many hours a day do you usually watch TV (including school days and weekends)? (Please tick one box)

- [ ] Not at all
- [ ] Up to one hour a day
- [ ] 1-3 hours a day
- [ ] 4 hours or more a day

37. On average how many hours a day do you usually watch videos (including school days and weekends)? (Please tick one box)

- [ ] Not at all
- [ ] Up to one hour a day
- [ ] 1-3 hours a day
- [ ] 4 hours or more a day

38. On average how many hours a day do you usually play video or computer games (including school days and weekends)? (Please tick one box)

- [ ] Not at all
- [ ] Up to one hour a day
- [ ] 1-3 hours a day
- [ ] 4 hours or more a day

39. How many people live with you? If your Mother and Father live at different places answer for the place you live most of the time

Number of people not counting you

- [ ] 1
- [ ] 2
- [ ] 3
- [ ] 4
- [ ] 5
- [ ] 6
- [ ] 7
- [ ] 8
- [ ] 9
- [ ] 10
- [ ] 11
- [ ] 12
- [ ] 13
- [ ] 14
- [ ] 15
- [ ] 16

40. Which of these people live at your home? If your mother and father live at different places, answer for the home where you live most of the time (tick and write as many times as needed)

- [ ] Mother
- [ ] Father
- [ ] Step-Mother
- [ ] Step-Father
- [ ] Brother/s. (How many) ____________
- [ ] Sister/s (How many) ____________
- [ ] Other children_____________________
- [ ] Other relations or adult people_____

The next questions are mainly about your life at school

41 Please read each statement about your school carefully then tick one box per line

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>In our school the students take part in making the rules</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The students are treated too strictly in this school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The rules in this school are fair</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our school is a nice place to be</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel I belong a this school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our school is clean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our school is safe</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
42 Please fill in one box for each statement about your teacher/s. If you have only one teacher, think of this person when you answer the questions?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am encouraged to express my own views in my class/s</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our teachers usually treat us fairly</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When I need extra help I can get it.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My teachers are interested in me as a person</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

43 Please fill in one box for each statement about the students in your classes?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most of the students in my class(es) enjoy being together</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most of the students in my class(es) are kind and helpful</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most other students accept me as I am.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The following section is about bullying

We say a student is being bullied when another student, or group of students, say or do nasty and unpleasant things to him or her. It is also bullying when a student is teased repeatedly in a way he or she doesn't like. But it is not bullying when two students of the same strength quarrel or fight.

44. Have you been bullied in school this term? (Please fill one box)

☐ I haven't been bullied in school this term
☐ Once or twice
☐ Sometimes

☐ About once a week
☐ Several times a week

45. How often have you taken part in bullying other students in school this term? (Please fill one box)

☐ I haven't bullied others in school this term
☐ Once or twice
☐ Sometimes

☐ About once a week
☐ Several times a week

46. How often does it happen that other students don't want to spend time with you at school and you end being alone? (Please tick one box)

☐ It hasn't happened this term
☐ Once or twice
☐ Sometimes

☐ About once a week
☐ Several times a week
47. How easy is it for you to talk to the following persons about things that really bother you? (Please tick the boxes that apply to you)

<table>
<thead>
<tr>
<th>Person</th>
<th>Very easy</th>
<th>easy</th>
<th>hard</th>
<th>Very hard</th>
<th>I don’t have</th>
</tr>
</thead>
<tbody>
<tr>
<td>Father</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brother/s</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sisters/s</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friends</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>school staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>principal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>doctor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>nurse</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Social worker</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other adults</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

48. How many close friends do you have?

- [ ] None
- [ ] One
- [ ] More than one

49. How often do you spend time with friends straight after school? (Please tick one box)

- [ ] Every day
- [ ] 4-5 days a week
- [ ] 2-3 days a week
- [ ] Once a week or less
- [ ] I only spend time with them in the weekend
- [ ] I don’t have any friends right now

50. How many evenings per week do you usually spend out with family or friends?

_______________ per week

51. Do you think your body is?

- [ ] Much too thin
- [ ] A bit too fat
- [ ] A bit thin
- [ ] Much too fat
- [ ] About the right size
- [ ] I don’t think about it

52. Are you on a diet to lose weight? (Please fill in one box)

- [ ] No because my weight is fine
- [ ] No but I need to loose weight
- [ ] Yes

53. Do you feel confident (good) about yourself? (Please tick one box)

- [ ] Always
- [ ] Sometimes
- [ ] Often
- [ ] Rarely
- [ ] Never
54 How rich do you think your family is? (Please tick one box)

☐ Very well off  ☐ Not very well off
☐ Well off  ☐ Not at all well off
☐ Average  ☐ I don’t know

55. Below are a number of statements. Please read each one and tick the box that you agree with

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>My friends drink a lot of alcohol</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My friends smoke cigarettes a lot</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My friends all eat junk food</td>
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<td></td>
</tr>
</tbody>
</table>

56. My friends make it hard for me to obey what my parents say about (tick one box for each line)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drinking alcohol</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smoking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eating junk food</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watching too much TV/ playing video games</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

57. What do you think are the three (3) biggest threats to the environment in New Zealand (tick THREE (3) boxes)

☐ Nuclear radiation  ☐ Global warming
☐ Loss of top soil  ☐ Pollution from cars
☐ Industrial waste  ☐ Loss of forests
☐ Loss of native birds/animals  ☐ Hole in the ozone layer
☐ Other (please state)______________________________________________

58. What is the most important thing you feel you can do to improve the environment (Please tick ONE (1) box)

☐ Recycle glass, paper or plastics
☐ Turn off unnecessary lights
☐ Put on a jumper when it is cold/ turn heaters off
☐ Write to politicians, asking them to do more to save the environment
☐ Be involved in tree planting projects
☐ Get rubbish off the streets
☐ Ride my bike or walk
☐ Other (please state)________________________

Thank you very much for completing this questionnaire
### Appendix 3.18 Conceptual groupings of variables used in survey data analysis

<table>
<thead>
<tr>
<th>Number</th>
<th>Category</th>
<th>Variables</th>
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<td>Teachper10, schlike11, schmiss12, schenvir41, teacher42, students43, bullied44, bully45,</td>
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<td>3</td>
<td>Weight, height</td>
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<td>4</td>
<td>Drug and Alcohol</td>
<td>Nosmoke25, oftensmok26, alcohol27, oftenalc28, drunk29FrBehv55Parcont56</td>
</tr>
<tr>
<td>5</td>
<td>Physical activity and PE, recreation</td>
<td>NoPE14, sweatPE15, feelPE16, NoOS17, twatch36, videos37, vcgaming38,</td>
</tr>
<tr>
<td>6</td>
<td>Dental health</td>
<td>Brush18, floss19, dentist20med35</td>
</tr>
<tr>
<td>7</td>
<td>Nutrition</td>
<td>Foodfreq21, fastfood22, Frbeh55, Parcont56</td>
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<tr>
<td>8</td>
<td>Safety, injury</td>
<td>Seatbelt23, helmet24,</td>
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<tr>
<td>9</td>
<td>Psychological variable, perceptions</td>
<td>Feellife31, lonely32, tired33, lonely46, confident53, medications (sleep, nervous, etc, 35,</td>
</tr>
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<td>10</td>
<td>Physical Health perceptions, medication</td>
<td>Howhealth30, illhealth34, medication35,</td>
</tr>
<tr>
<td>11</td>
<td>Social support, peers</td>
<td>Talkease47, friends48, fttime49, timeout50,</td>
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<tr>
<td>12</td>
<td>Concern for environment</td>
<td>Threats57, important58,</td>
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Appendix 3.19 Memo to Principal and Deputy Principal re review of draft evidence

TO: ASHLEY BLAIR & MAUREEN SCOTT
FROM: JAN PEARSON
SUBJECT: THESIS EVIDENCE
DATE: 8/11/2007
CC: ALISON DIXON

Dear Ashley & Maureen,

Thank you for being willing to complete a check of the evidence section of my thesis. How I have gone about this is to use the health-promoting school framework and checkpoints that were defined by the World Health Organization and then selected the data I had collected to answer each of the questions. The appendices give more info to allow the reader to follow where the evidence was gathered.

I hope it is not too difficult to read.

What I would appreciate is

1. If you could read it and comment on any factually incorrect information I may have.
2. If you could add anything you think is relevant that I may have missed (please feel free to write on any part of the document as you go)
3. If you could write something about how the research process has been from your perspective so I can discuss it from both sides (schools and mine) in the final document I would be most appreciative.

I would like the section back by the end of January if that is possible and will come and collect it if you can please contact me by phone o4 475-9799 or 025 270-3052 or email me on janpearson@paradise.net.nz.

I hope you have a well-deserved break over Christmas and can make the most of the festive season.

Thank you for your assistance

Kind Regards Jan Pearson
Chapter four Appendices

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Appendix 4.1 Socio-ecological Determinants of Health & The Ottawa Charter for Health Promotion

Ottawa Charter and Socio-Ecological Determinants of Health

Socioeconomic, cultural & environmental conditions
Living and working conditions
Social and community influences
Individual lifestyle factors
Reorientate health systems
Develop personal skills
Strengthen community action
Create supportive environments
Build healthy public policy

Pearson, J. (2002). Developed for seminar presentation
Appendix 4.1 Photographs of Cannons Creek School

Fig 1 Cannons Creek Library
Viewed from the entrance to Cannons Creek School

Fig 2 Cannons Creek Shopping Centre
With Cannons Creek School patrol on duty after school
Fig 3. The entrance to Cannons Creek School.

Viewed from the shopping centre

Fig 4 Cannons Creek School Mural Te Moana Nui o Kiwa
Fig 5. The entrance to Cannons Creek School office

Fig 6 Cannons Creek School reception foyer
Fig 7 Cannons Creek Entrance foyer
Looking through to the library

Fig 8 Cannons Creek School Library
Fig 9. New entrant class of 2002
When I asked what was the best art work that I could photograph the unanimous reply was 'the pictures of our mums'

Fig 10 Some of the pictures of 'our mums'
Cats can climb
Cats can crawl
How many cats on
the garden wall?

Fig 11. Wall poster Room 11

Fig 12 Cannons Creek School end of year display 2001
Fig 13. A school assembly 2000

Fig 14 Art display in the hall end of year 2001
Fig 15 The happy wall

Fig 16 Climbing/play structure

Fig 17 Play ground climbing equipment With safety matting below
Fig 18 The school Playground. Looking towards Block 1 and the library

Fig 19 Cannons Creek School classroom block 3
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5 STUDENT HEALTH BEHAVIOUR SURVEY INTRODUCTION

The School Health Survey was developed and utilised as a health behaviour assessment tool in New South Wales, Australia (Bauman et al. 1996). The aim of that survey was to allow a better understanding of the prevalence and distribution of adolescent health behaviours. The original survey was administered to 3918 students in grades six (mean age 11.88 years), eight (mean age 13.96 years) and 10 (mean age 15.97 years), in a range of randomly selected State and Catholic schools. Permission to adapt and use the survey tool for this research project was given by Adrian Bauman of the National Centre for Health Promotion, University of Sydney. The aim of utilizing the survey was to gain information about the health behaviors of senior students at Cannons Creek School in a form that could provide a comparison to the original New South Wales survey results.

The students in the Cannons Creek School survey fell into a lower age range than those in the original Australian study. The youngest cohort in the Australian survey ranged in age from 9.67 to 12.75 years, with a mean age of 11.88 (sd 0.52). The New Zealand sample ranged in age from 7.58 to 12.25 years with a mean age of 9.86 (sd 1.05). Prior to the survey being used the tool was discussed and adapted in consultation with the teachers and principal at the school. The main alterations were to language to allow for the New Zealand context, and for the age of the student group.

The draft survey was piloted with a group of seven students aged 8.12 to 12.66 years (mean 10.33). Feedback from this group suggested that some words were hard to understand, and that the tool was too long and
complex to hold the attention of students that were not comfortable, competent readers (more males that females fell into this category). The survey was reviewed in light of this feedback, wording was altered and some questions removed. The questionnaire was not altered in any substantial manner as the school considered that all the information was useful, and should remain for comparisons to be made with the original survey.

The survey was administered to four classes of students in the senior school over a period of two days, following approval being gained from the Board of Trustees. The researcher, principal, teachers and in some cases, teaching assistants were in the room when the survey was introduced and given to each class.

Confidentiality was discussed with the students and staff, and most students covered their work with a book as they completed the questionnaire. To follow the school policy and practices on inclusion the survey group included some students with special learning needs and the teaching assistants helped these children to complete the survey. The principal read out each question to the group, with the aim of overcoming the varied reading levels of the class, while the researcher and teacher assisted individual students as necessary. Some students read and completed the survey unassisted. Following completion of the questionnaire I weighed and measured the students, entered these results on each student’s questionnaire then collected the numbered questionnaires for analysis. Teaching staff did not have access to any of the completed questionnaires.
Results from the survey are reported in a number of sections, reflecting the different areas of analysis. Appendix 3.16 lists the sections as conceptual groupings of variables used in the survey data analysis. These sections are:

4.1 Demographic characteristic;
5.1.2 School and school perception;
5.1.3 Weight and Height;
5.1.4 Tobacco and Alcohol use;
5.1.5 Physical activity and sedentary behaviours;
5.1.6 Dental Health;
5.1.7 Nutrition;
5.1.8 Safety and Injury;
5.1.9 Aspects of psychosocial health;
5.1.10 Physical health and medication use;
5.1.11 Social Support; from peers and others;
5.1.12 Concern for the environment.

These sections are similar to those used in the New South Wales survey report to allow for comparison and discussion of the results from the two student groups. Most questions had a number of ‘missing’ data when the question or section was not answered. These missing data have not been included in reported percentage totals in the report.

To ensure data validity a survey related focus group interview was held seven months following the student health behaviour survey. Results from this interview are reported in section 5.1.13.
5.1.1 Demographic Characteristics

One hundred and eleven students completed the survey. Fifty-five identified as female, 55 male. One student did not complete the gender or ‘what is your age?’ question. The mean age was 9.86 (sd 1.05), with ages ranging from 7.58 to 12.25 years. Three students were under eight years of age and one student was over 11 years of age.

When asked their country of birth 83.8% recorded that they were New Zealand born, 9.9% Samoan born, 3.6% Cook Islands born and 1.8% reported other.

When asked ethnicity 31 % of students reported two ethnicities. Ethnicity is reported in numbers of students (n), and percentage (%) order in table 5.1.1.

**Note:** when more than one ethnicity was reported no one ethnicity was able to be indicated as primary, therefore ethnicities in Table 5.1.1 are combined in alphabetic order.

<table>
<thead>
<tr>
<th>Self reported ethnicity</th>
<th>n</th>
<th>%</th>
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<tbody>
<tr>
<td>Samoan</td>
<td>40</td>
<td>36.0</td>
</tr>
<tr>
<td>Cook Island</td>
<td>14</td>
<td>12.6</td>
</tr>
<tr>
<td>NZ Maori</td>
<td>11</td>
<td>9.9</td>
</tr>
<tr>
<td>NZ Maori/Pakeha</td>
<td>11</td>
<td>9.9</td>
</tr>
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<td>Pakeha/Samoan</td>
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<td>6.3</td>
</tr>
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<td>Cook Islander/ NZ Maori</td>
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<td>5.4</td>
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<td>4.5</td>
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<td>Tokelauan</td>
<td>5</td>
<td>4.5</td>
</tr>
<tr>
<td>NZ Pakeha</td>
<td>4</td>
<td>3.6</td>
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<td>Cook Islander/Pakeha</td>
<td>2</td>
<td>1.8</td>
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<tr>
<td>Cambodien</td>
<td>1</td>
<td>0.9</td>
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<tr>
<td>Cook Islander/Samoan</td>
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<td>0.9</td>
</tr>
<tr>
<td>Fijian/Samoan</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>NZ Maori/Samoan</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>NZ Maori/Niuean</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>Niuean/Samoan</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td><strong>total</strong></td>
<td>111</td>
<td>100</td>
</tr>
</tbody>
</table>

Nine spoken languages and sign language were reported to be used in the homes of the student group. Over 40 percent (42.3%) reported being bilingual and 4.5 % reported speaking three languages at home.
Table 5.1.2 Languages spoken at home

<table>
<thead>
<tr>
<th>Language/s spoken</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>English/Samoan</td>
<td>26</td>
<td>23.4</td>
</tr>
<tr>
<td>English</td>
<td>23</td>
<td>20.7</td>
</tr>
<tr>
<td>Samoan</td>
<td>20</td>
<td>18</td>
</tr>
<tr>
<td>English/Cook Island Maori</td>
<td>9</td>
<td>8.1</td>
</tr>
<tr>
<td>Cook Island Maori</td>
<td>6</td>
<td>5.4</td>
</tr>
<tr>
<td>English/NZ Maori</td>
<td>5</td>
<td>4.5</td>
</tr>
<tr>
<td>English/Tokelauan</td>
<td>4</td>
<td>3.6</td>
</tr>
<tr>
<td>NZ Maori</td>
<td>4</td>
<td>3.6</td>
</tr>
<tr>
<td>NZ Maori/ Cook Island Maori</td>
<td>2</td>
<td>1.8</td>
</tr>
<tr>
<td>Samoan/Tokelauan</td>
<td>2</td>
<td>1.8</td>
</tr>
<tr>
<td>Tokelauan</td>
<td>2</td>
<td>1.8</td>
</tr>
<tr>
<td>Cook Island Maori/Tongan/Niuean</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>English/ Cambodian</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>English/Sign Language</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>English/Samoan/Cook Island Maori</td>
<td>1</td>
<td>0.9</td>
</tr>
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<td>English/Samoan/Tokelauan</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>English/Samoan/Fijian</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>English/Cook Island/Tokelauan</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>NZ Maori/Samoan/Tokelauan</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>total</td>
<td>111</td>
<td>100</td>
</tr>
</tbody>
</table>

When students were asked about their parent’s employment a number of students had no knowledge of the occupation of their respective parents (39.7% for fathers, and 34.6% for mothers), but 6.4% (for fathers), and 8.2% (for mothers) knew whom the parent worked for. Results are recorded in Table 5.1.3. The specific occupations have not been defined, as the numbers for each occupational group were very small.

Table 5.1.3 Parental employment

<table>
<thead>
<tr>
<th>Reported employment</th>
<th>n</th>
<th>father %</th>
<th>n</th>
<th>mother %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stated a job</td>
<td>47</td>
<td>42.3</td>
<td>39</td>
<td>34.8</td>
</tr>
<tr>
<td>Stated an employer</td>
<td>7</td>
<td>6.3</td>
<td>9</td>
<td>8.0</td>
</tr>
<tr>
<td>Housework/homemaker</td>
<td>1</td>
<td>0.9</td>
<td>8</td>
<td>7.1</td>
</tr>
<tr>
<td>Unemployed</td>
<td>17</td>
<td>15.3</td>
<td>20</td>
<td>17.9</td>
</tr>
<tr>
<td>Student</td>
<td>4</td>
<td>3.6</td>
<td>5</td>
<td>4.5</td>
</tr>
<tr>
<td>Don’t know</td>
<td>33</td>
<td>29.7</td>
<td>29</td>
<td>25.9</td>
</tr>
<tr>
<td>total</td>
<td>109</td>
<td>98.1</td>
<td>110</td>
<td>99.1</td>
</tr>
</tbody>
</table>

Students were asked how much money they had to spend on themselves each week. No distinction was made between money they had to spend on themselves or money spent to buy meals ie breakfasts on the way to school or school lunches.
Table 5.1.4 Spending money

<table>
<thead>
<tr>
<th>Amount of money per week</th>
<th>total n</th>
<th>total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nil</td>
<td>17</td>
<td>15.3</td>
</tr>
<tr>
<td>Up to $5</td>
<td>43</td>
<td>38.7</td>
</tr>
<tr>
<td>Up to $10</td>
<td>22</td>
<td>19.8</td>
</tr>
<tr>
<td>Up to $15</td>
<td>9</td>
<td>8.1</td>
</tr>
<tr>
<td>More than $20</td>
<td>20</td>
<td>18</td>
</tr>
<tr>
<td>total</td>
<td>111</td>
<td>100</td>
</tr>
</tbody>
</table>

When students were asked how rich they thought their family was the following results, were recorded.

Table 5.1.5 Perceived wealth of family

<table>
<thead>
<tr>
<th>Perceived wealth</th>
<th>total n</th>
<th>total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very well off</td>
<td>28</td>
<td>25.2</td>
</tr>
<tr>
<td>Well off</td>
<td>13</td>
<td>11.7</td>
</tr>
<tr>
<td>Average</td>
<td>33</td>
<td>29.7</td>
</tr>
<tr>
<td>Not very well off</td>
<td>5</td>
<td>4.5</td>
</tr>
<tr>
<td>Not well off at all</td>
<td>4</td>
<td>3.6</td>
</tr>
<tr>
<td>Don’t know</td>
<td>25</td>
<td>22.5</td>
</tr>
<tr>
<td>total</td>
<td>108</td>
<td>97.2</td>
</tr>
</tbody>
</table>

Students were also asked about the number of other persons that lived in their households. Responses ranged from one to 15 persons, with a mean of 5.8 persons, in addition to the student, per household.

Analysis revealed that the majority of households had between three and six persons other than the student living in them. The majority of students, 83 (74.8%), lived with both parents. Fifteen (13.5%) did not live with their mothers, but of these five (4.5%) reported living with a stepmother. Twenty-seven (24.3%) reported not living with their fathers, and of these six (5.4%) reported living with a stepfather. Almost one third of the students (32.4%) reported the presence of between one and five other adults, besides their parents, living in the household, and 16.2% of the group reported between one and six children, other than siblings living in their households. The majority (69.4%) of students reported that they had between one and six brothers living with them and 84 students (75.7%) reported that they had between one and six sisters living with them.
5.1.2 School and school perception

This section describes responses to questions about time off school, perceptions of school performance, the school social environment including bullying, and perceptions of the school physical environment.

When asked *what does the class teacher think of your work?* The following results (Table 5.1.6) were determined.

<table>
<thead>
<tr>
<th></th>
<th>Very good</th>
<th>good</th>
<th>okay</th>
<th>Not good</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>14</td>
<td>11</td>
<td>28</td>
<td>2</td>
</tr>
<tr>
<td>Females</td>
<td>27</td>
<td>17</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>All respondents</td>
<td>41</td>
<td>36.9%</td>
<td>28</td>
<td>25.2%</td>
</tr>
</tbody>
</table>

When asked *how do you feel about school?* the following results were reported

<table>
<thead>
<tr>
<th></th>
<th>Like it a lot</th>
<th>Like it a bit</th>
<th>Don't like it much</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>37</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>Females</td>
<td>43</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>All respondents</td>
<td>81</td>
<td>73.0%</td>
<td>26</td>
</tr>
</tbody>
</table>

Chi-square = 2.0654, (df = 2, p<0.36) demonstrates no significant gender differences in feelings about school.

![Perceptions of school performance and liking school by gender](image)

*Figure 5.1.1 Perceptions of school performance and liking school by gender*

Figure 5.1.1 gives a visual representation of the cross correlation between how many students liked school, with their perceptions concerning their school ability, by gender.
When asked about the number of days they had away from school and the reasons for absences the results in Table 5.1.8 were reported.

<table>
<thead>
<tr>
<th>reason</th>
<th>Nil days</th>
<th>Half day</th>
<th>1-2 days</th>
<th>3 days</th>
<th>other</th>
<th>total days</th>
<th>total n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illness</td>
<td>68</td>
<td>0</td>
<td>30</td>
<td>12</td>
<td>1 (4 days)</td>
<td>70-100</td>
<td>111</td>
</tr>
<tr>
<td>Wagging</td>
<td>104</td>
<td>1</td>
<td>6</td>
<td>0</td>
<td></td>
<td>6.5-12.5</td>
<td>111</td>
</tr>
<tr>
<td>Other</td>
<td>89</td>
<td>5</td>
<td>10</td>
<td>7</td>
<td>5 (funeral)</td>
<td>38.5-48.5</td>
<td>111</td>
</tr>
</tbody>
</table>

When asked to respond to questions about school, agreement to posed statements was requested. The following Table records results.

<table>
<thead>
<tr>
<th>statement</th>
<th>strongly agree %</th>
<th>agree  %</th>
<th>neither %</th>
<th>disagree %</th>
<th>strongly disagree %</th>
<th>total% n=111</th>
</tr>
</thead>
<tbody>
<tr>
<td>In our school the students take part in making the rules</td>
<td>20.7</td>
<td>30.6</td>
<td>18.9</td>
<td>17.1</td>
<td>9.0</td>
<td>96.4</td>
</tr>
<tr>
<td>Students are treated too strictly at this school</td>
<td>16.2</td>
<td>23.4</td>
<td>24.3</td>
<td>20.7</td>
<td>13.5</td>
<td>98.2</td>
</tr>
<tr>
<td>The rules at this school are fair</td>
<td>48.6</td>
<td>33.3</td>
<td>7.2</td>
<td>4.5</td>
<td>3.6</td>
<td>97.3</td>
</tr>
<tr>
<td>Our school is a nice place to be</td>
<td>50.5</td>
<td>34.2</td>
<td>5.4</td>
<td>4.5</td>
<td>2.7</td>
<td>97.3</td>
</tr>
<tr>
<td>I feel I belong to this school</td>
<td>53.2</td>
<td>37.8</td>
<td>4.5</td>
<td>1.8</td>
<td>1.8</td>
<td>97.3</td>
</tr>
<tr>
<td>Our school is clean</td>
<td>32.4</td>
<td>46.8</td>
<td>11.7</td>
<td>4.5</td>
<td>3.6</td>
<td>99.1</td>
</tr>
<tr>
<td>Our school is safe</td>
<td>44.1</td>
<td>37.8</td>
<td>11.7</td>
<td>2.7</td>
<td>1.8</td>
<td>98.2</td>
</tr>
</tbody>
</table>

When asked statements about students at the school results in Table 5.1.10 were determined.

<table>
<thead>
<tr>
<th>statement</th>
<th>strongly agree %</th>
<th>agree  %</th>
<th>neither %</th>
<th>disagree %</th>
<th>strongly disagree %</th>
<th>total% n=111</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most of the students in my class enjoy being together</td>
<td>42.3</td>
<td>30.6</td>
<td>15.3</td>
<td>9.0</td>
<td>1.8</td>
<td>99.1</td>
</tr>
<tr>
<td>Most of the students in my class are kind and helpful</td>
<td>32.4</td>
<td>39.6</td>
<td>18.9</td>
<td>5.4</td>
<td>2.7</td>
<td>99.1</td>
</tr>
<tr>
<td>Most other students accept me as I am</td>
<td>28.8</td>
<td>41.4</td>
<td>18.0</td>
<td>6.3</td>
<td>3.6</td>
<td>98.2</td>
</tr>
</tbody>
</table>

When asked about interaction with teachers, students responded thus:
Table 5.1.11 Interaction with teachers

<table>
<thead>
<tr>
<th>statement</th>
<th>strongly agree</th>
<th>agree %</th>
<th>neither %</th>
<th>disagree %</th>
<th>strongly disagree %</th>
<th>total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am encouraged to express my own views in class</td>
<td>38.7</td>
<td>35.1</td>
<td>14.4</td>
<td>6.3</td>
<td>2.7</td>
<td>97.3</td>
</tr>
<tr>
<td>Our teachers usually treat us fairly</td>
<td>47.7</td>
<td>38.7</td>
<td>5.4</td>
<td>4.5</td>
<td>2.7</td>
<td>99.1</td>
</tr>
<tr>
<td>When I need help I can get it</td>
<td>47.7</td>
<td>35.1</td>
<td>8.1</td>
<td>4.5</td>
<td>3.6</td>
<td>99.1</td>
</tr>
<tr>
<td>Teachers are interested in me</td>
<td>47.7</td>
<td>31.5</td>
<td>14.4</td>
<td>3.6</td>
<td>2.7</td>
<td>100</td>
</tr>
</tbody>
</table>

When asked how often other students did not want to spend time with them 49.5% (55) of the sample responded several times per week, 11.7% (13) selected weekly; 27.0% (30) selected sometimes; 4.5% (5) selected one or two times this term and 5.4% (6) responded never.

When asked about bullying the definition that was used in the original survey was given. The following statement, which preceded the relevant questions, was read out to the students.

"We say a student is being bullied when another student, or group of students, say or do nasty and unpleasant things to him or her. It is also bullying when a student is teased repeatedly in a way he or she doesn’t like. But it is not bullying when two students of the same strength quarrel or fight."

Table 5.1.12 Being bullied and bullying others

<table>
<thead>
<tr>
<th>Bullied</th>
<th>several times per week</th>
<th>weekly</th>
<th>sometimes</th>
<th>1-2 times this term</th>
<th>never</th>
<th>Total % or n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bullied</td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Males</td>
<td>28</td>
<td>25.2</td>
<td>10</td>
<td>9.0</td>
<td>12</td>
<td>10.8</td>
</tr>
<tr>
<td>Females</td>
<td>20</td>
<td>18.0</td>
<td>14</td>
<td>12.9</td>
<td>17</td>
<td>25.0</td>
</tr>
<tr>
<td>All</td>
<td>48</td>
<td>43.2</td>
<td>24</td>
<td>21.6</td>
<td>29</td>
<td>26.1</td>
</tr>
</tbody>
</table>

Bullying

| Males            | 24 | 21.6| 13 | 11.7 | 11 | 9.9     | 4  | 3.6  | 2  | 1.8  | 54 |        |     |       |     |       |
| Females          | 28 | 25.2| 9  | 8.1  | 14 | 12.6    | 0  | 0    | 3  | 2.7  | 54 |        |     |       |     |       |
| All              | 53 | 47.7| 22 | 19.8 | 25 | 22.5    | 4  | 3.6  | 5  | 4.5  | 98.2% |        |     |       |     |       |

When a cross correlation was made it appeared that of the greater percentage of those doing the bullying 53% several times per week, 35% of this group were also being bullied. Of 22% taking part in bullying on a weekly basis 15% were being bullied several times per week.
Given that 64.2% of all students were being bullied on a weekly or more basis, bullying is a significant event in the school. Chi-square = 8.05, (df = 4, p<0.08) for being bullied indicates no significant differences between genders. Bullying others on a weekly or more basis was 67.5% for all students and was therefore a significant event. Chi-square = 5.59, (df = 4, p<0.2312) for females and males bullying others also indicates insignificant gender differences. Overt bullying is not an activity that is readily observed in the playground or classroom, results that which were verified at a the focus group meeting held seven months post survey (see section 5.1.13). At this meeting the students were clear about the definition of bullying and explained that the girls were more responsible for verbal methods of bullying and the boys engaged in both verbal and physical bullying. The information supplied by this group supported the incidence of bullying recorded in the survey.

5.1.3 Weight and Height

Together with school staff I measured student’s weight and height and recorded the measurements. Weights for the student group varied between 26 and 72 kilograms (kg) with the mean being 40 kg. Heights varied from 128 centimetres (cm) to 160 cm, with the mean being 143.7 cm. Three students were above 67 kg and one student measured 109 cm. When weight percentiles at stated height were utilised and percentiles analysed seven students were over the 97th percentile, one by a large margin, and two were on the 3 percentile. The mean for the group was between the 50th and 75th percentile.

<table>
<thead>
<tr>
<th>Percentile</th>
<th>n of students =111</th>
<th>% =100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 97th</td>
<td>7</td>
<td>6.3</td>
</tr>
<tr>
<td>97th</td>
<td>12</td>
<td>10.8</td>
</tr>
<tr>
<td>90th</td>
<td>13</td>
<td>11.7</td>
</tr>
<tr>
<td>75th</td>
<td>24</td>
<td>21.6</td>
</tr>
<tr>
<td>50th</td>
<td>27</td>
<td>24.3</td>
</tr>
<tr>
<td>25th</td>
<td>20</td>
<td>18.0</td>
</tr>
<tr>
<td>10th</td>
<td>6</td>
<td>5.4</td>
</tr>
<tr>
<td>3rd</td>
<td>2</td>
<td>1.8</td>
</tr>
</tbody>
</table>
Students were also asked about their perceptions of their body. The results to both these questions are reported in Table 5.1.14, by gender.

<table>
<thead>
<tr>
<th>Do you think your body is</th>
<th>Too thin</th>
<th>About right</th>
<th>Too fat</th>
<th>Don’t think about it</th>
</tr>
</thead>
<tbody>
<tr>
<td>female</td>
<td>8</td>
<td>12</td>
<td>21</td>
<td>13</td>
</tr>
<tr>
<td>male</td>
<td>5</td>
<td>13</td>
<td>20</td>
<td>16</td>
</tr>
<tr>
<td>All respondents</td>
<td>13</td>
<td>11.7</td>
<td>25</td>
<td>41</td>
</tr>
<tr>
<td>Are you on a diet</td>
<td>No</td>
<td>No but I need to lose weight</td>
<td>Yes</td>
<td>Missing data</td>
</tr>
<tr>
<td>female</td>
<td>37</td>
<td>10</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>male</td>
<td>34</td>
<td>10</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>All respondents</td>
<td>71</td>
<td>63.9</td>
<td>20</td>
<td>18</td>
</tr>
</tbody>
</table>

Chi-square = 1.06 (df = 3, p<0.78) demonstrates no significant gender difference in body perception. Chi-square = 0.603, (df = 3, p<0.9) demonstrates no significant gender difference in dieting behaviour.

Slightly more females considering they were too thin than males, and slightly fewer females reporting the don’t think about it option for the first question. For the second question regarding being on a diet a greater number of females responded no and slightly more males responded yes.

When asked if any medication had been taken for dieting in the last month 6.5% or seven students reported yes and 93.5% no.

### 5.1.4 Tobacco and Alcohol use

Students were asked if they had ever smoked tobacco, how much and how often they smoked at present.

The majority of students had never smoked (88.1%) with 11.9% (13 students) reporting that they had smoked. There were two missing data sets for this question. When asked how often they currently smoked answers to the positive were very few and were therefore recorded as yes now smoke (3.6% or 4 students) or, no don’t smoke (96.4%).

Students were also asked have you ever tasted an alcoholic drink? It was not possible to determine how much the experience of tasting...
communion wine (some students asked about this when completing the survey question) influenced the reported results for the questions related to alcohol use in Table 5.1.15.

Table 5.1.15. Alcohol use

<table>
<thead>
<tr>
<th>Ever tasted alcohol</th>
<th>yes</th>
<th>no</th>
<th>don’t know</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>12</td>
<td>36</td>
<td>6</td>
<td>n = 54</td>
</tr>
<tr>
<td>Male</td>
<td>17</td>
<td>31</td>
<td>5</td>
<td>n = 53</td>
</tr>
<tr>
<td>All respondents</td>
<td>29</td>
<td>26.1</td>
<td>67</td>
<td>60.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current alcohol use</th>
<th>More than weekly</th>
<th>weekly</th>
<th>Less than weekly or none</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>5</td>
<td>8</td>
<td>42</td>
</tr>
<tr>
<td>Male</td>
<td>5</td>
<td>5</td>
<td>43</td>
</tr>
<tr>
<td>All respondents</td>
<td>10</td>
<td>9.0</td>
<td>13</td>
</tr>
</tbody>
</table>

Chi-square = 1.32, df = 2, (p = 0.5226) demonstrates no significant gender difference in tasting alcohol. Chi-square = 0.67, (df=2, p<0.7) demonstrates no significant gender difference in current alcohol use.

When asked about experience of being drunk, four students (three male, one female) reported that they had so much alcohol they were really drunk on one occasion, and two (both male) reported that this had happened on two or more occasions. When asked questions about their friend’s behaviour and alcohol and cigarette smoking statements were made to be agreed to, or not. Further statements about friends making it hard to obey parents about these behaviours were also asked (Table 5.1.16).

Table 5.1.16. Behaviour of friends

<table>
<thead>
<tr>
<th>statement</th>
<th>strongly agree</th>
<th>agree</th>
<th>neutral</th>
<th>disagree</th>
<th>strongly disagree</th>
<th>total n</th>
</tr>
</thead>
<tbody>
<tr>
<td>My friends drink a lot of alcohol</td>
<td>8</td>
<td>3</td>
<td>16</td>
<td>14</td>
<td>66</td>
<td>107</td>
</tr>
<tr>
<td>Friends make it hard to obey parents about alcohol</td>
<td>3</td>
<td>6</td>
<td>14</td>
<td>20</td>
<td>62</td>
<td>105</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>statement</th>
<th>strongly agree</th>
<th>agree</th>
<th>neutral</th>
<th>disagree</th>
<th>Strongly disagree</th>
<th>Total n</th>
</tr>
</thead>
<tbody>
<tr>
<td>My friends smoke cigarettes a lot</td>
<td>7</td>
<td>6</td>
<td>15</td>
<td>17</td>
<td>61</td>
<td>106</td>
</tr>
<tr>
<td>Friends make it hard to obey parents about cigarette smoking</td>
<td>8</td>
<td>5</td>
<td>13</td>
<td>21</td>
<td>59</td>
<td>106</td>
</tr>
</tbody>
</table>
In spite of self reported incidence, results for each of these questions indicated that alcohol use could be between 8.1% (9) and 9.9% (11), and cigarette-smoking rates could be around 11.7% (13) for this student group.

### 5.1.5 Physical Activity and sedentary behaviours

The students were asked how many Physical Education (PE) classes they attended each week and responses ranged from one to four.

*Table 5.1.17 Number of PE classes per week*

<table>
<thead>
<tr>
<th>classes per week</th>
<th>one</th>
<th>two</th>
<th>three</th>
<th>four</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of students</td>
<td>11.7</td>
<td>19.8</td>
<td>27.0</td>
<td>41.4</td>
</tr>
<tr>
<td>Total respondents</td>
<td>13</td>
<td>22</td>
<td>30</td>
<td>46</td>
</tr>
</tbody>
</table>

The next question asked about how much time during the reported PE classes the student was sweating or out of breath. Almost ¼ of students (23.4%) reported *none*, 22.5 reported *¼ of the time*, 19.8% reported *½ of the time*, 13.5% reported *more than ½ the time*, and 20.7% reported *almost all of the time*.

When asked how they felt about their school PE classes 75.7% reported that they liked the classes *very much*, 18.9% reported *I like them*, 3.6% *neutral* and 0.9% (1 student) disliked them, with a further one student disliking them very much. When the questions about number of classes and liking PE were cross tabulated and subject to a chi-square test no significant differences between liking more and doing more PE classes and no significant gender differences were found.

Questions about outside school activity revealed no significant gender difference in the average number of hours per day that students watched television, Chi-square = 6.2, (df = 3. P<0.10). However there was a significant gender difference in the amount of video or computer game usage between boys and girls, Chi-square = 12.09, (df = 3, p<0.01). This result demonstrated that more males in the group were using computer/video games for longer periods of time. These results are also presented in Figure 5.1.2.
Figure 5.1.2 Hours per day of television, video and computer/video games

Questions about outside school physical activity revealed that 38.2% of students reported that they did no physical activity outside school hours, during the week. An average of ½ an hour per week was reported by 15.5% of students, 18.2% reported one hour, 15.5% reported 2-3 hours, 3.6% reported 4-6 hours and 9.1% students reported over 7 hours.

Figure 5.1.3 Physical activity in hours per week

As can be seen in Figure 4.3.3 more females than males reported they did no exercise outside school hours. However this was still the highest reported option for both groups. Fewer males than females reported they did ½ an hour of activity per week, with the males reporting the highest number of 2-3 hours, 4-6 hours and over 7 hours. However some females also reported similar high levels of activity. No discrimination was made as to whether the reported activity was related to sport or getting to school.

When data from the questions about outside school physical activity and sedentary activity (television, video and computer game activity) were compared by determining the mean for each sedentary activity group, findings were that males, no matter how many hours they spent in sedentary
activities did more physical activity. The group that reported the lowest level of physical activity were females that watched no television. The index was determined by calculating the mean for all data sets in each of the four groupings for each gender (Table 5.1.18). The figures under the three categories are the mean hours of physical activity per week calculated for the group.

Table 5.1.18 Sedentary versus physical activity by gender index

<table>
<thead>
<tr>
<th>Active hrs Mean</th>
<th>TV watch Group</th>
<th>Active hrs Mean</th>
<th>Video watch Group</th>
<th>Active hrs Mean</th>
<th>Comp games Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5</td>
<td>&gt; 4 hr males</td>
<td>2.9</td>
<td>1-3 hr males</td>
<td>2.4</td>
<td>'none' males</td>
</tr>
<tr>
<td>2.3</td>
<td>'none' males</td>
<td>2.7</td>
<td>1-3 hr females</td>
<td>1.92</td>
<td>&gt;4 hr males</td>
</tr>
<tr>
<td>1.22</td>
<td>1 hr females</td>
<td>1.73</td>
<td>1 hr males</td>
<td>1.43</td>
<td>1-3 hr females</td>
</tr>
<tr>
<td>1.09</td>
<td>1 hr males</td>
<td>1.65</td>
<td>&gt;4 hr males</td>
<td>1.18</td>
<td>1-3 hr females</td>
</tr>
<tr>
<td>1.0</td>
<td>&gt;4 hr females</td>
<td>1.0</td>
<td>&gt;4 hr females</td>
<td>1.03</td>
<td>1 hr males</td>
</tr>
<tr>
<td>0.85</td>
<td>1-3 hr females</td>
<td>0.94</td>
<td>'none' males</td>
<td>1.0</td>
<td>1-3 hr females</td>
</tr>
<tr>
<td>0.57</td>
<td>1-3 hr males</td>
<td>0.85</td>
<td>'none' females</td>
<td>0.9</td>
<td>&gt;4 hr females</td>
</tr>
<tr>
<td>0.38</td>
<td>'none' females</td>
<td>0.55</td>
<td>1 hr females</td>
<td>0.52</td>
<td>'none' females</td>
</tr>
</tbody>
</table>

When an adaptation of the sedentary index (Hilary Commission, 1997) was used with less that half an hour of activity defined as sedentary and over half an hour, defined as active the findings were as per Table 5.1.19.

Table 5.1.19 Sedentary index vs computer games

<table>
<thead>
<tr>
<th></th>
<th>females</th>
<th>males</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>none</td>
<td>One hour</td>
</tr>
<tr>
<td>&lt; ½ hr</td>
<td>17</td>
<td>8</td>
</tr>
<tr>
<td>&gt; ½ hr</td>
<td>7</td>
<td>9</td>
</tr>
</tbody>
</table>

Chi-square = 5.96, (df = 3,p<0.11). Indicates no significant gender difference for this behaviour.

<table>
<thead>
<tr>
<th></th>
<th>females</th>
<th>males</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>none</td>
<td>One hour</td>
</tr>
<tr>
<td>&lt; ½ hr</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>&gt; ½ hr</td>
<td>8</td>
<td>7</td>
</tr>
</tbody>
</table>

Chi-square = 0.83, (df = 3,p = <0.08 indicates no significant gender difference for this behaviour.

Table 5.1.20 Sedentary index versus Television viewing

<table>
<thead>
<tr>
<th></th>
<th>females</th>
<th>males</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>none</td>
<td>One hour</td>
</tr>
<tr>
<td>&lt; ½ hr</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>&gt; ½ hr</td>
<td>3</td>
<td>7</td>
</tr>
</tbody>
</table>

Chi-square = 2.5, (df = 3,p<0.5). Indicates no significant gender difference for this behaviour.

<table>
<thead>
<tr>
<th></th>
<th>females</th>
<th>males</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>none</td>
<td>One hour</td>
</tr>
<tr>
<td>&lt; ½ hr</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>&gt; ½ hr</td>
<td>3</td>
<td>8</td>
</tr>
</tbody>
</table>

Chi-square = 5.3, (df = 3,p = <0.14). Indicates no significant gender difference.

Sedentary or inactive was defined as taking part in less than 2.5 hours of sport and active leisure in the past week.
5.1.6 Dental Health

Students were asked how often they brushed their teeth, used dental floss and when they had last visited the dentist or dental clinic. The physical health question about medication for toothache is also reported in this section as it gives further information on the general pattern of dental health.

<table>
<thead>
<tr>
<th>How often do you ...</th>
<th>&gt;once a day</th>
<th>Once a day</th>
<th>&lt; week</th>
<th>Weekly or less</th>
<th>Rarely or never</th>
<th>Total responds</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
</tr>
<tr>
<td>brush your teeth?</td>
<td>26</td>
<td>32</td>
<td>16</td>
<td>15</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>use dental floss?</td>
<td>0</td>
<td>0</td>
<td>10</td>
<td>8</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Chi-square = 3.01, (df = p <0.4) No significant gender difference is demonstrated.

A greater number of females reported that they brushed more than once a day, a similar number of males and females reported that they brushed more than once a week and one female reported never brushing.

Reported use of dental floss was low with the majority of students, with 62.1% reporting that they rarely or never used dental floss.

When asked if they had taken medicine for toothache in the last month 22 (19.8%) students reported that they had used medication for this purpose.

When asked about their last visit to the dental clinic or dentist 12.6% reported 'in the last week', 62.0% reported 'in the last month', and 23.4% reported 'in the last year'. The dental therapist had been at the school in the weeks preceding the survey.
5.1.7 Nutrition

A variety of questions were asked to elicit food preferences or actual food use. These included the following items, which are indications rather than an exact overall index of consumption. Results are recorded in Table 5.1.22.

<table>
<thead>
<tr>
<th>How often do you drink or eat any of the following</th>
<th>More than once a day %</th>
<th>Once a day %</th>
<th>Less than daily %</th>
<th>Never %</th>
<th>Total %</th>
<th>n=103-108</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tea</td>
<td>24.3</td>
<td>22.5</td>
<td>9.9</td>
<td>39.6</td>
<td>97.3</td>
<td></td>
</tr>
<tr>
<td>Coffee</td>
<td>8.1</td>
<td>7.2</td>
<td>3.6</td>
<td>74.8</td>
<td>95.5</td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>73.0</td>
<td>18.0</td>
<td>7.2</td>
<td>0</td>
<td>98.2</td>
<td></td>
</tr>
<tr>
<td>Coke or fizzy drink</td>
<td>31.5</td>
<td>25.2</td>
<td>26.1</td>
<td>12.6</td>
<td>95.5</td>
<td></td>
</tr>
<tr>
<td>Breakfast cereal</td>
<td>36.9</td>
<td>38.7</td>
<td>10.8</td>
<td>10.8</td>
<td>97.3</td>
<td></td>
</tr>
<tr>
<td>Sweets, chocolate etc</td>
<td>20.7</td>
<td>25.2</td>
<td>27.9</td>
<td>23.4</td>
<td>97.3</td>
<td></td>
</tr>
<tr>
<td>Fresh vegetables</td>
<td>40.5</td>
<td>21.6</td>
<td>18.9</td>
<td>14.4</td>
<td>95.5</td>
<td></td>
</tr>
<tr>
<td>Peanuts</td>
<td>17.1</td>
<td>15.3</td>
<td>14.4</td>
<td>47.7</td>
<td>95.5</td>
<td></td>
</tr>
<tr>
<td>Fresh fruit</td>
<td>57.7</td>
<td>18.9</td>
<td>12.6</td>
<td>3.6</td>
<td>92.8</td>
<td></td>
</tr>
<tr>
<td>Potato chips, CC’s, cheezels etc</td>
<td>25.2</td>
<td>18.9</td>
<td>30.6</td>
<td>22.5</td>
<td>97.3</td>
<td></td>
</tr>
<tr>
<td>Hot chips</td>
<td>24.3</td>
<td>27.9</td>
<td>28.8</td>
<td>16.2</td>
<td>97.3</td>
<td></td>
</tr>
<tr>
<td>Hamburgers or hot dogs</td>
<td>24.3</td>
<td>17.1</td>
<td>24.3</td>
<td>27.0</td>
<td>92.8</td>
<td></td>
</tr>
<tr>
<td>Brown or whole grain bread</td>
<td>28.8</td>
<td>19.8</td>
<td>10.8</td>
<td>36.0</td>
<td>95.5</td>
<td></td>
</tr>
<tr>
<td>White bread</td>
<td>48.6</td>
<td>24.3</td>
<td>11.7</td>
<td>10.8</td>
<td>95.5</td>
<td></td>
</tr>
<tr>
<td>Milk</td>
<td>44.1</td>
<td>27.9</td>
<td>10.8</td>
<td>11.7</td>
<td>94.6</td>
<td></td>
</tr>
<tr>
<td>Fruit juice</td>
<td>47.7</td>
<td>16.2</td>
<td>17.1</td>
<td>15.3</td>
<td>96.4</td>
<td></td>
</tr>
<tr>
<td>Meat</td>
<td>27.9</td>
<td>18.9</td>
<td>25.2</td>
<td>25.2</td>
<td>97.3</td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>9.9</td>
<td>18.0</td>
<td>22.5</td>
<td>44.1</td>
<td>94.6</td>
<td></td>
</tr>
<tr>
<td>Eggs</td>
<td>18.9</td>
<td>19.8</td>
<td>21.6</td>
<td>33.3</td>
<td>93.7</td>
<td></td>
</tr>
<tr>
<td>Biscuits or cakes</td>
<td>30.6</td>
<td>27.0</td>
<td>22.5</td>
<td>17.1</td>
<td>97.3</td>
<td></td>
</tr>
<tr>
<td>Muesli bars</td>
<td>18.9</td>
<td>22.5</td>
<td>15.3</td>
<td>37.8</td>
<td>94.6</td>
<td></td>
</tr>
</tbody>
</table>

When asked how often do you eat fast food from places such as McDonalds, chicken shops or pizza places? The following responses were recorded.

<table>
<thead>
<tr>
<th>Fast foods eaten</th>
<th>2-6 per week %</th>
<th>Once per week %</th>
<th>Monthly or rarely %</th>
<th>Total % n=111</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>18.0</td>
<td>32.4</td>
<td>45.0</td>
<td>95.4</td>
</tr>
</tbody>
</table>
Other questions were framed as statements and required the student to report what they thought their friends ate and if their friends made it hard for them to obey what parents said about eating ‘junk’ food. Table 5.1.24 records the responses.

Table 5.1.24 Friends eating and influence regarding ‘junk’ food

<table>
<thead>
<tr>
<th>My friends…</th>
<th>Strongly agree %</th>
<th>Agree %</th>
<th>Neutral %</th>
<th>Disagree %</th>
<th>Strongly disagree%</th>
<th>Total % n = 111</th>
</tr>
</thead>
<tbody>
<tr>
<td>all eat junk food</td>
<td>30.6</td>
<td>25.2</td>
<td>20.7</td>
<td>7.2</td>
<td>13.5</td>
<td>97.2</td>
</tr>
<tr>
<td>make it hard for me to obey my parents</td>
<td>20.7</td>
<td>20.7</td>
<td>13.5</td>
<td>12.6</td>
<td>28.8</td>
<td>96.3</td>
</tr>
</tbody>
</table>

5.1.8 Safety and Injury

There were two questions that asked students to report on the use of safety equipment, namely cycle helmets and car seatbelts. The results are presented in Table 5.1.25.

Table 5.1.25 Cycle and seat belt usage

<table>
<thead>
<tr>
<th>Cycle helmet</th>
<th>Always</th>
<th>Often used</th>
<th>Sometimes</th>
<th>Never used</th>
<th>No-cycle</th>
<th>total n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cycle helmet male</td>
<td>17</td>
<td>8</td>
<td>9</td>
<td>12</td>
<td>8</td>
<td>n =54</td>
</tr>
<tr>
<td>Cycle helmet female</td>
<td>17</td>
<td>10</td>
<td>12</td>
<td>6</td>
<td>11</td>
<td>n =56</td>
</tr>
<tr>
<td>All</td>
<td>34</td>
<td>30.6</td>
<td>18</td>
<td>16.2</td>
<td>21</td>
<td>18.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Seat belt</th>
<th>Always</th>
<th>Often used</th>
<th>Sometimes</th>
<th>Never used</th>
<th>No-cycle</th>
<th>total n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seat belt male</td>
<td>41</td>
<td>5</td>
<td>7</td>
<td>1</td>
<td>1</td>
<td>n =54</td>
</tr>
<tr>
<td>Seat belt female</td>
<td>45</td>
<td>1</td>
<td>9</td>
<td>0</td>
<td>0</td>
<td>n =55</td>
</tr>
<tr>
<td>All</td>
<td>86</td>
<td>79.2</td>
<td>6</td>
<td>5.4</td>
<td>14.4</td>
<td>1</td>
</tr>
</tbody>
</table>

Correlation of cycle helmet with seat belt usage revealed that of those that always used a seat belt 30 students always used a cycle helmet, 13 students often used one, 18 students sometimes used one and 14 students never used one. The one student who reported never using a seat belt also reported never using a cycle helmet. The two students who reported being sometimes seatbelt users and the one often user reported never using a cycle helmet. Whether each child that owned, or had access
to a cycle, owned a cycle helmet was not asked. A subsequent interview with parents revealed that following the, student health behaviour survey, one male student requested that his parent buy him a helmet. Questions about student injury rates were asked, and 12 (10.8%) reported sustaining injuries more than weekly, 29 (26.1%) weekly and 69 (62.2%) less than weekly. No information was requested on the cause of injury. Other information about the type and number of injuries that were sustained at school has been collected from statistics kept in the ‘medical room’ log. These are reported in Appendix 5.1.6.

5.1.9 Aspects of Psychosocial health

Several questions were asked about aspects of mental well being and perceived health. These included self-rated items about general health status (section 5.1.10), about life in general, feelings of loneliness and self-confidence. The school perception related questions reported in section 5.1.2 also indicate psychosocial health status. The results in Table 4.3.26 are related to how students felt about life.

<table>
<thead>
<tr>
<th>How do you feel about life</th>
<th>Very happy</th>
<th>okay</th>
<th>Don't feel happy</th>
<th>Not happy at all</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>female</td>
<td>31</td>
<td>11</td>
<td>5</td>
<td>6</td>
<td>n = 53</td>
</tr>
<tr>
<td>male</td>
<td>34</td>
<td>18</td>
<td>1</td>
<td>2</td>
<td>n = 55</td>
</tr>
<tr>
<td>All n / %</td>
<td>65</td>
<td>60.3</td>
<td>29</td>
<td>26.1</td>
<td>6</td>
</tr>
</tbody>
</table>
Chi-square = 6.5, (df = 3, p <0.09) The gender difference was insignificant

As reported in Table 5.1.26 female students were slightly less positive about life than male students. However more male students reported higher frequencies of feeling lonely (Table 5.1.27).

<table>
<thead>
<tr>
<th>Do you ever feel lonely</th>
<th>All the time</th>
<th>often</th>
<th>sometimes</th>
<th>Never</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>female</td>
<td>6</td>
<td>4</td>
<td>25</td>
<td>18</td>
<td>n = 53</td>
</tr>
<tr>
<td>male</td>
<td>9</td>
<td>1</td>
<td>21</td>
<td>24</td>
<td>n = 55</td>
</tr>
<tr>
<td>All n / %</td>
<td>15</td>
<td>13.5</td>
<td>5</td>
<td>4.5</td>
<td>46</td>
</tr>
</tbody>
</table>
Chi-square = 3.6, (df = 3, p<0.3). No significant gender difference was demonstrated
The question *do you feel confident about your self?* was also asked. The results in Table 5.1.28 were recorded for this question.

**Table 5.1.28 Confidence**

<table>
<thead>
<tr>
<th>Do you feel confident about your self</th>
<th>always</th>
<th>sometimes</th>
<th>often</th>
<th>Rarely</th>
<th>never</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female students</td>
<td>29</td>
<td>21</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>n =54</td>
</tr>
<tr>
<td>Male students</td>
<td>33</td>
<td>13</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>n =54</td>
</tr>
<tr>
<td>All n / %</td>
<td>2</td>
<td>55.8</td>
<td>34</td>
<td>30.6</td>
<td>7</td>
<td>6.3</td>
</tr>
<tr>
<td>Chi-square = 4.43, (df = 4, p&lt;0.4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>97.2%</td>
</tr>
</tbody>
</table>

No significant gender difference was demonstrated.

Very little difference in confidence was reported by male or female students (Table 5.1.28). However four students (3.6%) reported that they never feel confident.

**5.1.10 Physical Health and medication use**

This section describes physical and psychological symptoms reported by the sample group. Students were asked the general question *how healthy do you think you are now?* To which 45.9% responded *very healthy*, a further 49.5% responded *quite healthy* and 4.5% responded *not very healthy*. Specific questions and the use of medications for illness and/or symptoms are recorded in Table 5.1.29 as percentages. Symptoms are identified by their frequency, and listed according to descending frequency of more than weekly symptoms. Medication usage analysed as a yes or no option is reported for usage only and aligned to symptoms in Table 5.1.29.

It is of interest to note that more than a third of the student group experienced psychological symptoms (feeling unhappy, feeling grumpy or bad tempered, feeling nervous or having difficulty getting to sleep) once or more a week. Stomach-ache symptoms reported at the rate of 3.2% over the period of a week could indicate psychological or physical problems.
Table 5.1.29 Symptoms of illness and medication

<table>
<thead>
<tr>
<th>Symptoms/illness this year</th>
<th>More than Weekly %</th>
<th>Once a week %</th>
<th>Less than weekly/never %</th>
<th>Medication in the last month</th>
<th>Yes %</th>
</tr>
</thead>
<tbody>
<tr>
<td>feeling nervous</td>
<td>23.4</td>
<td>10.3</td>
<td>66.4</td>
<td>For nervousness</td>
<td>8.1</td>
</tr>
<tr>
<td>feeling unhappy</td>
<td>22.6</td>
<td>16.0</td>
<td>61.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>difficulty getting to sleep</td>
<td>18.7</td>
<td>18.7</td>
<td>62.6</td>
<td>For sleep difficulty</td>
<td>11.7</td>
</tr>
<tr>
<td>grumpy or bad tempered</td>
<td>17.8</td>
<td>19.6</td>
<td>62.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>asthma</td>
<td>15.1</td>
<td>7.5</td>
<td>77.4</td>
<td>for asthma</td>
<td>20.7</td>
</tr>
<tr>
<td>dizziness</td>
<td>14.8</td>
<td>11.1</td>
<td>74.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cold or flu</td>
<td>12.8</td>
<td>20.2</td>
<td>67</td>
<td>for cold or flu</td>
<td>43.2</td>
</tr>
<tr>
<td>Stomach-ache</td>
<td>12.0</td>
<td>22.2</td>
<td>65.7</td>
<td>for stomach-ache</td>
<td>27.9</td>
</tr>
<tr>
<td>headache</td>
<td>11</td>
<td>21.1</td>
<td>67.9</td>
<td>for headaches</td>
<td>43.2</td>
</tr>
<tr>
<td>injury</td>
<td>10.9</td>
<td>26.1</td>
<td>62.7</td>
<td>for pain</td>
<td>33.3</td>
</tr>
<tr>
<td>back ache</td>
<td>10.3</td>
<td>9.3</td>
<td>80.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>skin rash or infection</td>
<td>9.3</td>
<td>9.3</td>
<td>81.3</td>
<td>for skin problem</td>
<td>27.9</td>
</tr>
<tr>
<td>sore throat</td>
<td>6.5</td>
<td>26.2</td>
<td>67.3</td>
<td>for sore throat</td>
<td>38.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>for cough</td>
<td>47.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>for chest infection</td>
<td>12.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Toothache</strong></td>
<td>20.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Dieting/slimming</strong></td>
<td>6.3</td>
</tr>
</tbody>
</table>

*Also reported section 4.3.6 ** Also reported section 4.3.3

When asked about tiredness when going to school in the morning the following results were recorded.

Table 5.1.30 Tiredness

<table>
<thead>
<tr>
<th>Amount of times per week feeling tired when go to school in the morning</th>
<th>4 or more</th>
<th>1-3 times per week</th>
<th>occasionally</th>
<th>never</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female students</td>
<td>28</td>
<td>13</td>
<td>8</td>
<td>6</td>
<td>55</td>
</tr>
<tr>
<td>Male students</td>
<td>28</td>
<td>12</td>
<td>8</td>
<td>7</td>
<td>55</td>
</tr>
<tr>
<td>All respondents</td>
<td>50.4</td>
<td>22.5</td>
<td>14.4</td>
<td>11.7</td>
<td>99.1%</td>
</tr>
</tbody>
</table>

Discussion was held at the follow-up focus group interview and 50% of the group reported setting their own bedtimes, going to bed after 10pm or getting less than eight hours sleep per night.

When tiredness and feeling grumpy were correlated the following results were determined.
Table 5.1.31 Tiredness versus feeling grumpy by gender

<table>
<thead>
<tr>
<th>How often do you feel grumpy or bad tempered</th>
<th>Less than weekly feel grumpy or bad tempered</th>
<th>Weekly feel grumpy or bad tempered</th>
<th>More than weekly feel grumpy or bad tempered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vs how often do you go to school tired</td>
<td>4 or more times per week tired f/m</td>
<td>4 or more times per week tired f/m</td>
<td>19</td>
</tr>
<tr>
<td>4 or more times per week tired male</td>
<td>6</td>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td>1-3 times per week tired f/m</td>
<td>1</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>1-3 times per week tired male</td>
<td>2</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Occasionally tired f/m</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Occasionally tired male</td>
<td>0</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Rarely or never tired f/m</td>
<td>0</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Rarely or never tired male</td>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

From Table 5.1.31 it can be seen that the more times a week a student is tired the more the student is grumpy or bad tempered. During the focus group interview some students linked tiredness and feeling grumpy to their subsequent involvement in bullying.

5.1.11 Social support from peers and others

The following section describes sources of support that students could use if they were really bothered about an issue or problem. Potential sources included their parents, peers, school and other professionals and other adults. Responses could be selected from a range that went from very easy (to talk to), easy, hard, and very hard). An option of I don’t have was also available to allow students that did not have a mother, brother, etc to make an appropriate choice. When responses from the very easy and easy options were merged and responses from hard and very hard were treated in a similar manner, the following results (Tabled below as percentages) were recorded. Results are listed by very easy/easy results.
Table 5.1.32 Ease of talking to adults

<table>
<thead>
<tr>
<th>How easy is it to talk to your...</th>
<th>very easy/easy %</th>
<th>Hard/very hard %</th>
<th>I don't have %</th>
<th>Total n = 95 -109 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother</td>
<td>87.3</td>
<td>18</td>
<td>1.8</td>
<td>98.2</td>
</tr>
<tr>
<td>Friends</td>
<td>74.7</td>
<td>18.9</td>
<td>3.6</td>
<td>97.3</td>
</tr>
<tr>
<td>Sister/s</td>
<td>70.2</td>
<td>13.5</td>
<td>12.6</td>
<td>96.4</td>
</tr>
<tr>
<td>Father</td>
<td>67.5</td>
<td>22.5</td>
<td>6.3</td>
<td>96.1</td>
</tr>
<tr>
<td>Teachers</td>
<td>63.9</td>
<td>31.9</td>
<td>2.7</td>
<td>98.2</td>
</tr>
<tr>
<td>Brother/s</td>
<td>63</td>
<td>14.4</td>
<td>18.0</td>
<td>85.5</td>
</tr>
<tr>
<td>Doctor</td>
<td>62.1</td>
<td>24.3</td>
<td>9.0</td>
<td>95.5</td>
</tr>
<tr>
<td>Principal</td>
<td>60.3</td>
<td>32.4</td>
<td>4.5</td>
<td>97.3</td>
</tr>
<tr>
<td>School staff</td>
<td>59.4</td>
<td>31.5</td>
<td>4.5</td>
<td>95.5</td>
</tr>
<tr>
<td>Social worker</td>
<td>57.6</td>
<td>22.4</td>
<td>17.0</td>
<td>97.3</td>
</tr>
<tr>
<td>Other adults</td>
<td>56.7</td>
<td>24.3</td>
<td>13.5</td>
<td>94.6</td>
</tr>
<tr>
<td>Nurse</td>
<td>54.9</td>
<td>28.1</td>
<td>13.5</td>
<td>94.6</td>
</tr>
</tbody>
</table>

These results indicate that there were five (4.5%), unreliable data sets, as obviously all these school students did have contact with, school staff and a principal. Clearly mothers, then friends, then sisters, and then fathers were the easiest persons to talk to, for the greatest proportion of student participants. Teachers were easier to talk to that than brothers or doctors and school staff and the principal were ranked at a fairly similar level (60.3% and 59.43% respectively). It was interesting to note that 10 students reported that they did not have a doctor and another five did not answer this question. Fifteen students reported not having a nurse and another six students did not answer this question, leaving nurses ranked as lowest on the list. At the time of the survey social workers had been present in the school for seven months and the weekly school nurse clinic had not yet commenced. No discrimination was made in the question as to whether difficulty in talking to identified persons was due to lack of access to that person or with interaction problems with an individual.

A number of other questions were asked to elicit information about peers, and peer support. Only a small proportion of students (2.8%) reported no close friends at all in the specific item. However, as previously reported a total of five respondents either did not answer the related (and a number of other) questions or gave unreliable answers. The number reporting to have no friends in the three related questions was three or four.
students, with 9.2% reporting that they had one friend and the majority (88.1%) reporting that they had more than one close friend.

When asked how often they spent time with friends straight after school the following results were reported.

<table>
<thead>
<tr>
<th>How often do you spend time with your friends straight after school</th>
<th>Every day %</th>
<th>4 days a week %</th>
<th>2-3 days a week %</th>
<th>Once a week %</th>
<th>Weekend only %</th>
</tr>
</thead>
<tbody>
<tr>
<td>All respondents n = 106</td>
<td>39.6</td>
<td>11.7</td>
<td>13.5</td>
<td>14.4</td>
<td>16.2</td>
</tr>
</tbody>
</table>

When asked how many evenings per week they spent out with family or friends students reported the following.

<table>
<thead>
<tr>
<th>Evenings out a week per week</th>
<th>More than two %</th>
<th>Two %</th>
<th>One %</th>
</tr>
</thead>
<tbody>
<tr>
<td>All respondents n = 111</td>
<td>41.4</td>
<td>34.2</td>
<td>24.4</td>
</tr>
</tbody>
</table>

Students were also asked to report their level of tiredness in the mornings on a weekly basis (also see section 5.1.9). When the two variables for evenings out per week and tiredness in the mornings were correlated (Table 5.1.35) no clear distinction between the number of nights out per week and the number of mornings the student felt tired were found.

<table>
<thead>
<tr>
<th>Morning tiredness per week n = 94</th>
<th>One evening out by respondent</th>
<th>Two evenings out by respondent</th>
<th>More than 2 evenings out by respondent</th>
<th>4 or more evenings out by respondent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four or more mornings n = 50</td>
<td>14</td>
<td>15</td>
<td>21</td>
<td>0</td>
</tr>
<tr>
<td>One to three mornings n= 21</td>
<td>7</td>
<td>8</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>occasionally n = 21</td>
<td>2</td>
<td>1</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Rarely or never n = 11</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>0</td>
</tr>
</tbody>
</table>

No reason for being out in the evenings was asked.
5.1.12 Concern for the environment

This section covers items that reflect student’s perceptions of what they consider important, and what they could do to help the environment. A range of options were given and the question was asked **what do you think are the three biggest threats to the environment?** The three issues of most importance as perceived by the students are listed in descending order in Table 5.1.36.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Total n</th>
</tr>
</thead>
<tbody>
<tr>
<td>native bird and animal loss</td>
<td>59</td>
</tr>
<tr>
<td>car pollution</td>
<td>56</td>
</tr>
<tr>
<td>nuclear radiation</td>
<td>41</td>
</tr>
<tr>
<td>loss of forests</td>
<td>38</td>
</tr>
<tr>
<td>loss of topsoil</td>
<td>26</td>
</tr>
<tr>
<td>industrial waste</td>
<td>26</td>
</tr>
<tr>
<td>ozone hole</td>
<td>25</td>
</tr>
<tr>
<td>global warming</td>
<td>19</td>
</tr>
</tbody>
</table>

When asked what the most important thing the student could do to improve the environment the following results were reported.

<table>
<thead>
<tr>
<th>Action</th>
<th>Total %</th>
<th>Total n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycle glass, paper, plastic</td>
<td>28.8</td>
<td>32</td>
</tr>
<tr>
<td>Collect rubbish</td>
<td>25.2</td>
<td>28</td>
</tr>
<tr>
<td>Ride a bike or walk</td>
<td>15.3</td>
<td>17</td>
</tr>
<tr>
<td>Turn heater off, put a jersey on when cold</td>
<td>13.5</td>
<td>15</td>
</tr>
<tr>
<td>Write to politicians</td>
<td>7.2</td>
<td>8</td>
</tr>
<tr>
<td>Turn off lights</td>
<td>6.3</td>
<td>7</td>
</tr>
<tr>
<td>Plant trees</td>
<td>4.5</td>
<td>5</td>
</tr>
</tbody>
</table>
5.1.13 Results from the follow-up student focus group interview.

This interview took place in June 2000 – seven months after the student health survey. It was decided to hold the interview as a method of triangulation / verification of the health behaviour survey data and to gain more in-depth knowledge about aspects of the survey that were of doubtful reliability. Lack of reliability was considered to be a possible due to the format and length of the survey questions, the time allowed participant literacy and the method used to complete the survey.

Selection of participants for the focus group interview involved information and a consent form being sent home with students who had participated in the survey in November 1999. The participants of the group interview were selected because they were the first six students to return a signed consent form to the school. The group comprised four female and two male students. Student ages were one eight year old, three nine year olds and two ten year olds. The ethnic composition of the group was two Pacific Island, two Maori and two Pakeha students. No attempt was made to separate the responses of the students to individuals by age, gender or ethnicity.

The group met with me in a quiet room during school time. Participants sat around a Table with me and the purpose of the meeting was discussed and clarified prior to commencement. Permission was requested to use the tape recorder. The students appeared very keen to participate and apart from an interruption for a fire safety drill when we were all required to exit for approximately ten minutes, the group focused on the questions and vied with each other to be first to answer. Each student was given a chance to answer each question one at time and if they wanted could ‘pass’ on the first round then contribute later, or not respond at all if they wished. At the end of the time they were eager to listen to the tape and asked if they could come back to answer more questions at a later date. I gained the impression that the information they shared was their unbiased truth. I consider minimal reflexivity (Yin 1994) occurred in terms of participants trying to impress their peers or me.
Following a cutting remark from one student to another during a question about bullying, discussion was held about confidentiality and the need to confine the subject of our discussions within the group rather than telling others about it or using it to tease or ridicule a focus group participant. I gained the impression that a lot of teasing and using of information against each other (defined as bullying in the survey) was part of the school culture.

The first questions were about the food students ate for breakfast lunch and the evening meal. What the food was, and who prepared it was asked. Four of the group had cereal and milk for breakfast, three prepared it themselves, and the mother of one student usually prepared their food. The other two students bought their breakfast (usually a meat pie) on the way to school. For lunch, two student always brought sandwiches from home, one made their own, the other had them made by a parent. Two students usually brought sandwiches they had made and sometimes bought lunch at school. Two students always bought lunch, one from school, the other often on the way to school (with the purpose of including food they knew was not permitted or available at school). For their evening meal all of the students gave comprehensive information about the preparation of a variety of foods including meat, vegetables, rice, chop suey and taro. Two of the students had regular takeaways that included fish and chips, hamburgers and branded fast foods.

When asked about who did the shopping most of the students said they were involved in food shopping, often by themselves and sometimes with parents. All students said they were involved with some form of cooking at home and when asked if they would like to do cooking at school they were very enthusiastic. The older students then told me that they had done some cooking, which they had really enjoyed, during school the previous year.

When asked about bedtimes a variety of times were given. One student always went to bed at 8pm except on a Thursday, when a favorite television programme that finished at 9:30 was watched. Another student always went to bed at 8:30pm, while another student stayed up until 10 or 12 as otherwise I wake up too early. Another student stated that they took themself to bed at about 6pm and that getting up at 2am to watch television was a norm. The other students had no set bedtime, and this depended on
family activity. All students in the group said they were often tired during the school day.

When asked about ownership and use of toothbrushes, all students stated they owned a toothbrush. Two said that they never brushed their teeth and the other students said that they usually brushed their teeth twice per day.

When asked about illnesses so far this year all students stated they had the flu at least once. Others said they had skin problems and sore stomachs and one had asthma and eczema.

When asked about bullying the group stated various activities were considered to be bullying. These could be grouped into two categories; verbal bullying, described by one student as people being smart and; physical bullying, such as people hitting or physically hurting someone. All students knew that bullying was not good and that it was not allowed at Cannons Creek School. One student stated that Mr. B (principal) had said he did not want to be a principal of a school where bullying took place. Most of the group said that they reciprocated if someone was mean to them and that they were then mean back. They also stated that if someone gets physical they get physical in return. Two of the students admitted to being bullies and scaring and hitting little kids. Both these students were now involved with the social workers in the school and said that being occupied with breakdancing and skateboarding had helped them control their bullying. One made the connection with tiredness, and stated that when they were tired there was a tendency to hit out for no reason.

The distinction was made that girls are more often mean (verbal bullying) but boys were mean and hit as well. One girl suggested an all girls’ school would be good – the other girls supported the idea.

References
Hillary Commission for Sport Fitness and Leisure, Wellington

<table>
<thead>
<tr>
<th>Reason</th>
<th>Month</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
<th>September</th>
<th>October</th>
<th>November</th>
<th>December</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Asthma</td>
<td></td>
<td>2</td>
<td>2</td>
<td>8</td>
<td>7</td>
<td>2</td>
<td>3</td>
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<td>2</td>
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<td>0</td>
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<td>27</td>
</tr>
<tr>
<td>2 Cold/Flu</td>
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<td>2</td>
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<td>13</td>
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<td>11</td>
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<td>9 Fever/temperature</td>
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<td>0</td>
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</tr>
<tr>
<td>12 Boils/Skin Infection</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>20</td>
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<td>0</td>
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<td>0</td>
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<tr>
<td>14 Hosp/Dr act</td>
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<td>9</td>
<td>9</td>
<td>2</td>
<td>5</td>
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<td>1</td>
<td>1</td>
<td>4</td>
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<td>15 Other illness</td>
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<td>2</td>
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<td>0</td>
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<td>2</td>
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<td>0</td>
<td>0</td>
<td>3</td>
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<td>17 Other</td>
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<td>5</td>
<td>6</td>
<td>3</td>
<td>10</td>
<td>8</td>
<td>0</td>
<td>96</td>
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<tr>
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<td>17</td>
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<td>74</td>
<td>33</td>
<td>35</td>
<td>43</td>
<td>18</td>
<td>584</td>
</tr>
</tbody>
</table>

Note 1 Other included, no shoes, buying shoes, wet weather, holiday, seeing rels off at airport, visiting rels, visiting sick family, late (slept in), rugby trip, late (car breakdown), celebration
Note 2 Phone calls from parent, sibling or child. Note from parent, Dr's cert
Note 3 One report could cover 1 to 5 days
Note 4 Other illness includes non report of reason, infected eye, allergy, hay fever, chicken pox

Cannons Creek School Child Absences recorded by school office staff for 2000 year
Appendix 5.3 First Aid kit contents checklist


The first aid kits should include at least the following:

- disposable gloves
- antiseptic or sealed packs of alcohol wipes
- thermometer
- bandaids/small elastoplast dressings
- safety pins
- rolls of stretchable bandage
- cold pack
- note pad, pen/pencil
- a first aid manual
- National Poisons Centre phone number
- small plastic or metal splints
- scissors
- tweezers
- bandage tape
- sterile gauze pads
- eye dressing
- triangular bandage
- paracetamol
- syrup of ipecac
- insect sting preparation
- water
- soap

Among the items listed in a first aid kit, there should be an antiseptic to clean wounds and other injuries. There are a number of these products to choose from.

A number of organisations such as the Order of St John and the New Zealand Red Cross are able to assist with advice on restocking your first aid kit.
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Note: Other includes bee sting, burn, bite

Cannons Creek School Medical Room Injuries reported and treated by site of injury and cause 2000
Cannons Creek School Incident Register

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Note 1: Other = events requiring shower

Cannons Creek School Child medical room illness events recorded by school staff for 2000 year
What do parents say about Cannons Creek School?

"Everyone is so friendly, the teachers, the children. It is easy to talk to the teachers. The set up of the school is choice."

"I like the way the school teaches children to have pride in themselves and others."

"Cannons Creek School is wonderful in my opinion...my children are happy...their progress in their education is terrific."

"With my child's disability the school has been really good in helping him in any way they can to learn things."

Cannons Creek School caters for about 230 students from year 1 to year 6 (ages 5 to 10).

Education officials say...

"Expectations are high...emphasis is placed on the different skills and attributes of the range of cultural groups represented...students are demonstrating high levels of sustained application to learning."

Education Review Office, September 1995

"I also note the very positive comments both by the Education Review Office and the visiting American Principal. I commend the Principal, staff and Board of Trustees..."

Minister of Education, September 1995

Come and see for yourself...

A special invitation...

Cannons Creek School is a very special place. We invite you to come and see for yourself.

We would be proud to show you around and answer your questions.

If you would like to visit us - or just want more information - please call us any time during office hours.

CANNONS CREEK SCHOOL
in the heart of the community
Wespine Avenue, Porirua East
Phone: 237-7426
Fax: 237-6428
Principal: Ashley Blair
Office hours: 8.30am to 3pm weekdays

Choosing the right school is an important decision

Cannons Creek School offers

- Your child the chance to achieve results and develop to his or her full potential
- An excellent education for the modern world - from English to computers
- A friendly, multi-cultural environment where parents are always welcome
- Handy location, buses at the door and community facilities nearby

This brochure has been made possible by:

ENERGY ACTION
An energy resource for schools

Thanks to Negawatt Resources Ltd
Good teachers are important.

Parents are important too.

Great community support.

Individual learning programs

Healthy children learn better.

Multi-cultural advantages.
Working Towards “HEALTHY SCHOOLS”

PUBLIC HEALTH SERVICE COMMITMENT TO SCHOOLS

We Advocate Child Health and Well-being by:

- promoting safe environments
- providing support for parents and caregivers
- promoting culturally appropriate services
- providing current and reliable health information

We Provide Personal Health Services:

- vision, hearing & ear checks for 5 yr-old New Entrants, children referred and children new to New Zealand
- vision and colour vision screening (boys) for Form 1 students
- vision screening for Form 4 students
- child health assessment
- immunisation programme for Form 1 students
- monitoring New Entrant health & immunisation status
- assessment, treatment and referral of ear problems (Porirua)
- follow up of communicable disease incidents in schools

We Support School Health Education by:

- providing teachers with health advice and information
- accessing specialist services and information
- supporting the Heartbeat School Food programme

We Assist with Development of Health Policies:

- School Environmental Safety
- Sun Safety
- Medicine Safety
- Nutrition
- Smokefree
- Medical Room Management

and any other health related policies

For further information contact the Public Health Nurse in your area

PUBLIC HEALTH NURSE
DECILE ONE SCHOOL HEALTH CLINIC

RATIONALE

Health Clinics in Decile One schools are being implemented by Regional Public Health as a strategy for improving the health status for children, and their families.

Regional Public Health has a commitment to improving the health status of children and their families.
Public Health Nurses have competence in the assessment and appropriate intervention for child health concerns, and in the provision of health advice and information relevant to family health.
Public Health Nurses have knowledge of, and access to, community health and social systems.

Accessibility to Primary Health Care and health advice and information may be a difficulty for children and their families due to barriers of knowledge, confidence, affordability, and access.
Families may be reluctant to seek advice or care through a perception that their health issue is not significant enough to warrant formal entry to a Primary Health Provider.

The school as a setting is perceived as safe, accessible, reliable and as a part of the community.
The Public Health Nurse is seen as part of the school community and has a high degree of community acceptance as an accessible health professional.

The school therefore provides an ideal setting from which to provide a health service, and the Public Health Nurse the ideal health provider.

PROTOCOLS

- Weekly Health Clinics will operate from Decile One School premises, during school hours, during school terms, by arrangement with School management
- Health Clinics will be provided by Public Health Nurses, in the employ of Regional Public Health
- All Clinic attendance is free of charge and may be by appointment, or by attending any Clinic at Clinic times
- Attendance at the Health Clinic is voluntary for children attending the school, and for their families
- Public Health Nurse will provide nursing assessment and appropriate intervention/s for children attending the school
• Public Health Nurses will provide health advice and information to other family members of children attending the school.
• Public Health Nurses will not provide medical diagnosis, prescriptions, treatment, or counselling.
• Public Health Nurses will provide short term intervention and will not become the primary health provider for any child or their family.
• All Clinic attendees will have their health concerns assessed by the Public Health Nurse at the first opportunity.
• School students may refer themselves to the Clinic, and assessment will be undertaken at the discretion of the Public Health Nurse, in accordance with Public Health Nursing protocols and within the boundaries of the Health Act (1956) Section 125.
• Usually, the Public Health Nurse will contact any child’s usual caregiver to obtain consent to see a child when the child attends the Clinic of their own volition without their caregiver’s prior consent.
• Parental or caregiver consent for children may be waived by the Public Health Nurse in the instance of a serious health risk to a child or to other children, within the boundaries of the Health Act, 1956 (Section 125).
• Records of Public Health Nurse interactions will be kept according to the conditions of the Privacy Act, and Regional Public Health requirements.
• Information gathered from School Health Clinics may contribute to the planning of school or community health activities.
In these circumstances there will be no identification of individuals.
PHN HAS CHILD REFERRED

1. SELF
   Is the child able to understand and verbalise their health concern(s)?
   - YES
   - NO
     - PHN assesses child and takes appropriate action(s)
     - PHN assesses risk factors for the child
       - high
       - low

2. WRITTEN
   Parental consent?
   - YES
   - NO
     - PHN assesses child and takes appropriate action(s)
     - PHN assesses risk factors for the child
       - high
       - low

3. VERBAL
   Parental consent?
   - YES
   - NO
     - PHN has referral form completed
     - PHN assesses risk factors for the child
       - high
       - low

---

1 Refer to Guardianship Act 1988 (Section 25)
2 Refer to Convention on the Rights of the Child 1989
3 Refer Health Act 1959 (Section 125)

Appendix 5.11 Hutt Valley Health Child Health referral flow-chart
Appendix 5.12

Principals proposal for closing the gaps

Cannons Creek School

Kia Ora, Talofa Lava, Kia Orana, Malo e Lelei, Ni Sa Bula, Faka'alofo;
Malo Ni, Halo Olaketa, Greetings

Principal’s Proposal for Closing the Gaps

Pupils in low decile schools cannot be high achievers if the health, social, housing and early childhood infrastructure is closely linked to the school.

Schools in Porirua East service a population that is 50% pacific Island and 25% Maori. There are significant health issues that currently impair children’s success at school example in 1999 28% of five year olds starting at Cann Creek School were not fully immunised and in 1997 12% Cannons Creek School 5 year olds were caries-free in contrast to 69% of pupils on the total Wellington region.

The Full Service Cluster concept is based on the Full Service Schools model where physical, mental, emotional and health services are delivered to children through school appropriate service providers working co-operatively and collaboratively. A reference to Full Service Schools is Dryfoos 1998:

http://www.netstoreusa.com/eabooks/078/078794064

The schools in Dryfoos have, on average, over 1,000 pupils and a logical setting in Porirua East is a cluster made up all the schools.

The Full Service Cluster would provide:
- Dental services from age two and a half till school leaving age
- School nurses who provide personal health (in contrast Public Health Nurses who currently provide public health and who follow up
- Social Workers for all pupils (currently only provided for Year 1 to Year 6 pupils in nine schools, in Porirua East although Intermediates and Colleges in other areas have SWIS)
- Family counselling
- A nutritionist
- Child counselling/therapist
- Early Childhood Advocate (this role is to ensure that children under five access health, early childhood education, HIPPY and PACT services in much more significant numbers than at present)
- Annual hearing, vision, skin, and asthma checks for all...
pupils
• Regular checks for diabetes, Hepatitis B and TB
• A Co-ordinator (the networking centre; the first point of contact for schools, families, children; co-ordinator of triannual checks)
• A doctor on call

The success of this model is based on the service providers working in the community, being sensitive and responsive to community needs. Teachers, who are the second most significant group of adults for children, are often aware of things that families either miss or are unsure of the seriousness of the particular issue. Problems with children's teeth are a classic example of this. Because the child may not be in pain and because the treatment often takes place over a long period of time, nothing may be done.

When children are enrolled at school at age five it is the time, for many of them, that someone other than the family has a direct responsibility for their well-being and teaching in Porirua East schools take this responsibility very seriously. Schools are required, under the terms of their charters, to take all reasonable steps to reduce barriers to learning. Schools already have medical rooms and dentists which are significantly underused.

There are significant, and well documented, physical, mental and social health issues affecting the learning of Porirua children and the schools are often the child’s first line of defence.

The Social Workers in Schools project currently operatir nine schools in Porirua East and managed by a collaboration of the two service providers (Taeomanino Trust and T Roopu Awhina) and a representative from each of the schools is a stunningly successful example of how the F Service Cluster could operate.

Eight schools in Porirua East have turned against the competitive model and now have a memorandum of understanding with the Ministry of Education as the ICA schools (Improving Cooperative Achievement Networks). Already these schools have gained an extra $1 million in services over three years because they are working closely together with each other and the community.

The Ministry of Education commissioned researchers as a result of consultation with schools, boards of Trustees, community groups the ICAN schools now have an Action Plan. A high priority in this plan is for a Full Service Cluster that will go a long way to reducing the current physical,
emotional and mental barriers that a significant percent of pupils currently face.

Further Information:


ICAN (Improving Cooperative Achievement Networks)


http://www.geocities.com/Athens/Acropolis/3621/

http://www.edgazette.govt.nz/articles/show_articles.cg

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June 2000
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Chapter six Appendices

Appendix 6.1  New Zealand Nursing Council Competencies for Nurse Practitioner   1
Appendix 6.2  Pacific Community Health Certificate Programme Components...........6
Advanced nursing practice programmes are at postgraduate (Master's) level and will cross credit into a Master's degree programme with exit points at either Postgraduate Certificate or Postgraduate Diploma level. These programmes prepare registered nurses to develop their practice through scholarly inquiry, which is applied within a defined scope of practice. In general, entry to an advanced nursing practice programme would be by an undergraduate degree or equivalent.

Advanced nursing practice programmes focus on the development and critique of nursing practice at an advanced level. An advanced nursing practice programme will be a minimum of half an academic year in length and include relevant theory and practice. Advanced nursing practice programmes must meet the following standards for Nursing Council approval.

4.1 Standards for Advanced Nursing Practice Programmes (with/without Nurse Prescribing)

4.1.1 Each programme complies with the legislated requirements and Nursing Council policies and guidelines.

4.1.1.1 The nursing programme has the relevant tertiary education accreditation and approval for the curriculum at Master's degree level, and for any subsequent changes.

4.1.1.2 The co-ordinator of the programme is a registered nurse.

4.1.1.3 All staff teaching in the clinical or practice components must have current annual practising certificates.

4.1.1.4 Any programme preparing nurses for prescribing must comply with the relevant regulations.

4.1.2 Each programme will have a curriculum that supports a registered nurse to develop to an advanced level of practice and/or nurse prescribing, within the particular scope(s) of practice.

4.1.2.1 Each programme will be developed collaboratively between the nursing/health service provider(s) and an accredited tertiary education provider, and include appropriate multidisciplinary input.

4.1.2.2 The programme is located within one or more scope(s) of nursing practice, located within the New Zealand health context.

4.1.2.3 The development and critique of nursing practice at an advanced level provides the focus for the programme.
4.1.2.4 The curriculum will include integration of relevant theory, research and practice for achieving the competencies for advanced nursing practice and/or nurse prescribing within the particular scope(s) of practice.

4.1.2.5 The practice component provides for the application of theory and critique of research within the advancement of clinical practice skills. This is undertaken within the defined scope(s) of nursing practice and/or nurse prescribing.

4.1.2.6 The content for programmes leading to nurse prescribing within the scope(s) of practice will include:

Assessment Process:
- advanced nursing practice skills and judgements
- advanced health/clinical assessment
- differential diagnosis
- bioscience including epidemiology, microbiology and pathophysiology
- laboratory/diagnostic tests and interpretation
- collaboration/decision-making.

Prescribing Process:
- interventions/appliances/treatments/medicines choice
- prescribing variation
- clinical pharmacology of authorised medicines/vaccinations including pharmacodynamics, pharmacokinetics, individualising doses, and adverse drug reactions and interactions.

Monitoring Process:
- legal/ethical issues including responsibilities, documentation, regulatory framework, auditing and ethics of drug trials
- critical appraisal of clinical trials including relevant research methodologies.

4.1.3 Each programme will have clearly defined student-centred teaching, learning and assessment strategies which support the development of advanced nursing practice and/or nurse prescribing.

4.1.3.1 The expertise and academic qualifications of the nurse(s) facilitating and teaching the advanced nursing practice programme and/or nurse prescribing are appropriate¹ and reflect the particular scope(s) of nursing practice.

4.1.3.2 The nurse(s) with clinical expertise facilitating and teaching the advanced nursing practice programme and/or nurse prescribing maintain currency of knowledge and skills within the appropriate scope(s) of practice.

4.1.3.3 The programme delivery may include multidisciplinary input.

4.1.3.4 A variety of appropriate teaching and learning approaches are used to support the development of advanced nursing practice.

4.1.3.5 The assessment strategies used are appropriate for postgraduate level education.

¹ It is expected that teaching staff will have a qualification in advance of the qualification being taught.
4.1.3.6 There is a clear assessment process and tool which is used to assess the advanced practice competencies and skills of students against the Competencies for Advanced Nursing Practice (May 1999).

4.1.4 Appropriate facilities and resources will be available to support the programme.
4.1.4.1 Access to relevant and current literary resources (journals/texts) and search facilities.
4.1.4.2 A plan of appropriate clinical experience within the scope(s) of practice is negotiated for both part-time and full-time students.
4.1.4.3 Technical support, such as computers, video linking, laboratories, and e-mail are available.

4.1.5 Each programme will have clear graduate outcomes and will result in the award of a formal academic qualification at Master’s degree level.

4.1.6 Each programme will have detailed information on processes used to ensure quality improvement is a focus.
Includes:
- programme evaluation
- staff selection criteria and processes, appraisal and development (including all academic and clinical staff)
- student entry criteria and selection processes
- assessment and moderation
- credit transfer.

4.2 Competencies for Advanced Nursing Practice Programmes (with/without Nurse Prescribing)

4.2.1 Articulates scope of nursing practice and its advancement.
The nurse:
- defines the scope of independent/collaborative nursing practice in health promotion, maintenance and restoration of health, preventative care, rehabilitation and/or palliative care
- describes diagnostic enquiry processes responding to actual and potential health needs and characteristics of the particular population group
- explains the application/adaptation of advanced nursing knowledge, expertise and evidence based care to improve the health outcomes for clients across the care continuum within the scope of practice
- generates new approaches to the extension of nursing knowledge and delivery of expert care with the client groups in different settings.
4.2.2 Shows expert practice working collaboratively across settings and within interdisciplin ary environments.

The nurse:
- demonstrates culturally safe practice
- uses advanced diagnostic enquiry skills
- develops a creative, innovative approach to client care and nursing practice
- manages complex situations
- rapidly anticipates situations
- models expert skills within the clinical practice area
- applies critical reasoning to nursing practice issues/decisions
- recognises limits to own practice and consults appropriately
- uses and interprets laboratory and diagnostic tests.

4.2.3 Shows effective nursing leadership and consultancy.

The nurse:
- takes a leadership role in complex situations across settings and disciplines
- demonstrates skilled mentoring/coaching and teaching
- leads case review and debriefing activities
- initiates change and responds proactively to changing systems
- is an effective nursing resource
- participates in professional supervision.

4.2.4 Develops and influences health/socio-economic policies and nursing practice at a local and national level.

The nurse:
- contributes and participates in national and local health/socio-economic policy
- demonstrates commitment to quality, risk management and resource utilisation
- challenges and develops clinical standards
- plans and facilitates audit processes
- evaluates health outcomes and in response helps to shape policy.

4.2.5 Shows scholarly research inquiry into nursing practice.

The nurse:
- evaluates health outcomes, and in response helps to shape nursing practice
- determines evidence-based practice through scholarship and practice
- reflects and critiques the practice of self and others
- influences purchasing and allocation through utilising evidence-based research findings.
The following are additional competencies for those nurses who are seeking prescribing rights.

4.2.6 **Prescribes interventions, appliances, treatments and authorised medicines within the scope of practice.**

The nurse seeking prescribing rights:

- uses professional judgement to:
- assess the client's health status
- make a diagnosis
- implement nursing interventions/treatments
- prescribe
- refer the client to other health professionals
- orders appropriate diagnostic tests, accurately interpreting the results and prescribing in accordance with these results
- collaborates and consults with, and provides accurate information to, the client, the client's family and other health professionals about prescribing relevant interventions, appliances, treatments or medications
- facilitates the client's access to appropriate interventions or therapies
- prescribes and administers interventions, appliances, treatments and medications (including vaccines) within legislation, codes, scope of practice and according to the established prescribing process and guidelines
- prescribes within a framework of current best practice, nursing knowledge and knowledge of pharmacology, physiology, chemistry, pathophysiology, pharmacokinetics and pharmacodynamics
- understands the use, implications, contra-indications, and interactions of prescription medications with each other and with alternative/traditional/complementary medicine and over-the-counter medications/appliances
- understands the age-related implications of prescriptive practice on clients within the particular scope
- accurately documents assessments of the client's health status, diagnosis and decisions made about prescribed interventions, appliances, treatments, medications and referrals or follow-up
- evaluates the effectiveness of the client's response to the prescribed interventions, appliances, treatments and medications, and monitors decisions about prescribing, taking remedial action and/or referring accordingly
- demonstrates an ability to limit and manage adverse reactions/emergencies/crises
- recognises situations of drug misuse and acts appropriately
- understands the regulatory framework associated with prescribing, including the legislation, contractual environment, subsidies, professional ethics, and roles of key government agencies.
### PROGRAMME FOR PACIFIC : COMMUNITY HEALTH WORKERS CERTIFICATE

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<thead>
<tr>
<th>NZQA NUMBER</th>
<th>NAME</th>
<th>LEVEL</th>
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<td><strong>MODULE ONE</strong></td>
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<tr>
<td>11098 INTERPERSONAL COMMUNICATIONS</td>
<td>Listen and respond to information received</td>
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<td>9679 v2 INTERPERSONAL COMMUNICATIONS</td>
<td>Participate in formal meetings</td>
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<td>30561 INTERPERSONAL COMMUNICATIONS</td>
<td>Apply listening techniques</td>
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<td>3419 v 2 WRITING</td>
<td>Write a report</td>
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<td>Conduct a one to one interview</td>
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<td>1304 INTERPERSONAL COMMUNICATIONS</td>
<td>Communicate with people from other cultures</td>
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<td>1299 v 3 INTERPERSONAL COMMUNICATIONS</td>
<td>Be assertive in a range of specified situations</td>
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<td>Describe stress and explore strategies for dealing with stress</td>
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<td><strong>MODULE TWO</strong></td>
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<td>6419 CORE HEALTH</td>
<td>Demonstrate knowledge of abnormal human structure and function in a health context</td>
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<td>5</td>
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<td>12700 CORE HEALTH</td>
<td>Describe the human cardiovascular system</td>
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<td>12706 CORE HEALTH</td>
<td>Describe the human digestive system</td>
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<td>12708 CORE HEALTH</td>
<td>Describe the endocrine system of the human body</td>
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<td>12726 CORE HEALTH</td>
<td>Describe the reproductive system of the human body</td>
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<td>12728 CORE HEALTH</td>
<td>Describe the human respiratory system</td>
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<td>6418 CORE HEALTH</td>
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<td>6400 CORE HEALTH</td>
<td>Manage First aid</td>
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<td>2</td>
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<td>Module Three</td>
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|--------------------------------------------------|------------------------------------------------------------------|---|---
| 6413 CoRe HEALTH                                | Apply knowledge of Individuals, groups, and communities in a health and wellness context | 3 | 7 |
| 6414 CoRe HEALTH                                | Act as a health advocate                                         | 4 | 5 |
| 6420 CoRe HEALTH                                | Apply knowledge of health environmental factors to the promotion of wellness | 4 | 5 |
| 6421 CoRe HEALTH                                | Use problem solving approaches in health care                    | 3 | 2 |
| 6424 CoRe HEALTH                                | Assist clients to manage their own health                        | 3 | 5 |
| 6425 CoRe HEALTH                                | Use skills of teamwork in a health care context                  | 3 | 3 |
| 6426 CoRe HEALTH                                | Describe and use health care resources                           | 4 | 5 |
| 14266 HEALTH EDUCATION                         | Use Health Promotion to present as a aspect of school or community wellbeing | 3 | 5 |
| 14264 HEALTH EDUCATION                         | Examine societal issues related to alcohol                       | 3 | 4 |
| 16050                                           | Examine the historical impact of the Treaty of Waitangi          | 6 |  
|                                                 | **Subtotal**                                                     |   | 55 |
| **Module Four**                                  |                                                                   |   |  
| PACIFIC SEXUAL AND REPRODUCTIVE HEALTH          | Promote sexual and reproductive wellbeing to Pacific communities  | 6 | 4 |
| PACIFIC SEXUAL AND REPRODUCTIVE HEALTH          | Describe sexual and reproductive health in the context of a Pacific Community | 6 | 4 |
| 12847 SEXUAL & REPRODUCTIVE HEALTH              | Discuss and educate on contraceptive options                     | 5 | 3 |
| 12848 SEXUAL & REPRODUCTIVE HEALTH              | Advise others on fertility awareness                             | 5 | 3 |
| 12854 SEXUAL & REPRODUCTIVE HEALTH              | Develop an utilise educational resources for sexual & reproductive health education | 5 | 4 |
|                                                 | **Subtotal**                                                     |   | 18 |
|                                                 | **Total**                                                       |   | 120 |
REFERENCES


Baum, F. & D. Sanders (1995). Can health promotion and primary health care achieve Health for All without a return to their more radical agenda? Health Promotion International, 10(2), 149-158.


Central Regional Health Authority (1994). Strong links: Building better services to meet the health and disability support service needs of the people in Porirua. Wellington, Author.


